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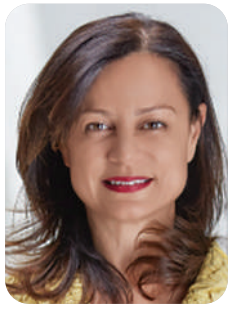


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ABSTRACTS

[H-003]

Compliance with EORNA/AORN 2026 standards and perception of surgical safety among operating room nurses: The determining role of clinical competence

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Objective: Operating rooms are among the most sensitive and high-risk clinical environments in terms of patient safety. The World Health Organization defines systematic adherence to standardized procedures as a fundamental requirement for the sustainability of safe surgery. However, it remains debatable whether surgical safety is grounded primarily in guideline awareness or in mastery of clinical practice. This study aims to examine the relationship between operating room nurses' awareness of international standards, their clinical practice competence, and their perception of surgical safety in a newly established public hospital.

Material and Methods: This descriptive, cross-sectional study was conducted with 75 nurses working in the operating room. Data were collected using a questionnaire consisting of demographic variables and an 11-item Likert-type scale measuring knowledge-awareness, clinical practice competence, and professional safety perception. Data analysis included descriptive statistics, Pearson correlation analysis, One-Way ANOVA, and exploratory factor analysis.

Results: While nurses demonstrated high levels of clinical practice competence (mean =4.45) and safety perception (mean =4.26), their level of standard-related knowledge was moderate (mean =3.14). A strong and statistically significant correlation was found between clinical competence and safety perception ($r=0.51$, $p<0.001$). A weak but significant relationship was identified between knowledge and safety perception ($r=0.28$, $p=0.014$), whereas no significant relationship was observed between knowledge and clinical competence ($p=0.171$). A statistically significant difference in safety perception was found according to years of professional experience ($F=2.863$, $p=0.043$), with nurses having three or more years of experience demonstrating higher safety perception scores. Factor analysis confirmed a three-dimensional structure explaining 56.6% of the total variance.

Conclusion: The findings indicate that the perception of surgical safety among operating room nurses is not solely based on guideline awareness but is primarily shaped by clinical practice competence. For the sustainability of a safe surgical culture, the integration of standard-related knowledge with clinical practice appears to be critical. These results suggest that strategies aimed at strengthening patient safety should not be limited to theoretical education but should also be supported through mentorship and practice-based learning processes.

Keywords: Perioperative nursing, surgical safety perception, compliance with standards

[H-004]

Drain-related pain after abdominal surgery: An investigation of predictive factors

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Objective: This study aimed to examine the level of pain experienced by patients undergoing abdominal surgery due to drain use and to identify the factors affecting pain intensity.

Material and Methods: This was a correlational study conducted with 201 patients in the general surgery clinic of a hospital in Türkiye between January and December 2023. Data were collected using the descriptive and clinical information form and the visual analog scale. Data were analyzed using multiple linear regression analysis.

Results: The mean age of the patients undergoing abdominal surgery was 50.29±14.85 years; 65.7% were female and 72.2% had undergone laparoscopic surgery. In 47.8% of the patients, the drain was located in the lower right quadrant; 81.6% had a Robinson drain, and 44.8% had a 16 Fr drain. The mean duration of drain placement was 2.44±2.16 days, the mean length of the drain inserted into the tissue was 27.19±10.49 cm, and the mean drain removal speed was 6.17±2.86 seconds. It was determined that 70.1% of the patients experienced drain-related pain. The highest level of pain related to drain use within the last 24 hours was 4.48±2.54, the pain level before drain removal was 2.11±1.54, and the pain level during drain removal was 3.52±2.77. Predictors of pain experienced in the last 24 hours related to drain use were economic status ($\beta=-0.152$, $p=0.005$), passage of flatus ($\beta=0.112$, $p=0.049$), presence of drain-related problems ($\beta=0.590$, $p=0.007$), difficulty in movement due to the drain ($\beta=-0.287$, $p=0.000$), stinging sensation due to the drain ($\beta=-0.113$, $p=0.039$), satisfaction with pain management ($\beta=-0.185$, $p=0.001$), and fear of drain removal ($\beta=0.142$, $p=0.013$), explaining 69% of the total variance. Significant predictors of pain level before drain removal were female gender ($\beta=-0.109$, $p=0.048$), satisfaction with pain management ($\beta=-0.110$, $p=0.039$), and pain level experienced in the last 24 hours due to drain use ($\beta=0.569$, $p=0.000$), explaining 54% of the total variance. Significant predictors of pain level during drain removal were female gender ($\beta=-0.109$, $p=0.048$), fear of drain removal ($\beta=0.159$, $p=0.011$), and pain level before drain removal ($\beta=0.517$, $p=0.000$), explaining 45% of the total variance.

Conclusion: More than half of the patients with drains following abdominal surgery reported pain at the drain site. Psychological preparation of the patient before drain removal and planning appropriate analgesic interventions may contribute to reducing pain. It is recommended that the predictors of pain related to both the presence of the drain and the drain removal process be taken into consideration in pain management.

Keywords: Abdominal surgery, drain, pain

[H-006]

The relationship between supportive care needs and psychological resilience in oncological surgery patients and an examination of influencing factors

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Objective: Oncological surgery patients face various support needs that affect their physical, psychosocial, and daily lives. Psychological resilience is an important characteristic that reflects individuals' adaptation and coping with stress arising from their disease and treatment. Evaluating this relationship may contribute to planning patient care according to individual needs. This study examines the relationship between supportive care needs and psychological resilience in oncological surgery patients and the factors affecting it.

Material and Methods: This study is descriptive and correlational in nature and was conducted with 170 oncological surgical patients hospitalized in the general surgery clinics of a university hospital. Data were collected between November 2024-2025 using the socio-demographic-clinical characteristics form, supportive care needs scale, and the brief psychological resilience scale. Descriptive statistics, tests of significance for differences between two means (t-test, Mann-Whitney U), One-Way Analysis of Variance, Kruskal-Wallis, and Pearson correlation analyses were used in the analysis of the data. At the end of the study, sample adequacy was assessed using G*Power (version 3.1.9.7) software; 99.9% power was obtained in the comparison of the daily life subscale according to chemotherapy status (Cohen's d=0.38; α=0.05). Institutional approval, ethics committee approval (30.10.2024-36/08), and informed consent from patients were obtained.

Results: The mean age of patients was 59.65±11.45, 52.4% were female, 18.8% had breast cancer (n=32), 58.8% had gastrointestinal cancer (n=100), and 22.4% had hepatopancreatobiliary cancer (n=38). 42.9% had a primary school education, and 60% had a chronic disease. The sexuality subscale of the supportive care needs scale was significantly associated with age (r=-0.23; p=0.002), gender (p=0.01), educational status (p=0.002), employment status (p=0.009), living alone (p=0.01), and smoking (p=0.03). Daily living subscale scores were found to differ according to cancer type (p=0.02) and were higher in patients who had previously received chemotherapy (p<0.001) and pre-diagnosis radiotherapy (p=0.02). Supportive care needs were found to differ significantly across all subscales depending on relative degrees (p<0.05). A negative and significant relationship was found between psychological resilience and supportive care needs in the psychology (p=0.001) and daily life (p<0.001) subscales. Female and working patients had higher psychological resilience levels (p<0.001), while patients receiving psychological support had lower levels (p=0.01). Furthermore, psychological resilience levels showed significant differences according to cancer type (p=0.003) and accompanying person (p=0.001).

Conclusion: Higher psychological resilience was associated with lower supportive care needs. Integrating interventions that strengthen psychological resilience into nursing care may reduce supportive care needs in psychosocial, daily living, and sexuality domains.

Keywords: Oncological surgery, nursing, resilience, supportive care

[H-008]

Post-thyroid surgery morbidity: A patient-centred perspective

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Objective: This study aimed to evaluate patient recovery by using a real-time monitoring method based on an instant messaging application (WhatsApp) to track postoperative recovery from the patient's perspective. Postoperative outcomes such as pain intensity, analgesic use, hoarseness and perceived energy levels were assessed daily in patients who underwent thyroid and parathyroid surgery.

Material and Methods: This descriptive cross-sectional study was conducted with 100 patients who underwent thyroid and/or parathyroid surgery at a university hospital between April and November 2025. The data were collected using a demographic and clinical information form and a questionnaire assessing postoperative morbidity and recovery experiences. Patients were requested to report their pain levels (VAS, 0-10), analgesic use (yes/no), voice quality (VAS, 0-10), and energy levels (VAS, 0-10) via WhatsApp messages sent every evening between days 0 and 3 postoperatively. Postoperative pain, voice, and energy scores were calculated as the average of daily VAS scores recorded during the follow-up period. The utilisation of analgesics was evaluated on the basis of patient reports collected concurrently. Patient satisfaction and suggestions regarding the follow-up method were collected via WhatsApp on the day of the outpatient control visit. The analysis of the data was conducted utilising the SPSS version 22.0 software.

Results: The demographic composition of the sample was as follows: 74% of the participants identified as female, while 26% identified as male. The total thyroidectomy procedure was performed in 72% of the subjects (n=72), and the most prevalent pathological diagnosis was papillary thyroid carcinoma (n=49, 49%). The mean postoperative pain score was 1.8, the mean voice score was 8.2, the mean energy level was 7.4, and the mean satisfaction score was 9.4 (all values are on a 0-10 VAS scale). The findings indicated that postoperative pain was generally mild, voice function was largely preserved, and perceived energy levels were relatively high. Pain levels peaked in the early postoperative period and gradually decreased over time, while energy levels showed a progressive increase. Temporary hoarseness was reported in some patients, and improvement in voice scores was observed during follow-up.

Conclusion: WhatsApp-based real-time postoperative monitoring has been shown to be a feasible, effective, and patient-centred approach for evaluating recovery following thyroid and parathyroid surgery. This method facilitates close monitoring of patient-reported outcomes, enables early diagnosis of postoperative complications, and may contribute to the individualisation and optimisation of postoperative care.

Keywords: Thyroid surgery, postoperative morbidity, patient-centered monitoring, WhatsApp, patient-reported outcomes

[H-009]

The relationship between fatalism and spiritual well-being in patients with breast cancer

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Objective: Breast cancer is one of the most common malignant tumors among women worldwide, affecting millions of individuals and impacting not only patients' physical health but also their spiritual and psychological well-being. This study was conducted to examine the relationship between fatalism and spiritual well-being, which play a critical role in influencing early detection behaviors, treatment adherence, and overall quality of life.

Material and Methods: This study is descriptive and cross-sectional. The research was conducted on individuals diagnosed with breast cancer between February 1 and December 1, 2025. Data were collected through an online questionnaire via Facebook and Instagram social media platforms and a link shared on the researcher's social network. The socio-demographic characteristics form, the breast cancer fatalism scale, and the spiritual well-being scale (FACIT-Sp-12) were used in the study. Ethical committee approval was obtained before the research, and participants who approved the informed consent text at the beginning of the online questionnaire were included in the study. The data obtained from the research were evaluated using the Statistical Package For Social Science (SPSS) 22.0 Windows software package. Parametric tests such as the Student's t-test and One-Way Analysis of Variance, and non-parametric tests such as the Mann-Whitney U and chi-square tests were used to determine the differences of independent variables on dependent variables, and the relationship between scales was evaluated with correlation analysis. In the study, $p<0.05$ was considered statistically significant.

Results: The mean age of the participants was 48.08±8.95 years, and the vast majority were women (99%). The mean score of the breast cancer fatalism scale was 2.81±1.84. Examination of the FACIT-Sp-12 subscale scores showed mean values of 9.61±2.25 for the meaning subscale, 9.13±2.22 for the peace subscale, and 10.57±3.68 for the faith subscale. The mean total spiritual well-being score was 29.31±6.86. The results indicated a positive weak correlation between breast cancer fatalism scale scores and the Faith subscale scores ($r=0.231$; $p<0.05$). In addition, a positive very weak correlation was found between breast cancer fatalism scale scores and the total spiritual well-being score ($r=0.147$; $p<0.05$).

Conclusion: The findings indicate that there is a statistically significant but weak association between fatalism and spiritual well-being among patients with breast cancer; notably, the faith subscale emerges as a prominent component in this relationship.

Keywords: Breast cancer, fatalism, spiritual well-being

Table 1. Patients' breast cancer fatalism scale and spiritual well-being (FACIT-Sp-12 version 4) scale scores

	X ± SD	M (min-max)
Breast cancer fatalism scale	2.81±1.84	3.0 (0-11)
Spiritual well-being (FACIT-Sp-12 version 4) scale		
Meaning	9.61±2.25	10.0 (0-16)
Peace	9.13±2.22	9.0 (0-16)
Faith	10.57±3.68	12.0 (0-16)
Total	29.31±6.86	31.0 (0-43)

SD: Standard deviation.

Table 2. The relationship between patients' breast cancer fatalism scale and spiritual well-being (FACIT-Sp-12) scale scores

Spiritual well-being (FACIT-Sp-12) scale	Breast cancer fatalism scale	
	r	p
Meaning	0.022	0.756
Peace	0.056	0.438
Faith	0.231	0.001*
Total	0.147	0.040*

Spearman's correlation, *: $p<0.05$.

[H-011]

Effect of structured follow-up intervention on glucose status after pancreatic cancer surgery: A randomized controlled trial

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Objective: Pancreatic cancer surgery increases the risk of pancreatogenic diabetes (Type 3c DM) by loss of endocrine pancreatic function. Inadequate postoperative glycemic control is associated with increased complications and reduced quality of life. However, the literature provides limited guidance on glycemic targets and follow-up strategies for Type 3c DM. Therefore, interventional studies are needed to support postoperative glycemic control. This study is the first randomized controlled interventional trial to improve glycemic control in patients undergoing pancreaticoduodenectomy (PD) and evaluates the effect of a structured follow-up intervention implemented during the first three months after PD on glycemic status. Additionally, the study analyzes factors affecting glycemic status in PD patients using data mining methods and assesses the effects of the structured follow-up intervention on patient outcomes and quality of life.

Material and Methods: This study is designed as a single-blind, randomized controlled, two-center trial. The target sample size is 40 participants. Block randomization in a 1:1 ratio was performed according to diabetes status. Patients in the intervention group receive a structured follow-up intervention, whereas patients in the control group receive standard discharge education. The conceptual framework of the intervention is based on scientific evidence demonstrating effectiveness in the glycemic management of Type 1 and Type 2 diabetes, including self-management education, goal setting, action planning, problem solving, and counseling. The intervention was implemented using the plan-do-check-act (PDCA) model. Blood glucose levels of all patients are continuously monitored using the Dexcom G6 device. Individualized feedback is provided to patients based on ambulatory glucose profile data. The primary outcome measures are mean glucose level, glucose standard deviation, coefficient of variation, glucose management indicator, and time in range. Secondary outcome measures include patient health outcomes such as readmission, additional surgical interventions, and complications, as well as quality of life assessed using the EORTC QLQ-C30 questionnaire.

Results: The data collection phase of the study has been completed at a rate of 80%. To date, a total of 30 patients have been enrolled, including 14 in the intervention group and 16 in the control group. The study is scheduled to be completed in April 2026.

Conclusion: This study represents the first multidisciplinary, randomized controlled interventional trial in the international literature aimed at achieving glycemic control in patients undergoing pancreaticoduodenectomy. The study is funded by the TÜBİTAK 1001-Scientific and Technological Research Projects Support Program (project no: 223S838).

Keywords: Pancreas, pancreaticoduodenectomy, pancreatogenic diabetes, Type 3c diabetes

[H-012]

Surgical safety and human factors: Psychological and physical risks in operating room nursing

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Objective: Despite advancements in technology and clinical expertise, surgical safety remains a significant concern on a global scale. Growing evidence suggests that adverse events occurring in surgical care are not primarily due to technical failures or individual incompetence, but rather to interactions between human cognition, physical environments, workload, team dynamics, and organizational culture. This study aims to synthesize empirical and theoretical evidence on human factors that emerge in surgical contexts, with a special focus on the psychological and physical dimensions that influence the practice of operating room nursing.

Material and Methods: An integrative narrative review design was adopted in this presentation. Peer-reviewed empirical and theoretical studies were identified through systematic searches in the databases of Scopus, Web of Science, PubMed, and ProQuest. Key search terms included human factors, surgical safety, non-technical skills, cognitive ergonomics, physical ergonomics, workload, fatigue, and safety culture. Studies focusing on surgical teams, especially operating room nurses, were prioritized. The selected articles were thematically analyzed and mapped according to six human factor domains: Cognitive ergonomics, physical ergonomics, non-technical skills, workload, fatigue, and safety culture.

Results: The synthesis revealed a unified human factors model of surgical safety. It revealed that psychological human factors such as cognitive load, situational awareness, emotional regulation, communication, and leadership directly affect decision-making quality, error detection, and team coordination. High mental workload, frequent interruptions, and stress have been consistently associated with an increased risk of adverse events. Physical human factors, such as ergonomic design, spatial layout, equipment positioning, and prolonged physical strain, have been found to contribute significantly to fatigue, musculoskeletal disorders, and decreased psychomotor performance. Importantly, psychological and physical factors are strongly related to each other; physical fatigue increased cognitive errors, while psychological stress decreased tolerance to physical demands. Non-technical skills promoted adaptive coordination and error compensation, while workload and fatigue shaped overall cognitive and emotional capacity.

Conclusion: This knowledge highlights a paradigm shift in surgical safety. Security is primarily ensured by human-centered system design, not technical skill or protocol compliance. From a human factors perspective, errors represent system signals rather than individual failures; fatigue is not a personal coping problem, but an organizational one; ergonomics creates not only staff comfort, but also patient safety intervention; and leadership behaviors act as clinical risk factors. Surgical safety can therefore best be conceptualized as an emerging socio-technical trait that is continually produced by interactions between human cognition, physical environments, teamwork practices, and organizational culture.

Keywords: Human factors, surgical safety, operating room nursing, non-technical skills, cognitive ergonomics, safety culture

[H-013]

Non-pharmacological methods used by patients for anxiety management in the preoperative period: A cross-sectional study

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Objective: This study was conducted to determine the non-pharmacological methods used by patients for anxiety management in the preoperative period and their effects on anxiety levels.

Material and Methods: The sample of this cross-sectional study consisted of 157 patients who were hospitalized in the general surgery ward of a university hospital and were in the preoperative period. Data were collected between April 14 and October 14, 2025, using the socio-demographic characteristics form, the visual analog scale for anxiety (VAS-A), and the non-pharmacological methods applied before surgical intervention form.

Results: The mean age of the participants was 46.54±18.23 years; 51% were female and 75.2% were married. It was determined that the most common diagnoses among these patients were cholelithiasis (14.6%) and appendicitis (11.5%), and that cholecystectomy (18.5%) and appendectomy (11.5%) were the most frequently planned surgical procedures. The mean VAS-A score of the patients in the preoperative period was 5.63±3.03. Among patients who used non-pharmacological methods to reduce anxiety before surgery, massage was the most frequently preferred physical method (38.9%), positive thinking was the most common cognitive-behavioral method (69.4%), talking with family or friends was the most frequently used psychosocial method (89.8%), and praying was the most commonly preferred spiritual method (84.5%). It was found that distraction techniques were used more frequently by patients with anxiety (6.80±2.57) compared to those with lower anxiety levels (5.14±3.09), and this difference was statistically significant ($p<0.05$).

Conclusion: The study revealed that patients experienced anxiety in the preoperative period. The most commonly used non-pharmacological methods for coping with anxiety were massage, positive thinking, talking with family or friends, and praying. In this context, it is recommended that surgical nurses take an active role in informing and supporting patients regarding non-pharmacological methods for anxiety management in the preoperative period.

Keywords: Anxiety, preoperative period, non-pharmacological methods, surgical patients

[H-014]

Environmental awareness in the operating room: Evaluation of nurses' knowledge and attitudes toward reducing carbon footprint

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Objective: This descriptive and cross-sectional study was conducted to determine the knowledge and attitudes of operating room nurses regarding carbon footprint reduction and to examine their relationship with ecological footprint awareness.

Material and Methods: The data were collected via Google forms between March and August 2025. The sample consisted of 213 nurses who are members of the Turkish Surgical and Operating Room Nurses Association. The data collection tools included a socio-demographic information form, the knowledge test on reducing carbon footprint in the operating room and the attitude questionnaire on reducing carbon footprint in the operating room developed by the researchers, and the ecological footprint awareness scale.

Results: The mean age of the participants was 34.64±7.21 years, and the mean duration of working in the operating room was 9.12±7.73 years. Among the participants, 88.3% were female, 54% were married, and 60.6% had a bachelor's degree. The mean scores for carbon footprint knowledge, attitude, and ecological awareness were 12.53±1.78, 10.67±0.84, and 105.22±42.31, respectively. More than 95% of the nurses stated that waste segregation reduces carbon emissions, and 98% reported taking individual measures for energy and water conservation. However, only 11.3% had received any formal education on this topic. A positive and significant correlation was found between the total score of the ecological footprint awareness scale and both the attitude questionnaire ($r=0.147$) and the carbon footprint knowledge level ($r=0.193$).

Conclusion: The study revealed that operating room nurses have highly positive attitudes toward environmentally friendly practices; however, their knowledge levels and formal training on carbon footprint reduction are inadequate. These findings highlight the need to plan educational programs on sustainable surgical practices and to strengthen environmental awareness in hospital policies. Increasing environmental awareness among nurses enhances their knowledge and attitudes toward reducing the carbon footprint in the operating room.

Keywords: Operating room nursing, carbon footprint, environmental sustainability

[H-016]

Evaluation of the positive work environment in hospitals: Scale development study

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Objective: It is essential to ensure a safe, empowering, and supportive positive work environment for empowered nurses and other healthcare professionals (such as physicians, midwives, and others). To achieve and sustain positive work environments, valid and reliable measurement instruments should be used to comprehensively assess the existing work environment. Accordingly, this study aims to develop the positive work environment in hospitals scale and to examine its validity and reliability.

Material and Methods: The study was conducted using a methodological design to develop the scale and to determine its psychometric properties. The study population consisted of healthcare professionals working in a total of five hospitals in İstanbul, including one foundation university hospital, one public university hospital, and three public training and research hospitals (n=5.100). A total of 1.062 healthcare professionals who worked in hospitals selected through random sampling and met the inclusion criteria constituted the study sample (n=1.062). Data were collected between September and December 2024 following approval from the ethics committee and the relevant institutional authorities.

Results: To establish the validity of the scale, content validity, face validity, and construct validity were assessed. Construct validity was examined using exploratory factor analysis (EFA), Confirmatory factor analysis (CFA), concurrent validity, convergent validity, and discriminant validity. Reliability was evaluated through item–total correlation analysis, Cronbach's alpha coefficient, split-half reliability, parallel-form reliability, and the test–retest method. The exploratory factor analysis indicated that the scale explained 65.09% of the total variance related to the construct. Cronbach's alpha coefficients were 0.967 for the overall scale and ranged from 0.740 to 0.925 for the subscales.

Conclusion: "The positive work environment in hospitals scale", developed to assess healthcare professionals' perceptions of a positive work environment and consisting of 9 subscales and a total of 50 items, was determined to be a valid and reliable measurement instrument.

Keywords: Nurses, positive work environment, scale development

[H-017]

Operating room nurse's process management in laser applications for benign anorectal diseases

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Objective: Laser technologies are increasingly used in the treatment of benign anorectal diseases due to the advantages of reduced postoperative pain and faster recovery. This technological transformation requires not only technical preparation but also active process management by the operating room nurse in terms of equipment safety, energy management, patient safety, and team coordination. The aim of this paper is to reveal the visible and invisible roles of the operating room nurse in benign anorectal laser surgeries from a process management perspective.

Material and Methods: This study includes the steps involved in laser surgery, a minimally invasive procedure for benign anorectal diseases, performed in our operating room. Preoperative preparation, intraoperative energy safety, sterile area management, personal protective measures, and equipment control protocols were evaluated within the framework of operating room nursing responsibilities in laser surgery procedures.

Results: In laser applications, it has been determined that the operating room nurse manages critical processes such as appropriate fiber selection, verification of energy parameters, ensuring laser safety precautions for the patient and team, control of flammable materials, and maintaining surgical field safety.

Conclusion: Laser applications in benign anorectal diseases are not only a surgical technique but also a multidisciplinary practice requiring a high level of process organization. Operating room nurses act as a bridge between technology and patient safety in this process, creating an invisible yet critical area of innovation. Standardizing and making visible nursing processes in laser surgeries will contribute to improving quality and safety outcomes.

Keywords: Laser safety, laser surgery, operating room nursing

[H-018]

How do differences in surgical methods affect nursing practice?

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Objective: Operating room nursing is considered a specialty in developed countries, and nurses without this specialization are generally not assigned to operating rooms. Although certification programs exist, as in every profession, experience significantly influences the opinions of nurses. This study aimed to evaluate the different perspectives of operating room nurses regarding laparoscopic and open surgical procedures.

Material and Methods: In our study, 75 nurses who agreed to participate were included using a questionnaire consisting of 25 statements developed by the researchers about laparoscopic and open surgical procedures, answered on a five-point Likert scale ranging from "strongly disagree" to "strongly agree", and 6 questions collecting some socio-demographic characteristics of the participants (age, gender, years spent in nursing, years spent in the operating room, percentage of laparoscopic and open surgeries performed in the last year). The responses were evaluated using the SPSS statistical program.

Results: Of the 75 participants in the study, 61 (81.3%) were women and 14 (18.7%) were men. The average age of the participants was 32 (min=23, max=50), the average time spent in nursing was 8 (min=3, max=31), and the average time spent in operating room nursing was 6 (min=0.5, max=31). The rates of laparoscopic and open surgeries performed in the last year ranged from 10% to 90%. There was no difference between the questions when evaluated according to gender. However, there were differences in the answers to the statements "The preparation process for laparoscopic cases is complex" (Statement 1) and "Equipment setup in laparoscopic cases makes preparation difficult" (Statement 2) in terms of age, time spent in nursing, and time spent in operating room nursing (for statement 1, p=0.007; p=0.005; p=0.009, respectively; for statement 2, p=0.01; p=0.022; p=0.003, respectively). Nurses with longer nursing experience, those working in the operating room, and those of older age had a higher agreement rate on statements 1 and 2. Regarding other statements about laparoscopic procedures, nurses largely agreed that the preparation processes are complex and difficult, require more technical knowledge, the risk of equipment malfunction creates stress, there is a greater need for backup equipment, and it is more mentally demanding.

Conclusion: Laparoscopic surgery procedures appear to be more complex and stressful for nurses, requiring attention to more details. However, the complexity and perceived stress factor of the procedures decreased with age, length of nursing experience, and time spent in laparoscopic surgery, while no significant difference was found in terms of gender among nurses.

Keywords: Open surgery, laparoscopic surgery

[H-019]

Does intraoperative nurse change affect surgical count safety in abdominal surgeries? A 10-year single-center experience

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Objective: Gauze and laparotomy sponge counting are fundamental practices in ensuring patient safety. Long surgeries, emergency interventions, and surgeries performed at night are considered situations that require attention in surgical counting processes. Intraoperative nurse change is evaluated as a potential risk factor for surgical counting safety, while maintaining team continuity in emergency and nighttime surgeries is also of paramount importance. This study aims to evaluate the impact of intraoperative nurse change and emergency surgical conditions on surgical count safety in patients undergoing abdominal surgery between 2015 and 2025.

Material and Methods: This retrospective single-center study included a total of 6150 patients who underwent abdominal surgery between 2015 and 2025. The cases were categorized into those with intraoperative nurse change and those without. Emergency and elective surgeries were evaluated separately. In the institution, intraoperative nurse change is not applied in emergency surgeries. Surgical count safety was evaluated based on gauze and laparotomy sponge count discrepancies, the need for recounting, and registered count events.

Results: Out of a total of 6150 patients, 1950 underwent intraoperative nurse change, while 4200 did not. The number of emergency surgeries was 2300, and team continuity was maintained in all of these cases. Only two patients (0.03%) in the entire group had gauze and laparotomy sponge count discrepancies. Both of the cases with discrepancies were emergency surgeries performed at night and without intraoperative nurse change. One of these cases was an appendectomy, and the other was surgery due to ileus. No patients had retained surgical materials or required additional surgical interventions.

Conclusion: Surgical count discrepancies are very rare in abdominal surgeries. In this study, it was observed that count discrepancies were not related to intraoperative nurse change, but rather occurred during emergency surgeries performed at night. Factors such as increased workload and fatigue in emergency nighttime surgeries may pose a risk to surgical counting processes.

Keywords: Surgical count, nurse handover, abdominal surgery, patient safety, emergency surgery

[H-020]

Macro responsibility in a microvascular world: Nurses' experiences in flap care

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Objective: The aim of this study was to examine the experiences of nurses involved in the care of patients undergoing free tissue flap procedures and to identify clinical monitoring practices, encountered challenges, emotional and professional reflections, and recommendations for improving the flap care process.

Material and Methods: This study was designed as a qualitative research using a phenomenological approach. Data were collected through online one-to-one interviews conducted with nurses providing free tissue flap care, using a semi-structured interview form. Each interview lasted approximately 30-45 minutes. Criterion sampling, one of the purposive sampling methods, was employed, and a total of nine nurses participated in the study. Data were analyzed using content analysis, and the MAXQDA software was utilized. Necessary approvals were obtained for the study.

Results: Data analysis revealed four main themes. Within the theme of Clinical monitoring and assessment in the care process, the first 24-48 hours were identified as a critical period, during which hourly monitoring, immobilization, delayed oral intake, and close vital sign surveillance were prioritized. The monitoring process was primarily based on clinical indicators such as color, temperature, capillary refill, Doppler signals, edema, and bleeding. The theme of challenges and difficulties encountered indicated that hourly monitoring increased workload in conjunction with ward intensity, while prolonged fasting periods, frequent interventions, donor site monitoring, and the lack of standardized protocols complicated the care process. Under the theme of emotional and professional reflections, the successful progression of the flap was associated with professional satisfaction, whereas potential circulatory impairment and the need for revision surgery led to anxiety and stress. The theme of recommendations for improving care focused on the need for standardized monitoring tools, strengthening multidisciplinary collaboration, updating clinical guidelines, and providing flap-specific education.

Conclusion: Nurses' experiences demonstrate that free tissue flap care is a process requiring intensive monitoring, largely guided by clinical experience, and characterized by a clear need for standardization.

Keywords: Free tissue flaps, microsurgery, postoperative care, nursing care, qualitative research

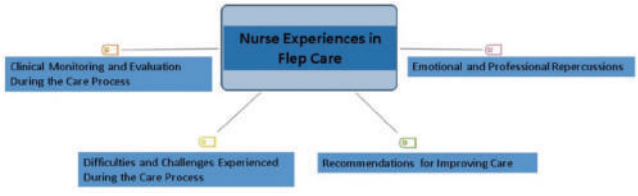


Figure 1. Themes.

[H-023]

Diagnostic yield of colonoscopy in patients with positive fecal occult blood test: A single-center retrospective analysis

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Objective: To evaluate the diagnostic yield of colonoscopy in patients with a positive fecal occult blood test (FOBT), with respect to polyp detection rate, histopathological distribution, lesion localization, morphology, and polypectomy rates.

Material and Methods: In this single-center retrospective analysis, patients who underwent colonoscopy following a positive fecal occult blood test (FOBT) between January 2024 and January 2026 were evaluated. Age, sex, and Charlson comorbidity index (CCI) were recorded. The clinical context for FOBT testing was categorized as screening, bleeding, anemia, or constipation. The interval between FOBT positivity and colonoscopy was calculated. In patients who underwent biopsy and/or polypectomy, histopathological diagnoses were classified according to adenoma subtypes and colorectal cancer; polyp presence was defined based on histopathological confirmation. In patients with detected polyps, maximum polyp size, morphology (sessile or pedunculated), performance of polypectomy, and anatomical location were assessed. In patients presenting with anemia, pre-colonoscopy hemoglobin, ferritin/iron parameters, and mean corpuscular volume (MCV) values were recorded.

Results: A total of 101 patients were included. The mean age was 56.0±13.2 years (median, 55; range, 21-88), and the mean CCI was 1.80±2.92. Of the patients, 54.5% (55/101) were male and 45.5% (46/101) were female. The mean interval between FOBT positivity and colonoscopy was 3.45±1.06 weeks. Colonoscopy indications were bleeding in 26.7% (27/101), anemia in 12.9% (13/101), constipation in 29.7% (30/101), and screening in 30.7% (31/101). Histological evaluation of biopsies revealed tubular adenoma in 19.8% (20/101), tubulovillous adenoma in 7.9% (8/101), villous adenoma in 2.0% (2/101), and colorectal cancer in 1.0% (1/101), while no biopsy was obtained in patients. Polyp positivity rate was 29.7% (30/101). Maximum polyp size was 23 mm, mean 12 mm. Morphologically, 76.7% (23/30) of polyps were sessile and 23.3% (7/30) were pedunculated; the polypectomy rate was 46.7% (14/30). Localization was the sigmoid colon (36.7%, 11/30) and transverse colon (23.3%, 7/30), with distal localization in 70.0% (21/30) and proximal localization in 30.0% (9/30). Polyp positivity rates did not differ significantly among indication groups (p=0.754). In patients undergoing colonoscopy for anemia, mean hemoglobin was 8.4 g/dL, ferritin/iron was 30, and MCV was 75.2 fL.

Conclusion: In patients with a positive FOBT, colonoscopy detected polyps in approximately 30% of cases, with lesions predominantly located in the distal colon. Colonoscopy following FOBT positivity demonstrates a high diagnostic value for the detection of clinically significant lesions.

Keywords: Colonoscopy, fecal occult blood test, polyp detection

[H-024]

Break in the safety chain: The impact of preoperative verification failure on the surgical process

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Objective: In tertiary care hospitals, surgical patient safety depends on the accurate and complete execution of preoperative processes and verification of critical steps before admission to the operating room. This study aims to analyze system-related failures leading to the postponement of surgeries in two patients with non-palpable breast lesions due to the lack of verification of preoperative localization and logistical requirements, and to discuss the role of nursing coordination in patient safety.

Material and Methods: Clinical processes of two patients scheduled for surgery after multidisciplinary breast council decisions were evaluated using qualitative case analysis from a patient safety perspective, focusing on preoperative verification chains and preoperative operating room admission controls.

Results: In both cases, essential preoperative requirements (radiological localization and intensive care bed availability) were not verified through a structured confirmation process prior to operating room admission. The deficiencies were detected during the final intraoperative safety check, leading to postponement of surgery for patient safety reasons. These events resulted in inefficient use of operating room resources, disruption of surgical schedules, unnecessary patient exposure to preparatory procedures, and increased psychosocial burden. The findings highlight systemic gaps in verification mechanisms rather than individual errors.

Conclusion: Standardizing preoperative verification processes through structured surgical safety checklists and strengthening nursing coordination during the ward-to-operating room transition are critical for sustainable patient safety. Assigning clear authority to nursing leadership for final verification before operating room admission constitutes an effective safety barrier to prevent similar adverse events.

Keywords: Patient safety, surgical safety checklist, team coordination

[H-025]

How does culture shape risk perception in tattoo and piercing practices? Findings from nursing students in Türkiye and India

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Objective: Body art practices are becoming increasingly common among nursing students; however, the cultural influences on these practices remain insufficiently studied. This study aimed to compare the knowledge levels regarding tattoos and piercings and the prevalence of having tattoos/piercings among nursing students in Türkiye and India who had completed the "surgical diseases nursing" course, and to examine the impact of cultural characteristics on students' risk perceptions.

Material and Methods: This descriptive cross-sectional study included 480 nursing students studying in western türkiye (n=184) and northwestern india (n=296). data were collected using a "student information form" and a "tattoo and piercing knowledge form." Chi-square test, independent-samples t-test, and logistic regression analysis were used for data analysis.

Results: The prevalence of piercing was significantly higher in the India group (55.1%) than in the Türkiye group (26.1%) ($p<0.001$). Logistic regression analysis showed that the country variable was a strong predictor of having a piercing even after controlling for age and gender. Regarding motivations, individual motives such as "freedom" and "rebellion" were more prominent among Turkish students (72.3%), whereas social motives such as "social acceptance" were more prominent among Indian students (55.1%). In terms of knowledge level, Turkish students' scores were significantly higher than those of Indian students ($p<0.001$).

Conclusion: Cultural characteristics substantially influence nursing students' attitudes toward body art practices and their risk perceptions. The traditional and widespread nature of these practices in India may be associated with a lower salience of perceived medical risks and with the normalization of the practice.

Keywords: Nursing education, body modification, tattoo, piercing, cultural characteristics, surgical nursing

[H-026]

Safe surgery begins with us: A phenomenological analysis of operating room nurses' experiences in safe surgical practice

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Objective: This study aims to explore operating room nurses' lived experiences of safe surgical practice and the meanings they attribute to this process, using an interpretative phenomenological analysis (IPA) approach.

Material and Methods: The study was conducted using IPA, a qualitative research design. A total of 10 nurses actively working in the operating room were recruited through purposive sampling. Data were collected through semi-structured, face-to-face interviews. All interviews were transcribed verbatim. During the analytical process, each transcript was read repeatedly, initial notes were generated, and themes were developed inductively based on participants' narratives.

Results: The analysis revealed that the experience of safe surgery was constructed around four main themes: (1) Safety awareness shaped by experiences of risk and potential crises; (2) a critical professional role established through multiple verification practices and attention to detail; (3) strengthening of professional discipline and identity; and (4) sustained advocacy for safety in the face of structural barriers. Participants reported that situations such as wrong patient identification, wrong-site surgery, documentation errors, and transfusion risks sharpened their safety awareness. Safe surgery was experienced not merely as the implementation of checklist steps, but as a continuous process requiring verification, vigilance, and accountability at every stage. Nurses emphasized their decisive position within the safety chain, highlighting that multiple verification practices enable early detection and prevention of errors. However, hierarchical structures, time pressure, and organizational shortcomings were identified as factors that hinder the consistent maintenance of safety practices.

Conclusion: The findings indicate that safe surgery extends beyond a technical procedure; it represents a multilayered experience shaped by ethical responsibility, professional discipline, and intra-team communication. The sustainability of safety requires the integration of individual awareness with institutional safety processes. This study makes visible the pivotal role of operating room nurses in ensuring safe surgical practice.

Keywords: Safe surgery, operating room nurse, interpretative phenomenological analysis

[H-027]

Body art in surgery: An overview of tattoo/piercing awareness and practices of operatin room nurses in Mediterranean countries

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Objective: The aim of this study is to examine the awareness levels of operating room nurses working in five different countries in the Mediterranean basin (Türkiye, Spain, Israel, Croatia, and Italy) regarding the care of patients with tattoos and piercings during the surgical process and their safe surgical practices.

Material and Methods: This descriptive and cross-sectional study was conducted between September 2025 and December 2025. The population of the study consisted of nurses who are members of national operating room nursing associations in the specified countries. A total of 332 operating room nurses, selected via the stratified random sampling method, were reached through an online survey. Data were collected using a "personal information form", "tattoo/piercing awareness form", and "practices survey". Descriptive statistics, chi-square test, One-Way ANOVA tests were used for data analysis.

Results: A significant difference was determined between the countries in terms of personal body art experience ($p=0.002$). While nearly half of the nurses in the Israel (50.0%) and Spain (46.1%) samples stated that they had tattoos or piercings on their own bodies, this rate was 22.5% in the Turkish group. In contrast, while the "total awareness score" regarding tattoo/piercing risks was highest in the Türkiye group (6.81 ± 2.74), the lowest group was determined to be Italy (4.39 ± 2.88). Similarly, the Türkiye group was found to be significantly higher than other countries in the "safe surgical practice score" (6.80 ± 3.16) ($p<0.001$). Training rates were highest in Türkiye (27.5%) and Israel (26.9%). Spain, despite having the lowest training rate (8.7%), showed the highest demand for clinical guidelines (92.2%). When nurses' perceptions regarding individuals' reasons for turning to body art were examined; while similarities were observed between countries in terms of aesthetic concerns and fashion trends ($p>0.05$), statistically highly significant differences were detected regarding symbolic meanings such as "feeling privileged" and "indication of love/belief".

Conclusion: The study results indicate that personally possessing body art does not directly enhance professional awareness or safe surgical practices. The high awareness and practice scores observed among nurses in Türkiye parallel the rates of receiving training points to the critical role of in-service training in improving patient safety parameters. It was determined that there is a necessity for training regarding the management of patients with tattoos/piercings across Mediterranean countries and that nurses are in need of standard clinical guidelines in this field.

Keywords: Operating room nursing, tattoo, piercing, patient safety, awareness, Mediterranean countries

[H-028]

The effects of nomophobic behaviors and self-efficacy on clinical decision-making perceptions of surgical nurses

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Objective: Surgical nurses make critical clinical decisions in high-risk, time-pressured care settings. This study aims to examine the effects of nomophobic behaviors and nursing professional self-efficacy on perceived clinical decision-making among surgical nurses.

Material and Methods: The descriptive, cross-sectional study included 300 surgical nurses who had worked in surgical clinics for at least six months and volunteered to participate. Data were collected online (Google forms) between March 2025 and January 2026 using the Üsküdar nomophobia scale, nursing self-efficacy scale, and clinical decision-making in nursing scale. Data analysis was performed using the SPSS 29.0 software package. Descriptive and analytical statistical methods were used. Statistical significance was set at $p<0.05$. Ethical committee approval was obtained and informed consent was provided before the study began.

Results: Most nurses were female (77.3%), held a bachelor's degree (83.0%), and worked night shifts (81.3). The mean length of professional experience was 10.60±9.42 years. The mean total score of the Üsküdar nomophobia scale was 50.94±16.00, indicating a low level of nomophobia. The mean total scores of the nursing professional self-efficacy scale and the clinical decision-making in nursing scale were 67.01±12.66 and 102.82±16.61, respectively. As nomophobia increased among surgical nurses, clinical decision-making skills significantly decreased. Excessive use and inability to communicate negatively affected decision-making, whereas the functional impairment subdimension showed a weak positive relationship. In addition, higher professional self-efficacy and some of its subdimensions were associated with lower clinical decision-making scores. Multiple linear regression analysis conducted to determine the effects of nomophobic behaviors and nursing professional self-efficacy on clinical decision-making among surgical nurses revealed a statistically significant model ($F=19.232$, $p<0.001$), explaining 24.6% of the variance in clinical decision-making ($R=0.496$, $R^2=0.246$). While the functional impairment subdimension and total professional self-efficacy score positively affected clinical decision-making, excessive use, inability to communicate, and professional situations subdimensions had significant negative effects. In the second multiple linear regression analysis examining other factors affecting clinical decision-making, the model was also statistically significant ($F=7.690$, $p<0.001$) and explained 28.8% of the variance ($R=0.537$, $R^2=0.288$). Working unit and the functional impairment subdimension of nomophobia positively influenced clinical decision-making, whereas total nomophobia and quality of care subdimension had significant negative effects.

Conclusion: This study showed that nomophobic behaviors and professional self-efficacy influence clinical decision-making in surgical nurses. The functionality impairment subscale had a positive effect, while the excessive use, inability to communicate, and professional situations subscales had negative effects.

Keywords: Surgical nursing, nomophobia, clinical decision-making, self-efficacy

[H-029]

Cold chain process management by operating room nurses in botulinum toxin applications in proctology

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Objective: Botulinum toxin injections are minimally invasive procedures that can be performed in outpatient settings for the treatment of benign perianal diseases and are becoming increasingly popular as an effective treatment option. Cold chain management is critical in maintaining the effectiveness of botulinum toxin. The aim of this report is to present the role of the operating room nurse in cold chain process management during planned or intraoperative botulinum toxin injections in our clinic, from the perspective of patient safety and drug safety.

Material and Methods: This study was prepared to describe the process management in our operating room for botulinum toxin injection applications in benign perianal diseases, starting with the request of cold chain preparations by the operating room nurse and ending with their disposal. The process of requesting botulinum toxin preparations from the operating room, the transfer process, dilution, preparation under aseptic conditions, recording, and disposal processes were evaluated within the scope of operating room nursing responsibilities.

Results: It has been determined that the operating room nurse manages critical safety steps such as ensuring thermal stability is maintained during transport, checking the expiration date, performing dilution under aseptic conditions, preparing the correct dose, and double-checking all these steps. Deviations from the cold chain have been shown to pose a risk of decreased toxin efficacy, treatment failure, and economic loss.

Conclusion: In proctology, the correct management of the preparation and administration steps for botulinum toxin injections is crucial for achieving the correct treatment the surgeon aims to provide to the patient. Botulinum toxin applications are not only a technical injection procedure but also a multidisciplinary process requiring precise drug management and thermal stability control. The operating room nurse plays a key role in maintaining the cold chain and preserving treatment efficacy. Any disruption in these steps will reduce the effectiveness of the drug and negatively impact the expected treatment outcome. Standardization of this process and its support with written protocols will contribute to improving quality and safety outcomes.

Keywords: Botulinum toxin, cold chain, drug safety

[H-030]

Pre- and post-operative information needs of breast surgery patients and nurses' reception levels

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Objective: Nurses play a role in the success of breast surgery by providing adequate physical care, education, and psychological support to patients undergoing surgery. Providing sufficient information on topics where patients need it helps them better understand their condition, alleviates anxiety and curiosity, increases their willingness to participate in treatment and care, and thus improves the success of the process. The aim of this study is to determine, through interviews with patients undergoing breast surgery, which information needs were most prevalent before and after surgery, which areas lacked knowledge, and to what extent these needs were met.

Material and Methods: Data for this retrospective study were obtained by telephone interviews with patients discharged from the general surgery breast diseases ward within the last four months, using their contact information from their patient files. Open-ended question-and-answer interviews were conducted with 80 patients: 40 patients regarding their preoperative information needs and the level of fulfillment of those needs, and 40 patients regarding their postoperative information needs and the level of fulfillment of those needs. The responses were categorized, frequency and percentage distributions were calculated, and these data were statistically analyzed.

Results: According to data obtained by asking patients open-ended questions, the most frequent preoperative information needs were "How the surgery will be performed" (50%), "Risks and complications" (25%), while the least frequent were "Pain management" (7.5%) and "Anesthesia options" (5%), and 75% (n=30) of these information needs were met. Postoperative information needs were most frequent in "Postoperative recovery process" (37.5%), "Treatment and care process" (25%), and "Psychological effects" (20%), while the least frequent were "Wound care and hygiene" (12.5%) and "Information about anesthesia" (5%), and 80% (n=36) of these information needs were met. It was found that all patients (n=80) were informed by nurses about breast self-examination, arm and shoulder exercises, hygiene, nutrition, and discharge, but the information needs regarding drainage education, medication use, and follow-up procedures were met in only 75% (n=30).

Conclusion: Based on the results of this study, it can be said that patients undergoing breast surgery should be informed according to their needs, and this information should be provided by competent healthcare professionals. Patients should receive training tailored to their needs, planned and implemented by a multidisciplinary team including nurses. It is recommended that this training, with the participation of the patient and family, begin upon hospital admission and continue with follow-up and check-ups after discharge.

Keywords: Breast surgery, information needs, nursing

[H-032]

Investigation of compassion-mercy and self-esteem levels among living kidney donors and relatives of patients with kidney failure

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Objective: The kidney transplantation process is a complex experience that can affect not only recipients but also living donors and relatives of patients in psychosocial terms. This study aimed to determine and compare compassion-mercy and self-esteem levels among living kidney donors and relatives of patients with kidney failure.

Material and Methods: This study was conducted using a descriptive and comparative design. Data were collected through face-to-face interviews with living kidney donors and relatives of dialysis patients attending a kidney transplantation outpatient clinic, using the socio-demographic and clinical characteristics form, the compassion-mercy scale, and the self-esteem scale.

Results: The study included 222 living donors and 116 relatives of patients on the cadaveric transplant waiting list. The mean age of living donors was 55.16±10.34 years, and the mean age of relatives of patients on the waiting list was 46.25±10.10 years. A significant difference was observed between groups in the compassion subscale, with higher scores among relatives of patients on the waiting list ($p<0.001$). Significant between-group differences were also found in the Rosenberg self-esteem scale subscales, including self-esteem, sensitivity to criticism, daydreaming, psychosomatic symptoms, parental interest, and relationship with father ($p<0.05$). Living donors had significantly higher self-esteem levels compared to relatives of patients on the waiting list ($p<0.001$). Among living donors, compassion and kindness levels were associated with selected clinical and sociodemographic factors ($p<0.05$), whereas among relatives of patients on the waiting list, self-centeredness was significantly associated with the degree of kinship ($p=0.010$).

Conclusion: The results indicate differences in compassion-mercy and self-esteem levels between living kidney donors and relatives of patients with kidney failure. Higher compassion among relatives and higher self-esteem among living donors suggest variation in psychosocial needs during the transplantation process. These findings emphasize the importance of psychosocial assessment and supportive approaches in kidney transplantation.

Keywords: Kidney transplantation, living donor, waiting list

[H-033]

Retrospective review of the completion rates of safe surgical checklists in surgical services and operating rooms

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Objective: Safe surgical practices have been standardized using the safe surgery checklist developed by the World Health Organization to enhance patient safety. This checklist systematically checks critical stages of the surgical process and contributes to reducing errors. The aim of this study is to examine the completion rates of safe surgical checklists filled out in surgical wards and operating rooms.

Material and Methods: The data were obtained from the files of patients discharged from the general surgery, orthopedics, plastic and reconstructive surgery, ear, nose, and throat surgery, and pediatric surgery clinics in the last week. The study population consisted of 121 patients, but the study was completed with 83 patients due to the discharge of 38 patients without surgery. The data were examined in two groups: elective and emergency cases. In addition, the safe surgery checklist items were divided into four categories: "before leaving the ward", "before anesthesia", "before the surgical incision", and "after surgery". The subheadings of each category were evaluated separately.

Results: Upon reviewing all data, it was found that 7.22% of the pre-departure section, 83.1% of the pre-anesthesia section, 41% of the pre-incision section, and 38.5% of the post-operative section of the safe surgical checklist were not completed. In elective cases, these rates were found to be 4.6%, 80.5%, 32%, and 36%, respectively, and 43% of the "were instruments, gases, compresses, and needles counted?" subheading in the postoperative section was not completed. In emergency cases, 27.7% of the section before leaving the ward, 100% of the section before anesthesia, 81.8% of the section before the surgical incision, and 81.8% of the section after surgery were not completed.

Conclusion: These results indicate that pre-anesthesia, pre-incision, and post-operative checks are often neglected, particularly in emergency cases, which may pose significant risks to patient safety. Furthermore, the findings of our study underscore the importance of implementing measures to enhance the effectiveness of the safe surgery checklist.

Keywords: Safe surgical checklist, patient safety

[H-034]

Preparation and case management of the operating room nurse in laparoscopic total extraperitoneal inguinal hernia repair

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Objective: Laparoscopic inguinal hernia repair is currently frequently performed using the total extraperitoneal (TEP) technique. Less postoperative pain, earlier mobilization, shorter hospital stay, and consequently a reduced risk of nosocomial infection make minimally invasive surgery preferable. However, despite these advantages, the technical complexity and potential complications necessitate careful process management. The safe application of the technique is directly related to the operating room nurse's process management and proactive preparation. The aim of this study is to reveal the role of the operating room nurse in preoperative preparation, intraoperative coordination, and crisis management regarding potential complications in laparoscopic inguinal hernia repair, in terms of patient safety.

Material and Methods: This study is designed to share our experiences in laparoscopic inguinal hernia repair using the TEP technique in our operating room. The process will be evaluated in terms of preoperative preparation, intraoperative procedures, and the management of possible complications.

Results: The responsibilities of an operating room nurse include: Checking surgical consent, verifying patient identification, verifying side marking, inquiring about drug allergies, checking height and weight information for local anesthesia applications, ensuring the safe surgical checklist is checked, ensuring the patient is positioned appropriately for surgery, assessing for circulation and pressure ulcers and placing support pads in appropriate areas, preparing appropriate surgical sets and consumables, establishing and maintaining a sterile environment, implementing counting protocols, and ensuring intra-team coordination. These responsibilities directly affect patient safety and are fundamental determinants of surgical safety. Furthermore, controlling the laparoscopy tower system and energy devices, preparing appropriate mesh and fixation materials, controlling the CO_2 gas pressure alarm and correctly adjusting the initial pressure and flow rate, monitoring intra-abdominal pressure, planning for transition to open surgery in case of possible epigastric, bladder, and bowel injuries and the risk of severe bleeding, delivering mesh material in the correct direction, and preparing additional and rapid instrumentation are also critical responsibilities of the operating room nurse. Throughout this process, the operating room nurse contributes to reducing the risk of complications through team communication and proactive preparation.

Conclusion: The role of an operating room nurse is not limited to technical support. They play a crucial role in ensuring and maintaining patient safety through proactive planning for potential complications, crisis management, and process coordination. Making nursing process management visible is recommended to strengthen the surgical safety culture.

Keywords: Laparoscopic inguinal hernia, operating room nursing, patient safety

[H-036]

The role of nursing care in complication management in patients undergoing endocrine surgery

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Objective: Endocrine surgery is a subspecialty focusing on the surgical treatment of various diseases of the endocrine glands, including neuroendocrine tumors of the thyroid gland, parathyroid glands, adrenal glands, gastrointestinal system, and pancreas. Unlike other surgeries, endocrine surgery has not only anatomical but also physiological and hormonal consequences. Therefore, nursing care requires a multidisciplinary approach and close monitoring. The aim of this study is to reveal the contribution of nursing care to the prevention, early diagnosis, and effective management of complications that may develop after surgery.

Material and Methods: This retrospective study was conducted by examining the files of patients who underwent endocrine surgery between December 2025 and February 2026. The study population consisted of patients who underwent endocrine surgery during the specified period. The sample consisted of 40 patients whose file records were fully accessible and who met the research criteria. The obtained data were categorized, frequency and percentage distributions were calculated, and these data were statistically analyzed.

Results: Of the 40 patients who underwent endocrine surgery, 65% (n=26) had subtotal, total thyroidectomy and parathyroidectomy, 25% (n=10) had adrenal surgery, and 10% (n=4) had neck dissection. In all 26 patients (65%) who underwent thyroidectomy, hoarseness control, semi-Fawler position, drain monitoring, and respiratory function were monitored. Ice application was performed on the surgical site in patients who underwent neck dissection (n=4) and total thyroidectomy (n=18). In the same patient group (n=26, 65%), signs of hypocalcemia were observed postoperatively, serum calcium and PTH levels were checked at 6-8 hours, and calcium replacement was performed in cases where deemed necessary (n=20) as directed by the physician. All 10 patients (25%) who underwent adrenal surgery had regular blood pressure monitoring and serum cortisol levels checked in the postoperative period, and steroid treatment was administered by nurses as directed by the physician. No complications other than hypocalcemia in patients who underwent total thyroidectomy and neck dissection (n=22) and hypertension in 2 out of 10 patients (n=10) who underwent adrenal surgery (20%) were observed, and all patients were discharged within the normal discharge timeframe (24-48 hours).

Conclusion: The findings indicate that physician-nurse collaboration improves the quality of postoperative care. Nursing care practices play a critical role in the prevention and management of complications following endocrine surgery. A multidisciplinary approach, with active participation from nurses, is recommended for the early identification and effective management of complications in the follow-up of patients undergoing endocrine surgery.

Keywords: Endocrine surgery, complication, nursing care

[H-039]

Strategic role of operating room nurses in intraoperative complication prevention and management: A systematic review of current literature

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Objective: The perioperative process inherently involves high-risk interventions, and surgical complications directly impact patient mortality/morbidity as well as healthcare costs. As the central figure of the surgical team, the operating room nurse serves as a critical barrier in preventing complications through “patient advocacy” and “aseptic surveillance” roles. This review aims to analyze the evidence-based importance of nursing interventions in preventing major intraoperative complications, including surgical site infections, retained surgical items, positional injuries, and hypothermia

Material and Methods: Within the scope of this review, current guidelines from the WHO (World Health Organization), AORN (Association of periOperative Registered Nurses), and EORNA (European Operating Room Nurses Association), along with literature published in the last five years (2020-2025), were examined. Synthesis was conducted by analyzing studies retrieved using keywords such as “surgical safety”, “operating room nursing”, “complication management”, and “patient safety”.

Results: The analysis revealed that strategic interventions in which operating room nurses play an active role significantly reduce complication rates: Surgical site infections (SSI): SSI rates can be prevented by up to 25% through the nurse’s supervision of aseptic techniques and traffic control. Retained surgical items (RSI): Complete implementation of systematic counting protocols (audible and dual-control) minimizes technical errors. Positional injuries: The use of pressure-redistributing gel pads and correct positioning reduces the risk of nerve damage by 90%. Hypothermia: Active warming protocols accelerate wound healing and decrease the risk of coagulopathy.

Conclusion: The operating room nurse is not merely a surgical assistant but an active auditor in preventing complications. Within this framework, it is recommended that the “surgical safety checklist” be internalized as an institutional culture rather than a mere administrative form. Furthermore, increasing specialized training in perioperative nursing and implementing systemic improvements by reporting “near-miss” events are essential strategies for enhancing patient safety.

Keywords: Operating room nursing, complication prevention, patient safety

24th NATIONAL CONGRESS OF SURGERY ABSTRACTS

ORAL PRESENTATIONS

[S-001]

Clinical outcomes after resident-performed single- vs. double-layer bowel anastomosis: A retrospective comparative study

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Objective: Single-layer bowel anastomosis has been associated in the literature with similar safety outcomes and shorter procedure times compared to double-layer anastomosis. However, this success is only poorly documented for resident surgeons. This report aims to investigate whether these results are applicable to resident surgeons and to allow residents to review and comparatively evaluate single-layer and double-layer bowel anastomoses performed manually.

Material and Methods: This study evaluated patients who underwent manual single or double-layer bowel anastomosis at University of Health Sciences Türkiye, İzmir Tepecik Education and Research Hospital between January 2022 and December 2025. Patients who underwent isoperistaltic and side-to-side anastomoses; those who used 3/0 Prolene sutures for single-layer anastomoses and 3/0 PDS and 3/0 silk sutures for double-layer anastomoses; and those whose stumps were stapled and the stump line embedded with 3/0 silk sutures were included in the study. Patients who underwent protective ileostomy or colostomy were excluded. The primary endpoints of the study were anastomotic leakage, anastomotic stricture, and intraabdominal abscess.

Results: Of the 197 patients included, 62.9% (n=124) underwent elective surgery and 37.1% (n=73) emergency surgery. Anastomosis types were ileocolic in 80.7% (n=159), colocolic in 11.7% (n=23), and enteroenteric in 7.6% (n=15). Overall, 29.4% (n=58) received a single-layer and 70.6% (n=139) a double-layer anastomosis. In elective cases, single-layer was used in 33.1% (n=41) and double-layer in 66.9% (n=83). Elective outcomes were: Single-layer—leak 2.4% (n=1), intra-abdominal abscess 4.9% (n=2), no stricture; double-layer—leak 6.0% (n=5), abscess 1.2% (n=1), stricture 6.0% (n=5), with no significant difference between groups (p>0.05). In emergency cases, single-layer was performed in 23.3% (n=17) and double-layer in 76.7% (n=56). Emergency outcomes were: single-layer—leak 5.9% (n=1) and abscess 5.9% (n=1), no stricture; double-layer—leak 12.5% (n=7) and abscess 3.6% (n=2), again with no significant difference (p>0.05). As elective and emergency subgroups did not differ significantly, a pooled cohort analysis was performed to increase statistical power. In the overall cohort, leak rates were 3.4% (n=2) for single-layer and 8.6% (n=12) for double-layer (p>0.05); intra-abdominal abscess rates were 5.2% (n=3) vs. 2.2% (n=3) (p>0.05). Anastomotic stricture occurred only in the double-layer group (3.6%, n=5; p>0.05).

Conclusion: Single-layer anastomoses performed by residents showed clinical outcomes comparable to double-layer anastomoses. With appropriate case selection and under expert supervision, they can be performed safely.

Keywords: Single-layer anastomosis, double-layer anastomosis, surgical resident

Table 1. Presence of comorbidities according to operation type

Comorbidity	Emergency surgery	Elective surgery
Present	56.2% (n=41)	65.3% (n=81)
Absent	43.8% (n=32)	34.7% (n=43)
There was no statistically significant difference in the presence of comorbidities between the emergency and elective surgery groups (p>0.05).		

Table 2. Presence of comorbidities according to anastomosis technique

Comorbidity	Single-layer anastomosis	Double-layer anastomosis
Present	69% (n=40)	59% (n=82)
Absent	31% (n=31)	41% (n=57)
There was no statistically significant difference in the presence of comorbidities between the single-layer and double-layer anastomosis groups.		

Table 3. Hemoglobin level (g/dL) according to anastomosis layer (single-layer vs. double-layer)

Parameter	Single-layer anastomosis	Double-layer anastomosis
Hemoglobin level (g/dL)	12.18±2.61	11.66±2.23
There was no statistically significant difference in preoperative hemoglobin levels between the two groups (p>0.05)		

Table 4. Albumin (g/dL), CRP (mg/L), and leukocyte count (×10³/mL) according to operation type

Parameter	Emergency surgery	Elective surgery
Albumin (g/dL)	2.94±0.56	3.38±0.68
CRP (mg/L)	41 (18-150)	10 (3-25.5)
Leukocyte count (×10³/mL)	12.11±5.53	8.19±2.27
When emergency and elective cases were compared in terms of laboratory parameters, albumin levels were lower and CRP and leukocyte counts were significantly higher in the emergency group (p<0.001).		

[S-002]

The effect of percutaneous endoscopic gastrostomy on early nutritional parameters: A single-center retrospective study

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Objective: Percutaneous endoscopic gastrostomy (PEG) is a safe and effective method widely used to provide long-term enteral nutrition in patients with insufficient or impossible oral intake. It plays an important role in maintaining nutritional support, particularly in patients with cerebrovascular events, neurodegenerative diseases, and those requiring prolonged intensive care. Data evaluating early changes in nutritional laboratory parameters following PEG placement are limited. Therefore, this study aimed to present our center's experience with PEG and to evaluate the effects of PEG placement on nutritional indicators such as albumin and hemoglobin over a 30-day period.

Material and Methods: This retrospective study was conducted by reviewing the medical records of patients who underwent PEG between 2023 and 2025 at University of Health Sciences Türkiye, Gülhane Training and Research Hospital. A total of 83 patients who underwent PEG during the study period were included. Patients' demographic characteristics, comorbid conditions, indications for PEG placement, 30-day in-hospital mortality, and post-PEG complications were recorded. Laboratory parameters at the time of PEG placement, including albumin, hemoglobin, platelet count, neutrophil count, lymphocyte count, and C-reactive protein, were evaluated in all patients.

Results: A total of 83 patients were analyzed. The 30-day in-hospital mortality rate was 22.9% (n=19). The overall complication rate after PEG was 12%, with most being minor complications (10.8%). The most common complication was peristomal leakage (6%). One patient (1.2%) developed a major complication, gastrointestinal bleeding. To evaluate the effect of PEG on nutritional parameters, only the 64 patients who survived for at least 30 days were analyzed. In these patients, mean serum albumin levels increased significantly from 2.65±0.48 g/dL before PEG to 2.88±0.66 g/dL at day 30 (p=0.004). Mean hemoglobin levels also increased significantly from 9.39±1.45 g/dL to 9.78±1.71 g/dL (p=0.002). Mean platelet counts showed no statistically significant change (p=0.113) (Tables 1, 2).

Conclusion: In our center's PEG experience between 2023 and 2025, the procedure was found to be safe with a low rate of major complications. In patients who survived for 30 days after PEG placement, statistically significant increases in albumin and hemoglobin levels were observed. These findings suggest that PEG not only provides enteral nutrition but may also have positive early effects on nutritional and hematological parameters. In conclusion, when appropriate patient selection is performed, PEG is both a safe intervention and an effective nutritional method that contributes to the improvement of early nutritional parameters. Larger and prospective studies are required to determine the impact of these biochemical improvements on clinical outcomes.

Keywords: Enteral nutrition, percutaneous endoscopic gastrostomy

Table 1. Comparison of laboratory values before PEG placement and at day 30 in patients who survived for 30 days (n=64)

Variables	Median	Mean	Standard deviation	Minimum	Maximum	p-value*
Albumin (g/dL)	2.5	2.65	0.48	1.9	3.9	0.004
Albumin at 30 days (g/dL)	2.95	2.88	0.66	1.5	4.0	
Hemoglobin (g/dL)	9.4	9.39	1.45	6.9	13.2	0.002
Hemoglobin at 30 days (g/dL)	9.5	9.78	1.71	6.9	14.0	
Platelet count ($\times 10^9$/L)	264.5	288.14	141.64	12	880	0.113
Platelet count at 30 days ($\times 10^9$/L)	290	296.33	98.97	93	520	

Table 2. Demographic and clinical characteristics and pre-PEG laboratory values of all patients (n=83)	
Parameters	**Values**
Gender	
Female	34 (41%)
Male	49 (59%)
Age (years)	76 (18-97)
Body mass index (kg/m²)	24.4 (17.6-44.4)
Diabetes mellitus	
Present	19 (22.9%)
Absent	64 (77.1%)
Indications for PEG placement	
Cerebrovascular event	31 (37.3%)
Prolonged intensive care stay	24 (28.9%)
Dementia/Alzheimer's disease	12 (14.5%)
Multiple sclerosis	6 (7.2%)
Head and neck trauma	4 (4.8%)
Esophageal cancer	3 (3.6%)
Head and neck cancer	2 (2.4%)
Motor neuron disease	1 (1.2%)
30-day in-hospital mortality	
Survived	64 (77.1%)
Died	19 (22.9%)
Post-PEG complications	
None	73 (88%)
Any complication	10 (12%)
Minor complications	9 (10.8%)
Peristomal leakage	5 (6%)
Peristomal infection	2 (2.4%)
Accidental tube dislodgement	2 (2.4%)
Major complications	1 (1.2%)
Gastrointestinal bleeding	1 (1.2%)
Albumin (g/dL)	2.5 (1.9-3.9)
Hemoglobin (g/dL)	9.1 (6.8-15.1)
Platelet count (×10⁹/L)	239 (12-880)
Neutrophil count (×10⁹/L)	78.8 (19.1-95.6)
Lymphocyte count (×10⁹/L)	13.1 (1.9-46.5)
C-reactive protein (mg/L)	79 (11-332)

[S-003]

Preoperative indications, postoperative transition to enteral autonomy, and management of parenteral nutrition dependence in patients undergoing surgical feeding tube placement: A single-center experience

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Objective: Surgical feeding jejunostomy is a widely used method of nutritional support in patients with insufficient oral or enteral intake. Postoperative transition to enteral feeding, achievement of enteral autonomy, and management of parenteral nutrition requirements are critical determinants of clinical outcomes. This study aimed to evaluate preoperative characteristics, the postoperative transition to enteral autonomy, and the management of parenteral nutrition dependence in patients who underwent surgical feeding jejunostomy.

Material and Methods: Patients aged ≥18 years who underwent surgical feeding jejunostomy at University of Health Sciences Türkiye, İzmir City Hospital between 1, January, 2024, and 31, December,2025,were retrospectively analyzed. Patients were divided into two groups according to enteral autonomy status: Achieved (n=34) and not achieved (n=8). Demographic data, preoperative clinical and nutritional characteristics, surgical and postoperative processes, and discharge and mortality outcomes were analyzed. Categorical variables were presented as number (%) and compared using appropriate statistical tests. A p-value <0.05 was considered statistically significant.

Results: Forty-two patients were included. Postoperative enteral autonomy was achieved in 34 patients (81%) and not achieved in 8 (19%). Patients without enteral autonomy were older (median 69.5 vs. 62.5 years) and all were male (100% vs. 58.8%; p<0.05). Overall, 88.1% of patients were classified as ASA III-IV, and 92.9% had at least one comorbidity. No significant differences were observed between groups regarding ASA score, comorbidities, admission type,or ward of hospitalization (p>0.05). Bedridden status was more common in patients without enteral autonomy (p<0.05). Preoperative clinical indications were similar between groups (p>0.05). The median preoperative albumin level was 2.95 (2-4) g/dL in the entire cohort and 3.0 (2.3-4) g/dL versus 2.75 (2-3.6) g/dL in patients with and without enteral autonomy, respectively, with no significant difference (p>0.05). Preoperative TPN use rates were also similar (p>0.05), and no major TPN-related complications were observed. All patients underwent open Witzel jejunostomy. In 32 patients (76.2%), the procedure was performed during primary surgery, while in 10 patients (23.8%) it was performed as an additional procedure. Early jejunostomy-related complications occurred in four patients, all due to leakage,and were more frequent in patients without enteral autonomy (37.5% vs. 2.9%; p<0.05). Three patients required reoperation. Failure to initiate postoperative enteral feeding was significantly higher in patients without enteral autonomy (p<0.001). Postoperative TPN was required in all patients without enteral autonomy (100% vs. 55.9%; p<0.05). All patients without enteral autonomy died, whereas most patients with eneral autonomy were discharged (p<0.001).

Conclusion: Failure to achieve enteral autonomy is associated with advanced age, male sex, and low functional status. Although preoperative clinical and nutritional characteristics were largely similar, inability to initiate enteral feeding, postoperative TPN dependence, early jejunostomy-related complications, and adverse clinical outcomes were prominent. TPN was administered safely without major complications. Early initiation of enteral feeding was not associated with increased complications or mortality, and delayed enteral feeding could not be identified as an independent predictor of mortality.

Keywords: Surgical feeding jejunostomy, enteral autonomy, jejunostomy-related complications, Witzel jejunostomy, parenteral nutrition dependence

Table 1. Demographic and preoperative clinical characteristics

Değişken	Toplam (n=42)	Otonomi VAR (n=34)	Otonomi YOK (n=8)	p değeri
Yaş (yıl)	64,14 (24–88)	62.64 (24–85)	70,5 (54–88)	0.18
Cinsiyet				0.04
Erkek	28 (66.7%)	20 (58.8%)	8 (100.0%)	
Kadın	14 (33.3%)	14 (41.2%)	0 (0.0%)	
ASA Skoru				0.11
II	5 (11.9%)	5 (14.7%)	0 (0.0%)	
III	28 (66.7%)	20 (58.8%)	8 (100.0%)	
IV	9 (21.4%)	9 (26.5%)	0 (0.0%)	
Başvuru				0.29
Elektif	36 (85.7%)	30 (88.2%)	6 (75.0%)	
Acil	6 (14.3%)	4 (11.8%)	2 (25.0%)	
Jejunostomi kararı alındığında yatış yeri				0.99
Servis	37 (88.1%)	30 (88.2%)	7 (87.5%)	
YBÜ	5 (11.9%)	4 (11.8%)	1 (12.5%)	
Mobilizasyon				0.48
Bağımsız	20 (47.6%)	17 (50.0%)	3 (37.5%)	
Yardımla	7 (16.7%)	6 (17.6%)	1 (12.5%)	
Yatağa bağımlı	15 (35.7%)	11 (32.4%)	4 (50.0%)	
Bilinç durumu				0.61
Açık	35 (83.3%)	29 (85.3%)	6 (75.0%)	
Konfüze	4 (9.5%)	3 (8.8%)	1 (12.5%)	
Entübe/sedatize	3 (7.1%)	2 (5.9%)	1 (12.5%)	
Preop Albümin (g/dL)	2.95 (2–4)	3 (2.3–4)	2.75 (2–3.6)	0.21
Preop klinik endikasyon				0.87
Onkolojik GİS	25 (59.5%)	20 (58.8%)	5 (62.5%)	
Nörolojik yutma disfonksiyonu	4 (9.5%)	4 (11.8%)	0 (0.0%)	
Diğer	13 (31.0%)	10 (29.4%)	3 (37.5%)	
Komorbidite 1'den fazla	38 (%90,5)			0.66
Komorbidite: DM	9 (21.4%)	7 (20.6%)	2 (25.0%)	
Komorbidite: HT	17 (40.5%)	16 (47.1%)	1 (12.5%)	
Komorbidite: KAH	8 (19.0%)	6 (17.6%)	2 (25.0%)	
Komorbidite: Kalp yetmezliği	2 (4.8%)	2 (5.9%)	0 (0.0%)	
Komorbidite: KOAH	2 (4.8%)	2 (5.9%)	0 (0.0%)	
Komorbidite: KBY	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Komorbidite: Kronik karaciğer hastalığı	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Komorbidite: Nörolojik hastalık	2 (4.8%)	2 (5.9%)	0 (0.0%)	
Komorbidite: Aktif malignite	33 (78.6%)	26 (76.5%)	7 (87.5%)	
Komorbidite: Diğer	11 (26.2%)	10 (29.4%)	1 (12.5%)	
Komorbidite yok	4 (9.5%)	3 (8.8%)	1 (12.5%)	

Table 2. Preoperative nutritional and TPN characteristics

Değişken	Toplam (n=42)	Otonomi VAR (n=34)	Otonomi YOK (n=8)	p değeri
Alım yolu				0.235
Oral	9 (21.4%)	8 (23.5%)	1 (12.5%)	
Enteral	3 (7.1%)	3 (8.8%)	0 (0.0%)	
TPN	13 (31.0%)	11 (32.4%)	2 (25.0%)	
Kombine	17 (40.5%)	12 (35.3%)	5 (62.5%)	
Jejunostomi öncesi SON beslenme				0.688
TPN	26 (61.9%)	20 (58.8%)	6 (75.0%)	
NG	3 (7.1%)	3 (8.8%)	0 (0.0%)	
Oral	12 (28.6%)	11 (32.4%)	1 (12.5%)	
Oral düzey (R1/R2/R3)				0.195
R1	12 (28.6%)	8 (23.5%)	4 (50.0%)	
R2	11 (26.2%)	9 (26.5%)	2 (25.0%)	
R3	6 (14.3%)	6 (17.6%)	0 (0.0%)	
oral kapalı	13 (31.0%)	11 (32.4%)	2 (25.0%)	
Preop TPN kullanımı				0.398
Hayır	13 (31.0%)	12 (35.3%)	1 (12.5%)	
Evet	29 (69.0%)	22 (64.7%)	7 (87.5%)	
Preop TPN süresi				0.686
≤7 gün	19 (45.2%)	15 (44.1%)	4 (50.0%)	
8–14 gün	8 (19.0%)	7 (20.6%)	1 (12.5%)	
>14 gün	13 (31.0%)	10 (29.4%)	3 (37.5%)	
Bilinmiyor	2 (4.8%)	2 (5.9%)	0 (0.0%)	
Preop TPN komplikasyonu	0 (0.0%)	0 (0.0%)	0 (0.0%)	
TPN komplikasyonu: CLABSI	0 (0.0%)	0 (0.0%)	0 (0.0%)	
TPN komplikasyonu: Kateter trombozu	0 (0.0%)	0 (0.0%)	0 (0.0%)	
TPN komplikasyonu: Hiperglisemi	0 (0.0%)	0 (0.0%)	0 (0.0%)	
TPN komplikasyonu: Elektrolit bozukluğu	0 (0.0%)	0 (0.0%)	0 (0.0%)	
TPN komplikasyonu: Refeeding sendromu	0 (0.0%)	0 (0.0%)	0 (0.0%)	
TPN komplikasyonu: Hipertrigliseridemi	0 (0.0%)	0 (0.0%)	0 (0.0%)	
TPN komplikasyonu: Kolestaz	0 (0.0%)	0 (0.0%)	0 (0.0%)	
TPN komplikasyonu: LFT anlamlı yükselme	0 (0.0%)	0 (0.0%)	0 (0.0%)	
TPN komplikasyonu: Diğer	0 (0.0%)	0 (0.0%)	0 (0.0%)	

Table 3. Surgical technique and early complications

Değişken	Toplam (n=42)	Otonomi VAR (n=34)	Otonomi YOK (n=8)	p değeri
Cerrahi yaklaşım(Açık,Laparaskopik,Robotik)				
Açık	42 (100.0%)	34 (100.0%)	8 (100.0%)	
Jejunostomi tekniği(Stamm,Janeway,Witzel)				
Witzel	42 (100.0%)	34 (100.0%)	8 (100.0%)	
Eşlik eden cerrahi var mı				0.075
Yok -Primer beslenme tüpü cerrahisi	32 (76.2%)	28 (82.4%)	4 (50.0%)	
Var -Eşlik eden cerrahi bölgesi	10 (23.8%)	6 (17.6%)	4 (50.0%)	
Özofagus	3 (7.1%)	1 (2.9%)	2 (25.0%)	
Gastroözefegaeal	1 (2.4%)	1 (2.9%)	0 (0.0%)	
Mide	3 (7.1%)	2 (5.9%)	1 (12.5%)	
Kolon/rektum	2 (4.8%)	2 (5.9%)	0 (0.0%)	
Hepatobilier	1 (2.4%)	0 (0.0%)	1 (12.5%)	
Erken jejunostomi komplikasyonu (≤30 gün)				0.018
Var -Erken komplikasyon nedeni:	4 (9.5%)	1 (2.9%)	3 (37.5%)	
Erken komplikasyon: Enfeksiyon	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Erken komplikasyon: Sızıntı	4 (9.5%)	1 (2.9%)	3 (37.5%)	
Erken komplikasyon: Tüp dislokasyonu	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Erken komplikasyon: Tüp tıkanıklığı	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Erken komplikasyon: Barsak perforasyonu	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Erken komplikasyon: Diğer	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Komplikasyon nedeniyle reoperasyon				0.088
Evet	3 (7.1%)	1 (2.9%)	2 (25.0%)	
Hayır	39 (92.9%)	33 (97.1%)	6 (75.0%)	

Table 4. Postoperative nutritional course and enteral autonomy

Değişken	Toplam (n=42)	Otonomi VAR (n=34)	Otonomi YOK (n=8)	p değeri
Jejunostomi enteral beslenmeye başlama günü (Postop Gün)				<0.001
0–1	12 (28.6%)	11 (32.4%)	1 (12.5%)	
2–3	17 (40.5%)	16 (47.1%)	1 (12.5%)	
≥4	7 (16.7%)	7 (20.6%)	0 (0.0%)	
Hiç başlanamadı	5 (11.9%)	0 (0.0%)	5 (62.5%)	
Takip Dışı	1 (2.4%)	0 (0.0%)	1 (12.5%)	
Enteral otonomi sağlandı mı				<0.001
Hayır	8 (19.0%)	0 (0.0%)	8 (100.0%)	
Evet	34 (81.0%)	34 (100.0%)	0 (0.0%)	
Enteral otonomi günü (Postop Gün)				
1–3	13 (31.0%)	13 (38.2%)	0 (0.0%)	
4–7	13 (31.0%)	13 (38.2%)	0 (0.0%)	
8–14	5 (11.9%)	5 (14.7%)	0 (0.0%)	
>14	3 (7.1%)	3 (8.8%)	0 (0.0%)	
Sağlanmadı	8 (19.0%)	0 (0.0%)	8 (100.0%)	
Postop TPN kullanımı				0.035
Hayır	15 (35.7%)	15 (44.1%)	0 (0.0%)	
Evet	27 (64.3%)	19 (55.9%)	8 (100.0%)	
Toplam postop TPN süresi				0.21
0–1	9 (21.4%)	9 (26.5%)	0 (0.0%)	
2–4	15 (35.7%)	12 (35.3%)	3 (37.5%)	
5–7	3 (7.1%)	0 (0.0%)	3 (37.5%)	
8–14	3 (7.1%)	1 (2.9%)	2 (25.0%)	
>14	2 (4.8%)	2 (5.9%)	0 (0.0%)	
Takip Dışı	10 (23.8%)	10 (29.4%)	0 (0.0%)	
Uzamış TPN (>14 gün) ana neden				0.99
Enteral otonomi sağlanamadı	1 (2.4%)	1 (2.9%)	0 (0.0%)	
Diğer GİS komplikasyonu	3 (7.1%)	2 (5.9%)	1 (12.5%)	
Sepsis/hemodinamik instabilite	5 (11.9%)	1 (2.9%)	4 (50.0%)	
Takip Dışı	33 (78.6%)	30 (88.2%)	3 (37.5%)	

Table 5. Discharge and mortality outcomes

Değişken	Toplam (n=42)	Otonomi VAR (n=34)	Otonomi YOK (n=8)	p değeri
Taburculuk durumu				<0.001
Taburcu	30 (71.4%)	30 (88.2%)	0 (0.0%)	
Exitus	12 (28.6%)	4 (11.8%)	8 (100.0%)	
Taburculukta beslenme yolu				<0.001
Enteral (jejunostomi)	30 (71.4%)	30 (88.2%)	0 (0.0%)	
Takip Dışı	12 (28.6%)	4 (11.8%)	8 (100.0%)	
Taburculukta enteral otonomi mevcut mu				<0.001
Evet	27 (64.3%)	27 (79.4%)	0 (0.0%)	
Hayır	3 (7.1%)	3 (8.8%)	0 (0.0%)	
Takip Dışı	12 (28.6%)	4 (11.8%)	8 (100.0%)	
Taburculukta jejunostomi durumu				<0.001
Aktif (HEN)	30 (71.4%)	30 (88.2%)	0 (0.0%)	
Takip Dışı	12 (28.6%)	4 (11.8%)	8 (100.0%)	

[S-004]

Initial clinical outcomes of the nutrition unit established within the first ERAS outpatient clinic in Türkiye: A single-center experience

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Objective: Malnutrition in surgical patients is closely associated with postoperative complications, infection rates, prolonged hospital stay, and increased costs. One of the key components of enhanced recovery after surgery (ERAS) protocols is the optimization of preoperative and postoperative nutrition. This study aimed to evaluate the initial five-month clinical outcomes of the nutrition unit established within the multidisciplinary ERAS outpatient clinic—including preoperative anemia clinic, smoking cessation clinic, physiotherapy unit, and nutrition unit—set up for the first time in Türkiye at University of Health Sciences Türkiye, İstanbul Haseki Training and Research Hospital.

Material and Methods: Patients who were referred for nutrition consultation from our general surgery clinic between October 2025 and February 2026 were retrospectively analyzed. Duplicate records were counted as a single patient. The timing of consultation was classified as preoperative or postoperative based on text content analysis. Nutritional risk was assessed using the NRS-2002 score, and biochemical response was evaluated via serum albumin levels. Reconsultation was analyzed as an indicator of failure to achieve nutritional goals.

Results: A total of 90 patients were included in the study (mean age 62.7±15.2 years). Among them, 35.6% had an oncological diagnosis. Postoperative consultations accounted for 93.3% of all consultations. Among the 59 patients with available NRS data, 72.9% were found to be at high nutritional risk (NRS ≥3). Repeat evaluations were performed in 27.8% of patients. Of the 7 patients who underwent repeat consultation and had biochemical follow-up, 5 patients (71.4%) showed an increase in albumin levels, with a mean increase of +9.0 g/L. These findings suggest that targeted nutritional interventions can lead to significant improvements in biochemical parameters. The table presents the demographic and clinical characteristics of 90 surgical patients included in the study, the distribution of preoperative and postoperative nutrition consultations, oncological status, NRS-2002 nutritional risk scores, and changes in albumin levels during repeat consultations. Parameters such as the proportion of patients at high nutritional risk (NRS ≥3), albumin follow-up during repeats, and mean albumin increase illustrate the effectiveness of targeted nutritional interventions.

Conclusion: The nutrition unit within the ERAS outpatient clinic, established for the first time in Türkiye, revealed a high prevalence of malnutrition risk in surgical patients and demonstrated biochemical improvement in those who were followed. The fact that consultations were predominantly conducted in the postoperative period indicates the need to increase preoperative nutrition optimization. Due to the limited number of patients and the absence of mortality during the analysis period, data on mortality and major complications were not evaluated in this study. These parameters are planned to be analyzed in a larger patient series in the future and presented at the next national congress.

Keywords: Malnutrition, ERAS, nutrition

Table 1. Demographic and clinical characteristics and nutritional outcomes of surgical patients receiving nutrition consultation

Parametre	Sonuç
Toplam hasta	90
Yaş (ortalama ± SS)	62.7 ± 15.2 yıl
Tekrar konsültasyon	25 hasta (%27.8)
Preop hasta	6 (%6.7)
Postop hasta	84 (%93.3)
Onkolojik hasta	32 (%35.6)
Benign / Diğer hasta	58 (%64.4)
NRS verisi olan hasta	59
NRS ≥3 (yüksek risk)	43/59 (%72.9)
Tekrarlarda albumin takibi olan	7 hasta
Albumin artışı saptanan	5/7 (%71.4)
Tekrarlarda ort. albumin değişimi	+9.0 g/L
Preop–Postop karşılaştırılabilir hasta	3

[S-006]

The relationship between preoperative nutritional parameters and anastomotic leakage in bowel resections: A single-center experience

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Objective: Anastomotic leakage is a major complication following colorectal surgery and is associated with increased morbidity and mortality. Anastomotic healing depends on adequate tissue perfusion, inflammatory response, and immune function. Preoperative malnutrition may impair collagen synthesis and weaken immune defense, thereby compromising anastomotic integrity. The prognostic nutritional index (PNI) and the controlling nutritional status (CONUT) score, calculated using serum albumin, total lymphocyte count, and total cholesterol levels, are commonly used to objectively assess nutritional status in surgical patients. However, evidence regarding their association with anastomotic leakage is limited. This study aimed to evaluate the relationship between preoperative nutritional parameters and anastomotic leakage in patients undergoing bowel resection at our center.

Material and Methods: Patients who underwent anterior or low anterior resection were retrospectively analyzed. Preoperative serum albumin, total lymphocyte count, total cholesterol, and pre-albumin levels were recorded. PNI was calculated using the established formula, and CONUT scores were determined based on albumin, lymphocyte, and cholesterol values. Anastomotic leakage was diagnosed according to clinical, laboratory, and radiological findings. Patients were divided into leakage and non-leakage groups. Continuous variables were expressed as mean ± standard deviation and compared using the independent samples t-test. A p-value <0.05 was considered statistically significant. Only patients with complete data were included in the CONUT analysis.

Results: Continuous variables were expressed as mean ± standard deviation. Comparisons between patients with and without anastomotic leakage were performed using the independent samples t-test. Due to incomplete data in some patients, the CONUT analysis included only those with complete relevant parameters. A p-value <0.05 was considered statistically significant for all analyses.The mean serum albumin level was 3.78 g/dL in patients who developed anastomotic leakage and 3.91 g/dL in those who did not, with no statistically significant difference between the groups. The mean total lymphocyte count was 1.48×10^9/L in the leakage group and 1.64×10^9/L in the non-leakage group, also showing no significant difference. The mean PNI scores were 45.18 and 47.23 in the leakage and non-leakage groups, respectively, without reaching statistical significance. The mean CONUT score was 7 in patients with anastomotic leakage and 1.8 in those without leakage.

Conclusion: Serum albumin, total lymphocyte count, and PNI were not significantly associated with anastomotic leakage. However, patients who developed leakage tended to have poorer preoperative nutritional status. Higher CONUT scores may represent a potential risk indicator. Larger prospective studies are needed to confirm these findings.

Keywords: CONUT scoring system, PNI scoring system, surgical nutrition

[S-007]

Preference dynamics in medical specialty quotas: The role of time, institution, and geography in TUS placements

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Objective: This study aims to identify structural trends in specialty training planning by examining the occupancy rates and score dynamics of the Turkish Medical Specialty Exam (TUS) quotas in terms of years, exam periods, hospital types, geographic regions, and city characteristics.

Material and Methods: The study analyzed a total of 2.617 placement records obtained from the ÖSYM TUS placement guides published between 2019 and 2025. The TUS year, exam period (spring/fall), additional placement status, hospital type, geographic region, metropolitan status, number of vacancies opened and remaining vacant, and vacancy rates were evaluated. Minimum and maximum scores were analyzed by year using descriptive statistics. The analyses were performed using descriptive statistics only.

Results: During the period under review, overall bed occupancy rates exhibited a downward trend, particularly after 2021. Capacity utilization varied significantly by hospital type; city hospitals maintained the highest occupancy levels, whereas university hospitals faced substantial underutilization. Geographically, while the Marmara, Mediterranean, and Central Anatolia Regions remained relatively advantaged, the Eastern and Southeastern Anatolia regions, along with Cyprus, reported high rates of entirely vacant centers. Furthermore, occupancy was higher in metropolitan areas compared to non-metropolitan provinces. Notably, additional placement quotas remained almost entirely unfilled. Classification of center occupancy revealed that nearly half of the institutions were completely vacant, a trend most evident in university hospitals. Scale analysis further indicated that centers with smaller quotas (1-2 persons) had lower occupancy compared to larger-scale centers, especially within city hospitals. Finally, despite fluctuating base and ceiling scores, instances where ceiling scores remained high while occupancy declined suggest a marked concentration of demand in limited centers.

Conclusion: This study demonstrates that TUS quotas are not merely a matter of numerical planning; instead, preferences are clearly polarized along institutional and geographical lines. Despite high occupancy rates in city hospitals, quotas in university hospitals and non-metropolitan provinces frequently remain unfilled, revealing a systemic "quotas exist but demand is absent" paradox. While the Marmara, Mediterranean, and Central Anatolia regions maintain a relative advantage, high rates of vacant centers in Eastern Anatolia and Cyprus suggest structural settlement dynamics rather than seasonal fluctuations. Furthermore, the failure to fill additional placement quotas implies that these vacancies cannot be effectively compensated for later. The persistence of high maximum scores alongside declining occupancy further confirms that demand is concentrated in limited prestigious centers. Consequently, TUS policies require a refined planning approach that simultaneously addresses institutional prestige, regional attractiveness, and candidate preference behavior alongside quantitative adjustments.

Keywords: Capacity utilization rate, lowest-highest score, regional distribution, specialist training policies, specialty exam in medicine

Table 1: TUS Yılı ve Sınav Dönemine Göre Kontenjan Doluluk Oranları (%)

TUS Yılı	İlkbahar Dönemi (%)	Sonbahar Dönemi (%)
2019	53.58	66.07
2020	58.83	68.47
2021	38.99	42.00
2022	57.67	46.08
2023	50.02	39.59
2024	41.09	39.92
2025	46.09	40.04

Table 2. Hastane Türüne Göre Kontenjan Doluluk Durumu
A) Ortalama Doluluk Oranı (%)

A) Ortalama Doluluk Oranı (%)

Hastane Türü	Ortalama Doluluk (%)
Üniversite Hastanesi	40.54
EAH	59.24
Şehir Hastanesi	**82.83**

B) Kontenjanın Tamamen Dolma Oranı (%)

Hastane Türü	Tam Doluluk (%)
Üniversite Hastanesi	37.6

Table 3. Coğrafi Bölgelere Göre Kontenjan Doluluk Durumu
A) Ortalama Kontenjan Doluluk Oranı (%)

A) Ortalama Kontenjan Doluluk Oranı (%)

Bölge	Ortalama Doluluk (%)
Marmara	**60.87**
Akdeniz	58.09
İç Anadolu	53.89
Ege	47.81
Güneydoğu Anadolu	35.64
Karadeniz	28.77
Doğu Anadolu	26.69
Kıbrıs	**3.33**

B) Kontenjanın Tamamen Dolma Oranı (%)

Bölge	Tam Doluluk (%)
Marmara	**58.3**
Akdeniz	57.1
İç Anadolu	52.1
Ege	43.1
Güneydoğu Anadolu	31.4
Karadeniz	26.5
Doğu Anadolu	18.8
Kıbrıs	**0.0**

Table 4. Büyükşehir Durumuna Göre Kontenjan Doluluk Oranları

A) Ortalama Kontenjan Doluluk Oranı (%)

İl Durumu	Ortalama Doluluk (%)
Büyükşehir değil	23.76
Büyükşehir	**54.68**

B) Kontenjanın Tamamen Dolma Oranı (%)

İl Durumu	Tam Doluluk (%)
Büyükşehir değil	20.2
Büyükşehir	**51.8**

Table 5. TUS Yılı ve Hastane Türüne Göre Kontenjan Doluluk Oranları (%)

TUS Yılı	Üniversite	EAH	Şehir Hastanesi
2019	53.17	85.37	95.45
2020	55.69	88.89	95.65
2021	32.40	59.94	88.62
2022	44.56	67.09	86.56
2023	34.76	56.09	82.50
2024	30.20	46.83	79.17
2025	34.09	51.10	70.37

Table 6. Açılan Kontenjan Sayısına Göre Kontenjan Doluluk Oranları

Kontenjan Grubu	Ortalama Doluluk (%)
1 kişi	41.72
2 kişi	44.01
3–5 kişi	57.70
≥6 kişi	**63.35**

Table 7. Coğrafi Bölgelere Göre Tamamen Boş Kalan Merkez Oranı (%)

Bölge	Tamamen Boş Kalan Merkez (%)
Kıbrıs	**93.3**
Karadeniz	67.3
Doğu Anadolu	62.8
Güneydoğu Anadolu	57.4
Ege	48.4
İç Anadolu	43.8
Akdeniz	40.0
Marmara	**36.1**

Table 8. Hastane Türüne Göre Tamamen Boş Kalan Merkez Oranı (%)

Hastane Türü	Tamamen Boş Kalan Merkez (%)
Üniversite Hastanesi	**55.5**
EAH	36.5
Şehir Hastanesi	**15.6**

Table 9. Büyükşehir Durumuna Göre Tamamen Boş Kalan Merkez Oranı (%)

İl Durumu	Tamamen Boş Kalan Merkez (%)
Büyükşehir değil	**70.9**
Büyükşehir	41.9

Table 10. Sınav Dönemine Göre Tamamen Boş Kalan Merkez Oranı (%)

TUS Dönemi	Tamamen Boş Kalan Merkez (%)
İlkbahar	47.5
Sonbahar	48.3

Table 11. TUS Yıllarına Göre Taban Puanların Dağılımı

TUS Yılı	n	Ortalama	Medyan	Min–Maks
2019	207	51.49	50.45	45.12 – 66.34
2020	203	49.65	48.12	45.12 – 63.45
2021	174	52.40	51.54	45.09 – 68.90
2022	198	51.89	50.59	45.09 – 68.22
2023	175	49.88	48.45	45.09 – 65.62
2024	182	48.77	47.88	45.12 – 61.12
2025	225	**53.36**	**53.00**	45.05 – 68.90

Table 12. TUS Yıllarına Göre Tavan Puanların Dağılımı

TUS Yılı	n	Ortalama	Medyan	Min–Maks
2019	207	52.86	51.88	45.12 – 69.12
2020	203	50.98	49.88	45.12 – 66.34
2021	174	**55.82**	**55.25**	45.12 – 73.68
2022	198	54.92	54.68	45.12 – 73.68
2023	175	53.36	52.13	45.13 – 73.68
2024	182	50.81	50.67	45.12 – 61.12
2025	225	**55.65**	**55.25**	45.10 – 70.12

Table 13. Hastane Türüne Göre Merkez Doluluk Durumu Dağılımı (%)

Hastane Türü	Tam dolu (%)	Kısmen dolu (%)	Tamamen boş (%)
Şehir Hastanesi	**82.0**	2.5	15.6
EAH	54.9	8.6	36.5
Üniversite Hastanesi	37.6	7.0	**55.4**

Table 14. Hastane Türüne Göre Ek Yerleştirmeye Kalma Oranı (%)

Hastane Türü	Ek yerleştirme yok (%)	Ek yerleştirme var (%)
Şehir Hastanesi	**88.1**	11.9
EAH	75.7	24.3
Üniversite Hastanesi	**60.6**	**39.4**

[S-008]

The contribution of surgeon specialty in 5-year survival rate in breast cancer: A multi-center study

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Objective: Our objective in this study was to study the effect of surgeon factor on survival in breast cancer treatment.

Material and Methods: This was planned as a multi-centered and retrospective study. Demographic data, tumor and patient related factors, surgery type and surgeon specialty were evaluated. The training condition, surgical experience, fields of interest within general surgery, the number of patients treated every year with breast cancer diagnosis were determined for the surgeons conducting the primary surgical treatment of the disease. Breast specific surgeons and general surgeons were compared for 5-year survival. Multivariable and univariate survival analyses were conducted on survival.

Results: The study covered a total of 1280 breast cancer patients. Mean age of the patients was 54.7 years. 1.8% of the patients (n=23) had local recurrence, 1.8% (n=23) had regional recurrence and 7.7% (n=98) had distant organ metastasis. In survival analysis, breast cancer stage, lymphovascular invasion, distant metastasis and regional recurrence presence were observed to affect 5-year survival ($p<0.05$). Patient age, surgical technique method, surgery type and surgical border positivity were not observed to be effective ($p>0.05$).

Conclusion: The stage of the disease and tumoral factors are the most effective parameters on 5-year survival in breast cancer. Breast-specific field of working does not provide an advantage on survival in the surgical treatment of breast cancer.

Keywords: Breast cancer, surgeon speciality, breast spesicific surgeon

Table 1. Evaluation of surgeon factor in terms of survival in all BC patients (Kaplan-Meier survival analysis)

	Estimated	Std. error	95% confidence interval	
			Lower bound	Upper bound
Breast specific surgeons	117.649	1.419	114.868	120.429
General surgeons	127.263	1.486	124.351	130.175
Overall	127.440	1.096	125.292	129.588
	Chi-square	df	Sig.	
Log-rank (Mantel-Cox)	0.019	1	**0.890**	

Table 2. Five-year survival analysis based on gender in patients who had BCS and mastectomy

Kaplan-Meier survival					
Mastectomy	**Mean**	**SEM**	**95% CI**		**P (Long-rank)**
Breast specific surgeons	107.2904	1.58645	104.1809	110.3998	**0.587**
General surgeons	125.0034	1.933712	121.2133	128.7935	
BCS	**Mean**	**SEM**	**95% CI**		**P (Long-rank)**
Breast specific surgeons	121.2898	1.19192	118.9537	123.626	**0.152**
General surgeons	124.0192	0.971293	122.1155	125.923	

[S-009]

Is de-escalation of axillary surgery safe in young patients with T1-T2 breast cancer?

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Objective: In recent years, breast cancer surgery has trended toward de-escalation for axillary biopsy and surgery, supported by the SOUND and INSEMA trials. However, these studies typically focus on low-risk populations. Young patients carry a high risk for "occult metastasis" due to dense breast tissue and aggressive biological features. This study aimed to analyze the reliability of radiological data in predicting axillary metastasis and the appropriateness of de-escalation in patients under 45 years old with T1-T2 tumors.

Material and Methods: The data of 180 patients with pathological T1-T2 operated on between 2022 and 2025, were retrospectively analyzed. The success of preoperative imaging (USG, MRI, PET, MG) in predicting axillary metastasis—in conjunction with tumor biology—was compared with pathological results. Pearson Correlation Analysis, chi-square, and Fisher's Exact tests were utilized. The efficacy of imaging modalities was evaluated via sensitivity and specificity analyses. Statistical significance was defined as $p<0.05$.

Results: Tumor types were identified as Luminal B (51.1%), Luminal A (37.8%), triple negative (6.7%), and HER2-positive (4.4%). 84.9% of patients had Grade 2-3 tumors; a Ki-67 index of ³20% was found in 55.1%. Regarding tumor diameter, the correlation between imaging and pathology was weak ($r=0.264$, $p=0.001$). In axillary evaluation, pathologic metastasis (pN+) was detected in 33.3% of patients whom USG classified as "negative" (cN0). Within this "false negative" group, 23.4% had >2 positive lymph nodes (high nodal burden). The sensitivity for detecting metastasis was 41.5% for USG, 52.7% for MRI, and 43.4% for mammography. Even in the "triple negative" imaging group (where USG, MRI, and PET were all negative), the occult metastasis rate was found to be 29.6%.

Conclusion: This study demonstrates that in young T1-T2 patients, one in three axillae appearing radiologically N0 actually harbors metastatic lymph nodes. An occult metastatic burden of up to 30%—even with combined imaging (USG, MRI, PET)—and high biological aggressiveness suggest that aggressive de-escalation strategies may be oncologically risky in this population. While avoiding axillary surgery may be possible in selected cases, the decision for de-escalation in the young age group must be individualized.

Keywords: Breast cancer, axilla, de-escalation

[S-010]

Incidence of goblet cell carcinoma, treatment strategies, and follow-up outcomes in patients undergoing appendectomy for presumed acute appendicitis: A single-center experience

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Objective: Goblet cell carcinoma (GCC) of the appendix is a rare and aggressive tumor entity, and its optimal management remains controversial. It is characterized by a tendency for early peritoneal dissemination, and patients with peritoneal spread generally have a poor prognosis. This study aimed to evaluate the incidence of GCC in patients undergoing appendectomy for presumed acute appendicitis, as well as the post-diagnostic treatment approaches, recurrence patterns, and survival outcomes.

Material and Methods: Patients who underwent surgery with a preoperative diagnosis of acute appendicitis between 2018 and 2024 were retrospectively reviewed. Those with a histopathological diagnosis of GCC were included in the study. Patients were analyzed in terms of demographic, clinical, pathological, and follow-up characteristics.

Results: Among 1.574 patients who underwent appendectomy, GCC was identified in 4 patients (0.25%). The median age was 44 years (range: 30-60), and all patients were male. Histopathological examination of the appendectomy specimens revealed T3 disease in three patients and T4 disease in one patient. All four patients subsequently underwent right hemicolectomy. Lymph node metastasis was detected in the patient with T4 disease, whereas no residual malignancy was identified in the right hemicolectomy specimens of the remaining three patients. Three patients received adjuvant chemotherapy, while one patient with T3N0 disease and histological grade 1 tumor was managed with observation alone. During a median follow-up of 29 months (range: 13-52), no local recurrence, distant metastasis, or mortality was observed.

Conclusion: Although goblet cell carcinomas are generally described in the literature as having an aggressive clinical course, long-term survival can be achieved in incidentally detected cases with appropriate surgical management.

Keywords: Acute appendicitis, goblet cell carcinoma

[S-011]

Outcomes of elective hemicolectomy in patients aged 75 years and older: Does the risk increase?

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Objective: The incidence of colon cancer increases with age, and a substantial proportion of patients undergoing elective hemicolectomy belong to the elderly population. Reduced physiological reserve, increased comorbidity burden, and frailty in elderly patients may influence surgical outcomes. However, whether chronological age alone represents an independent surgical risk factor remains controversial. This study aimed to evaluate early postoperative clinical outcomes following elective hemicolectomy in patients aged 75 years and older and to compare them with those of younger patients.

Material and Methods: Patients who underwent elective right or left hemicolectomy at a single center between 2020 and 2025 were retrospectively analyzed. Patients were divided into two groups: <75 years and ≥75 years. Demographic characteristics, ASA score, comorbidity status, operative time, length of hospital stay (LOS), 30-day morbidity, and major complication rates (Clavien-Dindo ≥3) were compared between groups. Statistical analyses included chi-square test, Student's t-test or Mann-Whitney U test, and multivariable logistic regression. A p-value <0.05 was considered statistically significant.

Results: A total of 286 patients were analyzed, of whom 78 (27.3%) were in the ≥75 years group. The proportion of patients with ASA ≥3 was significantly higher in the elderly group (56.4% vs. 28.1%; p<0.001). Operative time was similar between groups (median 145 minutes vs. 138 minutes; p=0.312). The 30-day overall morbidity rate was higher in the ≥75 years group (38.5% vs. 24.2%; p=0.018). The rate of major complications (Clavien-Dindo ≥3) was 14.1% in the elderly group and 7.3% in the younger group (p=0.041). Length of hospital stay was longer in the elderly group (median 9 days vs. 7 days; p=0.009). In multivariable analysis, ASA score and presence of comorbidity were identified as independent risk factors, whereas age ≥75 years was not an independent predictor of major complications (OR 1.38; 95% CI 0.71-2.69; p=0.334) (Table 1).

Conclusion: Although morbidity rates appear higher in patients aged 75 years and older following elective hemicolectomy, chronological age alone was not identified as an independent risk factor in multivariable analysis. In surgical risk assessment, consideration of physiological reserve and comorbidity burden rather than age alone may be more appropriate.

Keywords: Colon cancer, geriatric surgery, hemicolectomy

Table 1. Baseline characteristics and postoperative outcomes according to age group

Variable	<75 years (n=208)	≥75 years (n=78)	p-value
Age (years, mean ± SD)	63.4±7.8	78.6±3.1	<0.001
Female sex (%)	46.2%	48.7%	0.721
ASA ≥3 (%)	28.1%	56.4%	<0.001
Presence of comorbidity (%)	41.8%	67.9%	0.002
Operative time (min, median)	138	145	0.312
30-day overall morbidity (%)	24.2%	38.5%	0.018
Major complication (Clavien-Dindo ≥3) (%)	7.3%	14.1%	0.041
Length of hospital stay (days, median)	7	9	0.009

[S-012]

The impact of histological subtype on clinical course in retroperitoneal adipose tumors: A comparison of dedifferentiated liposarcoma and benign adipose tumor

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Objective: Retroperitoneal adipose tumors are rare, and preoperative differentiation between benign and malignant lesions is often challenging. Because these tumors can remain asymptomatic for a long time within the wide retroperitoneal space, they are usually diagnosed after reaching a large size. Histological subtype, particularly the presence of dedifferentiated liposarcoma, has a significant impact on clinical course, local recurrence risk, and prognosis. In this study, two retroperitoneal adipose tumors with different biological behaviors were compared to highlight the impact of histological subtype on clinical outcomes.

Material and Methods: This study is a retrospective evaluation of two patients who presented with abdominal pain and were found to have retroperitoneal adipose tumors. The patients were assessed using contrast-enhanced computed tomography (CT), and open surgical resection was performed following a multidisciplinary board decision. Resected specimens were examined histopathologically and immunohistochemically. Postoperatively, the patients were followed up with clinical and radiological evaluations.

Results: In both cases, preoperative contrast-enhanced CT revealed retroperitoneal adipose tumors. In the first case, the mass measured 36×24×13 cm and showed a heterogeneous appearance with thick septations and solid nodular components. En-bloc surgical resection was performed, and histopathology revealed FNCLCC grade 3 dedifferentiated liposarcoma with positive margins. At six months, follow-up CT demonstrated local recurrence involving the left kidney, and the patient underwent reoperation with concomitant nephrectomy. In the second case, a 22×11 cm retroperitoneal mass with homogeneous fat density and thin septations was observed, and complete resection was achieved. Histopathology showed no cellular atypia or mitotic activity, consistent with a benign adipose neoplasm (lipoma), and surgical margins were negative. During one-year follow-up, no local recurrence or complications were detected. When the cases were compared, early local recurrence occurred in the dedifferentiated liposarcoma case, whereas no recurrence occurred in the benign case. Positive margins and aggressive histology adversely affected the clinical course. No perioperative mortality or major complications were observed.

Conclusion: Histological subtype is one of the most important factors determining the clinical course and risk of local recurrence in retroperitoneal adipose tumors. Dedifferentiated liposarcoma exhibits aggressive biological behavior with early local recurrence, whereas benign adipose tumors generally have a favorable postoperative prognosis. In malignant cases, achieving negative surgical margins and close long-term follow-up are critical for disease-free survival. Therefore, a histology-based surgical approach and regular surveillance are recommended in the management of retroperitoneal adipose tumors.

Keywords: Retroperitoneal tumor, liposarcoma, adipose neoplasia

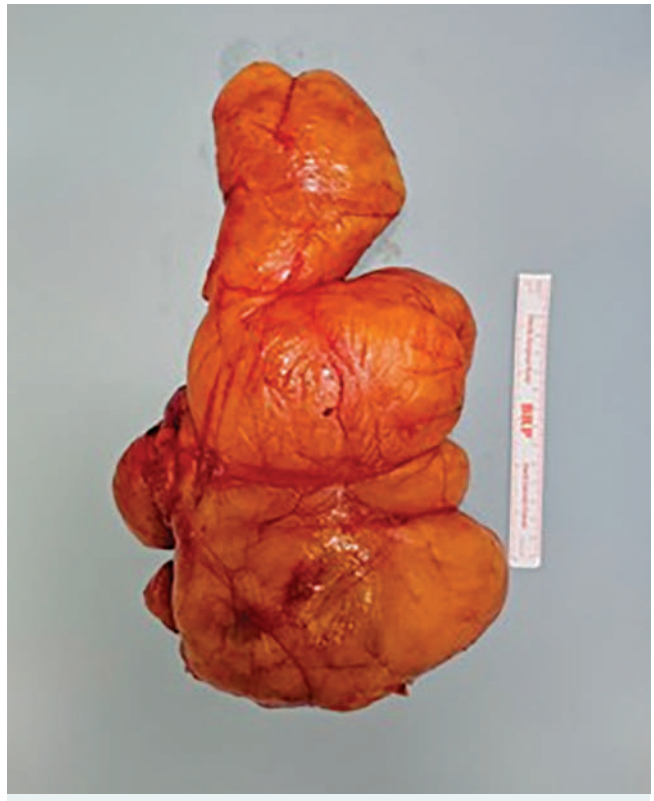


Figure 1. Adipose neoplasm.

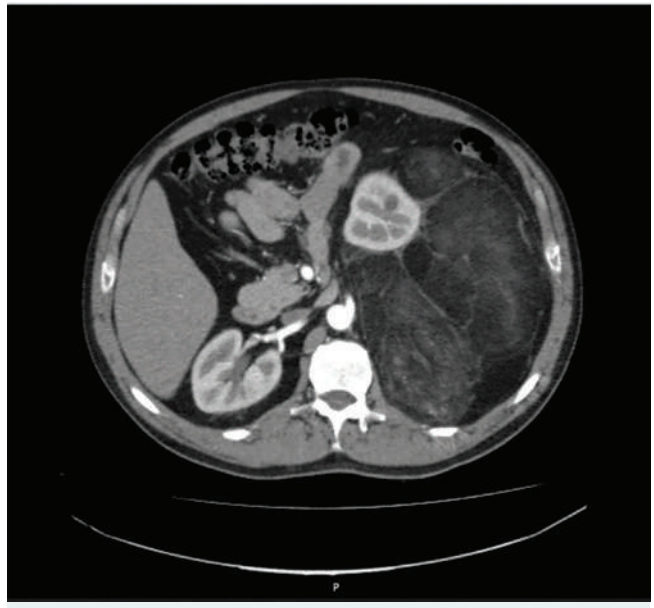


Figure 2. Dedifferentiated liposarcoma.

[S-013]

Predictive factors in determining postoperative complications after lower gastrointestinal surgery: A two-center study

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Objective: Malign or benign diseases of the lower gastrointestinal tract present an indication for emergency or elective surgery by general surgeons. In these diseases, correlation between the patient's etiological factors and laboratory findings, as well as the need for reoperation after surgery, early survival, and length of hospitalization, can be important indicators for predicting potential complications and mortality risks. In our study, we evaluated early postoperative blood test results in patients along with findings obtained during the patients' recovery period.

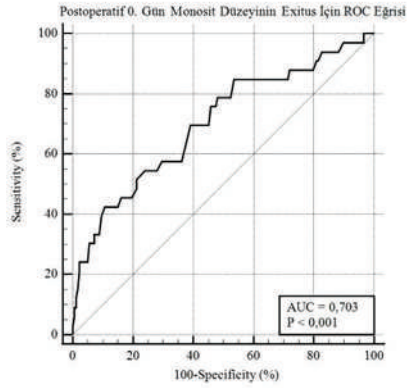
Material and Methods: Our study included emergency and elective lower gastrointestinal tract cases involving anastomosis that were operated on between 01.01.2023, and 01.10. 2025, at University of Health Sciences Türkiye, İzmir Bozyaka Training and at the General Surgery Clinic 1 of University of Health Sciences Türkiye, İzmir City Hospital. In our study, we investigating relationship between postoperative first day glucose, lymphocyte, monocyte, neutrophil counts in blood samples and postoperative hospitalization length, need for reoperation after surgery and mortality rate in the operated patients using with multivariate regression analysis, Mann-Whitney U test and ROC analysis.

Results: A total of 212 cases were included in our study; 77 were women and 135 were men. The average age of the cases included in our study was 56.2. The mortality rate in operated cases was %15, and the rate of patients requiring reoperation was %23. Postoperative hospital stay was significantly longer in patients who underwent reoperation (p<0.001). monocyte levels were found to be significantly higher in the group that did not undergo reoperation (p=0.018). In the multivariate logistic regression analysis, the odds ratio adjusted for age and gender (OR=0.89) shows that every 100-unit increase in monocyte levels on postoperative day 0 is associated with approximately an 11% decrease in the probability of reoperation, independent of age and gender. The fact that the entire confidence interval is below 1 supports the protective nature of this relationship. This finding suggests that monocyte levels may be an indicator of early postoperative immune response rather than a direct cause of reoperation, and could be considered a potential biomarker in clinical risk assessment. In patients who did not require reoperation a weak but statistically significant positive correlation was found between postoperative day 0 glucose level and postoperative length of stay (r=0.220; p=0.005).

Conclusion: In our study, we found that early immunomodulatory use after surgery was associated with complications and hospital stay durations in patients. More specific studies with more defined sample groups are needed on this topic.

Keywords: Lower gastrointestinal system, monocytes, predictability of complication risks, reoperation rate

EXİTUS İÇİN ÇOK DEĞİŞKENLİ LOJİSTİK REGRESTON ANALİZİ SONUCUNDA ANLAMLI OLARAK BELİRLENEN BELİRLENEN POSTOPERATİF 0. GÜN MONOSİT DÜZEYİ İÇİN ROC ANALİZİ



Parametre	Değer
Örneklem büyüklüğü (n)	212
Ex (n, %)	33 (%15,57)
AUC	0,703
%95 Güven Aralığı	0,59 – 0,81
p-değeri (AUC ≠ 0,5)	<0,001
Optimal cut-off (Youden)	≤ 360
Duyarlılık (%)	42,42
Özgüllük (%)	89,39

Figure 1.

EXİTUS İÇİN TEK DEĞİŞKENLİ ANALİZ SONUÇLARI

	EXITUS		
	EX (n=33) ORT ± SS Q1 Q2 Q3	YAŞIYOR (n=179) ORT ± SS Q1 Q2 Q3	P DEĞERİ*
YAŞ	66,45 ± 14,99 55,00 68,00 80,00	62,13 ± 13,85 54,50 65,00 72,00	0,119
POSTOP YATIŞ SÜRESİ	28,27 ± 49,55 8,00 15,00 32,00	10,86 ± 10,77 6,00 7,00 11,50	0,005
POSTOP 0 LENFOSIT	840,30 ± 513,81 450,00 730,00 1040,00	982,91 ± 600,33 595,00 820,00 1230,00	0,196
POSTOP 0 MONOSIT	490,61 ± 309,90 280,00 460,00 620,00	706,98 ± 304,91 490,00 670,00 895,00	<0,001
POSTOP 0 NOTROFIL	8468,79 ± 5398,98 5520,00 7430,00 10680,00	10629,20 ± 5623,57 7955,00 9830,00 12470,00	0,005
POSTOP 0 GLIKOZ	205,12 ± 74,19 146,00 187,00 250,00	182,23 ± 131,97 136,00 160,00 201,50	0,017

ORT: Ortalama, SS: Standart Sapma, Q1: 25. Persantil, Q2: Medyan, Q3: 75. Persantil
*: Mann-Whitney U Test

Figure 2.

REOPERASYON İHTİYACI İÇİN TEK DEĞİŞKENLİ ANALİZ SONUÇLARI

	REOPERASYON İHTİYACI		
	VAR (n=51) ORT ± SS Q1 Q2 Q3	YOK (n=161) ORT ± SS Q1 Q2 Q3	P DEĞERİ*
YAŞ	62,98 ± 14,23 53,00 66,00 74,00	62,75 ± 14,09 55,00 65,00 73,00	0,972
POSTOP YATIŞ SÜRESİ	27,37 ± 40,60 10,00 16,00 29,50	9,20 ± 8,83 6,00 7,00 9,00	<0,001
POSTOP 0 LENFOSIT	955,10 ± 675,49 570,00 780,00 1095,00	962,48 ± 560,97 600,00 820,00 1230,00	0,558
POSTOP 0 MONOSIT	601,96 ± 347,91 350,00 530,00 845,00	695,90 ± 301,38 490,00 670,00 870,00	0,018
POSTOP 0 NOTROFIL	10720,00 ± 7225,28 6495,00 9030,00 14230,00	10157,62 ± 5043,25 7490,00 9520,00 12010,00	0,944
POSTOP 0 GLIKOZ	183,55 ± 64,17 145,00 170,00 210,00	186,51 ± 138,85 137,00 160,00 209,00	0,507

ORT: Ortalama, SS: Standart Sapma, Q1: 25. Persantil, Q2: Medyan, Q3: 75. Persantil
*: Mann-Whitney U Test

Figure 3.

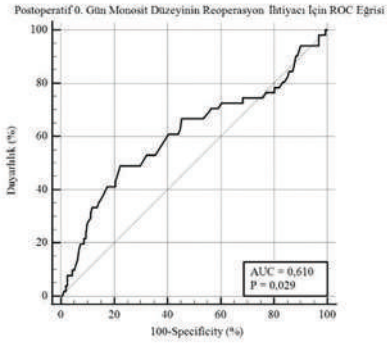
REOPERASYON İHTİYACI İÇİN ÇOK DEĞİŞKENLİ LOJİSTİK REGRESTON ANALİZİ

	OR	%95 GA	P DEĞERİ
Postop 0 monosit (100 birim)	0,89	0,80 – 0,99	0,038
Yaş (yıl)	1,00	0,98 – 1,03	0,753
Cinsiyet (Erkek)	1,59	0,79 – 3,22	0,196

OR: Odds Ratio, GA: Güven Aralığı

Figure 4.

REOPERASYON İHTİYACI İÇİN ÇOK DEĞİŞKENLİ LOJİSTİK REGRESTON ANALİZİ SONUCUNDA ANLAMLI OLARAK BELİRLENEN BELİRLENEN POSTOPERATİF 0. GÜN MONOSİT DÜZEYİ İÇİN ROC ANALİZİ



Parametre	Değer
Örneklem büyüklüğü (n)	212
Reoperasyon (n, %)	51 (%24,1)
AUC	0,61
%95 Güven Aralığı	0,51 – 0,71
p-değeri (AUC ≠ 0,5)	0,029
Optimal cut-off (Youden)	≤ 470
Duyarlılık (%)	49,0
Özgüllük (%)	77,6

Figure 5.

[S-014]

Retrospective analysis of cytoreductive surgery and HIPEC cases performed at our center over the last two years

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Objective: Peritoneal surface malignancies are associated with poor prognosis due to advanced-stage diagnosis and limited treatment options. Cytoreductive surgery (CRS), aiming at complete removal of macroscopic tumor burden, followed by hyperthermic intraperitoneal chemotherapy (HIPEC), has increasingly been accepted as a multimodal treatment approach that improves survival in selected patient populations. However, due to the aggressive nature of this treatment strategy and its associated risk of high morbidity, careful patient selection and performance in experienced centers are essential. This study aimed to evaluate the early surgical and oncological outcomes of patients who underwent CRS+HIPEC at our center over the last two years.

Material and Methods: Patients who underwent CRS+HIPEC at our center between January 4, 2024 and December 17, 2025 were retrospectively analyzed. Data regarding age, type of malignancy, history of neoadjuvant and adjuvant therapy, presence of extra-abdominal metastasis, length of hospital stay, perioperative and postoperative complications, need for reoperation, recurrence status, and overall survival were collected and analyzed.

Results: A total of 20 patients were included in the study. The mean age was 60.2 years. Neoadjuvant therapy was administered in 65% of patients (n=13), while 35% (n=7) did not receive neoadjuvant treatment. Extra-abdominal metastasis was absent in 95% of patients (n=19); one patient (5%) had lung metastasis. The perioperative complication rate was 30% (n=6), whereas no perioperative complications were observed in 70% of patients (n=14). Postoperative complications occurred in 35% of patients (n=7), while 65% (n=13) had no postoperative complications. The most common postoperative complications were pulmonary complications (10%, n=2). Other complications included ileus (5%, n=1), anastomotic leakage (5%, n=1), bleeding (5%, n=1), hyperbilirubinemia (5%, n=1), and ureteral leakage (5%, n=1). Reoperation was required in 20% of patients (n=4), whereas 80% (n=16) did not require additional surgical intervention. During follow-up, recurrence was observed in 10% of patients (n=2), while 90% (n=18) continued regular follow-up.

Conclusion: The early morbidity and mortality rates of patients undergoing CRS+HIPEC at our center are consistent with and comparable to those reported in the literature. With appropriate patient selection and widespread use of adjuvant therapies, CRS+HIPEC appears to be a safe and effective treatment option. Further evaluation of oncological outcomes requires longer follow-up periods and larger patient cohorts.

Keywords: Cytoreductive surgery, HIPEC, peritoneal surface malignancies, retrospective analysis, surgical morbidity



Figure 1. Peroperative images.

[S-015]

Evaluation of clinical and pathological characteristics in patients undergoing intraabdominal mass excision: A single-center retrospective analysis

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Objective: Intraabdominal masses encompass a broad histopathological spectrum and may include both benign and malignant pathologies. The clinical course, therapeutic approach, and prognosis largely depend on the underlying pathology. Surgical excision constitutes the primary approach for both diagnostic confirmation and curative treatment.The aim of this study is to evaluate the demographic characteristics, pathological distribution, and postoperative clinical outcomes of patients who underwent intraabdominal mass excision.

Material and Methods: This single-center retrospective study included patients who underwent surgical excision due to an intraabdominal mass. Demographic characteristics, radiological and macroscopic features of the mass, histopathological findings, surgical margin status, postoperative morbidity and mortality, and length of hospital stay were analyzed. Postoperative complications were reported as an overall morbidity rate without stratification. The distribution of clinicopathological parameters was presented using descriptive statistics. Continuous variables were expressed as median (minimum-maximum), and categorical variables as number (%). Comparisons between groups were performed using the Mann-Whitney U test and Fisher's exact test. A p-value <0.05 was considered statistically significant.

Results: A total of 35 patients were included in the study. Of the patients, 62.9% were female (n=22) and 37.1% were male (n=13), with a median age of 58 years (28-86). Eighty-five point seven percent of the lesions were solid in nature. Histopathological evaluation revealed that 65.7% of the cases were malignant (n=23), whereas 34.3% were benign (n=12). The median age was 48 years in the benign group and 60 years in the malignant group (p=0.082). The median length of hospital stay was 9 days in the benign group and 10 days in the malignant group, with no statistically significant difference between the groups (p=0.328). The postoperative morbidity rate was 8.3% in the benign group and 30.4% in the malignant group (p=0.216). Mortality was observed only in the malignant group (4.3%), and no statistically significant difference was detected between the groups (p=1.000).

Conclusion: In this series, malignant pathologies were found to predominate among patients who underwent intraabdominal mass excision. Postoperative mortality was observed at a low rate, and no statistically significant differences were identified between the benign and malignant groups in terms of length of hospital stay or mortality.Our study highlights the importance of jointly considering patient- and tumor-related characteristics in the evaluation of clinical outcomes associated with intraabdominal mass surgery.

Keyword: Intraabdominal mass

[S-016]

Clavien-Dindo complication analysis in esophageal cancer surgery: A single-center experience from Türkiye participating in the ESO-DATA registry

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Objective: Esophageal cancer surgery is associated with high morbidity rates, and standardized reporting of postoperative complications is essential for meaningful comparison of clinical outcomes. This study aimed to evaluate postoperative complications following esophageal cancer surgery in our center using the Clavien-Dindo classification and to assess compatibility with the international ESO-DATA registry standards.

Material and Methods: Patients who underwent surgery for esophageal cancer at our institution were retrospectively reviewed. Demographic characteristics, surgical approaches, and postoperative complications were recorded. Complications were graded according to the Clavien-Dindo classification. Outcomes were analyzed in accordance with the standardized complication definitions recommended by the ESO-DATA international registry system.

Results: A total of 17 patients who underwent surgery for esophageal cancer were included. The mean age was approximately 58 years. The majority of procedures were performed using minimally invasive or hybrid approaches.The overall postoperative complication rate was approximately 29%. According to the Clavien-Dindo classification, Grade I-II complications occurred in 3 patients, and Grade III complications were observed in 2 patients. No Grade IV complications were recorded, and there was no postoperative mortality. Patients with major complications were successfully managed with interventional procedures. Our center is the first and currently the only active institution in Türkiye contributing data to the ESO-DATA international esophageal surgery registry, and all complications are recorded in accordance with international standards.

Conclusion: Standardized reporting of complications using validated classification systems allows meaningful comparison of institutional outcomes with international data. The early postoperative results from our center demonstrate acceptable complication rates, and integration into the ESO-DATA registry contributes significantly to quality improvement and benchmarking in esophageal cancer surgery.

Keywords: Esodata, esaphageal cancer, Clavien-Dindo

[S-017]

Does the anatomical siting of the splenic flexure predict postoperative morbidity in rectal cancer surgery? A retrospective analysis

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Objective: Splenic flexure mobilization (SFM) is a technically demanding step in rectal cancer surgery. This study aims to investigate the predictive value of the preoperative radiological anatomical siting of the splenic flexure on postoperative morbidity and surgical outcomes.

Material and Methods: A total of 105 patients who underwent elective curative resection for rectal cancer with routine splenic flexure mobilization were retrospectively analyzed. Preoperative CT scans were used to evaluate the vertebral level of the flexure and specific linear distances, including the distance from the vertebral center to the anterior abdominal wall (CVBI) and to the lateral colonic wall (CVBL). The vertebral level was evaluated as an additional parameter to these distances. The anatomical position of the splenic flexure was evaluated through the CVBI/CVBL ratio.

Results: Increased anteroposterior abdominal depth (CVBI) was a significant predictor of postoperative morbidity (p=0.002), and male gender was an independent risk factor (OR =5.91, p=0.03). Caudally positioned flexures (T12 and below) showed a borderline significant association with lower morbidity (p=0.07). Patients in the low ratio group had a significantly higher lymph node yield compared to those in the high ratio group (17.96±7.8 vs. 12.73±7.9, p=0.022). No significant differences were observed regarding anastomotic leakage or recurrence rates (p>0.05).

Conclusion: The anatomical position of the splenic flexure may affect surgical quality. Increased abdominal depth and a higher flexure location may be associated with surgical morbidity, while anatomical accessibility influences the technical success of lymphadenectomy.

Keywords: Anatomic landmarks, postoperative complications, rectal neoplasms, splenic flexure mobilization, tomography, X-ray computed

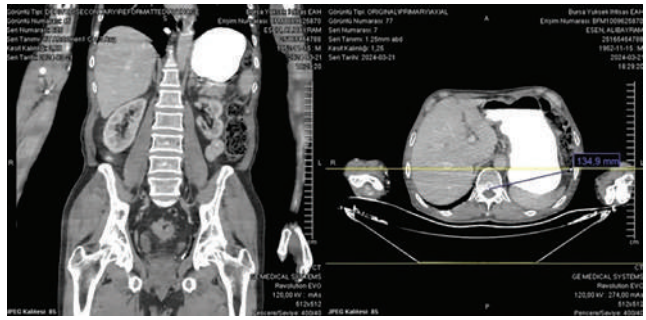


Figure 1. Measurement of distance to lateral wall. Axial CT section showing the linear measurement from the center of the vertebral body to the most lateral aspect of the splenic flexure.

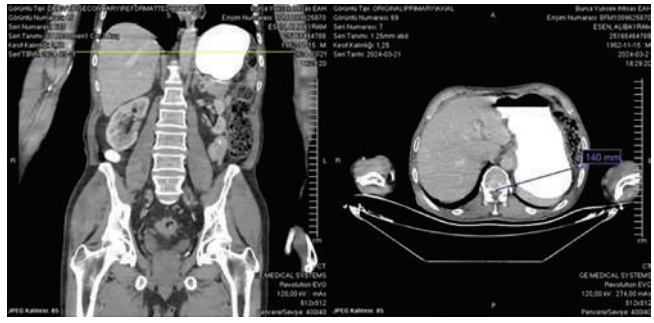


Figure 2. Measurement of distance to inner wall. Axial CT section illustrating the measurement from the center of the vertebral body to the inner abdominal wall, following the trajectory towards the splenic flexure.

Table 1. Comparison of demographic, clinical, and pathological characteristics according to the extreme quartiles (Q1 vs. Q4) of the CVBI/CVBL ratio

	n	Low ratio	n	High ratio	p
Age (years)	26	67.5±12.1	26	64.3±12.9	0.363
Gender					
Male/female	26	20 (76.9%)/6 (23.1%)	26	17 (65.4%)/9 (34.6%)	0.358
BMI (kg/m²)	24	25.3±3.1	20	26.3±4.2	0.392
Operation time (min)	26	280 (150-395)	26	245 (180-420)	0.267
Lymph node yield	25	17.96±7.8	26	12.73±7.9	0.022
General morbidity	26	5 (19.2%)	26	6 (23.1%)	0.734
Anastomotic leak	26	0	26	1 (3.8%)	1.000
Readmission	26	3 (11.5%)	26	4 (15.4%)	0.685
Recurrence (yes)	26	7 (26.9%)	26	8 (30.8%)	0.760

Table 2. Comparison of demographic, clinical, and radiological characteristics according to morbidity status

	n	Morbidity (+)	n	Morbidity (-)	p
Demographic & clinical data					
Age (years)	28	69.1±10.2	77	65.2±12.8	0.14
Gender					
Male/female	28	26 (92.9%)/2 (7.1%)	77	48 (62.3%)/29 (37.7%)	0.002
BMI (kg/m²)	20	25.4 (19-31.2)	65	24.3 (19.5-37.7)	0.52
ASA score					
ASA II/ASA III	27	6 (21.4%)/21 (75%)	77	10 (13%)/67 (87%)	0.35
Surgical & pathological data					
Neoadjuvant therapy	28	12 (42.9%)	77	25 (32.5%)	0.32
Tumor localization					
Upper rectum	28	15 (53.6%)	77	43 (55.8%)	0.38
Mid rectum		4 (14.3%)		18 (23.4%)	
Lower rectum		9 (32.1%)		16 (20.8%)	
Surgical approach					
Laparoscopic/open	28	12 (42.9%)/16 (57.1%)	77	43 (55.8%)/34 (44.2%)	0.27
Ileostomy	28	16 (57.1%)	77	38 (49.4%)	0.48
Operation time (min)	28	247.5 (130-420)	76	255 (150-470)	0.68
Tumour size (mm)	27	43.7±20.3	71	41.4±17.9	0.59
Lymph node yield	28	14.9±7.6	74	15.2±7.6	0.87
Radiological measurements					
Distance to ant. abd. wall (mm)	28	162.9 (130.8-193)	77	150.7 (114.2-215)	0.002
Distance to lat. abd. wall (mm)	28	147±13.8	77	138.7±19.3	0.039
Splenic flexure height					
Caudal (low)	28	4 (14.3%)	77	29 (37.7%)	0.07
Middle		15 (53.6%)		29 (37.7%)	
Cranial (high)		9 (32.1%)		19 (24.7%)	
CVBI/CVBL ratio	28	1.11 (1.04-1.37)	77	1.09 (1.01-1.40)	0.43

[S-018]

Clinical contribution of axillary surgery in postmenopausal luminal a breast cancer: A single-center experience based on the SOUND study

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Objective: Axillary management in early-stage, low-risk breast cancer has shifted toward surgical de-escalation. Recent trials, particularly SOUND, question routine axillary surgery in clinically node-negative patients. This study evaluates axillary metastasis rates and nodal burden against SOUND thresholds.

Material and Methods: This retrospective, single-center descriptive study included patients who underwent surgery for breast cancer between 2017-2024. Ethical approval was obtained from the Eskişehir City Hospital Scientific Research Ethics Committee. A total of 49 postmenopausal patients with T1 tumors (<20 mm), Luminal A subtype (ER/PR (+), HER2 (-), low Ki-67), and clinically negative axilla were included. Demographic, tumor-related, and pathological data were analyzed. Outcomes of interest were the presence of axillary metastasis and metastatic axillary nodal burden, classified as low (<4 positive LN) or high (≥4 positive LN). Axillary metastasis rates and nodal burden were compared with SOUND trial data using a one-sample binomial test. Associations between axillary metastasis and clinicopathological variables were evaluated using Fisher's exact test.

Results: The mean age of the patients was 63.8±7.1 years (range: 55-88), and the mean tumor size was 1.5±0.4 cm (range: 0.1-2.0). Axillary metastasis was detected in 6 patients (12.2%). Importantly, none of the patients had four or more metastatic axillary lymph nodes, indicating the absence of clinically relevant high nodal burden. The axillary metastasis rate in the entire cohort (12.2%) and among patients undergoing sentinel lymph node biopsy (11.1%) was statistically comparable to the rate reported in the SOUND trial (13.7; p>0.05). In contrast, the frequency of high metastatic nodal burden was significantly lower than that reported in the SOUND study (0.0% vs. 0.6%, p<0.001). Axillary metastasis was significantly more frequent in patients with Ki-67 <10% compared with those with Ki-67 ≥10% (26.3% vs. 3.3%, p=0.027). No significant association was observed between axillary metastasis and age or tumor size (p>0.05).

Conclusion: In postmenopausal patients with low-risk, Luminal A, early-stage breast cancer, axillary metastasis rates were consistent with SOUND trial thresholds, and no clinically significant high nodal burden was identified. These findings provide real-world evidence supporting the omission of sentinel lymph node biopsy and potentially all axillary surgical procedures in carefully selected patients. However, given the retrospective design, single-center setting, and limited sample size, larger multicenter prospective studies are warranted to further define patient selection criteria for safe axillary surgery de-escalation.

Keywords: Early breast cancer, SOUND trial, axillary surgery

[S-019]

Predictors of recurrence in postpartum extra-abdominal desmoid tumors

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Objective: Desmoid-type fibromatosis (DTF) in post-partum women represents a distinct clinical entity. While β-catenin immunohistochemistry is routinely performed, its prognostic value in this hormonally-influenced subgroup remains unclear. To evaluate whether β-catenin expression, Ki-67 proliferation index, and mitotic activity predict local recurrence in post-partum extra-abdominal DTF localized to the rectus abdominis muscle.

Material and Methods: This retrospective two-center study included 31 female patients (median age 41 years, range 32-52) with histologically confirmed post-partum DTF diagnosed between 2002-2024. All tumors were located in the rectus abdominis muscle (87.1%) or extra-abdominal fascial structures, presenting within 24 months of delivery. Immunohistochemical assessment included β-catenin nuclear staining, Ki-67 labeling index, and mitotic count per 10 high-power fields. Surgical margin status was categorized as R0 (clear) or R1/R2 (positive). Fisher's exact test evaluated associations with local recurrence. Median follow-up was 15 years (range 4-27).

Results: β-catenin nuclear positivity was present in 87.1% of patients. During follow-up, local recurrence occurred in 7 of 31 patients (22.6%) at median 13 months. In this limited cohort, univariate analysis revealed two factors significantly associated with recurrence: Surgical margin status (R1/R2 vs. R0: 77.8% vs. 0% recurrence, p<0.001) and mitotic activity (≥1 vs. 0 mitoses per 10 HPF: 70.0% vs. 0% recurrence, p<0.001). Conversely, β-catenin nuclear positivity (p=1.000) and Ki-67 proliferation index (p=0.631) showed no significant association with recurrence in this series.

Conclusion: In this cohort of 31 post-partum extra-abdominal DTF patients, surgical margin status and mitotic activity—but not molecular markers like β-catenin or Ki-67—were significantly associated with recurrence risk. These hypothesis-generating findings suggest a potential two-factor prognostic model specific to hormonally-mediated DTF and raise questions about the universal applicability of biomarkers from heterogeneous populations. Prospective validation in larger independent cohorts is essential before clinical implementation.

Keywords: Desmoid-type fibromatosis, Ki-67, postpartum tumor, rectus abdominis, recurrence, β-catenin

Table 1. Relationship between β-catenin expression and recurrence

β-catenin	Recurrence (+)	Recurrence (–)	Total
Negative	1	3	4
Positive	6	21	27
Total	7	24	31

Note: Values indicate the number of cases.

Table 2. Relationship between Ki-67 index and recurrence

Ki-67	Recurrence (+)	Recurrence (–)	Total
<2%	1	15	16
≥%2	5	4	9
Unknown	1	5	6
Total	7	24	31

Note: Ki-67 was categorized as <2% and ≥2%.

Table 3. Relationship between surgical margin status and recurrence

Surgical margin	Recurrence (+)	Recurrence (–)	Total
R0	3	19	22
R1	3	1	4
R2/uncertain	1	4	5
Total	7	24	31

R0: Negative surgical margin; R1: Microscopically positive margin; R2: Macroscopic residual disease; "Indeterminate" = margin not clearly defined or missing in the report.

[S-020]

The impact of neoadjuvant chemoradiotherapy and surgical technique on pathological and early oncological outcomes in rectal cancer

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Objective: This study aims to evaluate the impact of neoadjuvant chemoradiotherapy (CRT) and different surgical techniques on pathological and early oncological outcomes in the treatment of rectal cancer. The effects of appropriate surgical procedures and neoadjuvant therapies on survival rates, recurrence rates, and pathological responses in rectal cancer treatment were investigated.

Material and Methods: The study was conducted on 158 patients who underwent surgery for rectal cancer at Akdeniz University Faculty of Medicine between January 2019 and December 2023. The study was designed retrospectively, and the patients' demographic characteristics, surgical procedures, stages, neoadjuvant treatment status, and pathological findings were evaluated. Factors affecting survival and recurrence rates were analyzed using statistical methods.

Results: The mean age of the patients was 63.1±12.4 years, with 63,3% being male. Low anterior resection was performed to 113 (70.1%) patients, while abdominoperineal resection was performed to 45 (28.5%) patients. Open surgery was applied to 78 (49.3%) patients, laparoscopic surgery to 52 (33%), and robotic surgery to 28 (17.7%) patients. A total of 113 (71.5%) patients received neoadjuvant chemoradiotherapy (CRT). The complete pathological response rate in patients who received CRT was 18.6%, with a decrease in the average number of lymph nodes identified in the specimens. The overall survival time was 47.3±2.2 months, and the survival rate was 78.8% in the CRT group compared to 60% in the non-CRT group (p=0.015). The recurrence rate was 20%. Lymphovascular invasion (LVI), perineural invasion (PNI), positive lymph node status, advanced stage, and recurrence were identified as poor prognostic factors.

Conclusion: Neoadjuvant CRT increases survival rates in the treatment of rectal cancer. Although open surgery resulted in the removal of more lymph nodes compared to laparoscopic and robotic surgery, no significant difference was observed in overall survival between surgical techniques. While no association was found between the number of lymph nodes removed (whether more or less than 12) and survival, lymph node positivity, complete pathological response, LVI and PNI, and tumor stage were identified as significant prognostic factors for survival and recurrence.

Keywords: Rectal cancer, neoadjuvant chemoradiotherapy, robotic surgery, survival, lymph node status

[S-021]

Gastrointestinal stromal tumors; a 23-year follow up

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Objective: Gastrointestinal stromal tumors (GISTs) are rare neoplasms arising from precursors of the interstitial cells of Cajal in the muscular layer of the gastrointestinal tract, driven primarily by mutations in the c-KIT proto-oncogene. Historically, smooth muscle tumors were classified as leiomyomas when benign and as leiomyosarcomas when malignant; however, advances in immunohistochemistry have led to the reclassification of tumors harboring c-KIT mutations as a distinct entity, namely GIST.

Material and Methods: Between 2002 and 2025, 44 patients with GIST were followed at Taksim Gaziosmanpaşa Training and Research Hospital and University of Health Sciences Türkiye, Gaziosmanpaşa Training and Research Hospital. The mean follow-up duration was 3.5 years (range: 5 months-13 years). Patients were stratified according to the Fletcher risk classification. High-risk patients were followed every 3-6 months during the first 3 years and every 6 months for the subsequent 5 years using ultrasonography or abdominal computed tomography. Statistical analyses were performed using SPSS version 22.0, and survival analyses were conducted using the Kaplan-Meier method.

Results: The male-to-female ratio was 5:4, and the mean age was 60.4 years (range: 29-82). Tumor localization was gastric in 62.9%, extra-intestinal in 14.8%, small intestine in 7.4%, esophagus in 7.4%, and rectum in 7.4%. According to the Fletcher classification, 14 patients (31.8%) were very low risk, 15 (34.1%) low risk, 7 (15.9%) intermediate risk, and 8 (18.1%) high risk. The mean Ki-67 index was 15.6% (range: 7-25) in stage IV disease and 9.6% (range: 2-25) in intermediate- and high-risk groups. The mean tumor diameter was 5.45 cm (range: 0.5-18 cm); large tumors were extra-intestinally located with a mean diameter of 13.2 cm (range: 8-18 cm). Histologically, 26 tumors (59%) were spindle cell, 11 (25%) epithelioid, and 7 (15.9%) mixed type. Recurrence occurred in four patients (three times in one patient with retroperitoneal localization), and one patient died due to local complications of a large gastric GIST.

Conclusion: In our cohort, GISTs were most frequently localized in the stomach, and larger tumor size, higher mitotic index, and elevated Ki-67 values were associated with intermediate-, high-risk, and metastatic disease.

Keywords: Gastrointestinal stromal tumors, Cajal cells, Fletcher grading, Ki 67, mitotic index

[S-022]

The clinical value of total omentectomy in gastric cancer: Comparison of patients receiving and not receiving neoadjuvant chemotherapy

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Objective: Total omentectomy is widely performed as part of standard surgical resection in gastric cancer surgery. However, the frequency of omental involvement and the oncological contribution of total omentectomy, especially in patients receiving neoadjuvant chemotherapy (NAKT), have not been clearly established. This study aimed to compare the frequency of omental involvement and clinical outcomes in gastric cancer patients who did and did not receive NACT.

Material and Methods: Patients who underwent surgical treatment for gastric adenocarcinoma between January 2018 and December 2023 were retrospectively reviewed. All patients underwent total omentectomy along with curative gastrectomy. Patients were divided into two groups: Those who received neoadjuvant chemotherapy (NAKT+) and those who did not (NAKT−). Demographic data, pathological stage, omental involvement status, and clinical outcomes were compared.

Results: A total of 94 patients were included in the study. Forty-six patients (48.9%) received NAKT, while 48 (51.1%) did not. The mean age was 60.8±10.9 years in the NAKT group and 67.1±11.4 years in the non-NAKT group. Omental involvement was detected in 2 patients (4.3%) in the NAKT group and in 9 patients (18.8%) in the non-NAKT group. Although the rate of omental involvement was lower in patients receiving NAKT, this difference was not statistically significant (Fisher's exact test, p=0.062). The relative risk was calculated as 0.15 (95% CI: 0.03-0.73). A lower rate of more advanced pathological stage was observed in patients receiving NAKT, but these differences did not reach statistical significance. No significant difference was found between the groups in terms of early postoperative morbidity.

Conclusion: In this study, a lower rate of omental involvement was observed in gastric cancer patients receiving neoadjuvant chemotherapy, but this difference was not statistically significant. The findings suggest that neoadjuvant therapy may reduce the burden of omental disease; however, larger prospective studies are needed to draw definitive conclusions regarding the necessity of total omentectomy.

Keywords: Gastric cancer, neoadjuvant chemotherapy, omentum

[S-023]

Staged versus simultaneous resection for synchronous colorectal liver metastases: Long-term outcomes and prognostic factors

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Objective: The optimal sequence of surgical management remains controversial. Traditionally, a staged colon-first approach has been accepted as the standard strategy. Increasing evidence suggests that survival is determined more by tumor biology and hepatic tumor burden than by the sequence of surgery. Comparative studies have reported that, in selected patient groups, simultaneous resection yields oncological outcomes similar to those of staged procedures.

Material and Methods: This study included 52 patients who underwent hepatic resection for synchron CRLM at Karadeniz Technical University Hospital between 2008-2022. Surgical resectability criteria were based on the principles of preservation of major hepatic vascular and biliary anatomical structures, ensuring adequate FLR capacity, and controlled extrahepatic disease. Descriptive statistics were calculated and reported separately for synchronous and metachronous CRLM groups.

Results: A total of fifty-two patients diagnosed with resectable synchronous CRLM were included in the study. Patients were divided into two groups according to the surgical strategy: The staged resection group (n=32) underwent sequential operations, while the simultaneous resection group (n=20) underwent both colorectal and hepatic resection in a single session. No significant differences were found between the two groups. In both groups, the dominant metastatic lobe was identified as the right lobe. No significant difference was found between the two groups in terms of CRC pathology. In both groups, T3 tumors were observed to be predominant. In the comparison of the two groups, surgical site infection was observed more frequently in the simultaneous group, and the length of hospital stay was also significantly longer in this group. No mortality was observed in either group. Although the staged approach was found to be statistically superior in univariate analyses, it wasn't significant in multivariate analyses. The presence of more than four metastatic lesions and a primary tumor originating from the rectum are independently associated with poorer OS. Although large metastasis size (>5 cm) was a poor prognostic factor in univariate analysis, its independent effect could not be demonstrated in multivariate analysis.

Conclusion: Tumor burden and primary tumor location are the most important determinants of long-term survival after hepatectomy for colorectal cancer liver metastases.Lymph node positivity is an important prognostic factor that negatively affects both DFS and OS,and the risk increases significantly with advancing stage. Simultaneous surgery is associated with a higher rate of surgical site infection and longer hospital stay; it should be selected carefully,especially in cases involving major hepatectomy and rectal surgery. It has been shown that the surgical strategy shouldn't be uniform but rather individualized according to patient characteristics. Biology-driven patient selection and personalized treatment timing are critical for improving long-term outcomes in CRLM; however, the study design and sample size limits the generalizability of the results.

Keywords: Colorectal cancer, liver metastasis

Table 1. Univariate analysis disease-free and overall survival

	DFS						OS				
	n	1 Y (%)	3 Y (%)	5 Y (%)	Median (months, CI 95%	Log rank p-value	1 Y (%)	3 Y (%)	5 Y (%)	Median (months, CI 95%)	Log rank p-value
Timing of surgery											
Staged	32	55	22	3	12.5 (7-16)	0.039	94	47	19	35 (26-50)	**0.059**
Simultaneus	20	20	5	4	4 (I 3-6.5)		60	25	10	17 (8-33)	
Age											
<65	45	40	14	5	8 (4-14)	0.793	78	35	16	25 (19-36)	0.569
>65	7	42	28	0	8 (5-43)		100	57	14	50 (28-54)	
Sex											
Female	15	54	14	5	13 (4-22)	0.257	74	40	20	25 (19-51)	0.521
Male	37	36	16	6	7 (4-12)		84	37	35	31 (20-47)	
CHT before liver surgery											
Yes	31	36	10	0	8 (4-16)	0.884	78	33	10	28 (20-36)	0.459
No	21	48	24	10	5 (I 3-16)		81	33	16	36 (19-53)	
CHT after liver surgery											
Yes	37	40	10	6	8 (4-16)	0.884	86	45	14	31 (24-43)	0.896
No	15	40	20	2	5 (3-16)		67	40	20	22 (8-51)	
Primary tumor											
Colon	24	45	16	4	8 (I 4-17)	0.150	78	50	28	41.5 (21-53)	**0.018**
Rectum	20	30	5	5	5 (I 4-11.5)		75	20	5	19.5 (13.5-29)	
Positive nodes											
0	12	84	33	8	17 (8-34)		100	58	29	47 (19-63)	
1-3	12	25	0	0	5 (3.5-10)	0.034	92	25	9	26 (19-41)	0.100
4+	14	21	5	0	4 (2-11)		47	16	7	9 (6-24)	
Liver characteristic											
Type of surgery											
Major	16	32	6	0	5 (3-19)	0.167	56	18	6	19.5 (7-35)	**0.018**
Minor	36	44	20	5	8 (4-16)		92	48	19	35 (24-51)	
Resected lesions											
1	17	42	30	4	5 (3-43)		83	53	24	49 (18-55)	
2-3	25	52	12	4	12 (7.0-17)	0.020	95	44	16	36 (24-47)	**<0.005**
4+	10	10	0	0	4.5 (2.5-8)		40	0	0	8.5 (6-22)	
Max metastasis size (cm)											
<5	35	45	22	5	8 (5-17)	0.009	88	49	20	36 (25-50)	**0.011**
>5	17	30	0	0	5 (3-13)		65	18	5	19 (8-31)	
Margin status											
Negative	43	47	18	4	11 (5-16)	0.214	87	45	18	35 (22-47)	0.916
Positive	7	15	0	0	4 (2-5)		35	15	15	31 (5-34)	
Annexin V											
Low	38	6	2	2	8 (4-16)	0.500	9	7	4	29 (22-39)	0.170
High	14	15	6	0	7.5 (3-16)		33	15	4	29 (7-63)	

Table 2. Perioperative results of liver metastasis resections				
	Staged (n=37) (65%)	Simultaneus (n=20 (35%)	Overall (n=57)	p-value
Type of surgery (n,%)				
Major	8 (21.6)	8 (40)	16 (29)	0.244
Minor	29 (78.4)	12 (60)	41 (72)	
Optime (min, range)	130 (60-375)	147 (60-480)	130 (60-480)	0.378
Pringle (min, range)	14 (0-40)	13 (0-41)	14 (0-41)	0.576
Bleeding (cc, range)	250 (10-2000)	275 (10-1200)	250 (10-2000)	0.933
Mortalite (n,%)	0	0	0	
Surgical site infection (n,%)	4 (10.8)	7 (35.0)	11 (19.3)	0.038
Pulmonary thromboembolism (n,%)	0	1 (5.0)	1 (1.8)	0.351
Pneumonia (n,%)	1 (2.7)	3 (15.0)	4 (7.0)	0.119
Acute renal failure (n,%)	2 (5.4)	3 (15.0)	5 (8.8)	0.332
DVT (n,%)	0	1 (5.0)	1 (1.8)	0.351
Bile leakage (n,%)	0	1 (5.0)	1 (1.8)	0.351
PO biliary drenaj (n,%)	5 (13.5)	1 (5.0)	6 (10.5)	0.410
ICU stay (days, range)	0 (0-1)	0 (0-3)	0 (0-33)	0.203
Hospital stay (days, range)	8 (6-12)	13.5 (7-37)	8 (6-37)	<0.001
Surgical margin (mm, range)	3.5 (0-10)	2 (0-10)	3 (0-10)	0.857
Tumor necrosis (n,%)	9 (25)	4 (20)	13 (23.2)	0.752

[S-024]

Relationship between tumor size, T stage, histopathological features, and metastatic lymph node involvement in colon carcinoma cases: A single-center experience

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Objective: Regional lymph node metastasis is one of the key determinants of prognosis and adjuvant treatment decisions in colon cancer. The impact of primary tumor size, depth of local invasion, and histopathological differentiation on metastatic lymph node burden remains controversial in the literature. This study aimed to evaluate the relationship between tumor size, T stage, histopathological characteristics, and the number of metastatic lymph nodes using data from a single-center patient cohort

Material and Methods: This retrospective study included 112 patients who underwent emergency or elective right hemicolectomy for right-sided colon adenocarcinoma at our institution between 2023 and 2025. Primary tumor size was categorized according to the maximum diameter as 0-2 cm, 2-5 cm, 5-10 cm, and ≥10 cm. T stage, histopathological differentiation grade, and the number of lymph nodes harvested during surgery were recorded. Factors associated with the number of metastatic lymph nodes were analyzed using non-parametric methods. Group comparisons were performed using the Kruskal-Wallis test, and a p-value <0.05 was considered statistically significant.

Results: According to tumor size, there were 2 patients in the 0-2 cm group with a mean metastatic lymph node count of 1.0. The 2-5 cm group included 53 patients with a mean metastatic lymph node count of 2.19. In the 5-10 cm group, 49 patients were identified, with a mean metastatic lymph node count of 2.04. The ≥10 cm group consisted of 7 patients with a mean metastatic lymph node count of 2.71. No statistically significant association was observed between tumor size and the number of metastatic lymph nodes. Analysis according to T stage demonstrated low metastatic lymph node counts in early stages, with a marked increase in advanced stages. While the mean metastatic lymph node counts remained low in T1 and T2 stages, a substantial increase was observed in T4 stage disease. A statistically highly significant association was found between T stage and metastatic lymph node count. With respect to histopathological differentiation, although well-differentiated tumors exhibited higher mean metastatic lymph node counts, no statistically significant difference was identified among histopathological subgroups

Conclusion: In this contemporary single-center patient cohort, a strong and statistically significant association was identified between T stage and metastatic lymph node burden. In contrast, primary tumor size and histopathological differentiation grade did not demonstrate a significant impact on the number of metastatic lymph nodes. These findings support the concept that depth of local invasion is one of the primary determinants of nodal metastasis in colon cancer.

Keywords: 18 lymph node involvement, colon carsinoma, stage

[S-025]

Effects of lymphovascular/perineural invasion on prognosis in breast cancer patients undergoing surgery

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Objective: Breast cancer is the most common type of cancer in women in Türkiye and worldwide, often requiring multidisciplinary treatment planning. Tumor size, histological type, proliferation rate, and several molecular factors, particularly axillary lymph node involvement, play a decisive role in breast cancer prognosis. While the negative effects of lymphovascular invasion on prognosis have been demonstrated in numerous studies, there are insufficient studies demonstrating the effects of perineural invasion on prognosis.

Material and Methods: Our study, which aimed to investigate the impact of lymphovascular and perineural invasion on disease-free and overall survival, included 262 patients diagnosed with breast cancer at our clinic between January 1, 2015, and December 31, 2019, who underwent surgery and afterwards under follow-up. The patients were primarily grouped according to those who survived and those who died during the follow-up period. Patients were divided into groups of two to create three different categorizations: Those with and without metastasis development, and those with and without metastasis among those who exitus. The groups constituting the categorization were compared in terms of lymphovascular invasion and perineural invasion development and the presence of statistically significant differences was investigated. In addition to these categorizations, two different categorizations were also created: Those with lymphovascular invasion (n=130) and without (n=132) in the final pathology results and those with perineural invasion (n=80) and without (n=182) in the final pathology results. In these categorizations; statistically significant differences in disease-free and overall survival between the groups were investigated. The dates of recurrence and metastasis were used as the basis for assessing disease-free survival and prognosis. The last follow-up date was October 31, 2024, for patients without recurrence or metastasis, and October 31, 2024, for patients without death.

Results: In analyses the effects of tumor-related parameters on mortality, the effects of lymphovascular invasion and perineural invasion on mortality and their importance within the holistic model were investigated.

Conclusion: Our study concluded that lymphovascular and perineural invasion were both factors that increased mortality, and both types of invasion were observed to shorten disease-free and overall survival. The presence of lymphovascular and/or perineural invasion in patients diagnosed with breast cancer who undergo surgery is considered to have negatively impact on breast cancer prognosis, and these parameters are independent predictors of poor prognosis. Patients with this type of invasion should be monitored more closely during postoperative follow-up period for conditions such as recurrence or metastasis.

Keywords: Breast cancer, prognosis, lymphovascular invasion, perineural invasion

[S-026]

The value of the C-reactive protein to albumin ratio as a prognostic and complication indicator in gastric cancer

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Objective: Identifying factors affecting prognosis in cancer patients is important for followup and treatment planning. Recent studies show that markers indicating increased systemic inflammatory response are associated with poor prognosis in many cancers. The C-reactive protein to albumin ratio (CAR) is one such marker. A cut-off value of ≥0.25 has been identified as significant for poor prognosis in gastric cancer. In this study, we aimed to evaluate the relationship between CAR and complications and survival in patients who underwent surgery for gastric cancer at our clinic.

Material and Methods: In this study, the data of 128 patients who underwent surgery for gastric cancer at University of Health Sciences Türkiye, Ankara Etlik City Hospital between March 2023 and December 2025 were retrospectively reviewed from digital records. The patients' stages, surgical interventions, preoperative albumin and CRP levels, postoperative complications classified according to Clavien-Dindo, survival times, and follow-up periods were documented.

Results: There were 38 female and 90 male patients, with a mean age of 63.2 years (range 32-86). Subtotal gastrectomy was performed in 39 patients (30.4%) and total gastrectomy in 89 patients (69.6%). Postoperative pathology revealed 28 patients (21.9%) with stage 1 disease, 28 (21.9%) with stage 2, 57 (44.5%) with stage 3, and 15 (11.7%) with stage 4. Preoperative CRP and albumin values were used to calculate the CRP/albumin ratio (CAR), and patients were grouped as CAR ≥0.25 or CAR <0.25. Postoperative Clavien-Dindo scores, complication rates, follow-up periods, and overall survival were compared between groups. Mortality was significantly higher in the CAR ≥0.25 group. Multivariate analysis showed that elevated CAR was an independent predictor of mortality (OR=3.5, 95% CI: 1.3-7.8, p=0.009; HR=2.5, 95% CI: 1.2-5.0, p=0.013). Kaplan-Meier analysis demonstrated a mean survival of 19.2 months in the CAR ≥0.25 group and 27.2 months in the CAR <0.25 group. Median survival could not be calculated because survival did not fall below 50% during follow-up. The survival difference was significant (log-rank p<0.001). High CAR was also significantly associated with postoperative complications (p=0.003).

Conclusion: Liu et al. found CAR to be independently associated with overall survival in gastric cancer patients using a cut-off value of 0.25 in their 2015 study. Alkurt et al. stated in their 2022 study that CAR could be used as a prognostic indicator using this cut-off value. In our series, in addition to demonstrating the relationship of this ratio with survival, we also tested its statistically significant relationship with postoperative complications. Multicenter prospective randomized controlled trials are needed to clarify this relationship.

Keywords: C-reactive protein, gastric cancer, prognosis

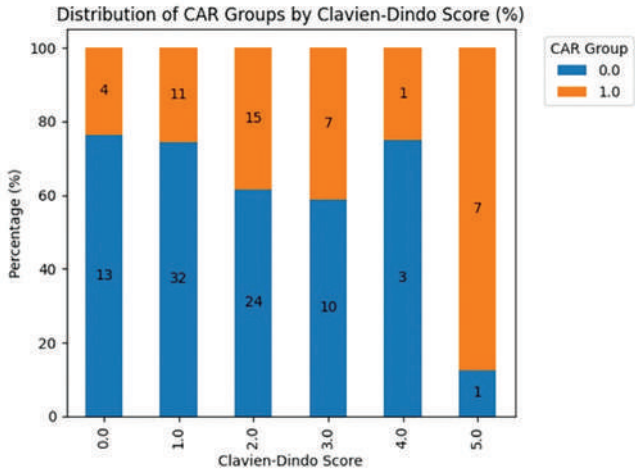


Figure 1. Distribution of CAR groups by Clavien-Dindo score.

0: CAR <0.25 1: CAR ≥0.25

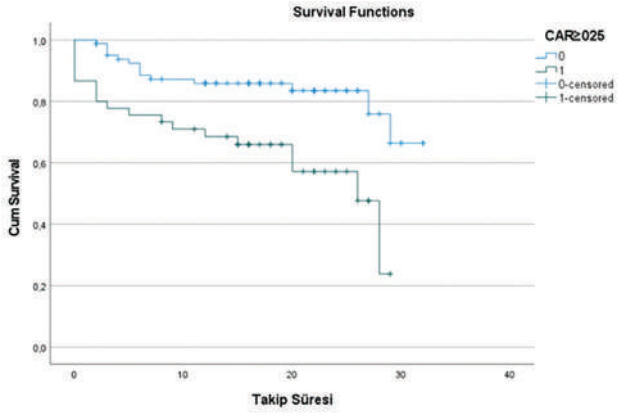


Figure 2. Kaplan-Meier survival curve.

0: Represents patients with CAR <0.25 and 1: Represents patients with CAR ≥0.25. The group with low CAR shows better survival.

Table 1. Distribution of patients' overall survival (OS) times according to clinical and laboratory parameters

	Count	GS - month (95% CI)	p-value
Gender			0.702
Female	38 (30%)	24.2 (22.6-26.8)	
Male	90 (70%)	24.9 (22.5-27.4)	
Age			0.478
≥65	63 (49.3%)	24.1 (20.9-27.1)	
<65	65 (50.7%)	25.5 (22.7-28.3)	
CRP (mg/L)			<0.001
≥5	68 (53.1%)	21.1 (18-24.2)	
<5	60 (46.9%)	29.1 (27-31.2)	
Albumin (g/L)			<0.001
≥35	74 (57.8%)	28 (25.9-30.1)	
<35	54 (42.2%)	20.4 (16.7-24.1)	
CAR			<0.001
≥0.25	45 (35.1%)	19.2 (15.7-22.6)	
<0.25	83 (64.9%)	27.2 (25-29.4)	
TNM stage			0.002
Stage 1	28 (21.8%)	27.8 (25.2-30.3)	
Stage 2	28 (21.8%)	27.2 (23.4-31)	
Stage 3	57 (44.5%)	22.5 (19.4-25.6)	
Stage 4	15 (11.7%)	24.7 (22.6-26.8)	

Mean survival time in months and p-values according to Kaplan-Meier analysis.

[S-027]

Upgrade rate to malignancy and clinicopathological associations in cases with papillary lesions detected on breast core needle biopsy

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Objective: Papillary lesions of the breast represent a heterogeneous histopathological spectrum ranging from benign intraductal papilloma to papillary carcinoma. In cases diagnosed with papillary lesions by core needle biopsy, optimal management remains controversial due to the possibility of under-sampling and the risk of an associated malignancy. This study aimed to evaluate the upgrade rate to malignancy and the associated clinicopathological factors in patients who underwent surgical excision following a diagnosis of papillary lesion.

Material and Methods: Between 2020 and 2025, a total of 36 patients who were reported as having intraductal papilloma or papillary neoplasm on core needle biopsy and subsequently underwent surgical excision were retrospectively analyzed. Evaluated variables included age (mean: 48.41 years), lesion size, imaging modalities (ultrasonography, mammography, MRI), BI-RADS category, and immunohistochemical markers (ER, PR, CK5/6, CK14, p63, actin, calponin). Categorical variables were analyzed using the chi-square or Fisher's exact test, and continuous variables were analyzed using the Mann-Whitney U test. Statistical significance was accepted as $p<0.05$.

Results: Among the 36 patients, malignancy was detected in 12 (33.3%) following surgical excision (upgrade rate: 33.3%; 95% CI: 20.2-49.7). The mean age was significantly higher in the group with malignancy (≥50 years) ($p=0.003$). Cases reported as "suspicious for carcinoma" on biopsy demonstrated a significantly higher malignancy rate in the excision specimen ($p<0.001$). Although the malignancy rate was higher in patients with BI-RADS ≥4 lesions, this difference did not reach statistical significance ($p>0.05$). No significant association was found between immunohistochemical markers and upgrade to malignancy.

Conclusion: The observed 33.3% upgrade rate in papillary lesions highlights the diagnostic value of surgical excision in selected patients. Careful evaluation is particularly warranted in older patients and in cases where malignancy is suspected on biopsy. Clinical, radiological, and pathological findings should be considered together to guide patient-based decision-making.

Keywords: Papillary lesion, surgical excision,upgrade

[S-028]

A western perspective on a rare disease: Surgical and oncologic experience in remnant gastric cancer

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Objective: Remnant gastric cancer (RGC), a distinct and rare subtype of gastric cancer, arises in the remnant stomach following partial gastrectomy. Its clinicopathological features remain poorly understood, and the overall prognosis is unfavorable. No standardized treatment protocol exists for RGC, and clinical management is largely extrapolated from treatment strategies for primary gastric cancer. Most studies have originated from East Asia. This study aims to present our institutional experience and contribute to the understanding of RGC in a Western cohort.

Material and Methods: This retrospective study analyzed data from a prospectively maintained database of patients who underwent surgery for RGC at Marmara University Hospital between January 2015 and January 2025. Patient characteristics, postoperative management strategies, short-term complications, and histopathological characteristics of the resected specimens were evaluated.

Results: A total of 36 patients were included, stratified according to the indication for the initial gastrectomy (benign vs. malignant). The mean interval between the initial surgery and development for RGC was significantly longer in the benign group (395.7±145.8 months) compared to the malignant group (98.8±71.3 months; $p=0.001$). The median number of harvested lymph nodes was 11.0 (5.0-15.0) in the benign group and 3.5 (2.2-6.5) in the malignant group ($p=0.048$). Clavien-Dindo grade IIIa or higher complications occurred in 24% and 18% of patients, respectively. Five-year overall survival decreased with advancing stage with median survival not reached in early stages but limited to 21.9 and 7.4 months in stages III and IV, respectively.

Conclusion: Consistent with previous reports, RGC following malignant disease developed after a shorter interval. The limited number of lymph nodes harvested may contribute to disease understaging and poorer outcomes.

Keywords: Remnant, gastric, cancer

Table 1. Demographic features and patient characteristics			
	Benign group (n=25, 69%)	**Malignant group (n=11, 31%)**	**p-value**
Sex (M/F, n)	21/4	8/3	0.650
Age (years, mean ± SD)	67.8±7.7	62.3±13.2	0.126
BMI (kg/m², mean ± SD)	23.9±3.5	22.0±2.4	0.177
ASA score	I: 4 II: 11 III: 9 IV: 1	I: 1 II: 6 III: 3 IV: 1	0.882
Smoking (n)	14	7	0.669
Interval from first surgery (months, mean ± SD)	395.7±145.8	98.8±71.3	p<0.001
LOS [days, median (IQR)]	5.0 (4.0-6.0)	6.0 (5.0-9.0)	0.136
Complications (Clavien-Dindo ≥3, n, %)	6 (24%)	2 (18%)	1.000

Table 2. Tumor characteristics			
Variable	**Benign group (n=25, 69%)**	**Malignant group (n=11, 31%)**	**p-value**
Tumor location Anastomotic site Non-anastomotic	 19 6	 8 3	 1.000
Harvested lymph nodes [median (IQR)]	11.0 (5.0-15.0)	3.5 (2.2-6.5)	0.048
Positive lymph nodes [median (IQR)]	3.0 (0.0-4.0)	2.0 (0.0-2.8)	0.408
Positive surgical margin (n, %)	3 (12%)	5 (45%)	0.040

[S-029]

Determinants of recurrence after gastrointestinal stromal tumor surgery: A retrospective analysis

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Objective: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the gastrointestinal tract and exhibit heterogeneous biological behavior. Although surgical resection constitutes the cornerstone of curative treatment in localized disease, the risk of postoperative recurrence remains a significant clinical concern, particularly in high-risk cases. The aim of this study is to evaluate the clinical, pathological, and surgical factors associated with recurrence in patients with surgically treated GISTs and to identify prognostic determinants.

Material and Methods: This retrospective study included 212 patients who underwent surgical treatment for gastrointestinal stromal tumors (GISTs) at Ankara Bilkent City Hospital between 2019 and 2026. Demographic characteristics, surgical approach, tumor location, tumor size, mitotic index, intratumoral hemorrhage, necrosis, ulceration, tumor rupture, type of resection, and surgical margin status were recorded. Cases were stratified according to the AFIP risk classification. A subset of high-risk patients received adjuvant imatinib therapy in the postoperative period. The median follow-up duration was 38 months (range, 6-96 months). During follow-up, recurrence was assessed, and patients with and without recurrence were compared. Statistical analyses were performed using the Mann-Whitney U test and the chi-square test, with p-values <0.05 considered statistically significant.

Results: The median age was 65 years, and 55.7% of patients were male. Most tumors were gastric (66.5%), with a median size of 3.65 cm; R0 resection was achieved in 93.9%. Recurrence occurred in 12 patients (5.7%), most commonly local (41.7%) or extra-GIST (33.3%). Recurrence was significantly associated with intratumoral hemorrhage, tumor necrosis, tumor rupture, a mitotic index ≥11, and AFIP high-risk classification (all p<0.05), while no associations were observed with age, sex, tumor size, surgical approach, or ulceration.

Conclusion: Recurrence following GIST surgery is closely associated with tumor rupture, a high mitotic index, tumor necrosis, the presence of intratumoral hemorrhage, and classification within the AFIP high-risk group. Our findings support the importance of considering certain histopathological features, in addition to established risk classification systems, when making decisions regarding postoperative surveillance and adjuvant therapy. The retrospective design of the study and the heterogeneity of adjuvant treatment data constitute the main limitations.

Keywords: GIST, relapse, adjuvan

[S-030]

The effect of neoadjuvant chemotherapy on metastatic lymph node distribution in cardial gastric cancer

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Objective: In locally advanced gastric cancer, neoadjuvant chemotherapy (NAC) is commonly used before surgery to reduce tumor burden and improve survival. While studies exist regarding the effect of neoadjuvant chemotherapy on the primary tumor, there are insufficient studies on its effect on lymph nodes. This study aimed to investigate the effect of neoadjuvant chemotherapy on the distribution pattern in lymph nodes.

Material and Methods: Patients who underwent total gastrectomy and D2 lymph node dissection for gastric cardia tumors by the same surgeon at our clinic between 2015 and 2025 were retrospectively reviewed. The study included tumors with T3 and T4 tumor classifications on pathological examination. Demographic data, surgical procedures, and pathology data of the patients were analyzed. Lymph node involvement patterns were examined station-based (Nos: 1-12) according to the Japanese Gastric Cancer Society. Patients were divided into two groups: those receiving neoadjuvant chemotherapy (NAC+) and those not receiving neoadjuvant chemotherapy (NAC-). The chi-square test was used for statistical analysis, and a p-value <0.05 was considered statistically significant.

Results: A total of 42 patients with T3 and T4 tumors who underwent total gastrectomy and D2 lymph node dissection due to gastric cardia tumors and had complete data were included in the study. Thirteen patients were examined in the NAK+ group and 29 patients in the NAK- group. The positivity rate in some lymph node stations was found to be significantly lower in the NAK+ group compared to the NAK- group. The positivity rate in lymph node stations 3, 4, 6, 8, and 10 was significantly lower in the NAK+ patient group (p<0.05). No significant difference in metastatic lymph node ratio was observed in other lymph node stations. Additionally, the total number of lymph nodes removed at stations 3, 4, 6, 7, 8, 9, and 11 was significantly lower in the NAK+ group (p<0.001).

Conclusion: In proximal gastric cancer, neoadjuvant chemotherapy affects both the total number of lymph nodes and the metastatic lymph node ratio.

Keywords: Gastric cardia cancer, lymph node station, total gastrectomy

[S-031]

Extent of omentectomy and survival in clinically node-positive gastric cancer

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Objective: Total omentectomy has long been considered a standard surgical approach in gastric adenocarcinoma. However, with the widespread use of modern neoadjuvant chemotherapy regimens—particularly perioperative FLOT—the oncologic necessity of routine total omentectomy has become increasingly controversial. The survival benefit of total omentectomy following neoadjuvant treatment has not been clearly demonstrated in the current literature

Material and Methods: Between January 2014 and December 2024, 84 patients with clinically node-positive gastric adenocarcinoma who underwent D2 total gastrectomy after neoadjuvant FLOT chemotherapy were retrospectively analysed. Patients were grouped according to the extent of omentectomy as partial or total. Overall survival (OS) and progression-free survival (PFS) were evaluated using the Kaplan-Meier method. Prognostic factors affecting survival were assessed using multivariable Cox regression analysis.

Results: No significant differences were observed between the partial and total omentectomy groups in terms of demographic or clinicopathological characteristics. Omental tumour deposits were rare (3.6%). Median OS and PFS were comparable between the two groups (p>0.05). In multivariable Cox regression analysis, lymphatic invasion and positive resection margin were identified as independent adverse prognostic factors, whereas the extent of omentectomy was not an independent predictor of OS or PFS.

Conclusion: In clinically node-positive gastric cancer patients treated with neoadjuvant FLOT, partial omentectomy provides oncologic outcomes comparable to those of total omentectomy. These findings suggest that total omentectomy should not be routinely performed but rather individualised based on patient characteristics and intraoperative findings.

Keywords: Gastric adenocarcinoma, lymph node, neoadjuvant chemotherapy, omentectomy, overall survival

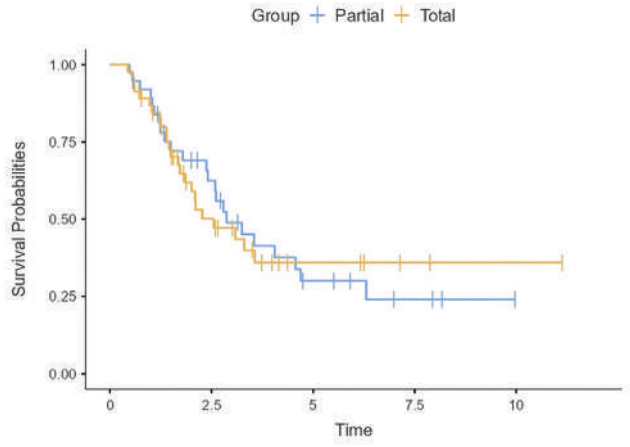


Figure 1. Overall survival in partial and total omentectomy groups.

Overall survival curves of clinically node-positive gastric cancer patients undergoing partial or total omentectomy were compared using the Kaplan-Meier method. No statistically significant difference in overall survival was observed between the two groups (log-rank p=0.91).

Table 1. Survival outcomes according to the extent of omentectomy

Variable	Partial	Total	p
Omental tumor deposit, n (%)	1(2.6)	2 (4.3)	1.00
Lymphatic invasion, n (%)	20 (52.6)	21 (45.7)	0.49
Median OS, years	2.50	1.83	0.91
Median PFS, years	1.53	1.31	0.70

Comparison of survival outcomes and clinicopathological characteristics between partial and total omentectomy groups.

[S-032]

Intraoperative biopsy practices in perforated gastric ulcer: A survey study evaluating surgeons' preferences in Türkiye

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Objective: Intraoperative biopsy in perforated gastric ulcers has traditionally been performed to exclude underlying malignancy. However, despite growing evidence indicating a low incidence of malignancy in recent years, the extent to which this practice is adopted by surgeons remains unclear. This study aimed to evaluate the attitudes of general surgeons in Türkiye toward intraoperative biopsy in perforated gastric ulcers and to identify factors influencing their decision-making.

Material and Methods: This descriptive, cross-sectional survey study was conducted among actively practicing general surgeons across Türkiye. A total of 361 surgeons were included. The questionnaire collected data on demographics, biopsy practices in perforated gastric ulcers, surgical approach preferences, and postoperative endoscopy planning. Multivariable logistic regression analysis was performed to identify factors associated with routine intraoperative biopsy.

Results: The mean age of participants was 41.4±10.3 years, and the mean duration of surgical experience was 12.8±9.7 years. Only 24.2% of surgeons correctly estimated the current malignancy risk (<5%) in perforated gastric ulcers, while 102 participants did not provide a quantitative estimate of malignancy risk. Routine biopsy was reported by 52.9% of participants, selective biopsy by 42.9%, and no biopsy by 4.2%. In multivariable analysis, age, surgical experience, and perceived malignancy risk were associated with routine biopsy practice; however, none of these factors reached independent statistical significance. The majority of participants (87.0%) reported recommending postoperative endoscopy.

Conclusion: Despite low malignancy rates reported in contemporary literature, intraoperative biopsy in perforated gastric ulcers remains widely practiced in Türkiye. Surgeons' biopsy decisions appear to be influenced primarily by perceived malignancy risk, clinical experience, and traditional practice patterns. These findings suggest that an evidence-based approach favoring selective intraoperative biopsy combined with planned postoperative endoscopy should be more effectively integrated into clinical practice.

Keywords: Perforated gastric ulcer, intraoperative biopsy, postoperative endoscopy



Figure 1. Geographic distribution of general surgeons who participated in the survey across Türkiye.

Table 1.

Variable	Group	Value	p-value
Intraoperative biopsy	Routine biopsy	Age: 42.6±10.1	0.01
	Non-routine biopsy*	Age: 39.810.1	
	Routine biopsy	Experience: 14.3±9.7	0.002
	Non-routine biopsy*	Experience: 11.0±9.2	
Surgical approach	Primary repair	328 (90.9%)	—
	Resection	21 (5.8%)	
	Case-dependent	12 (3.3%)	
	Resection	Age: 49.1±10.6	<0.002
	Primary repair	Age: 40.8±10.1	
Postoperative endoscopy	Recommended	314 (87.0%)	—
	Not/selective	47 (13.0%)	

[S-033]

Retrospective evaluation of the impact of anatomical and biological characteristics of abdominal retroperitoneal tumoral masses on morbidity, mortality, and oncological outcomes

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Objective: The aim of this study was to develop a complexity scoring system to guide surgical technique in patients operated on for primary abdominal retroperitoneal tumoral masses (PARTM) and to evaluate the multidisciplinary oncological outcomes of our clinic using this scoring system.

Material and Methods: The dataset of 103 patients aged 18 years and older who were treated for PARTM was retrospectively analyzed. A retroperitoneal tumor complexity score ("RETCOX") was developed using clinico-radiological parameters ("resected organ, comorbidity, tumor diameter, and tumor volume").

Results: Gastrointestinal organ resection (p=0.031) and the presence of comorbidity (p=0.044) were identified as independent risk factors for the development of complications. Presentation with primary or recurrent disease (p=0.018) and receiving postoperative chemotherapy (p=0.013) were found to be strong independent risk factors for local recurrence. Regarding the development of distant metastasis, adjacent organ invasion (p=0.016) and postoperative chemotherapy (p=0.028) were identified as strong independent risk factors. For combined recurrence, postoperative chemotherapy (p<0.001) was an independent and significant risk factor. In the Cox regression analysis performed to evaluate factors affecting disease-free survival (DFS), postoperative chemotherapy (p=0.005) and preoperative chemotherapy (p=0.011) were identified as independent significant prognostic factors. For overall survival (OS), increasing tumor diameter (p=0.015), adjacent organ invasion (p=0.003), malignant pathology (p=0.046), and development of local recurrence (p=0.001) were found to be strong independent prognostic factors.Postoperative complications were categorized into three groups: "no complications," "low-grade complications," and "high-grade complications." The complication tree grouped according to the RETCOX score was evaluated using the Kruskal-Wallis test (p=0.021).When RETCOX scores were analyzed in terms of mortality, the mean RETCOX score was 7.6 in the surviving patient group and 10.5 in the deceased patient group. High RETCOX scores showed a statistically significant difference in terms of mortality (p<0.001). A high RETCOX score was identified as a strong independent risk factor for both complication development (p=0.01) and mortality (p=0.004).

Conclusion: A high RETCOX score was also found to be a strong independent prognostic factor for DFS (p=0.008) and OS (p=0.001). However, the RETCOX score was not identified as an independent risk factor for oncological outcomes such as local recurrence (p=0.232), distant metastasis (p=0.519), or combined recurrence (p=0.204).

Keywords: Radical resection, retroperitoneum, abdominal retroperitoneal tumoral masses, complexity score

Komplikasyon

	B	S.E.	Wald	df	p	OR	Alt %95 güven aralığı	Üst %95 güven aralığı
Gastrointestinal sistem organı rezeksiyonu	1.043	.483	4.674	1	.031	2.839	1.102	7.310
Ko-morbidite	1.118	.556	4.042	1	.044	3.058	1.028	9.093
RETCOX skoru	.139	.054	6.609	1	.01	1.149	1.034	1.278

*Modelde bulunan diğer değişkenler: Tümör çapı, Kompartman yerleşimi, Tümör volümü, Komşu organ invazyonu, Primer veya nüks hastalık, Preoperatif KT tedavisi, Gastrointestinal sistem organı rezeksiyonu, Ko-morbidite

Mortalite

	B	S.E.	Wald	df	p	OR	Alt %95 güven aralığı	Üst %95 güven aralığı
Tümör çapı	1.778	.681	6.821	1	.009	5.916	1.558	22.462
Cerrahi sınır durumu	1.189	.663	3.217	1	.073	3.282	.896	12.303
Lokal nüks	2.190	.730	8.998	1	.003	8.931	2.136	37.345
Patoloji sonucu(malign/benign)	1.810	.997	3.296	1	.069	6.113	.866	43.160
Uzak metastaz	2.830	.924	9.376	1	.002	16.946	2.769	103.701
RETCOX skoru	.170	.059	8.365	1	.004	1.186	1.056	1.331

*Modelde bulunan diğer değişkenler: Cinsiyet, Primer veya nüks hastalık, Postoperatif KT tedavisi, Gastrointestinal sistem organı rezeksiyonu, Tümör çapı, Tümör volümü, Komşu organ invazyonu, Cerrahi sınır durumu, Lokal nüks, Patoloji sonucu(malign/benign), Uzak metastaz.

Lokal nüks

	B	S.E.	Wald	df	p	OR	Alt %95 güven aralığı	Üst %95 güven aralığı
Primer veya nüks hastalık	1.272	.536	5.624	1	.018	3.569	1.247	10.213
Postoperatif KT tedavisi	2.643	1.060	6.212	1	.013	14.05	1.759	112.347

*Modelde bulunan diğer değişkenler: Primer veya nüks hastalık, Postoperatif KT tedavisi, Gastrointestinal sistem organı rezeksiyonu, Patoloji sonucu(malign/benign), Preoperatif KT tedavisi

Uzak metastaz

	B	S.E.	Wald	df	p	OR	Alt %95 güven aralığı	Üst %95 güven aralığı
Postoperatif KT tedavisi	2.331	1.064	4.800	1	.028	10.29	1.279	82.820
Komşu organ invazyonu	1.902	.793	5.755	1	.016	6.697	1.416	31.670

*Modelde bulunan diğer değişkenler: Postoperatif KT tedavisi, Patoloji sonucu(malign/benign), Komşu organ invazyonu

Kombine nüks

	B	S.E.	Wald	df	p	OR	Alt %95 güven aralığı	Üst %95 güven aralığı
Postoperatif KT tedavisi	3.673	1.044	12.38	1	<.001	39.38	5.091	304.696

*Modelde bulunan diğer değişkenler: Postoperatif KT tedavisi, Patoloji sonucu(malign/benign), Gastrointestinal sistem organı rezeksiyonu, Preoperatif KT tedavisi, Komşu organ invazyonu, Primer veya nüks hastalık.

KT: Kemoterapi

Figure 1. Logistic regression analysis of statistically significant variables in patients diagnosed with retroperitoneal tumoral masses.

Tablo 20: Retroperitoneal tümöral kitle tanılı hastaların bağımsız güçlü prognostik faktörleri (Cox Regresyon Analizi)

Genel Sağkalım

	B	S.E.	Wald	df	p	HR	Alt %95 güven aralığı	Üst %95 güven aralığı
Tümör çapı	1.139	.468	5.916	1	.015	3.124	1.248	7.824
Tümör volümü	-.833	.439	3.603	1	.058	.435	.184	1.028
Komşu organ invazyonu	1.168	.392	8.871	1	.003	3.217	1.491	6.940
Patoloji sonucu(malign/benign)	1.489	.746	3.982	1	.046	4.432	1.027	19.134
Lokal nüks	1.120	.327	11.727	1	.001	3.066	1.615	5.822

Figure 2. Independent strong prognostic factors in patients diagnosed with retroperitoneal tumoral masses (Cox regression analysis).

Tablo 26: Retroperitoneal tümöral kitle tanılı hastaların bağımsız güçlü prognostik faktörleri (Cox Regresyon Analizi)

Hastalıksız Genel Sağkalım

	B	S.E.	Wald	df	p	HR	Alt %95 güven aralığı	Üst %95 güven aralığı
Postoperatif KT tedavisi	2.872	1.023	7.890	1	.005	17.675	2.382	131.146
Preoperatif KT tedavisi	.931	.367	6.423	1	.011	2.537	1.235	5.212

*Modelde bulunan diğer değişkenler: Tümör çapı, Tümör kompartman yerleşimi, Tümör volümü, Cerrahi sınır durumu, Patoloji sonucu(malign/benign), Komşu organ invazyonu, Preoperatif KT tedavisi, Postoperatif KT tedavisi

KT: Kemoterapi

Figure 3. Independent prognostic factors in patients diagnosed with retroperitoneal tumoral masses (Cox regression analysis).

Tablo 35: Retroperitoneal kitle tanılı hastalarda düşük ve yüksek RETCOX skoruna göre ortalama ve ortanca genel sağkalım süreleri (ay)

RETCOX skoru kesim noktası: 7.5	Ortalama			Ortanca		
	Sağkalım süresi	SH	%95 güven aralığı	Sağkalım süresi	SH	%95 güven aralığı
Düşük skor	157.672	20.595	117.3-198.0	209.639	69.4	73.478-345.8
Yüksek skor	52.843	8.623	35.9-69.744	23.508	7.759	8.302-38.715
Genel	87.962	12.124	64.2-111.72	40.885	14.43	12.594-69.17

Grafik 16: Retroperitoneal kitle tanılı hastalarda RETCOX skorunun genel sağkalım süresine etkisinin karşılaştırılması (ay)

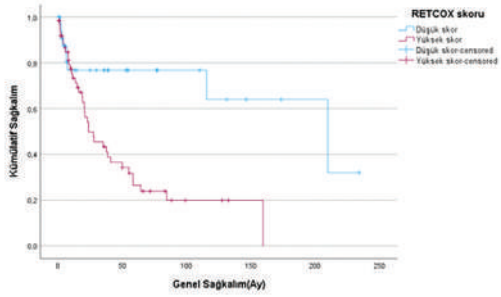


Figure 4. Mean and median overall survival (months) according to low and high RETCOX scores in patients with retroperitoneal tumoral masses.

Tablo 36: Retroperitoneal kitle tanılı hastalarda düşük ve yüksek RETCOX skoruna göre ortalama ve ortanca hastalıksız sağkalım süreleri (ay)

RETCOX skoru kesim noktası: 7.5	Ortalama			Ortanca		
	Sağkalım süresi	SH	%95 güven aralığı	Sağkalım süresi	SH	%95 güven aralığı
Düşük skor	146.797	23.707	100.33-193.2	.	.	.
Yüksek skor	57.788	9.608	38.95-76.621	21.738	12.493	0-46.224
Genel	98.208	14.648	69.49-126.91	54.754	13.165	28.95-80.55

Grafik 17: Retroperitoneal kitle tanılı hastalarda RETCOX skorunun hastalıksız sağkalım süresine etkisinin karşılaştırılması (ay)

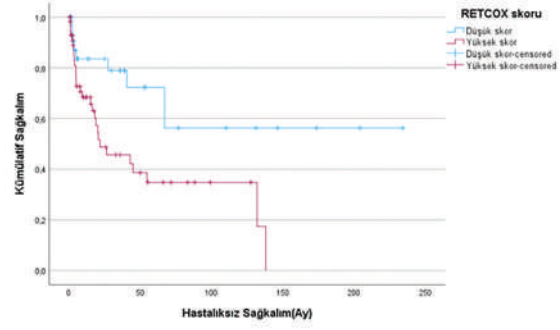


Figure 5. Mean and median disease-free survival (months) according to low and high RETCOX scores in patients with retroperitoneal tumoral masses.

[S-034]

Evaluation of TRPM2 ION channel progression in premalignant and malignant gastric lesions

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Objective: Gastric cancer is the fifth most common cancer worldwide and ranks third among cancer-related causes of death. The fact that the disease is most often diagnosed at an advanced stage negatively affects prognosis. Therefore, identifying molecular markers involved in the process from premalignant lesions to malignant transformation is of great importance. The transient receptor potential melastatin-2 (TRPM2) ion channel plays a role in cellular calcium signaling and has been associated with cell survival in many cancers. In this study, it was aimed to investigate the role of TRPM2 expression in the progression process in benign, premalignant, and malignant gastric tissues.

Material and Methods: Gastric biopsy and resection specimens diagnosed between 2015 and 2020 were retrospectively reviewed from the archives of the Department of Pathology, Fırat University. The study included 20 control cases, 20 premalignant lesions (intestinal metaplasia), and 60 cases of gastric adenocarcinoma (20 grade I, 20 grade II, and 20 grade III). From the paraffin blocks of cases with confirmed diagnoses, 4-µm-thick sections were obtained and immunohistochemical staining for TRPM2 was performed. Staining extent and intensity were evaluated, and the histoscore (extent × intensity) was calculated. Statistical analyses were performed to compare the groups, and $p<0.05$ was considered statistically significant.

Results: TRPM2 immunoreactivity showed an increase in premalignant lesions compared to the control group and was found to be statistically significantly higher in gastric adenocarcinomas. In the comparison among adenocarcinomas, no significant difference was observed between grade I and grade II tumors, whereas a significant decrease in TRPM2 expression was detected in grade III adenocarcinomas. A statistically significant association was found between TRPM2 expression and tumor grade.

Conclusion: It was determined that the TRPM2 ion channel exhibits increased expression in gastric tissue as it progresses from benign lesions to premalignant and malignant stages, but shows a tendency to decrease in high-grade tumors. These findings suggest that TRPM2 may play a role in gastric carcinogenesis and could serve as a potential biomarker for diagnosis and tumor grading. Further studies are needed to elucidate the prognostic and therapeutic value of TRPM2.

Keyword: Gastric cancer

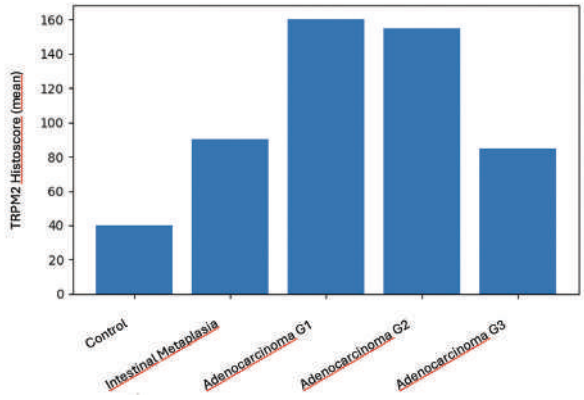


Figure 1. TRPM2 immunoreactivity in premalignant and malignant gastric lesions.

Table 1. TRPM2 immunoreactivity and statistical comparisons according to study groups				
Study group	**Number of cases (n)**	**TRPM2 immunoreactivity (histoscore)**	**Comparison**	**p-value**
Control	20	Low	Control vs. intestinal metaplasia	**p<0.05**
Intestinal metaplasia	20	Moderate	Control vs. intestinal metaplasia (overall)	**p<0.001**
Adenocarcinoma Grade I	20	High	Grade I vs. Grade II	p>0.05
Adenocarcinoma Grade II	20	High	Grade I-II vs. Grade III	**p<0.05**
Adenocarcinoma Grade III	20	Decreased	Premalignant vs. malignant (overall)	**p<0.001**

[S-035]

Prognostic value of preoperative immune-inflammatory and nutritional indices (NLR, SII, CALLY) on postoperative morbidity and mortality in patients undergoing gastric cancer surgery

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Objective: Gastric cancer surgery remains a complex procedure associated with high postoperative morbidity and mortality rates despite advancing techniques. Preoperative immune-inflammatory response and nutritional status are critical factors directly influencing the recovery process and oncological outcomes. Although the prognostic significance of biomarkers such as NLR, SII, and CALLY has been demonstrated in various malignancies, data regarding their specificity in predicting major complications and early mortality following gastric cancer surgery is limited. This study aims to analyze the predictive value of preoperative immune-nutritional parameters on short-term surgical outcomes.

Material and Methods: Data from 166 patients who underwent surgery for gastric cancer between January 2015 and May 2024 were retrospectively analyzed. Preoperative NLR, SII, PNI, and CALLY indices were calculated. Complications were graded according to the Clavien-Dindo (CD) classification, with CD ≥3 defined as major complications. Optimal cut-off values for biomarkers in predicting 30-day mortality and major complications were determined using ROC analysis.

Results: The study population comprised 112 males and 54 females, with a mean age of 66.1±12.3 years. Major complications occurred in 7.8% of the cohort, while the 30-day mortality rate was 6.6% In the major complication group, NLR (6.85 vs. 2.32, p=0.004) and SII ($1.16x10^6$ vs. $0.56x10^6$, p=0.014) were higher. For predicting mortality, the cut-off for NLR was 10.38 (AUC: 0.792, 99.4% specificity, 60% sensitivity) and for SII was $1.56x10^6$ (AUC: 0.753, 92.9% specificity, 60% sensitivity). A negative correlation was found between PNI and tumor size (r=-0.23, p=0.012).

Conclusion: Preoperative NLR and SII are independent and potent biomarkers with high specificity for predicting early mortality and major complications after gastric cancer surgery. Proactive management of patients with a high preoperative inflammatory burden may enhance surgical success.

Keywords: Neutrophil-to-lymphocyte ratio (NLR), systemic immune-inflammation index (SII), tumor size

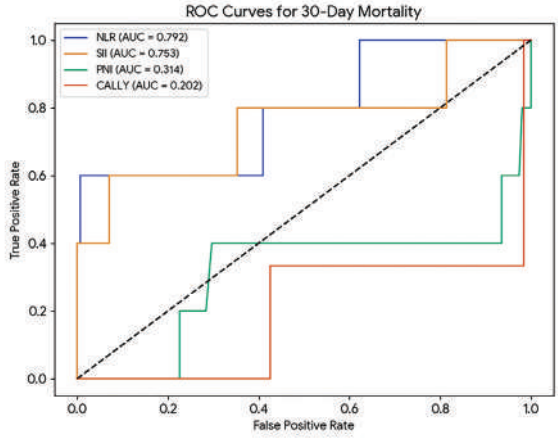


Figure 1. The relationship between biomarkers and 30-day mortality: ROC analysis.

Table 1. Biomarker analysis according to major complication status			
Biomarker	**Complication (-) median**	**Complication (+) median**	**p-value**
NLR	2.32	6.85	0.004
SII	569,313	1,161,044	0.014
CALLY	336.35	9.46	0.015
PNI	49.70	42.98	0.164

Table 2. The relationship between biomarkers and pathological stage		
Biomarker	**Tumor size (r, p)**	**Metastatic lymph node count (r, p)**
NLR	0.07 (p=0.473)	-0.08 (p=0.292)
SII	0.05 (p=0.566)	0.01 (p=0.901)
PNI	-0.23 (p=0.012)	-0.10 (p=0.225)
CALLY	-0.19 (p=0.208)	-0.05 (p=0.691)

[S-037]

Evaluation of the diagnostic accuracy of methods in patients with lymphadenopathy

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Objective: Lymphadenopathy is a common clinical entity in general surgical practice, and exclusion of malignancy is of paramount importance. Radiologic imaging and fine-needle aspiration biopsy (FNAB) are widely used as first-line diagnostic tools; however, their performance may be limited, particularly in lymphoproliferative disorders. This study aimed to comparatively evaluate the diagnostic contribution of excisional lymph node biopsy versus radiologic assessment and FNAB findings.

Material and Methods: Eighty-nine patients who underwent excisional lymph node biopsy between 2023 and 2025 were retrospectively analyzed. Demographics, biopsy localization, radiologic reports, FNAB results (if available), and final histopathological diagnoses were reviewed.

Results: Fifty patients (56.2%) were male and 39 (43.8%) were female. Excisional biopsy revealed hematologic malignancy in 25 patients (28.1%) and metastatic malignancy in 3 (3.4%), with an overall malignancy rate of 31.5%. Forty-two patients underwent axillary and 47 inguinal excisional biopsy. The malignancy rate was 34% (16/47) in inguinal biopsies and 28.5% (12/42) in axillary biopsies. All metastatic malignancies were located in the inguinal region. The mean diameter of pathologic lymph nodes was 24.5 mm versus 8.5 mm in non-pathologic nodes. In the hematologic malignancy group, the mean diameter was 31.0±14.6 mm compared with 25.8±8.9 mm in non-hematologic pathologic cases; this difference was not statistically significant (p=0.06). Malignancy was detected histopathologically in 3 patients (10.7%) whose radiologic evaluation had described the lymph nodes as reactive/benign.Among the 25 patients with hematologic malignancy, 3 had Hodgkin lymphoma and 22 (88%) had non-Hodgkin lymphoma. Eight had previously undergone FNAB; only 4 demonstrated atypia/malignancy, while 2 were benign and 2 non-diagnostic. In 3 of these 25 patients (10.7%), radiologic assessment had reported reactive/benign findings despite excisional biopsy confirming malignancy. Among the 61 patients without malignancy, 51 had reactive lymphoid hyperplasia, 8 granulomatous lymphadenitis, and 2 normal lymph node histology. Hematologic malignancy rates were 36% in males and 17.9% in females.

Conclusion: Detection of malignancy in nearly one-third of patients underscores the critical role of excisional biopsy in clinically suspicious lymphadenopathy. Lymph node size and benign radiologic appearance alone were not reliable exclusion criteria, and the 50% rate of inadequate or false-negative FNAB results in hematologic malignancies highlights the superiority of excisional biopsy, particularly in non-Hodgkin lymphoma where tissue architecture is essential. Excisional biopsy should therefore not be delayed in persistent or suspicious cases and remains the gold standard when lymphoproliferative disease is suspected.

Keywords: Lymphadenopathy, excisional biopsy, hematologic malignancy

[S-038]

Diagnostic performance of contrast-enhanced mammography compared with ultrasound, PET/CT, MRI, and postoperative pathology in patients with newly diagnosed breast cancer

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Objective: In this study, we aimed to compare contrast-enhanced mammography (CEM) a relatively new, cost-effective, easily accessible, and practical imaging modality with other imaging techniques in terms of preoperative tumor size assessment.

Material and Methods: A total of 54 female breast cancer patients who were newly diagnosed at the university hospital between 2023-2024 and underwent surgery without requiring neoadjuvant therapy. Tumor sizes measured using five different imaging modalities ultrasonography (US), conventional mammography, positron emission tomography (PET), magnetic resonance imaging (MRI), and contrast-enhanced mammography (CEM) were statistically compared with postoperative histopathological tumor sizes.

Results: Mean tumor sizes measured by imaging modalities were 21.67 mm with ultrasonography, 24.02 mm with MRI, 20.02 mm with PET, 23.32 mm with mammography, and 25.17 mm with CEM. No statistically significant differences were observed between histopathological tumor size and measurements obtained by CEM (p=0.943), MRI (p=0.437), or mammography (p=0.232). Among all imaging modalities, CEM yielded tumor size measurements numerically closest to histopathological findings. Furthermore, CEM demonstrated the strongest correlation with histopathological tumor size (r=0.789, p<0.001).

Conclusion: In recent years, CEM has emerged as an important imaging modality for breast evaluation due to its cost-effectiveness, accessibility, and ease of application. In our study, CEM demonstrated superior performance in tumor size measurement compared with other imaging modalities. Given its improved accuracy over conventional mammography, we believe that CEM has the potential to replace conventional mammography and be adopted for routine use in patients diagnosed with breast cancer.

Keywords: Breast cancer, contrast enhanced mammography, tumour extent

[S-039]

Preoperative imaging-based axillary lymph node evaluation in breast cancer: Can it replace sLNB? A real-world analysis of 311 patients

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Objective: Axillary lymph node status is a key determinant of prognosis and adjuvant treatment planning in breast cancer. Although sentinel lymph node biopsy (SLNB) is the standard staging method in clinically node-negative axillae, it remains an invasive procedure and is not entirely free of morbidity. The increasing diagnostic accuracy of advanced imaging modalities has raised the question of whether axillary surgery can be safely reduced in selected patients. In this study, we compared the diagnostic performance of preoperative ultrasonography (US), magnetic resonance imaging (MRI), and 18F-FDG PET/CT in predicting axillary metastasis against final pathological results.

Material and Methods: A total of 311 patients with primary operable breast cancer who underwent surgery between December 2023 and January 2025 were retrospectively analyzed. Patients with histologically confirmed invasive breast carcinoma who had at least one preoperative axillary imaging modality and completed surgical pathological axillary assessment were included. Imaging positivity was defined according to standard radiological criteria. Final axillary status was determined based on histopathological examination of specimens obtained via SLNB and/or axillary dissection. Sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), and receiver operating characteristic (ROC) curve analyses were calculated.

Results: The mean age of the patients was 55.6 years, and 39.8% had received neoadjuvant chemotherapy. Final pathology revealed axillary metastasis in 157 patients (50.5%). Ultrasound was performed in 306 patients and demonstrated the highest sensitivity (57.9%) for detecting metastatic nodes. PET/CT was evaluated in 277 patients and achieved the highest specificity (79.3%). ROC analysis showed an AUC of 0.76 for PET/CT, 0.70 for MRI, and 0.67 for ultrasound. However, none of the modalities reached a high level of overall diagnostic accuracy. Negative predictive values ranged between 60% and 63%, indicating a clinically relevant false-negative rate in radiologically negative axillae. Diagnostic performance declined in patients who received neoadjuvant therapy; the AUC of PET/CT decreased from 0.80 to 0.69. These findings suggest that systemic therapy-induced morphological and metabolic changes in lymph nodes may adversely affect imaging accuracy.

Conclusion: Preoperative US, MRI, and PET/CT demonstrate moderate diagnostic performance in predicting axillary metastasis. However, current data indicate that none of these imaging modalities are sufficiently reliable to replace SLNB. The false-negative rates observed in radiologically negative axillae preclude the safe omission of surgical staging. Prospective validation of multimodal predictive models is required to enable the safe de-escalation of axillary surgery.

Keywords: SLNB, AD, BREAST

[S-040]

Clinicopathological features and prognostic factors of gastroenteropancreatic neuroendocrine tumors: A single-center experience

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Objective: Gastroenteropancreatic neuroendocrine tumors (GEP-NETs) are a heterogeneous group of neoplasms with increasing incidence and variable clinical behavior. This study aimed to describe the clinicopathological characteristics of surgically/endoscopically treated GEP-NETs and identify prognostic factors associated with overall survival (OS) in a single tertiary center.

Material and Methods: We retrospectively reviewed adult patients diagnosed with GEP-NETs and treated at the Department of General Surgery, Marmara University Faculty of Medicine, between January 2018 and December 2024. Demographic, clinical, and pathological variables, including histologic type (NET vs. NEC), tumor grade, tumor size, Ki-67 index, mitotic index, nodal status, and stage, were collected. The OS was analyzed using the Kaplan-Meier method and compared using the log-rank test. Cox proportional hazards models were used to identify independent predictors of mortality.

Results: Among the 96 patients included in the final analysis, 55% were female, with a median age of 55 years. The primary tumor sites were the pancreas (46%) and stomach (35%), followed by the appendix (6%), small intestine (5%), colorectal (3%), and hepatobiliary tract (4%). Surgical resection and lymph node dissection were performed in 90% and 72%, respectively. NET and NEC accounted for 71% and 29%, respectively. Grades were G1 (48%), G2 (22%), G3 (16%), MiNEN (8%), and undefined (6%). The 5-year OS for the cohort was 79%. Survival was significantly worse in patients with pancreatic and gastric tumors, higher-grade tumors, larger tumors, elevated Ki-67/mitotic indices, NEC histology, and advanced stage. In the multivariable analysis, older age, NEC histology, and advanced stage remained independent adverse prognostic factors.

Conclusion: In this single-center experience, GEP-NET prognosis was primarily driven by age, histologic type, and disease stage. To optimize outcomes, risk-adapted, multidisciplinary management tailored to tumor biology and extent is essential.

Keywords: Neuroendocrine neoplasms, neuroendocrine tumors, gastroenteropancreatic neuroendocrine tumors, Ki-67 proliferation index, prognostic factors

[S-041]

Surgical outcomes after neoadjuvant treatment in patients with locally advanced breast cancer: 12 years of single-center experience

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Objective: Locally advanced breast cancer (LABC) encompasses tumors larger than 5 cm, with axillary lymph node involvement or invasion of the skin/chest wall, necessitating multimodal therapy. It accounts for 5-10% of new breast cancer diagnoses, with prognosis influenced by tumor biology and treatment response. Neoadjuvant chemotherapy (NAC) decreases tumor size, broadens surgical choices, boosts breast-conserving surgery rates, and improves survival in patients achieving pathologic complete response (pCR). Targeted therapies have enhanced outcomes, especially in HER2-positive cases. This study assessed surgical outcomes post-NAC, pCR rates by biologic subtypes, and long-term survival in LABC patients.

Material and Methods: We retrospectively analyzed 455 LABC patients at Ankara Oncology Hospital from January 2010 to December 2022 who had surgery after NAC. Staging used physical exams, mammography, ultrasonography, and MRI, following AJCC 8th edition criteria. Data included age, tumor size, axillary status, biologic subtypes (Luminal A/B, HER2-positive, Triple-negative), Ki-67 index, lymphovascular invasion, chemotherapy regimens (e.g., AC, docetaxel, paclitaxel), surgery type, and pathologic response. Survival was evaluated via Kaplan-Meier curves and log-rank tests; prognostic factors via Cox regression.

Results: Mean age was 51.25±11.71 years; 26.4% were under 40. Invasive ductal carcinoma predominated (91%), with 59.8% grade 3. Subtype distribution: Luminal A (49.2%), Luminal B (25.1%), HER2-positive (11.6%), Triple-negative (14.1%). Clinically, 67.7% were N1 and 20.7% N2. Overall pCR rate: 22.8%; partial response: 36%; no response: 41.2%. HER2-positive cases had 38.3% pCR vs. 12.8% in HER2-negative ($p<0.001$). ER-negative tumors: 39.3% pCR vs. 14.6% ER-positive ($p<0.001$). Grade 3 tumors: 28.3% pCR vs. lower grades ($p<0.001$) (Table 1). Surgery: 69.2% modified radical mastectomy, 20.6% breast-conserving. Mastectomy linked to age <40, tumor ≥5 cm, axillary positivity ($p<0.05$). pCR patients had higher breast-conserving rates ($p<0.001$). Mean follow-up: 121.1 months. Survival varied by subtype (Figure 1), best in hormone receptor-positive, worst in triple-negative (log-rank $p<0.001$).

Conclusion: This 12-year review highlights biologic subtype as key to pCR and survival in LABC. HER2 positivity and ER negativity predict higher pCR, while triple-negative shows poorest survival. Tailored approaches are vital for better outcomes.

Keywords: Locally advanced breast cancer, pathologic complete response (pCR), triple-negative breast cancer, survival (Kaplan-Meier)

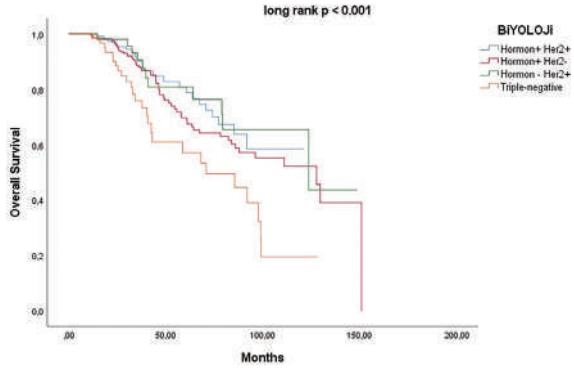


Figure 1. Overall survival according to biological subtypes (Kaplan-Meier analysis, log-rank $p<0.001$).

Table 1. The influence of various clinical and biological variables on pathological response

Variable (category)	Subcategory	Complete response % (n)	Partial response % (n)	No response % (n)	p-value
Age	<40	22.9% (22)	32.3% (31)	44.8% (43)	0.904
	≥40	22.0% (79)	30.6% (110)	47.4% (170)	
Tumor size	<5 cm	23.8% (84)	30.9% (109)	45.3% (160)	0.278
	>5 cm	16.7% (17)	31.4% (32)	52.0% (53)	
Lymph node status	N-	20.8% (75)	33.0% (119)	46.3% (167)	0.142
	N+	27.7% (26)	23.4% (22)	48.9% (46)	
Pathology	Invasive ductal carcinoma	23.1% (94)	31.2% (127)	45.7% (186)	0.235
	Other	23.8% (5)	33.3% (7)	42.9% (9)	
	Invasive lobular carcinoma	7.4% (2)	25.9% (7)	66.7% (18)	
Grade	Grade 1	9.1% (2)	27.3% (6)	63.6% (14)	0.001
	Grade 2	13.7% (22)	26.1% (42)	60.2% (97)	
	Grade 3	28.3% (77)	34.2% (93)	37.5% (102)	
ER status	Negative	39.3% (55)	35.7% (50)	25.0% (35)	0.001
	Positive	14.6% (46)	28.9% (91)	56.5% (178)	
PR status	Negative	36.3% (57)	31.2% (49)	32.5% (51)	0.001
	Positive	14.8% (44)	30.9% (92)	54.4% (162)	
HER2 (c-erbB2)	Negative	12.8% (37)	27.8% (80)	59.4% (171)	0.001
	Positive	38.3% (64)	36.5% (61)	25.1% (42)	
Triple-negative	Negative*	33.8% (22)	35.4% (23)	30.8% (20)	0.010
	Not**	20.3% (79)	30.3% (118)	49.5% (193)	
Ki-67	<15	17.9% (10)	30.4% (17)	51.8% (29)	0.642
	>15	22.8% (91)	31.1% (124)	46.1% (184)	
Lymphovascular invasion	Absent	20.4% (71)	33.0% (115)	46.6% (162)	0.123
	Present	28.0% (30)	24.3% (26)	47.7% (51)	
Chemotherapy regimen	Paclitaxel	20.5% (58)	31.4% (89)	48.1% (136)	0.219
	Docetaxel	20.7% (25)	32.2% (39)	47.1% (57)	
	AC	35.3% (18)	25.5% (13)	39.2% (20)	
Completion of chemotherapy	Not completed	18.9% (17)	30.0% (27)	51.1% (46)	0.597
	Completed	23.0% (84)	31.2% (114)	45.8% (167)	
Type of surgery	MRM	21.0% (66)	21.3% (67)	57.8% (182)	0.001
	Mastectomy + SLNB	34.8% (16)	50.0% (23)	15.2% (7)	
	BCS + axillary dissection	8.3% (4)	52.1% (25)	39.6% (19)	
	BCS + SLNB	32.6% (15)	56.5% (26)	10.9% (5)	

[S-042]

Clinical course and the role of surgical diagnosis in gastrointestinal diffuse large B-cell lymphomas: A retrospective analysis of 47 cases

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Objective: The gastrointestinal (GI) tract is the most common site for extranodal lymphomas. The most frequent histopathological subtype is Diffuse Large B-Cell Lymphoma (DLBCL), with the stomach being the most commonly involved organ. The literature indicates that small intestinal and colonic lymphomas exhibit a more aggressive clinical course and frequently present with complications such as perforation and ileus. This study aims to analyze the clinical characteristics, diagnostic modalities, and survival data of GI-DLBCL cases managed at our institution.

Material and Methods: Fourty-seven patients diagnosed with GI-DLBCL between 2010 and 2025 were evaluated retrospectively. Patients were divided into three groups based on tumor localization: stomach (n=32), small intestine (n=7), and colon (n=8). Demographic data, presenting symptoms, diagnostic methods (biopsy vs. surgery), laboratory parameters, and mortality rates were statistically compared.

Results: The mean age of the 47 patients was 59.9±14.7 years, with a male predominance (70.2%, n=33). The stomach was the most frequently involved organ (68%), followed by the colon (17%) and the small intestine (15%). Clinical presentation varied significantly according to localization; while gastric lymphomas were incidentally detected in 65.6% of cases, a striking 85.7% of small intestinal lymphomas presented with surgical emergencies such as ileus (57.1%) or perforation (28.6%). Analyzing the relationship between diagnostic methodology and tumor biology, tumor sizes in cases diagnosed via surgical resection (57.6±38.3 mm) were statistically significantly larger than those diagnosed via endoscopic biopsy (36.4±20.3 mm) (p=0.011). In the gastric group, *H. pylori* positivity (43.8%) had no significant impact on survival (p=1.000). The overall cohort mortality rate was 38.3%, and the diagnostic modality (surgery vs. biopsy) had no direct effect on mortality rates (p=0.209). Furthermore, no statistically significant differences were observed between deceased and surviving patients regarding albumin, LDH, or hematological parameters (p>0.05).

Conclusion: In GI-DLBCL, anatomical localization is the primary determinant of clinical presentation. While gastric tumors are typically detected incidentally, intestinal cases frequently present as surgical emergencies like ileus and perforation. Our study demonstrates that the requirement for surgical diagnosis increases significantly as tumor size increases (p=0.011). The lack of direct impact of the diagnostic method (surgery vs. biopsy) on survival supports that the current role of surgery is focused on "diagnostic certainty" and "complication management" rather than an oncological cure.

Keywords: Diffuse large B-cell lymphoma, gastrointestinal lymphoma

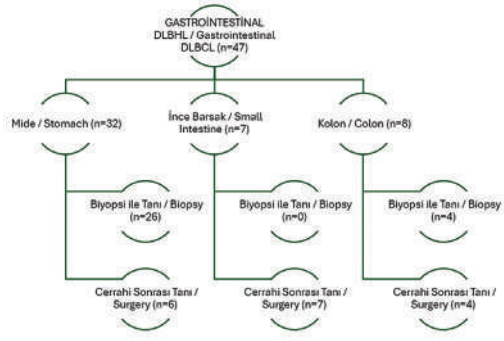


Figure 1. Diagnostic method.

Parametre/Parameter	Mide/Stomach (n=32)	İnce Barsak/Small Intestine (n=7)	Kolon/Colon (n=8)
En Sık Semptomlar/Most Frequent Symptoms	Dispepsi/Dyspepsia (40.6%) Karın AğrısıAbdominal Pain (21.9%) Kanama/Bleeding (12.5%)	Karın Ağrısı/Abdominal Pain (71.4%) Kusma/Vomiting (28.6%) -	Karın Ağrısı/Abdominal Pain (50.0%) Halsizlik/Fatigue (25.0%) Tesadüfi/Incidental (25.0%)
Tanı Nedeni (Klinik Tablo)/Reason for Diagnosis (Clinical Presentation)	Incidental (65.6%) Kanama/Bleeding (15.6%) Perforasyon/Perforation (15.6%)	Ileus (57.1%) Perforasyon/Perforation (28.6%) Obstrüksiyon/Obstruction (14.3%)	Incidental (50.0%) Ileus (50.0%) -
Alt Lokalizasyon/Sub-localization	Antrum (56.3%) Corpus (37.5%) Cardia (6.2%)	Jejunum (57.1%) Ileum (42.9%) -	Sağ Kolon/Right Colon (62.5%) Rektum/Rectum (25.0%) Sol Kolon/Left Colon (12.5%)

Figure 2. Clinical presentation and detailed localization characteristics.

Table 1. Localization and characteristic distribution of gastric DLBCL

Classification parameter	Subgroups	Number of cases (n)	Percentage (%)
Site of Gastric Involvement	Antrum	18	56.3%
	Corpus	1	37.5%
	Cardia	2	6.2%
Endoscopic Lesion Appearance	Ulcerated	13	40.6%
	Ulcerovegetative Mass	12	37.5%
	Mucosal Irregularity	4	12.5%
	Polypoid	3	9.4%
H. pylori Status	Positive (+)	14	43.8%
	Negative (-)	18	56.2%

Table 2. Clinical and laboratory characteristics of GI DLBCL

Characteristic	Total (n=47)	Stomach (n=32)	Small intestine (n=7)	Colon (n=8)	p-value
Age (Mean ± SD)	59.9±14.7	60.6±13.5	50.4±20.5	65.5±11.0	0.227
Age <60, n (%)	21 (44.7%)	16 (50.0%)	4 (57.1%)	1 (12.5%)	0.125
Age ≥60, n (%)	26 (55.3%)	16 (50.0%)	3 (42.9%)	7 (87.5%)	
Gender: Male, n (%)	33 (70.2%)	21 (65.6%)	4 (57.1%)	8 (100.0%)	0.117
Gender: Female, n (%)	14 (29.8%)	11 (34.4%)	3 (42.9%)	0 (0.0%)	
ASA score: 1, n (%)	4 (8.5%)	2 (6.2%)	2 (28.6%)	0 (0.0%)	0.227
ASA score: 2, n (%)	19 (40.4%)	14 (43.8%)	1 (14.3%)	4 (50.0%)	
ASA score: 3, n (%)	20 (42.6%)	12 (37.5%)	4 (57.1%)	4 (50.0%)	
ASA score: 4, n (%)	4 (8.5%)	4 (12.5%)	0 (0.0%)	0 (0.0%)	
BM involvement: present, n (%)	6 (12.8%)	4 (12.5%)	1 (14.3%)	1 (12.5%)	0.992
BM involvement: absent, n (%)	41 (87.2%)	28 (87.5%)	6 (85.7%)	7 (87.5%)	
Serum LDH (Mean ± SD)	345.7±295.7	350.6±332.9	394.0±272.1	283.8±115.5	0.726
WBC (Mean ± SD)	9.8±4.3	10.3±4.1	9.7±4.9	7.8±4.4	0.188
HGB (Mean ± SD)	11.0±2.4	11.2±2.6	9.7±2.5	11.1±1.4	0.245
Platelet count (Mean ± SD)	322.9±176.9	309.1±127.6	484.1±321.5	237.0±98.0	0.079
Albumin (Mean ± SD)	3.27±0.74	3.24±0.75	3.07±0.80	3.54±0.65	0.387
Tumor size (mm), Mean ± SD	41.5 ± 28.4	35.2 ± 22.6	57.1±44.3	52.8±28.2	0.190
Mortality, n (%)	18 (38.3%)	15 (46.9%)	1 (14.3%)	2 (25.0%)	0.192

[S-043]

Frailty-based risk profiles as predictors of surgical outcomes in geriatric patients with acute cholecystitis: Modified frailty index and risk analysis index

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Objective: Acute cholecystitis poses a high-risk clinical scenario in geriatric patients. Frailty-based indices, which jointly address functional status and comorbidity burden, are gaining increasing importance in predicting perioperative risk. In this study, the effectiveness of risk profiles created using the modified frailty index (mFI) and Risk Analysis Index (RAI) in predicting surgical outcomes in geriatric acute cholecystitis patients was evaluated.

Material and Methods: Patients aged 70 years and older with acute cholecystitis were classified into risk groups according to mFI and RAI using existing clinical data. The Mann-Whitney U test was used to compare continuous variables, and the chi-square or Fisher's exact test was used to analyze categorical variables. The independent effect of frailty scores on surgical outcomes was evaluated using logistic regression analysis. Statistical significance was set at $p<0.05$.

Results: A total of 78 geriatric patients who underwent surgical treatment for acute cholecystitis were included in the study. The mean age of the patients was 76.0±4.8. According to the mFI, 57.7% of the patients were classified as high-risk, while 44.9% were classified as high-risk according to the RAI. It was observed that surgical outcomes deteriorated significantly as frailty levels increased. The need for intensive care was 75.6% in the high-risk group according to mFI and 51.5% in the low-risk group, and a statistically significant correlation was found between intensive care admission and the mFI index ($p=0.027$). Similarly, the need for intensive care was 77.1% in the high-risk group and 55.8% in the low-risk group according to RAI, and a statistically significant difference was found between intensive care admission and the RAI index ($p=0.049$). In terms of hospital stay duration, it was longer in the high-risk group for both frailty indices and was found to be statistically significant ($p=0.047$ for mFI, $p=0.021$ for RAI). The postoperative mortality rate was 17.8% in the high-risk group according to mFI, while no mortality was observed in the low-risk group, and this difference was statistically significant ($p=0.018$). According to RAI, mortality was higher in the high-risk group, but this increase did not reach statistical significance.

Conclusion: The higher discriminatory power of mFI in predicting mortality suggests that this index can be used as a reliable predictor in perioperative risk classification. In contrast, the effectiveness of RAI in predicting intensive care requirements and length of hospital stay suggests that frailty assessment may be a complementary risk determination tool for different clinical outcomes.

Keywords: Acute cholecystitis, frailty, geriatric patient

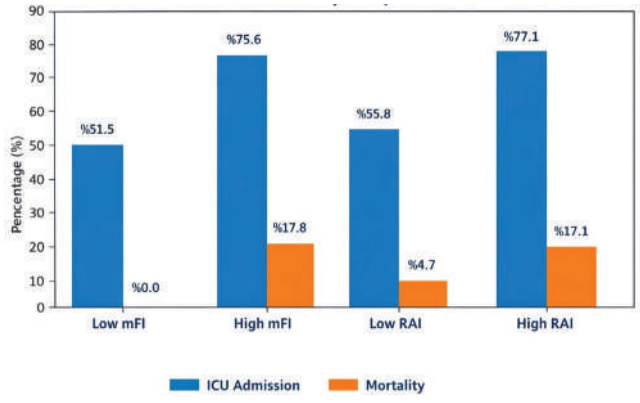


Figure 1. Clinical outcomes by frailty indices.

[S-044]

Outcomes of geriatric patients followoed up in the intensive care unit after major abdominal surgery: Is there a difference between decades?

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Objective: Advanced age is associated with increased mortality and morbidity after abdominal surgery due to comorbidities and reduced functional reserve, often resulting in greater intensive care needs and prolonged hospitalization. However, data comparing outcomes across geriatric age subgroups remain limited. This study aimed to compare outcomes in geriatric patients undergoing major abdominal surgery and to evaluate the relationship between increasing age and mortality risk.

Material and Methods: We retrospectively reviewed 366 patients aged ≥65 years who were admitted to the General Surgery Intensive Care Unit of Dicle University Hospital following major abdominal surgery between January 1, 2020, and December 31, 2024. Patients were categorized into three age groups: 65-74 years (young-old), 75-84 years (old), and ≥85 years (very old). Demographic and clinical variables including ASA, SOFA, APACHE II, Charlson comorbidity index (CCI), Glasgow Coma scale (GCS), ECOG performance status, diagnosis, timing (elective/emergency) and type of surgery (open/laparoscopic), morbidity severity (Clavien-Dindo classification), mortality, and ICU and hospital length of stay were analyzed. The effect of age decades on mortality was assessed.

Results: Of the cohort, 207 patients were young-old, 130 were old, and 29 were very old. Significant differences among age groups were observed for ASA ($p<0.001$), APACHE II ($p=0.021$), CCI ($p<0.001$), GCS ($p=0.014$), diagnosis ($p=0.035$), surgical indication ($p=0.015$), operative duration ($p=0.012$), septic shock on admission ($p=0.022$), and postoperative septic shock ($p=0.002$). Younger patients had lower ASA, APACHE II, and CCI scores, higher GCS, and more elective procedures (52.2%), with longer operative times (186.4±108.5 min). In the very old group, 96.6% had ASA ≥3 and 75.9% underwent emergency surgery; operative times were shorter (105±80.5 min). Overall, complications occurred in 365 patients, but only 39.1% were Clavien-Dindo grade ≥3. The overall mortality rate was 18.6%, with no significant difference between age groups ($p=0.064$). ICU ($p=0.597$) and hospital stay ($p=0.232$) were also comparable. In univariate analysis, age, ASA, ECOG, APACHE II, SOFA, CCI, GCS, emergency and open surgery, sepsis, septic shock on admission, and postoperative septic shock were associated with mortality. Multivariate analysis identified ASA, CCI, GCS, and postoperative septic shock as independent predictors.

Conclusion: This study found no difference in mortality between decades after major abdominal surgery, but determined that ASA and GCS scores and the presence of postoperative septicshock wereassociated with mortality. It was observed that the mortality risk of geriatric patients after major abdominal surgery was related more to their physiological status and comorbidities than to their biological age.

Keywords: Decade, major abdominal surgery, mortality

[S-045]

Incidental parathyroidectomy after thyroidectomy: Anatomical characteristics and clinical outcomes

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Objective: Incidental parathyroidectomy (IPE) is a key determinant of postoperative hypocalcemia and hypoparathyroidism after thyroidectomy. The reported incidence of parathyroid tissue in thyroidectomy specimens ranges from 10% to 22%, but the impact of gland number and surgical factors on outcomes remains unclear. This study evaluated the anatomical features of incidentally excised parathyroid glands and their association with postoperative outcomes.

Material and Methods: Between January, 2024 and December, 2025, 497 thyroidectomy cases performed at our center were retrospectively reviewed, and 118 patients (23.7%) with parathyroid tissue identified in the surgical specimen were included. Demographic, preoperative, surgical, pathological, and postoperative variables were analyzed. Surgical variables included the type of operation, presence of neck dissection, reoperative status, and a composite difficulty score. The number, location, and size of excised parathyroid glands were recorded. The primary endpoint was postoperative hypoparathyroidism (transient+permanent). Patients were compared according to hypoparathyroidism status; categorical variables were analyzed using the chi-square test, and odds ratios (OR) were calculated for significant factors.

Results: The mean age of the 118 patients was 48.76±13.87 years; 83.9% were female,and the mean body mass index was 27.09±4.68 kg/m². Overall,86.4% were classified as ASA II-III. The mean preoperative TSH level was 1.62±1.69 mIU/L, and the mean calcium level was 9.56±0.55 mg/dL. The mean length of hospital stay was 2.68±1.11 days. Postoperative hypoparathyroidism developed in 36 patients (30.5%), including 19.5% transient and 11.0% permanent cases. Of the cohort, 73.7% underwent total thyroidectomy, 23.7% lobectomy, and 2.5% completion thyroidectomy. A single parathyroid gland was excised in 86.4% of cases, whereas 13.6% had two or more glands removed. The excised glands were right-sided in 50.8%, left-sided in 35.6%, and ipsilateral to the dominant thyroid lesion in 72.9% of patients. Total thyroidectomy was significantly associated with hypoparathyroidism (86.1% vs. 68.3%; p=0.041; OR=2.86, 95% CI: 1.03-7.95). Removal of two or more parathyroid glands also increased the risk (22.2% vs. 9.8%; p=0.048; OR=2.62,95% CI: 1.01-6.80). In contrast, central neck dissection,malignancy, reoperative surgery,and the composite difficulty score were not significantly associated (p>0.05). In the hypoparathyroidism group, postoperative calcium (6.86±1.51 vs. 8.47±0.74 mg/dL; p<0.001) and PTH levels (8.67±8.12 vs. 33.12±13.84 pg/mL; p<0.001) were significantly lower. Laboratory hypocalcemia (88.9% vs. 43.9%), symptomatic hypocalcemia (52.8% vs. 7.3%), and intravenous calcium requirement (36.1% vs. 3.7%) were significantly higher (all p<0.001). Length of hospital stay was also significantly longer in the hypoparathyroidism group (3.25±1.37 vs. 2.41±0.92 days; p=0.002).

Conclusion: The rate of incidental parathyroidectomy at our center was near the upper limit reported in the literature,and the permanent hypoparathyroidism rate was high at 11%. Only total thyroidectomy and removal of two or more parathyroid glands were significantly associated with hypoparathyroidism, whereas the composite surgical difficulty score was not predictive. These findings indicate that the development of hypoparathyroidism is determined more by quantitative loss and functional preservation of the parathyroid glands than by macroscopic surgical difficulty. The predominance of ipsilateral gland excision suggests that the dissection plan plays a critical role in parathyroid preservation. Overall, these results underscore the importance of systematic parathyroid preservation strategies in reducing complications during thyroid surgery.

Keywords: Total thyroidectomy, incidental parathyroidectomy, hypocalcemia

Table 1. Baseline demographic and preoperative clinical characteristics

Değişken	Toplam (n=118)	Hipo (–) (n=82)	Hipo (+) (n=36)	p
Yaş (yıl)	48,76 ± 13,87	49,32 ± 13,41	47,44 ± 14,86	0,52
Kadın cinsiyet	99 (%83,9)	69 (%84,1)	30 (%83,3)	0,91
BMI (kg/m²)	27,09 ± 4,68	27,52 ± 4,61	26,13 ± 4,76	0,18
ASA ≥ II	102 (%86,4)	70 (%85,4)	32 (%88,9)	0,83
Malignite	32 (%27,1)	20 (%24,4)	12 (%33,3)	0,3
Preop TSH (mIU/L)	1,62 ± 1,69	1,55 ± 1,58	1,79 ± 1,93	0,48
Preop Kalsiyum (mg/dL)	9,56 ± 0,55	9,60 ± 0,50	9,48 ± 0,61	0,34

Table 2. Surgical and parathyroid factors associated with postoperative hypoparathyroidism

Değişken	Hipo (–) n=82	Hipo (+) n=36	p	OR (%95 GA)
Total tiroidektomi	56 (%68,3)	31 (%86,1)	**0,041**	**2,86 (1,03–7,95)**
Santral diseksiyon	4 (%4,9)	4 (%11,1)	0,21	2,43 (0,56–10,56)
Reoperatif cerrahi	3 (%3,7)	2 (%5,6)	0,64	1,54 (0,24–9,65)
≥2 paratiroid bez çıkarılması	8 (%9,8)	8 (%22,2)	**0,048**	**2,62 (1,01–6,80)**
Aynı taraf eksizyon	57 (%69,5)	29 (%80,6)	0,21	1,81 (0,73–4,52)
Zor tiroidektomi skoru	1,39 ± 0,65	1,47 ± 0,71	0,61	—

***Zor tiroidektomi skoru:** *İnvazyon, Rt Öyküsü, Aynı Taraf İlab, Graves / Hipervaskülarite, Tiroidit / İnflamasyon, Zuckerkandl, Metastatik Lap, Anatomik Varyasyon;* **bulguları varlığında 1 puan verilerek hesaplanmıştır.**

Table 3. Anatomical characteristics of incidentally excised parathyroid glands

Değişken	n=118 (%)	Değişken	n=118 (%)
1 bez çıkarılan	102 (%86,4)	Bilateral	12 (%10,2)
≥2 bez çıkarılan	16 (%13,6)	Lezyonla aynı taraf	86 (%72,9)
Sağ yerleşimli	60 (%50,8)	Ortalama bez çapı (mm)	3,44 ± 1,57
Sol yerleşimli	42 (%35,6)		

Table 4. Postoperative clinical outcomes according to hypoparathyroidism status

Değişken	Hipo (–) n=82	Hipo (+) n=36	p
Postop Kalsiyum (mg/dL)	8,47 ± 0,74	6,86 ± 1,51	<0,001
Postop PTH (pg/mL)	33,12 ± 13,84	8,67 ± 8,12	<0,001
Laboratuvar hipokalsemi	36 (%43,9)	32 (%88,9)	<0,001
Semptomatik hipokalsemi	6 (%7,3)	19 (%52,8)	<0,001
IV kalsiyum gereksinimi	3 (%3,7)	13 (%36,1)	<0,001
Yatış süresi (gün)	2,41 ± 0,92	3,25 ± 1,37	0,002
30 gün içinde yeniden başvuru	4 (%4,9)	4 (%11,1)	0,22
IV kalsiyum gereksinimi	3 (%3,7)	13 (%36,1)	<0,001
Yatış süresi (gün)	2,41 ± 0,92	3,25 ± 1,37	0,002
30 gün içinde yeniden başvuru	4 (%4,9)	4 (%11,1)	0,22

[S-046]

Postoperative thyroglobulin levels and factors affecting thyroglobulin levels in patients undergoing surgery for thyroid cancer

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Objective: This study aimed to evaluate postoperative thyroglobulin (Tg) levels and the clinical, biochemical, and pathological factors influencing Tg levels in patients who underwent surgery for thyroid cancer.

Material and Methods: The data of 273 patients who underwent bilateral total thyroidectomy with a diagnosis of thyroid cancer between January 2018 and December 2022 were retrospectively analyzed. Demographic characteristics, preoperative and postoperative thyroid-stimulating hormone (TSH) and thyroglobulin levels, tumor size, histopathological features, and lymphovascular invasion status were evaluated. Statistical analyses were performed using IBM SPSS version 22.0, and a p-value <0.05 was considered statistically significant.

Results: Of the included patients, 78.4% were female and 21.6% were male. The mean age was 47.79±12.85 years. A statistically significant association was found between postoperative thyroglobulin levels and both preoperative and postoperative TSH levels ($p<0.05$). Postoperative thyroglobulin levels showed a strong positive correlation with preoperative thyroglobulin levels ($p<0.001$). Postoperative thyroglobulin levels increased significantly with increasing tumor size ($p<0.05$). Male patients had significantly higher postoperative thyroglobulin levels compared to female patients ($p=0.036$). Patients with lymphovascular invasion had significantly higher postoperative thyroglobulin levels ($p=0.002$).

Conclusion: Postoperative thyroglobulin level is an important biochemical marker for predicting recurrent disease in the follow-up of patients with differentiated thyroid cancer. Tumor size, lymphovascular invasion, TSH levels, and male gender were found to be associated with elevated postoperative thyroglobulin levels. Closer and more careful postoperative surveillance is recommended for these patient groups.

Keywords: Thyroid cancer, thyroglobulin

[S-047]

Voice related symptoms after thyroid/parathyroid surgery: Preop-postop patient reported outcomes

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Objective: Although laryngeal nerve integrity may be preserved after thyroid and parathyroid surgery, patients can still experience voice-related complaints without paralysis. This study aimed to compare patient-reported voice-related symptom outcomes before thyroid/parathyroid surgery and at postoperative month 1 in patients without vocal fold injury.

Material and Methods: Over a 3-month period, 71 individuals were contacted and 59 participants who met the inclusion criteria (no vocal cord paralysis, signal obtained from intraoperative neuromonitoring, and post-operative interview) were included in the study. Data were collected one day preoperatively and one month postoperatively using the reflux symptom index (RSI), voice handicap index (VHI), and vocal tract discomfort scale (VTDS). In addition, GRBAS scores based on the speech-language therapist's (SLP) perceptual judgment were recorded. Pre-post comparisons were analyzed using a paired-samples t-test or the appropriate non-parametric equivalent depending on normality. Linear correlations among the self-report scales were also evaluated.

Results: Preoperative mean scores were low across all three questionnaires. Compared with postoperative first month, no statistically significant differences were detected in RSI, VHI, or VTDS scores ($p>0.05$). Similarly, no significant changes in perceptual voice quality features were observed in GRBAS scores between the two time points. Correlations among RSI, VHI, and VTDS were fair preoperatively and increased to a moderate level postoperatively.

Conclusion: According to the findings, in patients without evidence of vocal fold injury after thyroid/parathyroid surgery, patient-reported voice-related symptoms (RSI, VHI, VTDS) and perceptual voice quality (GRBAS) at postoperative first month were comparable to preoperative levels. These findings suggest that, when appropriate surgical technique is used and supported by intraoperative neuromonitoring, non-paralytic voice complaints may not show a clinically meaningful deterioration by the first postoperative month. The choice of the one-month follow-up time point is also a feasible approach, as early postoperative inflammation/edema is more likely to have stabilized, enabling more consistent patient-reported and perceptual assessments. Although all three questionnaires assess voice-related symptoms, they appear to capture different constructs and therefore should not be used interchangeably; instrument selection should be guided by the intended clinical outcome. The results may help clinicians in counseling patients and managing expectations regarding recovery of voice-related outcomes at approximately one month after surgery.

Keywords: Thyroid/parathyroid surgery, voice changes, intraoperative nerve monitoring.

[S-048]

Incidental malignancy rate and risk factors in thyroid nodules with benign cytology: A single-center experience

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Objective: Despite a benign cytological diagnosis in thyroid nodules, incidental thyroid carcinoma may be detected in surgical pathology. The aim of this study was to determine the incidence of incidental thyroid cancer and to identify associated risk factors in patients who underwent surgery despite having benign preoperative fine-needle aspiration biopsy (FNAB) results.

Material and Methods: A total of 122 patients who had benign FNAB results and underwent thyroidectomy due to surgical indications were included in the study. The patients were divided into two groups based on histopathological findings: Group 1 (benign, n=83) and Group 2 (malignant, n=39). The groups were statistically compared in terms of age, sex, thyroid nodule size, number, and characteristics on ultrasonography, preoperative and postoperative TSH and free T4 levels, and the presence of Hashimoto's thyroiditis. Continuous variables were analyzed using the independent samples t-test or the Mann-Whitney U test according to data distribution. Categorical variables were analyzed using Pearson's chi-square test or Fisher's exact test. A p value <0.05 was considered statistically significant.

Results: Incidental malignancy was detected in 32% (n=39) of patients. No significant differences were found between the groups regarding age, sex, or preoperative and postoperative TSH and free T4 levels (p>0.05). The mean nodule diameter was significantly smaller in the malignant group (21.6 mm vs. 31.8 mm, p=0.0002), and solitary nodules were more frequent (p=0.018). Hashimoto's thyroiditis was more common in the malignant group (20.5% vs. 10.8%, p=0.041). In subgroup analysis, capsular invasion and the need for completion surgery were higher in patients with papillary thyroid carcinoma than in those with papillary thyroid microcarcinoma (p<0.05). These findings indicate that benign cytology does not provide absolute assurance, and closer evaluation may be required, particularly in patients with small nodules and Hashimoto's thyroiditis.

Conclusion: The risk of incidental malignancy should not be overlooked in patients with small, solitary nodules and coexisting Hashimoto's thyroiditis despite benign cytology. In these high-risk groups, surgical decision-making and postoperative follow-up strategies should be managed more carefully.

Keywords: Benign cytology, incidental carcinoma, Hashimoto's thyroiditis

Table 1. Comparison of Benign and Malignant Groups

Değişken	Grup 1	Grup 2	P değeri
Yaş	48.6 ±12.1	45.4±11.5	0.168
Cinsiyet (% Kadın)	%78.3	%87.2	0.245
Nodül çapı (mm)	31.8±14.2	21.6±13.8	**0.0002**
Preop TSH (mIU/ml)	1.63±1.2	1.94±1.4	0.224
Preop sT4 (ng/dL)	1.16 ±0.3	1.28±0.4	0.076
Hashimoto Varlığı	%10.8	%20.5	**0.041**

[S-049]

Four gland exploration in primary hyperparathyroidism: Single-center experience

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Objective: Although minimally invasive parathyroidectomy is the gold standard in primary hyperparathyroidism (PHPT) surgery, four-gland exploration (FGE) remains necessary in selected patients. This study evaluated the clinical characteristics, imaging accuracy, indications for exploration, and surgical outcomes of patients who underwent FGE for PHPT.

Material and Methods: Between January 2018 and September 2025, 674 patients underwent parathyroidectomy for PHPT; 43 (6.4%) who required FGE were retrospectively analyzed. Preoperative imaging (ultrasonography, scintigraphy, four-dimensional computed tomography), intraoperative parathyroid hormone (IOPTH) monitoring, histopathology, postoperative biochemical parameters, and complications were assessed. Cure was defined as parathyroid hormone (PTH) ≤65 pg/mL and corrected calcium ≤10.0 mg/dL at 6 months.

Results: Thirty-three patients (76.7%) were female; mean age was 55.4±10.0 years. Multinodular goiter (MNG) was present in 72.1%, and in 70% of these, nodules were ipsilateral to the adenoma. The main surgical indication was hypercalcemia (90.7%), followed by osteoporosis, nephrolithiasis, and hypercalciuria. Vitamin D was <20 ng/mL in 53.7%. Indications for FGE were preoperative non-localization (44.2%), inadequate IOPTH decline (23.3%), suspicious/negative frozen section (14.0%), preoperative-intraoperative discordance (11.6%), and imaging discordance (9.3%). Single adenoma was found in 72.1%, double adenoma in 9.3%, hyperplasia in 4.7%, and normal parathyroid tissue in 11.6%; one gland was not identified. Median adenoma size was 12 mm. Ectopic localization occurred in 20.9% (intrathyroidal, intrathymic, thyrothymic ligament). Concomitant thyroid surgery was performed in 32.6%. Mean operative time was 172.3±54.3 minutes. According to the Miami criterion, adequate IOPTH decline occurred in 88.4%. Overall cure rate was 81.4%. Among non-cured patients, most had normocalcemic hyperparathyroidism attributed to vitamin D deficiency with later normalization. Recurrent/persistent disease occurred in 9.3%. Complications were observed in 11.6%, with no permanent recurrent laryngeal nerve injury.

Conclusion: In our series, FGE was required in 6.4% of PHPT surgeries. High MNG prevalence and ipsilateral nodules reduced imaging accuracy. The frequent occurrence of normocalcemic hyperparathyroidism emphasizes the role of vitamin D deficiency in postoperative PTH elevation. The risk of late recurrence in hyperplasia necessitates long-term follow-up. The notable rate of ectopic localization supports systematic FGE in selected patients.

Keywords: Primary hyperparathyroidism, four gland exploration

Table 1. Localization accuracy of preoperative imaging modalities

Method	Performed n (%)	Non-localized n (%)	Localized n (%)	Correct loc. n/N (%)*
Scintigraphy	43 (100)	26 (60.5)	17 (39.5)	8/18 (44.4)
USG	43 (100)	27 (62.8)	16 (37.2)	9/16 (5.,2)
4D CT	19 (44,2)	11 (57.9)		

*: Rate calculated among evaluable cases.

Table 2. Preoperative and postoperative biochemical parameters [median (range)]

	Preoperative	Postoperative day 1	Postoperative month 6
PTH (pg/mL)	128.0 (61-961)	9.6 (1.0-88.0)	50.0 (1.0-158)
Corrected Ca (mg/dL)	11.2 (9.9-13.3)	9.3 (7.9-11.8)	9.1 (8.1-11.5)

[S-050]

"Thyroid nodules in Graves' disease: More than an innocent finding?"

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Objective: Thyroid cancer is generally considered an infrequent finding in Graves-Basedow disease; however, emerging data suggest that accompanying thyroid nodules may confer a higher risk of malignancy.

Material and Methods: Between 2009 and 2025, a total of 83 consecutive patients who underwent surgery for Graves-Basedow disease at our center were retrospectively reviewed. Patients were stratified and compared according to the presence or absence of thyroid nodules. Demographic characteristics, preoperative ultrasonographic findings regarding nodule status, and final histopathological results were recorded. The primary endpoint was the presence of malignancy on final pathology.

Results: Of the 83 patients, 55 were female (66.3%) and 28 were male (33.7%). Preoperative ultrasonography revealed thyroid nodules in 34 patients (41%). Thyroid malignancy was identified in 27 patients (32.5%) on final histopathological examination, all within the spectrum of papillary thyroid carcinoma. The majority of malignant cases consisted of papillary thyroid microcarcinomas (24/27, 88.9%). The rate of malignancy was 67.6% (23/34) in patients with nodules, compared to 8.2% (4/49) in those without nodules.

Conclusion: In our surgical series, thyroid malignancy was observed at a considerable rate among patients with Graves-Basedow disease. In particular, the presence of thyroid nodules was strongly associated with malignancy. Our findings are consistent with previous studies reporting an increased risk of cancer in Graves patients with coexisting nodules.In patients with Graves' disease, careful ultrasonographic evaluation should be performed when nodules are present. Suspicious nodules should undergo fine-needle aspiration (FNA) in accordance with American Thyroid Association (ATA) recommendations, and the possibility of malignancy should be taken into account during surgical planning.

Keywords: Graves, thyroid, noudule

[S-051]

The role of preoperative vitamin D levels in the development of hypocalcemia after total thyroidectomy

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Objective: This study aimed to investigate the effect of preoperative vitamin D levels on the development of hypocalcemia following total thyroidectomy.

Material and Methods: Patients who underwent bilateral total thyroidectomy in our clinic between January 2018 and January 2026 and had preoperative serum vitamin D measurements were included. A retrospective analysis was performed on 48 patients, evaluating preoperative vitamin D levels and postoperative calcium values. Patients with iatrogenic parathyroidectomy during surgery, those who underwent lobectomy or completion thyroidectomy, patients using vitamin D supplements preoperatively, and cases without serum vitamin D results were excluded. Hypocalcemia was defined as postoperative calcium <8.5 mg/dL. Patients were categorized into three groups according to vitamin D levels: <10 ng/mL, 10-19 ng/mL, and ≥20 ng/mL. Hypocalcemia incidence was compared among the groups.

Results: The rates of hypocalcemia in the groups were 50%, 52%, and 57%, respectively, with no statistically significant difference (p=0.954).

Conclusion: IPreoperative vitamin D levels were not significantly associated with postoperative hypocalcemia. The limited sample size may have contributed to the lack of statistical significance, and larger studies may yield more meaningful results. Our findings suggest that vitamin D level alone is not a decisive factor in hypocalcemia development and should be evaluated together with other clinical parameters. A multifactorial approach is required in assessing the risk of postoperative hypocalcemia.

Keywords: Total thyroidectomy, postoperative hypocalcemia, vitamin D deficiency

Table 1. Post total thyroidectomy hypocalcemia and demographic features with vitamin D deficiency

	Total (n=48)	Eucalcemia (n=23)	Hypocalcemia (n=25)	p-value
Age (years, mean ± SD)	50.6±12.6	50.9±10.4	50.2±14.6	0.799
Gender male % (n)	10.4 (5)	60 (3)	40 (2)	0.838
Preoperative 25(OH) vitamin D (ng/mL)				0.954
<10	12	50% (6)	50% (6)	
10–19	29	48% (14)	52% (15)	
≥20	7	43% (3)	57% (4)	

[S-052]

The effect of fluorescence imaging techniques on parathyroid preservation and parathyroid function in total thyroidectomy

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Objective: Preserving parathyroid glands (PGs) is critical for minimizing postoperative hypoparathyroidism and hypocalcemia risks after total thyroidectomy. These complications stem from inadvertent PG excision or devascularization. Indocyanine green (ICG) angiography evaluates PG perfusion, while near-infrared autofluorescence (NIRAF) allows early PG detection using natural autofluorescence. This study compared naked-eye, ICG, and NIRAF methods for PG preservation during total thyroidectomy.

Material and Methods: A retrospective analysis was conducted using prospective Eurocrine database records of patients undergoing bilateral total thyroidectomy (January 2023-February 2026). Patients with missing pathology data or lateral neck dissection were excluded. Patients were categorized into Control (naked-eye), ICG, and NIRAF/AF groups. Primary endpoints were incidental parathyroidectomy (PG in surgical specimen), early hypoparathyroidism, and hypocalcemia. Continuous and categorical variables were compared using appropriate non-parametric tests, followed by adjusted post-hoc analyses. A multivariable logistic regression evaluated independent risk factors for incidental parathyroidectomy.

Results: A total of 356 patients were analyzed (Control n=228, ICG n=99, AF n=30). Age, gender, and BMI were similar across the groups. The malignancy rate was higher in the AF group (Control 68.9%; ICG 75.8%; AF 86.7%; p=0.042). The frequency of CND differed according to the methods (Control 47.8%; ICG 44.4%; AF 70.0%; p=0.026). Operative time varied among the groups [median (IQR): Control 75 (65-120) min; ICG 125 (105-152.5) min; AF 72 (60-110) min; p<0.001], and in the post-hoc analysis, the ICG group had a significantly longer time compared to the other two groups (adjusted p<0.001). Autotransplantation (≥1 gland) was more frequent in the ICG and AF groups compared to the Control group (Control 1.3%; ICG 23.2%; AF 16.7%; p<0.001), with no significant difference between the ICG and AF groups. The incidental parathyroidectomy rate differed among the techniques (Control 26.3%; ICG 16.2%; AF 10.0%; p=0.035). In the multivariable analysis for incidental parathyroidectomy, it was observed that CND increased the odds of incidental parathyroidectomy (aOR 2.31; 95% CI 1.15-4.67; p=0.019), whereas the use of AF significantly reduced the odds compared to the control group (aOR 0.28; 95% CI 0.08-0.96; p=0.043). Day 1 hypoparathyroidism and hypocalcemia rates were similar across the groups.

Conclusion: ICG and NIRAF were associated with higher parathyroid autotransplantation rates than the conventional approach. Unlike ICG, NIRAF did not prolong operative time. Most importantly, NIRAF independently reduced the risk of incidental parathyroidectomy. Larger, multicenter studies are needed to validate these findings and their impact on clinical outcomes.

Keywords: Thyroidectomy, parathyroid gland preservation, near-infrared autofluorescence

Table 1. Multivariable logistic regression for parathyroid gland identified in the surgical specimen

Predictor	Adjusted OR	95% CI	p-value
Age (per year)	1.01	0.99–1.03	0.284
Male sex (vs female)	0.64	0.34–1.20	0.164
Central neck dissection (yes vs no)	2.31	1.15–4.67	0.019
Malignancy/suspicion (vs not malignant)	0.91	0.42–1.99	0.818
Technique: ICG (vs control)	0.55	0.30–1.02	0.059
Technique: Autofluorescence (vs control)	0.28	0.08–0.96	0.043

[S-053]

Does the ATA 2025 guideline consider more patients eligible for hemithyroidectomy compared with the ATA 2015 guideline?

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Objective: In differentiated thyroid cancer (DTC), surgical management has evolved in recent years toward de-escalation strategies aimed at avoiding unnecessary total thyroidectomy while preserving oncologic safety. The 2015 American Thyroid Association (ATA) guideline defined hemithyroidectomy (HT) as an adequate surgical option in selected low-risk patients, whereas the 2025 update more broadly incorporates patient preference, surgeon experience, and pathological risk factors into the decision-making process. This study aimed to re-evaluate the surgical eligibility of DTC patients who underwent HT according to the ATA 2015 and ATA 2025 guidelines and to assess the concordance of completion thyroidectomy (CT) decisions with guideline recommendations.

Material and Methods: Between January 2015 and January 2025, 98 patients who underwent primary hemithyroidectomy for DTC at the Department of General Surgery, Marmara University Faculty of Medicine, were retrospectively analyzed. Demographic, surgical, and pathological data were obtained from hospital records. Cases of non-invasive follicular thyroid neoplasm with papillary-like nuclear features (NIFTP) and follicular tumors of uncertain malignant potential (FT-UMP) were excluded from guideline eligibility analyses. The remaining 86 patients were evaluated for HT eligibility and CT recommendations according to the ATA 2015 and ATA 2025 criteria. Differences between the two guidelines were analyzed using the McNemar test.

Results: The mean age of the patients was 45.1±13.5 years, and 79.6% were female. The most common postoperative diagnosis was papillary thyroid carcinoma (63.3%). The median tumor size was 12.5 mm (IQR: 8-25). According to the ATA 2015 guideline, 60.5% of patients were considered eligible for hemithyroidectomy, whereas this proportion increased to 81.4% according to the ATA 2025 criteria, with a statistically significant difference (McNemar test, $p<0.001$). The proportion of patients for whom completion thyroidectomy was recommended decreased from 44.2% under ATA 2015 to 26.7% under ATA 2025 ($p<0.001$). In real-world practice, completion thyroidectomy was performed in 35 patients (40.7%), and in some cases, surgical extension exceeded guideline recommendations based on ATA 2025 criteria.

Conclusion: The ATA 2025 guideline considers a greater proportion of patients eligible for hemithyroidectomy compared with ATA 2015 and substantially reduces recommendations for completion thyroidectomy. However, in clinical practice, the rate of completion thyroidectomy remains higher than guideline recommendations in selected cases. These findings support the promotion of de-escalation strategies and the strengthening of guideline-based decision-making in the surgical management of differentiated thyroid cancer.

Keywords: Guideline, thyroid neoplasms, thyroidectomy

Table 1. Eligibility for hemithyroidectomy and recommendations for completion thyroidectomy according to ATA 2015 and ATA 2025 guidelines (n=86)

Variables	n(%)
HT eligibility according to ATA 2015	
Eligible	52(60.5)
Not eligible	34 (39.5)
HT eligibility according to ATA 2025	
Eligible	70 (81.4)
Not eligible	16 (18.6)
CT recommendation according to ATA 2015	
Recommended	38 (44.2)
Not recommended	48 (55.8)
CT recommendation according to ATA 2025	
Recommended	23 (26.7)
Not recommended	63 (73.3)

Note: NIFTP and FT-UMP cases were excluded from guideline-based eligibility and CT analyses. Comparisons between ATA 2015 and ATA 2025 were performed using the McNemar test ($p<0.001$).

Table 2. Completion thyroidectomy recommendations according to ATA 2015 and ATA 2025 guidelines and actual clinical practice

	ATA 2015	ATA 2025	Actual practice
Completion thyroidectomy, n (%)	38 (44.2)	23 (26.7)	35 (40.7)

[S-054]

Lobectomy eligibility in T2 differentiated thyroid carcinoma: A tertiary hospital experience

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Objective: According to the 2025 ATA guidelines, lobectomy may be considered for T2 thyroid cancers. The aim of this study was to evaluate the suitability of this patient group for lobectomy at a tertiary hospital in Türkiye.

Material and Methods: Patients who underwent total thyroidectomy between 2021 and 2025 and were found to have a differentiated thyroid carcinoma measuring between 20 and 40 mm on final pathology were included in the study. Their demographic data, nodule size, pathology and the presence of contralateral nodules and malignancy were analysed retrospectively.

Results: A total of 78 patients were included in the study, comprising 22 men and 58 women. The median age was 43 years (IQR: 18-74). Contralateral nodules were detected by ultrasonography in 30 patients (38.4%). Contralateral malignancy was identified in 24 patients (30.8%). Of these, 10 patients (41.7%) had no ultrasonographical visible nodule in the contralateral lobe. Among the remaining 14 patients with a detectable nodule, TIRADS 3 was the most common (8/14), followed by TIRADS 2 (3/14) and TIRADS 4 (3/14). The median size of contralateral malignant tumours was 2 mm (range: 2-11 mm). Pathology revealed variants of papillary carcinoma in 23 patients, and one patient had a 3-mm medullary carcinoma. Lymph node metastasis was present in seven patients (9%), two of whom also had contralateral malignancy.

Conclusion: The rate of contralateral malignancy in our cohort was higher than the 5-25% range reported in the literature. These findings indicate that patients should be carefully selected for lobectomy in this tumour size range.

Keywords: Contralateral malignancy, differentiated thyroid carcinoma, lobectomy, T2 stage

[S-057]

Evaluation of the relationship between clinical dyspnea improvement and radiological recovery in patients undergoing thyroidectomy for compressive symptoms

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Objective: Dyspnea caused by tracheal compression is a significant clinical problem in patients undergoing thyroidectomy for compressive symptoms. Although postoperative radiological relief of tracheal compression is well documented, the extent to which this anatomical improvement correlates with patient-reported symptomatic relief remains unclear. In clinical practice, radiological and symptomatic recovery are often assumed to occur in parallel; however, this relationship may not be consistent across all patients. This study aimed to evaluate changes in clinical dyspnea using the dyspnea index (DI) before and after thyroidectomy and to investigate the relationship between clinical improvement and radiological parameters, including tracheal diameter and percentage of tracheal narrowing measured by computed tomography (CT).

Material and Methods: This retrospective, single-center study included 46 patients who underwent thyroidectomy for compressive symptoms at University of Health Sciences Türkiye, Konya City Hospital. Preoperative and postoperative (3-6 months) CT images were evaluated. Minimum tracheal diameter and percentage of tracheal narrowing were measured. Clinical assessment was performed using the DI preoperatively and postoperatively. Paired statistical tests were used to compare pre- and postoperative values. The relationship between clinical and radiological changes was analyzed using Pearson and Spearman correlation tests. Patients were categorized as responders and non-responders based on the median change in DI. A p-value <0.05 was considered statistically significant.

Results: Of the patients, 33 (71.7%) were female, and the mean age was 51.8±11.1 years. Total thyroidectomy was performed in 39 patients (84.8%) and hemithyroidectomy in 7 patients (15.2%). Postoperatively, DI scores showed a significant decrease ($p<0.001$). Radiological evaluation demonstrated a significant increase in minimum tracheal diameter and a marked reduction in the percentage of tracheal narrowing ($p<0.001$). However, only a weak correlation was found between the change in DI and the increase in tracheal diameter or the reduction in narrowing percentage. Some patients experienced substantial symptomatic improvement despite minimal radiological change. Responder analysis also showed that the magnitude of clinical improvement was not always parallel to the degree of radiological recovery.

Conclusion: Thyroidectomy provides significant clinical improvement in dyspnea in patients with compressive symptoms. However, the extent of symptomatic recovery does not always correlate with radiological changes in tracheal anatomy. These findings highlight that postoperative outcomes cannot be explained solely by anatomical improvement and emphasize the importance of patient-reported symptom assessment in surgical decision-making and follow-up.

Keywords: Thyroidectomy, tracheal compression, dyspnea

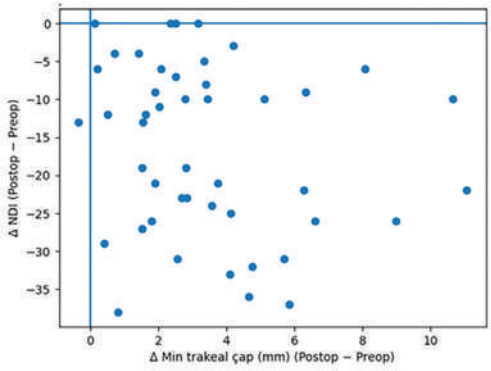


Figure 1. Scatter plot showing the relationship between the change in minimum tracheal diameter (Δ minimum tracheal diameter, postoperative-preoperative) and the change in dyspnea index (Δ DI, postoperative-preoperative).

Negative ΔDI values indicate clinical improvement, while positive Δ minimum tracheal diameter values indicate anatomical improvement. Horizontal and vertical reference lines represent no change.

Table 1. Demographic and clinical characteristics of the patients and primary and secondary outcomes (preoperative vs. postoperative)

Variable	Value	
Number of patients	46	
Age (years), mean ± SS	51.8±11.1	
Sex	Female 33 (71.7%), male 13 (28.3%)	
Type of Surgery	Total thyroidectomy 39 (84.8%), Hemithyroidectomy 7 (15.2%)	
Preop DI (descriptive), median [IQR]	24.0 [20.2]	
Preop tracheal narrowing (descriptive-%), median [IQR]	20.8 [14.2]	
		p-value
Preop DI	21.0±11.3	
Postop DI	4.5±6.7	<0.001
Δ (postop-preop) DI	-16.5	
Preop minimum tracheal diameter (mm, mean ± SS)	13.38±2.87	
Postop minimum tracheal diameter (mm, mean ± SS)	16.81±2.51	<0.001
Δ (postop-preop) minimum tracheal diameter (mm, mean ± SS)	3.43	
Preop tracheal narrowing (% , mean ± SS)	22.6±12.3	
Postop tracheal narrowing (% , mean ± SS)	2.3±11.2	<0.001
Δ (postop-preop) tracheal narrowing (% , mean ± SS)	-20.3	

The Δ value represents the mean change between postoperative and preoperative measurements (postop-preop). P-values were calculated using the paired t-test; values with p<0.001 are reported as such.

[S-058]

The role of gender in post-thyroidectomy transient hypocalcemia: A retrospective analysis of 156 patients

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Objective: Post-thyroidectomy hypocalcemia is one of the most common complications and significantly affects patients' quality of life. The role of gender in hypocalcemia development remains controversial in the literature. This study aims to investigate the effect of gender and other risk factors on post-thyroidectomy hypocalcemia.

Material and Methods: A total of 156 patients who underwent thyroidectomy in our clinic between January 2018 and December 2025 were retrospectively analyzed. Demographic characteristics, surgery type, intraoperative neuromonitoring (IONM) use, pathology results, and postoperative complications were recorded. Postoperative hypocalcemia was defined as symptomatic hypocalcemia or serum calcium level <8.5 mg/dL. Chi-square test, Mann-Whitney U test, and logistic regression analysis were used for statistical analysis. P<0.05 was considered statistically significant.

Results: The study included 116 female (74.4%) and 40 male (25.6%) patients. Mean age was 51.10±13.47 years. Total thyroidectomy was performed in 87 patients (55.8%) and subtotal thyroidectomy in 34 patients (21.8%). IONM was used in 137 patients (87.8%). Postoperative transient hypocalcemia lasting an average of 7 days developed in 80 patients (51.3%). Transient hypocalcemia rate was 59.5% (69/116) in females and 27.5% (11/40) in males (p=0.0009, OR=3.89, 95% CI: 1.78-8.51). No statistically significant relationship was found between age, surgery type, IONM use, and hypocalcemia (p>0.05). Recurrent laryngeal nerve injury occurred in 2 patients (1.3%) and bleeding/hematoma in 1 patient (0.6%). Mean hospital stay was 2.01±0.16 days.

Conclusion: Female gender is an independent and strong risk factor for post-thyroidectomy transient hypocalcemia. Female patients should undergo more careful preoperative evaluation, closer postoperative calcium monitoring, and prophylactic calcium-vitamin D supplementation should be considered. Our high IONM utilization rate (87.8%) was associated with low RLN injury rate (1.3%).

Keywords: Gender, thyroidectomy, transient hypocalcemia

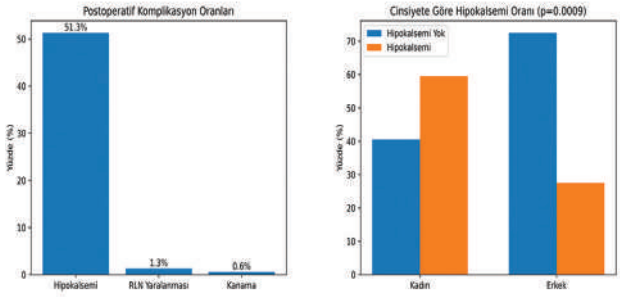


Figure 1. Postoperative complications.

Transient postoperative hypocalcemia developed in 80 patients (51.3%). Recurrent laryngeal nerve injury was observed in 2 patients (1.3%), and postoperative bleeding/hematoma occurred in 1 patient (0.6%).

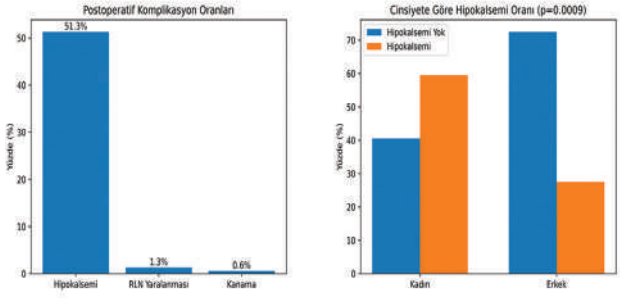


Figure 2. Association between transient hypocalcemia and sex.

Transient hypocalcemia rate was 59.5% (69/116) in females and 27.5% (11/40) in males (p=0.0009, OR=3.89, 95% CI: 1.78-8.51).

[S-059]

Localization success of ultrasonography and MIBI-SPECT in primary hyperparathyroidism: The effectiveness of combined imaging and the role of 4D-CT in negative cases

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Objective: Accurate preoperative localization of parathyroid adenomas is one of the main determinant in selecting the appropriate surgical approach. Conventional imaging methods, such as ultrasonography (US) and technetium-99m sestamibi scintigraphy (MIBI-SPECT), are routinely used; however, in cases where these methods are insufficient, advanced imaging modalities are utilized. This study evaluated the diagnostic success rates of US, MIBI-SPECT, and four-dimensional computed tomography (4D-CT) in localizing parathyroid adenomas in patients undergoing surgery for primary hyperparathyroidism.

Material and Methods: Patients who underwent surgery for primary hyperparathyroidism between January 1, 2018, and December 31, 2025, at the Endocrine Surgery Department of İstanbul University, İstanbul Faculty of Medicine were retrospectively reviewed. Demographic characteristics, preoperative imaging modalities, reported localization findings, intraoperative gland localization, the presence of concomitant thyroid disease, and whether concomitant thyroidectomy was performed were recorded. Diagnostic performance was assessed by comparing preoperative reported localization with the intraoperative gland location identified. Combined imaging analysis was conducted by evaluating ultrasound and MIBI-SPECT findings. Subgroup analyses were performed to investigate the potential impact of concomitant nodular thyroid disease on imaging performance.

Results: A total of 303 patients were included in the study. Ultrasonography correctly localized parathyroid adenomas in 251 patients (83.0%), while localization was unsuccessful in 51 patients (17.0%). Of the 295 patients who underwent MIBI-SPECT, accurate localization was achieved in 235 patients (79.7%),with 60 patients (20.3%) experiencing negative results. In 202 patients who underwent both imaging modalities, combined evaluation yielded correct localization in 194 patients (96.0%), with both methods failing in 8 patients (4.0%). All of these patients subsequently underwent advanced imaging, which successfully localized the adenoma in all cases. In two patients (25.0%) within this subgroup, ectopic parathyroid adenomas were identified intraoperatively. No statistically significant association was observed between the presence of concomitant nodular thyroid disease and imaging outcomes. Nodular thyroid disease was present in 60 of 251 US-positive patients and in 21 of 51 US-negative patients (p=0.4). Similarly, nodular disease was detected in 62 of 235 MIBI-SPECT-positive patients and in 16 of 60 MIBI-SPECT-negative patients (p=0.5). In the group with both modalities positive, nodular thyroid disease was observed in 45 of 194 patients, compared to 3 of 8 patients in whom both modalities were negative (p=0.38).

Conclusion: US and MIBI-SPECT demonstrate high diagnostic performance individually in the preoperative localization of parathyroid adenomas. However, their combined use significantly improves localization accuracy and enhances the reliability of surgical planning. In patients with negative results on both modalities, advanced imaging techniques—particularly for detecting ectopic adenomas—provide substantial additional value.

Keywords: Four-dimensional computed tomography (4D-CT), preoperative localization, primary hyperparathyroidism

Table 1. Localization success of USG and MIBI-SPECT

Imaging modality	Total (n)	Positive/ correct (n)	Negative (n)	Success (%)
US	302	251	51	83.0
MIBI-SPECT	295	235	60	79.7
US + MIBI	202	194	8	96.0

Table 2. Association between concomitant thyroid disease and imaging positivity

Imaging modality	Positive [n (N)]	Negative [n (N)]	p-value
US	60 (251)	21 (51)	0.4
MIBI-SPECT	62 (235)	16 (60)	0.5
US + MIBI	45 (194)	3 (8)	0.38

[S-060]

Performance of histopathological risk stratification systems in predicting metastasis in pheochromocytoma: A single-center retrospective analysis

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Objective: Predicting metastatic potential in pheochromocytoma remains clinically important yet challenging. The pheochromocytoma of the adrenal gland scaled score (PASS) and grading system for adrenal pheochromocytoma and paraganglioma (GAPP) systems are widely used for this purpose; however, their predictive value remains controversial. This study aimed to evaluate the association between clinical and pathological parameters and the development of metastasis in patients undergoing surgery for pheochromocytoma.

Material and Methods: In this retrospective single-center study, 57 patients who underwent surgery for pheochromocytoma between January 1, 2018 and December 31, 2025, at the Endocrine Surgery Department of İstanbul University, İstanbul Faculty of Medicine, were evaluated. Demographic characteristics, mode of tumor detection and surgical variables were recorded. Pathological assessment included maximum tumor diameter, presence of necrosis, atypical mitoses, mitotic count, capsular invasion,venous invasion, surgical margin status and immunohistochemical markers. Malignant potential was assessed using the PASS and GAPP scoring systems. A PASS score ≥4 was defined as high risk, while <4 was considered low risk. GAPP was categorized into low-, intermediate- and high-risk groups. Patients were grouped according to the development of metastasis during follow-up. Postoperative biochemical remission, postoperative complications,adrenal insufficiency and follow-up duration (months) were also recorded.

Results: The mean age of the patients was 44.9±14 years, and 59.6% were female. Tumors were detected incidentally in 26.3% of cases. The mean tumor diameter was 49.4±29.6 mm, the mean hospital stay was 5.5±3.6 days and the mean follow-up duration was 28.9±29.2 months. The postoperative biochemical remission rate was 93%. Postoperative complications occurred in 8.8% of patients, and adrenal insufficiency was observed in 12.3%. During follow-up, metastasis developed in 3 patients (5.3%). Metastatic disease involved the liver in one patient, the para-aortic region in one patient, and multiple organs (lung, liver, and bone) in one patient. According to the PASS system, 5 patients (8.8%) were classified as high risk, while 11 patients (19.3%) were categorized as intermediate-high risk according to GAPP. No statistically significant differences were observed between patients with and without metastasis in terms of tumor diameter, Ki-67 index or GAPP scores (p=0.300, p=0.954 and p=0.566,respectively). Although the rate of metastasis appeared higher in the PASS high-risk group compared to the low-risk group (20% vs. 3.8%), this difference did not reach statistical significance (p=0.245).

Conclusion: In this single-center cohort,widely used histopathological scoring systems such as PASS and GAPP, as well as the Ki-67 proliferation index, demonstrated limited performance in predicting metastatic development. Although metastasis rates were numerically higher among patients with elevated PASS scores, statistical significance could'nt be established, likely due to the low number of metastatic events. These findings suggest that current histopathological scoring systems may be insufficient as standalone predictors of malignant potential in pheochromocytoma and highlight the need for larger, multicenter studies to establish more reliable risk stratification models.

Keywords: Pheochromocytoma, PASS score, GAPP classification

Table 1. Demographic, clinical, and surgical characteristics

Number of patients	57
Age (years)	44.9±14
Female	34 (59.6%)
Male	23 (40.4%)
Incidentaloma	15 (26.3%)
Maximum tumor diameter (mm)	49.4±29.6
Length of hospital stay (days)	5.5±3.6
Surgical approach (open/endoscopic)	4/53
Laterality (right/left/bilateral)	21/31/5
Follow-up duration (months)	28.9±29.2
Postoperative complications	5 (8.8%)
Adrenal insufficiency	7 (12.3%)
Biochemical remission	53 (93%)
Metastasis	3 (5.3%)

Table 2. Comparison of clinical and pathological parameters according to metastasis development

Variable	No metastasis (n=54)	Metastasis (n=3)	p-value
Maximum tumor diameter (mm)	40 (5-120)	50 (30-70)	0.300
Ki-67 (%)	2 (0-20)	1 (1-5)	0.954
GAPP score	1 (1-3)	1 (1-2)	0.566
PASS high risk, n (%)	4 (7.4)	1 (33.3)	0.245

[S-061]

Neck dissection: Lymph node yield and clinical outcomes—correlation of US/FNA findings with pathological nodal metastasis

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Objective: Cervical lymph node metastasis in thyroid cancer is critical for staging and recurrence risk assessment. Preoperative ultrasound (US) is the primary imaging modality for detecting metastatic lymph nodes, and findings such as loss of fatty hilum, microcalcifications, cystic change, and abnormal vascularity are considered suspicious for malignancy. Fineneedle aspiration (FNA) is widely used to confirm suspicious lymph nodes, and thyroglobulin measurement in the needle washout (FNATg) may improve diagnostic accuracy in selected cases. This study aimed to evaluate the correlation between preoperative US/FNA findings and postoperative pathological nodal metastasis, as well as lymph node yield and clinical outcomes in patients undergoing neck dissection.

Material and Methods: This single-center retrospective study included 21 patients who underwent neck dissection in 2023. Demographics (age, sex), suspicious lymph node findings on US, maximum lymph node diameter, FNA results, type/side of dissection were recorded. Postoperative outcomes included final pathology, total lymph node yield, number of positive lymph nodes, lymph node ratio (LNR=positive/total), and length of hospital stay. Nodal metastasis was defined as ≥1 positive lymph node. The potential prognostic value of lymph node yield and LNR was considered based on the literature.

Results: Mean age was 54.3±13.1 years; 76.2% were female. All patients had suspicious lymph nodes on preoperative US. Final pathology was malignant in 66.7% and benign in 33.3%. Nodal metastasis was detected in 52.4% of patients. Median total lymph node yield was 14 (IQR: 7-31), and the median number of positive lymph nodes was 1 (IQR: 0-3). Median LNR was 0.056. Median length of hospital stay was 3 days.

Conclusion: Although nodal metastasis was identified in approximately half of the patients, a considerable proportion had benign final pathology despite suspicious preoperative imaging findings, underscoring the clinical impact of reactive lymphadenopathy and potential falsepositive US findings. Integrating US with FNA and using adjunctive tools such as FNATg when appropriate may optimize patient selection and reduce unnecessary dissections.

Keywords: Neck dissection, thyroid cancer, lymph node metastasis, ultrasound, fineneedle aspiration, lymph node yield

[S-062]

Is lobectomy sufficient for suspicious thyroid nodules? An analysis of malignancy and reoperation rates

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Objective: The optimal extent of surgery in papillary thyroid carcinoma (PTC) remains a matter of ongoing debate. The 2015 American Thyroid Association (ATA) guidelines recommend lobectomy as an adequate initial surgical approach for low-risk T1-T2N0 cases. However, in patients operated on for suspicious fine-needle aspiration biopsy (FNAB) findings, high-risk pathological features may be identified postoperatively, potentially necessitating completion thyroidectomy. In the literature, the reported malignancy rate in cases with suspicious cytology ranges between 25% and 75%. In this study, we analyzed the rate of malignancy, the need for completion thyroidectomy, and associated clinical risk factors in patients who underwent primary lobectomy due to suspicious FNAB results (Bethesda III-IV).

Material and Methods: In this single-center retrospective study, 121 patients who underwent surgery due to suspicious fine-needle aspiration biopsy (FNAB) findings were evaluated. All patients initially underwent unilateral lobectomy. Final histopathological results, reoperation records, sex distribution, postoperative complications, and family history were analyzed. Among patients who required reoperation, subsequent outcomes—including the administration of radioactive iodine (RAI) therapy—were also assessed.

Results: Benign pathology was identified in 41 of 121 patients (33.9%), while 80 patients (66.1%) were diagnosed with malignancy. This malignancy rate is consistent with those reported in the literature for suspicious cytology. Completion thyroidectomy was performed in 38 of the malignant cases (47.5%). The overall rate of secondary surgery in the entire cohort was 31.4%. Women constituted 77.7% of the study population (94/121), consistent with the well-established female predominance of thyroid cancer. Among patients who underwent reoperation, a positive family history was observed in 56.4%, suggesting that familial risk factors may play a significant role in the surgical decision-making process.

Conclusion: In patients who underwent lobectomy due to suspicious FNAB findings, the malignancy rate was high (66.1%), and approximately half of the malignant cases required a second surgical procedure. These findings suggest that, in selected patients with suspicious cytology, an initial total thyroidectomy may represent a rational surgical approach. However, routine total thyroidectomy for all patients would likely result in overtreatment and unnecessarily extensive surgery. Determination of the optimal surgical extent requires a more refined risk stratification model that incorporates family history and other clinical risk factors in addition to cytological findings.

Keywords: Thyroid nodules, FNAB, malignancy

[S-063]

Thyroidectomy after AUS/FLUS cytology: Does the risk of malignancy support the surgical decision?

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Objective: AUS/FLUS (Bethesda III) cytology represents a diagnostically indeterminate category with uncertain malignancy risk and remains controversial in clinical decision-making. This study aimed to determine the final histopathological malignancy rate in patients undergoing thyroidectomy after AUS/FLUS cytology and to evaluate whether surgical management is clinically justified.

Material and Methods: Between January 1, 2020 and December 31, 2025, 296 patients who underwent thyroidectomy were retrospectively reviewed. Patients with missing data (n=46), Graves' disease (n=12), lobectomy without postoperative calcium/albumin data (n=7), concomitant parathyroidectomy (n=2), and metastatic pathology (n=1) were excluded. The final analysis included 239 patients. Preoperative fine-needle aspiration biopsy (FNAB) results were recorded according to the Bethesda classification. The primary comparison cohort included Bethesda I-II (n=93) and AUS/FLUS (n=65) patients (n=158). A sensitivity analysis was performed including only total thyroidectomy cases (n=133) to minimize the effect of surgical extent. Early biochemical hypocalcemia was defined as postoperative day 1 corrected calcium <8.5 mg/dL. Clinical hypocalcemia was defined by the need for calcium replacement therapy.

Results: Among 239 patients, mean age was 50.5±13.2 years and 66.5% were female. Overall malignancy rate was 32.2%. Early biochemical hypocalcemia occurred in 47.3%, while clinical hypocalcemia requiring replacement was observed in 8.8%. In the primary comparison cohort, malignancy was detected in 23.1% (15/65) of AUS/FLUS patients and 14.0% (13/93) of Bethesda I-II patients (p=0.141). Early biochemical hypocalcemia (38.5% vs. 46.2%, p=0.331) and clinical hypocalcemia (4.6% vs. 11.8%, p=0.116) were comparable between groups. In the total thyroidectomy sensitivity cohort, malignancy rates were 21.4% in AUS/FLUS and 14.3% in Bethesda I-II groups (p=0.282), with no significant difference in clinical hypocalcemia (p=0.098). Most malignant cases in the AUS group were microcarcinomas (Tables 1, 2).

Conclusion: Approximately one in four patients undergoing thyroidectomy after AUS/FLUS cytology had malignancy. Early postoperative morbidity, particularly clinical hypocalcemia, was not significantly increased. However, as most malignancies were low-risk microcarcinomas, surgical decisions should be individualized based on a careful risk-benefit assessment.

Keywords: AUS/FLUS, thyroid cancer, thyroidectomy

Table 1. Definition of study cohorts and basic clinical outcomes

Variable	Main cohort (n=239)	Primary comparison (n=158)	Sensitivity analysis (n=133)
Age (years), mean ± SD	50.5±13.2	51.4±13.0	52.3±12.7
Female, n (%)	159 (66.5)	106 (67.1)	89 (66.9)
FNAB count, mean ± SD	1.61±0.74	1.64±0.75	1.67±0.76
US nodule size (mm), mean ± SD	33.4±19.0	35.8±19.4	39.6±18.8
Total thyroidectomy, n (%)	205 (85.8)	133 (84.2)	133 (100)
Lobectomy, n (%)	34 (14.2)	25 (15.8)	0 (0)
Completion thyroidectomy, n (%)	6 (2.5)	3 (1.9)	0 (0)
Central LN dissection, n (%)	17 (7.1)	4 (2.5)	2 (1.5)
Incidental parathyroidectomy, n (%)	21 (8.8)	16 (10.1)	13 (9.8)
Malignancy (final pathology), n (%)	77 (32.2)	28 (17.7)	23 (17.3)
Multifocality*, n (%)	17 (21.3)	2 (7.1)	1 (4.3)
Early biochemical hypocalcemia, n (%)	113 (47.3)	68 (43.0)	62 (46.6)
Clinical hypocalcemia + replacement, n (%)	21 (8.8)	14 (8.9)	14 (10.5)
Postoperative corrected Ca (mg/dL), mean ± SD	8.47±0.58	8.49±0.56	8.46±0.59
Length of hospital stay (days), mean ± SD	2.87±1.21	2.92±1.18	2.98±1.15
Operative time (minutes), mean ± SD	105.2±28.3	106.4±27.9	107.1±27.1

*Multifocality calculated among malignant cases.

FNAB: Fine-needle aspiration biopsy, US: Ultrasonography, LN: Lymph node, Ca: Calcium, SD: Standard deviation.

Table 2. Comparison of malignancy and early postoperative outcomes between Bethesda I-II and AUS/FLUS groups

Primary comparison cohort (n=158)			
Outcome	**Bethesda I-II (n=93)**	**AUS/FLUS (n=65)**	**p-value**
Malignancy, n (%)	13 (14.0)	15 (23.1)	0.141
Early biochemical hypocalcemia, n (%)	43 (46.2)	25 (38.5)	0.331
Clinical hypocalcemia + replacement, n (%)	11 (11.8)	3 (4.6)	0.116
Sensitivity analysis-total thyroidectomy only (n=133)			
Outcome	**Bethesda I-II (n=77)**	**AUS/FLUS (n=56)**	**p-value**
Malignancy, n (%)	11 (14.3)	12 (21.4)	0.282
Clinical hypocalcemia + replacement, n (%)	11 (14.3)	3 (5.4)	0.098

AUS/FLUS: Atypia of undetermined significance/follicular lesion of undetermined significance.

[S-064]

The diagnostic role of the systemic immune-inflammation index and the impact of surgical approach on immune response in patients undergoing surgery for adrenal masses

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Objective: Every surgical intervention exerts a controlled traumatic effect and induces both proinflammatory and anti-inflammatory changes in host immunity. The systemic immune-inflammation index (SII), which has gained increasing popularity in recent years, is proposed to reflect the balance between tumor-related inflammation and anti-tumor immune functions, thereby consistently indicating the host immune status. SII is calculated as (platelet × neutrophil)/lymphocyte. In this study, we aimed to evaluate the effect of disease etiology and type of surgical approach (open, laparoscopic, robotic) on systemic immune response using SII in patients operated on for adrenal masses.

Material and Methods: A total of 144 out of 176 patients who underwent surgery for adrenal masses at the General Surgery Department of University of Health Sciences Türkiye, Başakşehir Çam and Sakura City Hospital between April 2020 and April 2025 were included in the study. Preoperative SII values were calculated using complete blood count results obtained during preoperative evaluation, while postoperative SII values were calculated using hemogram results obtained at the 12th postoperative hour. Patients were classified according to preoperative diagnosis, pathological findings, and surgical approach. Data were analyzed retrospectively.

Results: A total of 144 patients were included in the study, of whom 107 were female and 37 were male. The mean age was 50±10.81 years (range, 21-74 years). At least one comorbidity was identified in 50.7% of the patients, with hypertension (46.5%) being the most common. Although patients with Cushing's syndrome, Conn's syndrome, and pheochromocytoma exhibited relatively higher mean preoperative SII values compared with those with non-functioning adrenal masses, no statistically significant differences were observed among the diagnostic groups. Similarly, patients with adrenocortical carcinoma demonstrated numerically higher preoperative SII values than those with other pathological diagnoses; however, this difference did not reach statistical significance. Postoperatively, the robotic surgery group showed significantly lower SII values compared with the laparoscopic and open surgery groups ($p<0.001$), whereas the open surgery group was associated with higher postoperative SII values than the minimally invasive approaches.

Conclusion: Our study demonstrates that minimally invasive adrenal surgery—particularly robotic surgery—is associated with a lower systemic immune response compared with open surgery, as assessed by the systemic immune-inflammation index.

Keywords: Adrenal mass, minimally invasive surgery, systemic immune-inflammation index

[S-067]

Follow-up and recovery rime of vocal cord function in patients experiencing loss of signal due to traction injury during neuromonitored thyroidectomy; preliminary results of a prospective observational study

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Objective: Loss of signal (LOS) in neuromonitored thyroidectomy is a significant warning sign and adversely affects postoperative vocal cord function (VCF). However, in traction injuries where the anatomical integrity of the RLN is preserved, the chances of nerve recovery are high. This study aimed to evaluate postoperative VCF outcomes and recovery times in patients who developed LOS due to traction injuries.

Material and Methods: Patients undergoing neuromonitored thyroid surgery who experienced LOS due to traction injuries were prospectively followed. Postoperative voice complaints and VCF were assessed by indirect laryngoscopy. The primary outcome was time to VCF recovery.

Results: A total of 13 patients were included (84.6% female). LOS was classified as Type 1 in 84.6% of cases and as Type 2 in 15.4% of cases. Postoperative hoarsenessoccurred in 53.8% of patients. Complete recovery of VCF was observed in 5 patients (median 4.5 weeks; 95% CI 0.89-7.27). No significant association was found between recovery of VCF and percentage of amplitude decrease, or LOS type (respectively, $p=0.642$, $p=0.481$). On the other hand, there was a significant difference between thesurgeon's experience and the percentage of amplitude decrease ($p=0.029$). A weakbut positive correlation was identified between age and the percentage of amplitude decrease ($p=0.04$).

Conclusion: Despite intraoperative signal loss, VCF recovery was observed in 5 patients, while follow-up continues in the remaining patients. The prognostic value of LOS type appears limited. Advancing age may contribute to increased signal loss severity; however, this relationship remains weak. Also, a surgeon's experience is an essential factor in the recovery period of VCF. These findings represent the preliminary results of an ongoing long-term prospective study, and increasing sample size and extended follow-up are expected to provide more robust conclusions.

Keywords: Thyroidectomy, vocal cord function

[S-068]

Surgical management of cT1 node-negative differentiated thyroid cancer: Evaluating the adequacy of lobectomy

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Objective: Current ATA guidelines recommend hemithyroidectomy (HT) for low-risk thyroid cancer (TC); however, total thyroidectomy (TT) is still frequently performed. This study aimed to evaluate the adequacy of HT in patients with cT1N0 TC.

Material and Methods: Patients who underwent thyroidectomy with TC diagnosis between May 2015-2025 were retrospectively reviewed. Inclusion criteria for HT eligibility were: A single-lobe nodule ≤20 mm, Bethesda V/VI cytology, absence of malignant or suspicious nodules in the contralateral lobe, and final pathology confirming differentiated TC (DTC). One hundred fifty-six patients met the criteria. Patients who underwent TT were stratified into two groups: Those eligible for HT and those not eligible for HT. Comparative analyses were performed between eligible vs. not eligible, and eligible vs. those who actually underwent HT.

Results: Of 156 patients, 115 (73.7%) were female, and the mean age was 44.6±13.1. TT was performed in 134 (85.9%), and 22 (14.1%) underwent HT. Among the TT group, 67 patients (50%) were eligible for HT, indicating potential overtreatment. In patients who underwent TT due to contralateral nodules, 63.9% had benign pathology in the contralateral lobe. Transient hypocalcemia developed in 22 patients (14.1%), while no permanent hypocalcemia was observed. Transient hypocalcemia occurred in 36.4% of cases with contralateral intrathyroidal parathyroid tissue in TT group. Recurrent laryngeal nerve injury occurred in 8 patients (5.1%). Operative time was longer with TT than HT ($p<0.001$).

Conclusion: In selected cT1N0 DTC patients, HT is adequate and associated with shorter operative time and lower complication risk. Accurate preoperative assessment may reduce unnecessary total thyroidectomies.

Keywords: ATA guidelines, differentiated thyroid cancer, hemithyroidectomy, total thyroidectomy

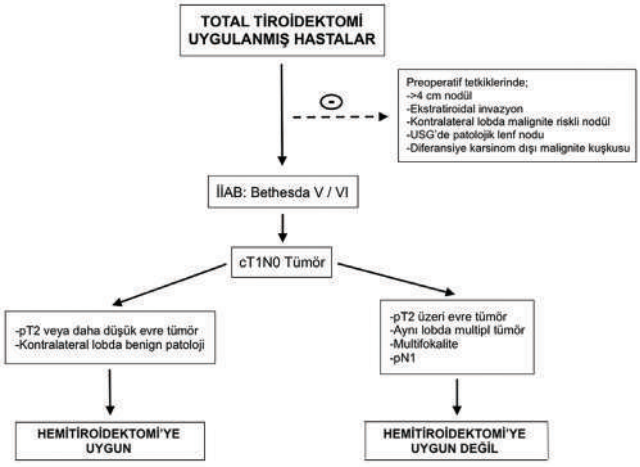


Figure 1. Eligibility criterias for hemithyroidectomy in patients who underwent total thyroidectomy for thyroid cancer.

Table 1. Pearson chi-square test results between the presence of a tumor in the contralateral lobe and the contralateral lobe histopathology

Contralateral lobe histopathology	No nodule on contralateral lobe* (n=73)	Existing nodule on contralateral lobe * (n=61)	p
Normal thyroid tissue	23 (31.5%)	5 (8.2%)	<0.001
Follicular nodular disease	12 (16.4%)	26 (42.6%)	
Chronic thyroiditis	23 (31.5%)	8 (13.1%)	
Papillary thyroid cancer	15 (20.5%)	22 (36.1%)	

*: According to preoperatively ultrasonography.

[S-069]

The effect of tumor multifocality on the prognosis of papillary thyroid carcinoma

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Objective: Papillary thyroid carcinoma (PTC) is a heterogeneous malignancy that generally has a good prognosis, but its behavior can vary depending on its clinicopathological features. There is no consensus in the literature regarding the prognostic value of multifocality, which is seen in approximately half of PTC cases. The aim of this study is to evaluate the effect of tumor multifocality on recurrence and disease-free survival (DFS) in PTC and to identify independent risk factors predicting recurrence.

Material and Methods: This retrospective cohort study included 254 patients with percutaneous thyroidectomy (PTC) who underwent a total of thyroidectomy between 2012 and 2020. The mean follow-up period was calculated as 99±7 months. Patients were divided into two groups: Multifocal (n=140) and unifocal (n=114). Clinicopathological variables were compared between the two groups. ROC curve analysis was used to determine parameters predicting recurrence, the Kaplan-Meier method and Log-rank test were used for disease-free survival. Multivariate Cox regression analysis was applied to identify independent predictors of recurrence.

Results: No significant difference was found in recurrence frequency between multifocal and unifocal groups (p=0.810). In disease-free survival comparison, multifocality did not significantly increase recurrence risk (HO: 1.78; p=0.211). In ROC analysis, age was not a significant predictor of recurrence (AUC: 0.524; p=0.758). In contrast, primary tumor size showed significant diagnostic performance (AUC: 0.652; p=0.012), with the best threshold >23 mm (sensitivity 68%, specificity 63%). In univariate analyses, significant risk factors included primary tumor size >23 mm (HO: 3.66; p=0.006), lateral dissection (HO: 12.60; p=0.003), central dissection (HO: 4.54; p=0.023), and perineural invasion (HO: 117.66; p=0.005). Extrathyroidal spread and metastatic lymph nodes showed borderline significance. In multivariate Cox regression, only two parameters remained independent risk factors: 1) lateral dissection (HO: 4.83; 95% CI: 1.73-13.48; p=0.003) and 2) primary tumor size >23 mm (HO: 3.89; 95% CI: 1.47-10.29; p=0.006). These findings suggest recurrence risk is related to tumor size and regional lymph node involvement rather than multifocality.

Conclusion: This study demonstrated that multifocality is not an independent prognostic predictor in papillary thyroid carcinoma. The strongest predictors of recurrence were large tumor size (>23 mm) and lateral dissection due to lateral lymph node metastasis. These results suggest that tumor size and nodal spread should be prioritized over multifocality when classifying clinical risk. Closer monitoring is recommended, particularly for patients with tumors >23 mm and those positive for lateral nodal metastasis, when determining follow-up strategies.

Keywords: Disease-free survival, multifocality, papillary thyroid carcinoma, prognostic factors, recurrence

[S-072]

Radiologic risk stratification for predicting postoperative morbidity in substernal goiter: A single-center retrospective study

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Objective: Surgery for substernal goiter is technically demanding due to mediastinal extension and distorted cervical anatomy. Although sternotomy requirement has been widely discussed, objective and clinically applicable models for predicting postoperative morbidity remain lacking. This study aimed to evaluate radiologic parameters associated with postoperative morbidity and to develop a practical radiologic difficulty score (RDS) for preoperative risk stratification.

Material and Methods: Thirty-six consecutive patients who underwent surgery for substernal goiter were retrospectively analyzed. Preoperative computed tomography scans were reviewed to assess intrathoracic volume, posterior mediastinal extension, and tracheal compression. Composite postoperative morbidity was defined as the occurrence of ≥1 of the following: Hypocalcemia, recurrent laryngeal nerve (RLN) injury, hematoma, or reoperation. Independent predictors were identified using multivariate logistic regression analysis. Model performance was evaluated using receiver operating characteristic (ROC) analysis.

Results: The mean age was 60.2±11.8 years, and 72.2% of patients were female. The malignancy rate was 13.9%, sternotomy rate was 5.6%, and composite postoperative morbidity occurred in 44.4% of patients. Postoperative transient hypocalcemia was observed in 11.1%, RLN injury in 27.8%, and hematoma in 5.6%. Intrathoracic volume emerged as an independent predictor of morbidity (OR: 1.02, 95% CI: 1.00-1.04, p=0.037). ROC analysis demonstrated an AUC of 0.74 for intrathoracic volume, and a threshold of 165 L yielded 75% sensitivity and 68% specificity. A 0-3 point RDS incorporating intrathoracic volume ≥165 mL, posterior mediastinal extension, and tracheal compression was developed. Each 1-point increase in RDS increased morbidity risk 2.85-fold (OR: 2.85, 95% CI: 1.32-6.14, p=0.008), with an AUC of 0.82.

Conclusion: Anatomical complexity, rather than histopathological characteristics, appears to be the primary determinant of postoperative morbidity in substernal goiter surgery. An intrathoracic volume ≥165 ml represents a clinically meaningful risk threshold. The proposed RDS provides a practical and robust tool for preoperative risk stratification and surgical planning.

Keywords: Substernal goiter, intrathoracic volume, postoperative morbidity

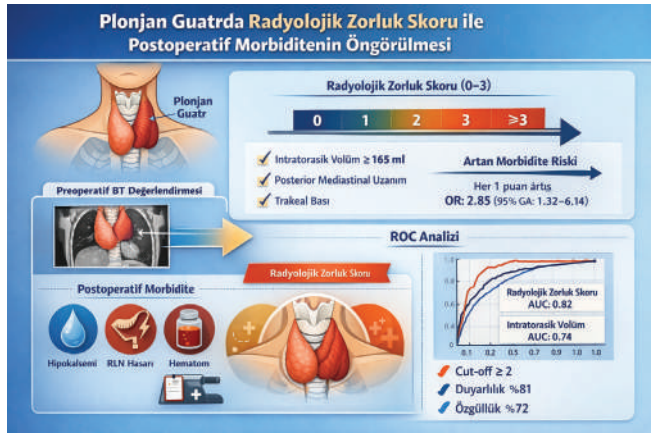


Figure 1. Radiologic difficulty score and postoperative morbidity in substernal goiter.

[S-073]

The significance of preoperative thyroglobulin and anti-thyroglobulin levels in thyroid diseases

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Objective: In differentiated thyroid cancers, postoperative thyroglobulin (Tg) and anti-thyroglobulin (anti-Tg) levels are important markers for tumor burden, recurrence, and metastasis. However, there is no clear consensus in the literature regarding the clinical significance of elevated preoperative Tg and anti-Tg levels observed in some patients with thyroid diseases. This study aimed to investigate the significance of preoperative serum Tg and anti-Tg levels in benign and malignant thyroid disorders.

Material and Methods: A total of 678 patients who underwent thyroidectomy between 2019 and 2025 were retrospectively evaluated. Patients with available preoperative Tg and anti-Tg measurements were included in the study. Patients were analyzed separately according to the presence of malignancy, thyroiditis, hyperthyroidism, and thyroid gland volume. Thyroid volume was calculated using three-dimensional measurements obtained during pathological examination of thyroidectomy specimens, applying the ellipsoid formula ($V=D1\times D2xD3\times\pi/6$). Patients were statistically compared based on elevated versus normal Tg and anti-Tg levels to identify factors associated with increased Tg and anti-Tg values.

Results: Of the 678 patients who underwent thyroidectomy, 328 (48.4%) had malignant and 349(51.5%) had benign pathology. Among the 369 patients with available preoperative Tg and anti-Tg measurements, 184 (49.9%) had benign and 185 (50.1%) had malignant disease. The rate of malignancy was significantly lower in patients with elevated preoperative Tg levels compared to those with normal Tg levels (36.5% vs. 58.2%, $p<0.001$). When Tg levels were evaluated according to thyroid volume, a statistically significant increase in preoperative Tg levels was observed with increasing thyroid volume. The mean thyroid volume was 94.0 mL in the elevated Tg group and 39.7 mL in the normal Tg group ($p<0.001$). However, no significant difference was found between benign and malignant groups when Tg levels per mm^3 of thyroid tissue were analyzed ($p=0.425$). The incidence of elevated Tg levels was significantly lower in patients with thyroiditis (29.1%) compared to those without thyroiditis (43.6%) ($p=0.004$). No statistically significant association was observed between hyperthyroidism and Tg levels ($p=0.238$). Analysis of anti-Tg levels revealed a strong correlation between elevated antibody titers and the presence of thyroiditis($p<0.001$). Thyroiditis was present in 85.6% of patients with elevated anti-Tg levels, compared to 34.7% in patients with normal anti-Tg levels. No significant association was found between elevated preoperative anti-Tg levels and malignancy ($p=0.350$), hyperthyroidism ($p=0.335$), or thyroid volume ($p=0.278$).

Conclusion: This study demonstrated that preoperative serum Tg and anti-Tg levels were not associated with the presence of malignancy. Elevated preoperative Tg levels were more frequently observed in benign thyroid diseases and were primarily related to increased thyroid volume. Elevated preoperative anti-Tg levels were associated with the presence of thyroiditis.

Keywords: Thyroglobuline, antithyroglobuline, thyroid disease

[S-074]

Risk factors affecting vocal cord paralysis in patients undergoing thyroidectomy with continuous intraoperative nerve monitoring

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Objective: Vocal cord paralysis (VCP) is a major complication of thyroid surgery. The use of intraoperative nerve monitoring (IONM) during thyroidectomy has increasingly been adopted to reduce this risk. In our clinic, IONM is routinely used; in some patients intermittent IONM (I-IONM) and in others continuous IONM (C-IONM) is preferred. In C-IONM, the vagus nerve is continuously stimulated via a probe, allowing real-time monitoring of recurrent laryngeal nerve (RLN) function. Despite C-IONM use, VCP may still occur. This study aimed to evaluate VCP rates and risk factors in patients undergoing thyroidectomy with C-IONM.

Material and Methods: Patients who underwent thyroidectomy under C-IONM guidance between 2016 and 2024 were retrospectively evaluated. C-IONM was applied according to International IONM Study Group recommendations. All patients had preoperative and postoperative vocal cord examinations. Patients with postoperative VCP were followed regularly; recovery within 1 year was defined as temporary VCP, and lack of recovery within 1 year as permanent VCP. Each neck side was evaluated separately. The effects of age, sex, body mass index, nerve side, preoperative diagnosis, hyperthyroidism, recurrent goiter, substernal goiter, extralaryngeal RLN branching, thin RLN (<1 mm), RLN-inferior thyroid artery relationship, RLN anatomical classification, and RLN entrapment at the berry ligament region on total and temporary VCP were analyzed using logistic regression.

Results: A total of 626 neck sides in 380 patients (309 females, 71 males) with a mean age of 48.5±13.5 years were evaluated. Total and temporary VCP rates were 6.5% (41) and 5.8% (36), respectively. Logistic regression identified RLN entrapment at the Berry ligament region and recurrent goiter as independent risk factors for both total and temporary VCP. For total VCP, Berry ligament entrapment ($p=0.000$; OR: 0.15; 95% CI: 0.065-0.345) and recurrent goiter ($p=0.005$; OR: 0.219; 95% CI: 0.076-0.633) were significant. For temporary VCP, Berry ligament entrapment ($p=0.000$; OR: 0.141; 95% CI: 0.058-0.343) and recurrent goiter ($p=0.01$; OR: 0.229; 95% CI: 0.075-0.699) were significant. Berry ligament entrapment increased VCP risk approximately 7-fold, and recurrent goiter approximately 4.5-fold.

Conclusion: The risk of VCP remains significant even in patients undergoing C-IONM. Although recurrent goiter can be predicted preoperatively, Berry ligament entrapment cannot be predicted preoperatively and can only be identified intraoperatively. We believe that careful identification of RLN anatomy and consideration of Berry ligament entrapment during surgical manipulation—particularly during traction—may help reduce the risk of VCP.

Keywords: Vocal cord paralysis, continous intraoperative nerve monitoring (C-IONM), Berry ligament

Table 1. Independent and clinically relevant risk factors for permanent vocal cord paralysis			
Variable	**p-value**	**OR**	**95% CI**
RLN entrapment at the Berry ligament	<0.001	0.150	0.065-0.345
Recurrent goiter	0.005	0.219	0.076-0.633
RLN anatomical fixed	0.048	0.029	0.001-0.966
RLN right type 2b	0.055	0.031	0.001-1.085
RLN right type 3	0.051	0.032	0.001-1.010

Table 2. Independent and clinically relevant risk factors for transient vocal cord paralysis			
Variable	**p-value**	**OR**	**95% CI**
RLN entrapment at the Berry ligament	<0.001	0.141	0.058-0.343
Recurrent goiter	0.010	0.229	0.075-0.699
Nerve side	0.174	1.715	0.788-3.732
Extralaryngeal branching	0.368	0.659	0.266-1.633

[S-075]

Surgeon transition to robotic adrenalectomy: A learning curve analysis

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Objective: Robotic adrenalectomy (RA) has increasingly been adopted as an alternative to laparoscopic adrenalectomy, particularly in complex adrenal cases. Despite its technical advantages, RA is associated with a learning curve, even among surgeons experienced in minimally invasive adrenal surgery. Objective data describing surgeon-specific learning patterns during the transition to RA remain limited.

Material and Methods: This retrospective single-center cohort study included consecutive patients who underwent robotic transabdominal adrenalectomy between March 2024 and December 2025 at a high-volume tertiary referral center. Learning curve assessment was performed using total operative time and surgeon-dependent console time. Temporal trends were evaluated using raw learning curve plots, 7-case moving averages, LOESS smoothing, and segmented linear regression. Surgical proficiency was objectively assessed using Learning Curve Cumulative Sum (LC-CUSUM) analysis with predefined operative time thresholds. Factors associated with operative time were analyzed using univariate and multivariate linear regression.

Results: A total of 56 patients were included. Mean operative time was 137.8±41.3 minutes, and mean console time was 91.0±34.4 minutes. LC-CUSUM analysis demonstrated early attainment of proficiency for total operative time at the 10th-12th case, depending on the applied threshold. In contrast, proficiency based on stricter console time criteria was achieved later, at approximately the 36th case. Descriptive analyses revealed an initial phase of rapid improvement followed by a secondary optimization phase, with stabilization observed after approximately 32 cases. Tumor size and ASA class were independently associated with operative time.

Conclusion: RA can be safely adopted in high-volume centers with experienced surgical teams. While overall operative efficiency improves early, refinement of surgeon-dependent console performance continues over a longer learning trajectory, supporting a multiphase learning curve model.

Keywords: Adrenal gland surgery, robotic adrenalectomy, robotic surgery, learning curve, minimally invasive surgery

[S-076]

Hashimoto's thyroiditis does not alter the malignancy risk of AUS cytology

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Objective: Atypia of undetermined significance (AUS) detected by fine-needle aspiration (FNA) represents a controversial cytological diagnosis in the management of thyroid nodules. In patients with Hashimoto's thyroiditis (HT), inflammatory and reactive changes may increase cytological atypia, potentially leading to unnecessary surgical interventions. This study aimed to compare postoperative malignancy rates in thyroid nodules diagnosed as AUS in patients with and without underlying HT.

Material and Methods: This retrospective study included 281 patients who underwent thyroid surgery between January 1, 2020, and December 1, 2025, at the Endocrine Surgery Department of İstanbul University, İstanbul Faculty of Medicine, following an AUS diagnosis on FNA of the index nodule. Patients with chronic lymphocytic thyroiditis on final histopathology or positive anti-Tg/anti-TPO antibodies were classified as Group 1 (HT present; n=87, 31%), while the remaining 194 patients (69%) constituted Group 2 (HT absent). Demographic characteristics, serum TSH levels, TI-RADS categories, suspicious ultrasonographic features, type of surgery, index nodule malignancy rates, and incidental malignancy rates were compared between the groups. Histopathological features were further evaluated in patients with confirmed malignancy.

Results: Although there was no significant difference in age between the groups, Group 1 exhibited a higher female-to-male ratio (p=0.01) (Table 1). Serum TSH levels were significantly higher in Group 1 compared with Group 2 (2.3 mIU/L vs. 1.5 mIU/L, p<0.01). No significant differences were observed between the groups regarding index nodule size, the proportion of high TI-RADS categories, or the presence of suspicious ultrasonographic findings (p>0.05) (Table 1). The rates of total thyroidectomy were similar between Group 1 and Group 2 (58.6% vs. 58.2%, p=0.95). The overall malignancy rate was 48.3% in Group 1 and 40.2% in Group 2 (p=0.2). Papillary thyroid carcinoma constituted the majority of malignancies in both groups (Table 2). The malignancy rate within the AUS index nodule across the entire cohort was 24.5%, corresponding to 30% in Group 1 and 22% in Group 2, without a statistically significant difference (p=0.16). Incidental malignancy rates outside the index nodule were comparable between the groups (Table 1). Furthermore, no significant differences were detected between Group 1 and Group 2 in terms of tumor size, aggressive histological subtype, lymph node metastasis, vascular invasion, or extrathyroidal extension (Table 2).

Conclusion: In patients with AUS cytology, the presence of Hashimoto's thyroiditis does not significantly influence either the overall malignancy rate or the likelihood of malignancy within the index nodule. These findings suggest that HT does not independently alter surgical decision-making for AUS nodules.

Keywords: Atypia of undetermined significance, Hashimoto's thyroiditis, thyroid cancer risk

Table 1. Demographic and clinical characteristics

Variable	Group 1 (n=87)	Group 2 (n=194)	p-value
Age, median (min-max)	49 (15-74)	50.5 (13-78)	0.95
Female sex, n	77/10	146/48	0.01
TSH, median (min-max)	2.3 (0.006-38)	1.5 (0.01-13.9)	<0.01
Primary nodule size (mm), median (min-max)	17 (4-89)	20 (3-81)	>0.05
High TI-RADS (4-5), n (%)	45 (51.7)	112 (57.7)	0.36
Presence of suspicious US findings, n (%)	17 (19.5)	28 (14.4)	0.29
Total thyroidectomy, n (%)	51 (58.6)	113 (58.2)	0.95
Malignancy in the index nodule, n (%)	26 (30)	43 (22)	0.16
Incidental malignancy, n (%)	16 (18.4)	35 (18.0)	0.94
Overall malignancy, n (%)	42 (48.3%)	78 (40.2)	0.2

Table 2. Histopathological characteristics of patients with malignancy

Variable	Group 1 (n=42)	Group 2 (n=78)	p-value
Tumor size (mm), median (min-max)	8 (1-70)	9 (1-77)	>0.05
Papillary microcarcinoma, n (%)	31 (73.8)	45 (57.7)	>0.05
Papillary thyroid carcinoma (>1 cm), n (%)	10 (23.8)	27 (34.6)	>0.05
Follicular thyroid carcinoma, n (%)	1 (2.4)	5 (6.4)	>0.05
Medullary thyroid carcinoma, n (%)	0	1 (1.3)	>0.05
Aggressive subtype, n (%)	5 (11.9)	8 (10.3)	0.78
Lymph node metastasis, n (%)	0	3 (3.8)	0.28
Vascular invasion, n (%)	2 (4.8)	1 (1.3)	0.30
Extrathyroidal extension, n (%)	0	1 (1.3)	1.00

[S-078]

Marine-Lenhart syndrome: A rare clinical presentation of Graves' disease – a case series

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Objective: Marine-Lenhart syndrome (MLS) is a rare clinical entity characterized by the coexistence of Graves' disease and autonomously functioning thyroid nodules, and has been reported in approximately 1-2.7% of patients with Graves' disease. The coexistence of diffuse autoimmune hyperthyroidism and nodular autonomy may pose challenges in the diagnostic evaluation and surgical planning. Only a limited number of cases have been reported in the literature. The aim of this study was to present the clinical, imaging, and surgical characteristics of patients diagnosed with MLS.

Material and Methods: Among 254 patients who underwent surgery for Graves' disease at our clinic between 2015 and 2026, those diagnosed with MLS were retrospectively evaluated. Demographic characteristics, thyroid ultrasonography and scintigraphy findings, localization of the hyperfunctioning nodule, presence of ophthalmopathy, preoperative thyroid-stimulating immunoglobulin (TSI) levels, and the surgical procedures performed were obtained from patients' medical records.

Results: MLS was identified in 10 patients. The mean age was 51.9±17.2 years; 6 patients were female and 4 were male. In all patients, thyroid scintigraphy demonstrated diffusely increased uptake together with focal areas of increased activity within nodules. On scintigraphy, hyperfunctioning nodules were localized in the left lobe in 4 patients, in the right lobe in 3 patients, and bilaterally in 3 patients. Ophthalmopathy was present in 4 patients. The mean preoperative TSI level was 7.53±7.39 IU/L (min-max). All patients received antithyroid drug therapy before surgery. Total thyroidectomy was performed in 9 patients, while 1 patient underwent total thyroidectomy with central neck dissection and therapeutic left lateral neck dissection. Postoperative histopathological examination revealed papillary thyroid carcinoma in 2 patients (20%). One of these patients subsequently received radioactive iodine therapy.

Conclusion: MLS is a rare entity with a heterogeneous clinical spectrum. The presence of an autonomously functioning thyroid nodule does not exclude the possibility of malignancy. Therefore, in patients with Graves' disease and coexisting thyroid nodules, careful physical examination and ultrasonographic evaluation should be performed, and fine-needle aspiration biopsy should be considered for nodules that are clinically and ultrasonographically suspicious, even when the nodule is hyperfunctioning.

Keywords: Graves' disease, Marine-Lenhart syndrome, thyroid nodule

[S-079]

Is the preference changing? Total thyroidectomy or lobectomy in the surgical management of T1b papillary thyroid carcinoma

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Objective: Papillary thyroid carcinoma (PTC) is the most common differentiated thyroid cancer, and surgery is the primary treatment modality. Most treated PTCs are low-risk T1 tumors (<2 cm). The optimal extent of surgery remains controversial. The American Thyroid Association (ATA) guideline is the most widely used guideline worldwide for differentiated thyroid cancer and also guides treatment decisions in our clinic. In the 2009 ATA revision, near-total or total thyroidectomy was recommended as the initial surgical approach for tumors >1 cm, provided there were no contraindications. However, in the 2015 revision, for tumors >1 cm and <4 cm without extrathyroidal extension and without clinical evidence of lymph node metastasis (cN0), either near-total/total thyroidectomy or lobectomy was considered appropriate as the initial procedure. In the 2025 revision, it is noteworthy that for patients with tumors <2 cm (cT1), without gross extrathyroidal extension and without metastasis (cN0M0), thyroid lobectomy is recommended as the initial surgical procedure, unless there is bilateral disease or another indication for contralateral lobectomy. In light of these recommendations, we aimed to evaluate whether there has been a change in the surgical management of T1b tumors over the past 10 years.

Material and Methods: We retrospectively reviewed patients operated on for PTC between January 2016 and December 2025 with T1b tumors (>1 cm - <2 cm). Patients who underwent central and/or lateral neck dissection were excluded. Only patients who had lobectomy or total thyroidectomy were included. Patients were divided into two groups: 2016-2020 (Group 1) and 2021-2025 (Group 2). Surgical extent was compared between the two periods.

Results: A total of 98 patients (75 females, 23 males) were included: 41 in Group 1 and 57 in Group 2. Initial surgery in Group 1 vs. Group 2 was lobectomy in 6 (14.6%) vs. 25 (43.9%) and total thyroidectomy in 35 (85.4%) vs. 32 (56.1%), respectively (p=0.0021). Completion thyroidectomy after lobectomy was performed in 4 (9.8%) and 5 (8.8%) patients in Groups 1 and 2, respectively (p=1). After completion procedures, final surgical distribution was lobectomy in 3 (7.3%) vs. 23 (40.4%) and total thyroidectomy in 38 (92.7%) vs. 34 (59.6%) (p=0.0003).

Conclusion: Over the last decade, there has been a clear shift in our clinic from total thyroidectomy toward lobectomy in the management of T1bN0M0 tumors. The initial lobectomy rate increased from 14.6% (2016-2020) to 43.9% (2021-2025), with similarly low completion thyroidectomy rates. This trend aligns with the 2025 ATA guideline, suggesting that lobectomy may increasingly become the preferred initial surgical approach.

Keywords: Papillary thyroid carcinoma, T1b tumor, lobectomy

[S-080]

The association of pan-immune and systemic immune indices with malignancy in thyroid nodules with atypia of undetermined significance on fine-needle aspiration biopsy

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Objective: The diagnostic approach to thyroid nodules is primarily based on fine-needle aspiration biopsy (FNAB). However, the "atypia of undetermined significance" (AUS/FLUS) category in the Bethesda system creates significant challenges in clinical decision-making due to its heterogeneous risk of malignancy. Reported malignancy rates in this group range between 10% and 30%, and a substantial proportion of patients are therefore referred for unnecessary surgery. In recent years, with a better understanding of the role of systemic inflammation in tumor biology, markers derived from complete blood count parameters—such as the pan-immune inflammation index (PIV), systemic immune-inflammation index (SII), and neutrophil-to-lymphocyte ratio (NLR)—have been shown to have diagnostic value in various solid tumors.

Material and Methods: In this retrospective observational study, 120 patients who underwent total thyroidectomy with a diagnosis of AUS/FLUS between 2017 and 2022 were evaluated. Based on histopathological examination, patients were divided into two groups as benign (n=60) and malignant (n=60); all malignant cases were papillary thyroid carcinoma. The groups were compared using the Mann-Whitney U test. Independent variables predicting malignancy were assessed by multivariate logistic regression analysis. Diagnostic performance was evaluated using receiver operating characteristic (ROC) analysis, and ROC curves were compared using the DeLong test.

Results: No significant differences were observed between the benign and malignant groups in terms of demographic characteristics. Inflammatory indices were significantly higher in the malignant group. PIV (327.9±90.1 vs. 217.6±80.0; p<0.001), SII (644.6±230.4 vs. 502.6±200.3; p<0.001), and NLR (2.26±0.75 vs. 1.88±0.70; p=0.002) values were markedly increased in the malignant group (Table 1). In ROC analysis, the area under the curve (AUC) values were calculated as 0.86 for PIV, 0.83 for SII, and 0.79 for NLR. In the combined model evaluating all parameters together, the AUC value reached 0.91 (Figure 1). In logistic regression analysis, PIV (p<0.001) and SII (p=0.008) were identified as independent predictors of malignancy.

Conclusion: PIV and SII are strong, inexpensive, and clinically applicable biomarkers for predicting the risk of malignancy in thyroid nodules diagnosed as AUS. These inflammatory indices may contribute to a more objective assessment of malignancy risk in the preoperative period, thereby helping to reduce repeat biopsies and unnecessary surgeries. Particularly in clinical settings where molecular testing is not readily available, PIV and SII may be used as practical tools to support surgical decision-making.

Keyword: Thyroid nodule

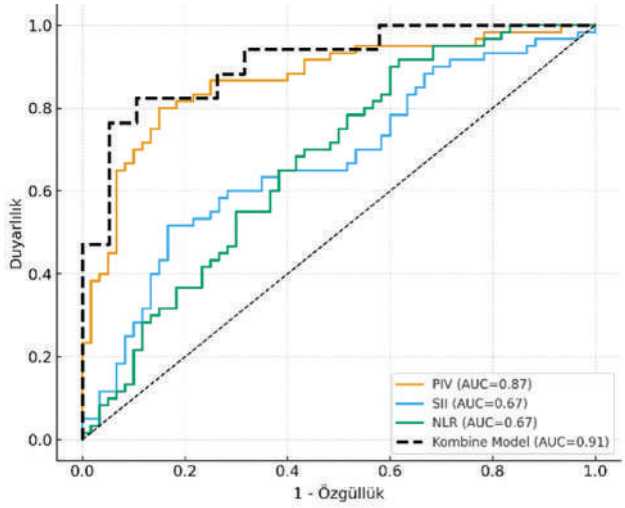


Figure 1. ROC curves of PIV, SII, NLR, and the combined model.

Table 1. Comparison of PIV, SII, and NLR values between benign and malignant disease

Parameter	Benign (Mean ± SS)	Malignant (Mean ± SS)	p-value
PIV	217.6±80.0	327.9±90.1	<0.001
SII	502.6±200.3	644.6±230.4	<0.001
NLR	1.88±0.70	2.26±0.75	0.002

[S-081]

Probe-based near-infrared autofluorescence imaging for identification of parathyroid glands during thyroidectomy: Experience of Zonguldak Bülent Ecevit University Faculty of Medicine

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Objective: Accidental excision or intraoperative injury of the parathyroid glands (PGs) may lead to transient or permanent hypoparathyroidism. Therefore, accurate identification and preservation of the parathyroid glands during thyroidectomy and parathyroidectomy constitute fundamental components of surgical success.In this study, we aimed to evaluate the effect of fiber-based near-infrared autofluorescence (NIRAF) technology on the number of parathyroid glands identified intraoperatively and on the incidence of postoperative hypoparathyroidism.

Material and Methods: This single-center clinical study was conducted between February 2025 and February 2026. Three experienced endocrine surgeons and five general surgery residents participated in the study. A total of 49 patients underwent unilateral total thyroidectomy, 37 patients underwent bilateral thyroidectomy, and 5 patients underwent completion thyroidectomy. The median follow-up period was 12 months. Probe-based NIRAF imaging was applied intraoperatively in all patients. In addition, both imaging-based and probe-based evaluations were performed on all surgical specimens. The primary outcome measure was defined as the mean number of parathyroid glands identified intraoperatively, and the secondary outcome measure was the rate of postoperative hypoparathyroidism.

Results: All 91 patients were analyzed for the primary outcome [median age (IQR): 52 (2) years; 67 women (73.6%)]. Forty-nine patients underwent unilateral thyroidectomy, 37 patients underwent total thyroidectomy with NIRAF guidance, and 5 patients underwent completion thyroidectomy. With the use of NIRAF in bilateral and completion thyroidectomies, the mean number of identified parathyroid glands was 4 in total thyroidectomies and 2 in completion thyroidectomies. In specimen evaluation, no additional parathyroid glands were detected by imaging-based assessment in cases where intraoperative probe-based NIRAF had been used. None of the patients in whom at least one parathyroid gland was visualized with NIRAF during thyroidectomy developed postoperative hypoparathyroidism. Review of the pathology reports confirmed that no inadvertent parathyroid gland excision had occurred.

Conclusion: Probe-based NIRAF technology appears to be safe for identification and preservation of parathyroid glands. It has the potential to increase the number of parathyroid glands identified during thyroidectomy and to reduce the risk of iatrogenic hypoparathyroidism.

Keywords: Thyroidectomy, hypoparathyroidism, parathyroid

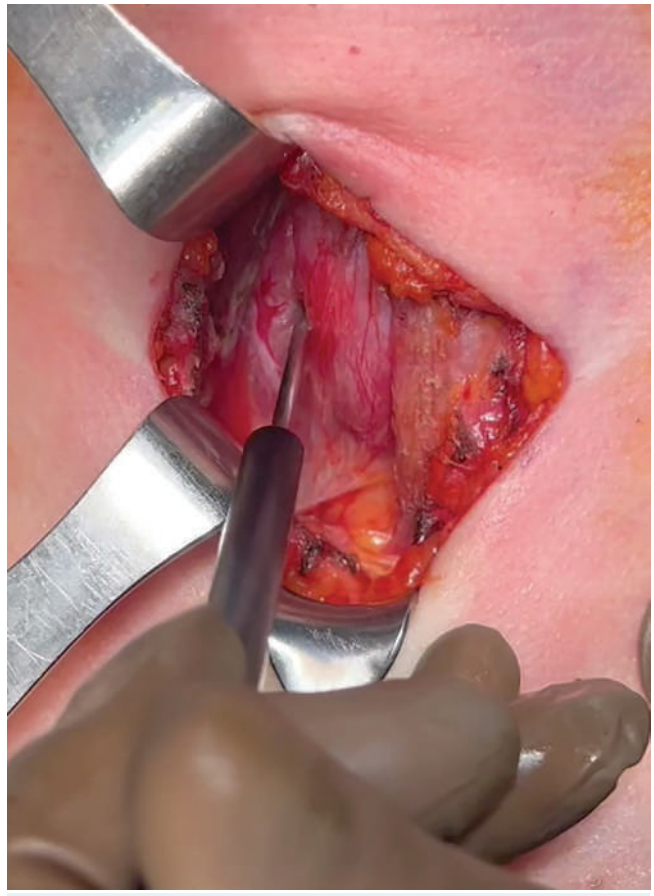


Figure 1. NIRAF.

Table 1.

Variable	N / %
AGE	5 ±2 years
Gender (female/male):	67/24 (73.6%/26.4%)
Type of surgery	Unilateral total Thyroidectomy: 49 (44.59%) Bilateral total Thyroidectomy: 37 (33.67%) Completion thyroidectomy: 5 (4.55%)
Number of identified parathyroid glands (mean):	Bilateral: 4 Completion: 2
Postoperative permanent hypoparathyroidism	0%
Unintended parathyroid excision	0%
Follow-up duration	12 months

[S-082]

Clinical and pathological features of struma ovarii: A retrospective analysis of twenty-eight cases

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Objective: Struma ovarii is a rare monodermal teratoma of the ovary that is usually benign; however, malignant transformation may occur in a small number of cases. Due to the non-specific nature of clinical and radiological findings, preoperative diagnosis remains challenging. The aim of this study was to evaluate the demographic, clinical, surgical, and pathological characteristics of patients diagnosed with struma ovarii and to identify distinguishing features of malignant struma ovarii cases using numerical data.

Material and Methods: The medical records of a total of 28 patients diagnosed with struma ovarii between January 2011 and December 2025 in our endocrine surgery clinic were retrospectively analyzed. Patient age, presenting symptoms, imaging findings, tumor size, presence of ascites, surgical procedures, histopathological diagnoses, and follow-up data were evaluated. Continuous variables were expressed as mean ± standard deviation, and categorical variables were expressed as number and percentage.

Results: The mean age of the patients was 41.5±15.1 years. Twenty-two cases (78.6%) were reported as benign struma ovarii, and six cases (21.4%) as malignant struma ovarii (Figure 1). The mean age of patients with malignant disease was higher than that of the benign group. Tumor sizes were larger in the malignant group, and this difference was more pronounced in cases where measurements were available. Ascites was detected only in the malignant group (n=2, 33.3%); no ascites was observed in benign cases. Preoperative imaging modalities (ultrasonography and computed tomography) were interpreted as benign ovarian cysts or mature teratomas in the majority of malignant cases, and malignancy was rarely suspected preoperatively. Frozen section examination was performed in a limited number of patients, and its diagnostic contribution to predicting malignancy was found to be low. While fertility-preserving surgical approaches were frequently preferred in benign cases, more extensive surgical procedures were performed in malignant cases. The mean follow-up duration in malignant patients was 33.7 months (range, 3-80 months), during which no distant metastasis or recurrence was observed.

Conclusion: In this series, the rate of malignant struma ovarii was 21.4%, and malignant cases could not be reliably distinguished from benign ones based on preoperative clinical and radiological findings. Large tumor size and the presence of ascites should be considered warning signs for malignancy; therefore, careful surgical planning and close long-term follow-up are recommended in such patients. This study contributes to the literature as one of the few series in which malignant struma ovarii cases are numerically analyzed and clinically relevant distinguishing features are emphasized.

Keywords: Malignancy, ovarian mass, struma ovarii, teratoma, thyroidectomy

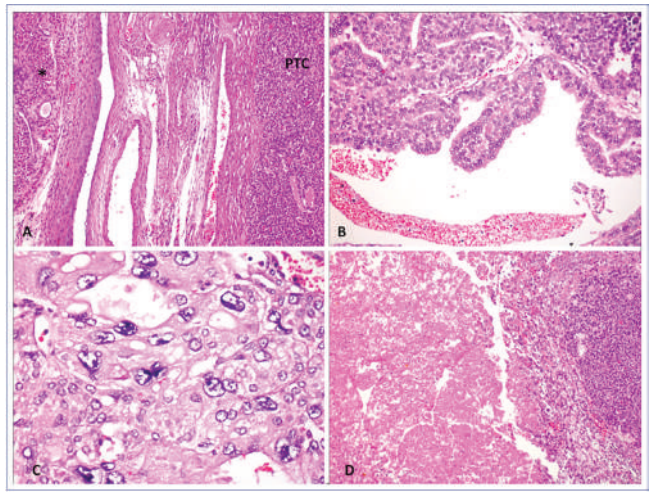


Figure 1. Microphotographs of malignant struma ovarii. Poorly differentiated papillary thyroid carcinoma (PTC) adjacent to luteinized cells (*) in the ovary (A, H&E ×40). The tumor shows well-differentiated areas with papillary structures (B, H&E ×100) and anaplastic transformation characterized by bizarre nuclei (C, H&E ×200) and tumor necrosis (D, H&E ×40).

[S-083]

Role of dominant thyroid nodule volume in predicting malignancy

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Objective: Thyroid cancer is the most common type of endocrine malignancy. While a strong correlation between lesion size and malignant potential has been demonstrated in many cancer types, the relationship between increasing thyroid nodule size and malignancy remains controversial. This study aimed to evaluate the role of preoperative dominant thyroid nodule volume in predicting malignancy.

Material and Methods: The medical records of 632 patients who underwent thyroidectomy at Ankara Bilkent City Hospital between January 2022 and December 2025 were retrospectively reviewed. Dominant thyroid nodule volume was calculated using the ellipsoid formula recommended by the World Health Organization (WHO) (length × width × depth × 0.479). Dominant nodule volumes were categorized as <5 cm³, 5-9.9 cm³, and ≥10 cm³. Categorical variables were analyzed using the chi-square test. Receiver operating characteristic (ROC) curve analysis was performed to determine the optimal volume cut-off value for predicting malignancy.

Results: Of the 632 patients, 136 (21.5%) were male and 496 (78.5%) were female. The mean age was 47 years, and the mean body mass index (BMI) was 29.46 kg/m². A family history of thyroid cancer was not significantly associated with malignancy. Dominant nodule volume data were available for 610 patients. Of these nodules, 46.1% were located in the right thyroid lobe and 53.9% in the left lobe. The mean dominant nodule volume was 11.73 cm³. Malignancy was detected in 49.1% of patients with dominant nodule volumes <5 cm³, 30.9% of those with volumes between 5-9.9 cm³, and 33.5% of those with volumes ≥10 cm³. ROC curve analysis demonstrated a low but statistically significant association between dominant nodule volume and malignancy (area under the curve =0.610; p<0.001).

Conclusion: In this large cohort of patients undergoing thyroidectomy, the relationship between dominant thyroid nodule volume and malignancy was evaluated. Although a statistically significant association was identified, the predictive strength of nodule volume was low. These findings suggest that dominant nodule volume may serve as a supportive parameter in malignancy risk assessment but is insufficient as a standalone predictor. Therefore, incorporating dominant nodule volume alongside ultrasonographic features and cytopathological findings may contribute to surgical decision-making.

Keywords: Dominant thyroid nodule volume, thyroid cancer, thyroid nodule

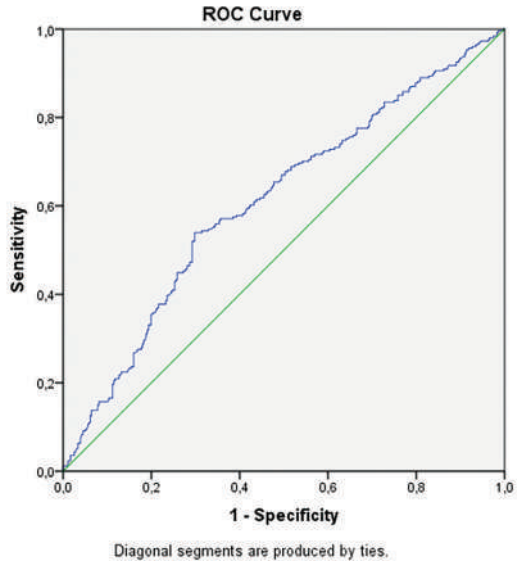


Figure 1. Receiver operating characteristic (ROC) curve analysis for nodule volume

Area under curve=0.610 (p<0.001) cut-off: 3.47 cm³

Table 1. Evaluation of pathological outcomes according to dominant nodule volume and total thyroid volume

	Pathology			
	Benign		Malignant	
	Number	(%)*	Number	(%)*
Largest nodule volume (n = 610)				
<5 cm³	170	50.9	164	49.1
5-9.99 cm³	67	69.1	30	30.9
≥10 cm³	119	66.5	60	33.5
χ^2=17,090 **p<0.001****				
Total thyroid volume (cm³) (n=632)				
Mean ± SD	51.98±56.33		38.24±44.74	
p<0.001***				

*: Row percentage, **: Chi-square test, ***: Mann-Whitney U test.

[S-084]

Effect of incidental parathyroidectomy on temporary and permanent hypocalcemia after total thyroidectomy

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Objective: Hypocalcemia (HC), both transient and permanent, may occur after total thyroidectomy, and incidental parathyroidectomy (IP) can develop despite attempts to preserve the parathyroid glands. The relationship between IP and postoperative hypocalcemia remains controversial. This study aimed to evaluate the impact of IP on transient and permanent hypocalcemia after total thyroidectomy and to identify potential risk factors associated with IP and hypocalcemia.

Material and Methods: After ethics committee approval, a retrospective review was conducted of patients who underwent total thyroidectomy at the Department of General Surgery, Mersin University Faculty of Medicine Hospital, between June 2007 and January 2024. Patients were categorized into those with IP [subgroups: Preventable IP (EIP) and unpreventable IP (IIP)] and those without IP (NIP). Groups were compared regarding the development of transient and permanent hypocalcemia and potential IP risk factors, including age, sex, ASA score, surgeon experience (faculty member, specialist, resident), retrosternal extension, and histopathological diagnosis (malignant vs. benign; malignant vs. multinodular goiter vs. thyroiditis). Patients were also classified as having transient or permanent hypocalcemia and compared according to IP-related risk factors (age <50 vs. ≥50 years).

Results: A total of 1.702 patients were included. IP occurred in 257 (15.1%), transient hypocalcemia in 1,118 (65.6%), and permanent hypocalcemia in 52 (3%) patients. IP significantly increased permanent and overall hypocalcemia; preventable IP increased permanent and overall hypocalcemia; and unpreventable IP increased transient and overall hypocalcemia ($p \leq 0.05$). Benign disease and thyroiditis were associated with higher rates of IP and PIP ($p \leq 0.05$). Female sex increased both transient and permanent hypocalcemia, while malignancy and age ≥50 years were associated with transient hypocalcemia and age <50 years with permanent hypocalcemia ($p \leq 0.05$).

Conclusion: Incidental parathyroidectomy (IP) significantly contributes to hypocalcemia after total thyroidectomy. IP and preventable IP are associated with permanent hypocalcemia, while unpreventable IP is mainly associated with transient hypocalcemia; all forms contribute to overall hypocalcemia. Benign disease and thyroiditis are key risk factors, particularly for preventable IP. Female sex, age, and histopathological diagnosis influence hypocalcemia risk: Female sex, age ≥50 years, and malignancy are associated with transient hypocalcemia, whereas female sex and age <50 years are associated with permanent hypocalcemia. The predominance of extraparenchymal IP suggests that many cases are preventable. Careful identification and *in situ* preservation of parathyroid glands during total thyroidectomy are essential to reduce IP and permanent hypocalcemia.

Keywords: Total thyroidectomy, incidental parathyroidectomy, hypocalcemia

[S-085]

CD66b$^+$ tumor-infiltrating neutrophil-like monocytes as potential biomarkers for clinical decision-making in thyroid cancer

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Objective: The increasing incidence of thyroid nodules and carcinomas has made the accurate assessment of malignancy potential a cornerstone of clinical endocrine practice. While Fine-needle aspiration biopsy (FNAB) and the Bethesda system are standard, they face limitations in sensitivity and specificity, particularly in indeterminate cases. Recent evidence suggests that cancer is a complex ecosystem where the tumor microenvironment (TME) significantly influences progression. This study aims to elucidate the presence and functional significance of CD66b$^+$ neutrophil-like monocytes (HLA-DR+CD14+CD66b$^+$), a distinct subgroup of myeloid cells characterized by phenotypic plasticity, as a novel biomarker for papillary thyroid carcinoma (PTC).

Material and Methods: In this prospective case-control study, samples were obtained from 24 PTC patients and 10 patients with benign thyroid nodules. The research utilized peripheral blood (PB), malignant tumor tissue, and adjacent non-tumor thyroid tissue. Primary cells were isolated using Histopaque-1077 density gradient centrifugation and enzymatic digestion with collagenase and DNase. Flow cytometric immunophenotyping was performed using monoclonal antibodies against CD45, CD66b, HLA-DR, and CD14. Statistical analyses were conducted to correlate immune cell frequencies with clinical parameters and histological findings.

Results: The study found that CD66b$^+$ neutrophil-like monocytes significantly populate the malignant PTC tissue and circulation (Figure 1). In the peripheral blood of PTC patients, these monocytes accounted for 11.9% of total mononuclear cells, significantly higher than the 3.8% found in benign cases ($p=0.0029$). Within tumor tissues, the concentration of these cells (21.1%) was 3-fold higher than in non-tumor tissues (7.5%) and up to 10-fold higher compared to peripheral blood ($p<0.001$). Furthermore, the infiltration level in malignant nodules was significantly higher (27.6%) compared to benign nodules (15.8%). These elevated levels indicate a specific inflammatory milieu and immune reprogramming within the TME of thyroid cancer.

Conclusion: This study is the first to demonstrate the diagnostic value of CD66b$^+$ neutrophil-like monocytes in thyroid cancer (Figure 2). These cells serve as a promising biomarker for distinguishing malignant from benign nodules, potentially addressing the diagnostic gaps of the Bethesda system. Beyond diagnosis, their presence in the TME suggests they may represent a novel immunotherapeutic target, particularly for radioiodine-refractory PTC. Incorporating these findings into clinical decision-making could refine surgical strategies, reduce unnecessary procedures, and move toward more personalized therapeutic management of thyroid cancer.

Keywords: Biomarker, CD66$^+$ monocytes, thyroid cancer

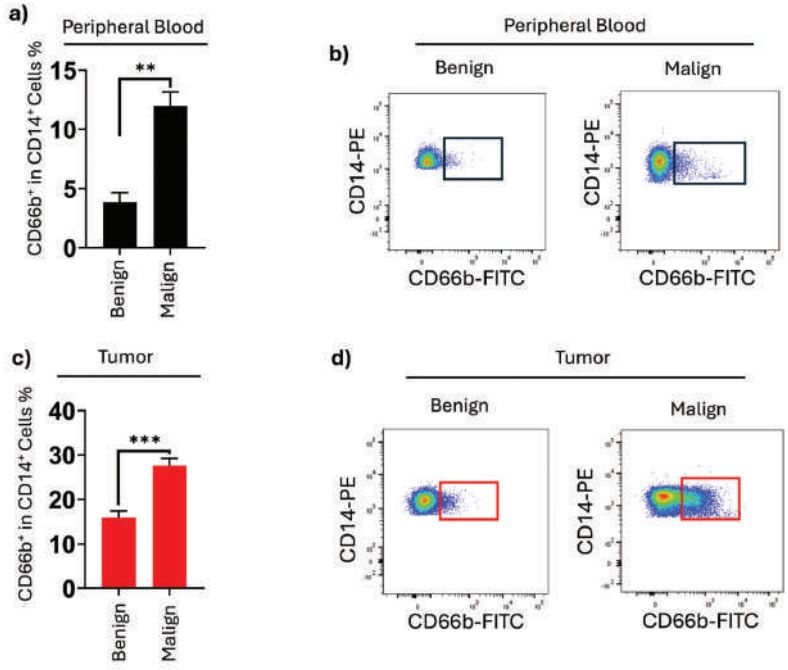


Figure 1. Increased frequency of CD66b+ monocytes in peripheral blood and tumor tissue of malignant thyroid lesions.

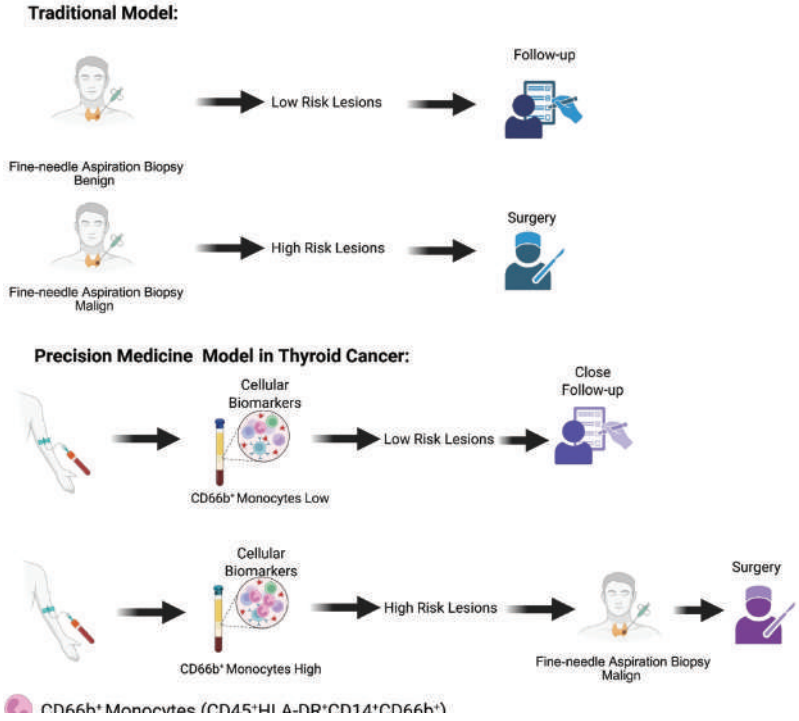


Figure 2. Methodological framework for evaluating the clinical decision-making potential of CD66+ monocytes.

[S-086]

Comparison of perioperative and early outcomes between laparoscopic and retroperitoneoscopic adrenalectomy: A single-center retrospective experience

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Objective: Laparoscopic and retroperitoneoscopic approaches are widely used in minimally invasive adrenal surgery. However, the impact of these two techniques on perioperative safety and early postoperative recovery remains a matter of debate. This study aimed to compare the clinical and surgical outcomes of patients undergoing laparoscopic and retroperitoneoscopic adrenalectomy.

Material and Methods: This retrospective study reviewed data from 107 patients who underwent minimally invasive adrenalectomy between January 1, 2020, and December 31, 2025, at the Endocrine Surgery Department of İstanbul University, İstanbul Faculty of Medicine. Patients were divided into two groups based on the surgical approach: Laparoscopic (n=88) and retroperitoneoscopic (n=19). The groups were compared in terms of age, sex, tumor functional status, and history of previous abdominal surgery. Early postoperative outcomes, including postoperative pain, as assessed by the visual analog scale (VAS), length of hospital stay, and perioperative complication rates, were evaluated. Continuous variables were analyzed using appropriate non-parametric tests, and categorical variables were compared using the chi-square or Fisher's exact test.

Results: The retroperitoneoscopic group consisted of 19 patients, while 88 patients underwent laparoscopic adrenalectomy. The median age was 52 (15-69) years in the retroperitoneoscopic group and 48 (18-77) years in the laparoscopic group, with no significant difference between groups (p=0.766). The proportion of female patients was 52.6% (n=10) in the retroperitoneoscopic group and 61.4% (n=54) in the laparoscopic group (p=0.607). Functional tumors were observed in 52.6% (n=10) of patients in the retroperitoneoscopic group and 71.6% (n=63) of patients in the laparoscopic group; however, this difference was not statistically significant (p=0.172). Furthermore, none of the patients in the retroperitoneoscopic group had a history of prior abdominal surgery, whereas 13.6% (n=12) of patients in the laparoscopic group did, a difference that was not statistically significant (p=0.119). Regarding early postoperative outcomes, the length of hospital stay was significantly shorter in the retroperitoneoscopic group [median 3 days (2-7) vs. 4 days (2-21); p=0.002]. Postoperative pain scores were also lower in the retroperitoneoscopic group [VAS median 2 (2-3) vs. 3 (2-5); * p * <0.001]. No perioperative complications were observed in the retroperitoneoscopic group (0%), while one complication (1.1%) occurred in the laparoscopic group; this difference was not statistically significant (p=1.000).

Conclusion: Retroperitoneoscopic adrenalectomy provides comparable perioperative safety outcomes to the laparoscopic approach while being associated with shorter hospital stay and lower postoperative pain scores. These findings suggest that, in appropriately selected patients, the retroperitoneoscopic approach represents an effective surgical alternative that facilitates early recovery and enhances patient comfort.

Keywords: Adrenalectomy, laparoscopic adrenalectomy, retroperitoneoscopic adrenalectomy

Table 1. Demographic characteristics and early outcomes according to surgical approach

Variable	Retroperitoneoscopic (n=19)	Laparoscopic (n=88)	p-value
Age, median (min-max)	52 (15-69)	48 (18-77)	0.766
Female sex, n (%)	10 (52.6%)	54 (61.4%)	0.607
Functional tumor, n (%)	10 (52.6%)	63 (71.6%)	0.172
Previous abdominal surgery, n (%)	0 (0%)	12 (13.6%)	0.119
Laterality (right/left/bilateral)	5/13/1	30/57/1	0.385
Length of hospital stay, days, median (min-max)	3 (2-7)	4 (2-21)	0.002
VAS pain score, median (min-max)	2 (2-3)	3 (2-5)	<0.001
Perioperative complication, n (%)	0 (0%)	1 (1.1%)	1.000

[S-087]

Factors predicting thyroid cancer in patients with primary hyperparathyroidism

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Objective: The coexistence of thyroid nodules and differentiated thyroid cancer is known to be more frequent in patients with primary hyperparathyroidism than in the general population. However, predictive factors guiding thyroidectomy indications in these patients are not clearly defined. This study aimed to identify clinical, ultrasonographic, and laboratory parameters that may predict thyroid malignancy in patients with primary hyperparathyroidism.

Material and Methods: A total of 174 patients who underwent parathyroidectomy for primary hyperparathyroidism with concomitant thyroidectomy between January 1, 2007, and May 1, 2024, at the Department of General Surgery, Dokuz Eylül University Faculty of Medicine Hospital were retrospectively analyzed. The presence of thyroid cancer was defined as the dependent variable. Demographic characteristics, clinical findings, thyroid ultrasonography features, and laboratory parameters were evaluated. Univariate and multivariate logistic regression analyses were performed.

Results: Of the patients, 149 (85.6%) were female and 25 (14.4%) were male, with a mean age of 57±12 years. Thyroid pathology was benign in 86 patients (49.4%) and malignant in 88 patients (50.6%). The most common malignancy was papillary microcarcinoma (72.8%). The risk of thyroid cancer was significantly lower in symptomatic patients (p=0.018). In particular, the presence of osteoporosis (p=0.006) and symptoms of body pain–weakness–fatigue (p<0.001) were found to be protective against malignancy. The presence of hypertension was significantly associated with thyroid cancer (p=0.023). Thyroid nodule presence, number, diameter, structure, and echogenicity were significantly associated with thyroid cancer (p<0.001). The presence of microcalcifications was also significantly related to malignancy (p=0.034). Regarding laboratory parameters, higher BUN levels (p=0.013) and lower ALP levels (p<0.001) were associated with thyroid cancer. In multivariate logistic regression analysis, body pain–weakness–fatigue (OR=3.48; 95% CI: 1.451-8.378; p=0.005) and osteoporosis (OR=3.43; 95% CI: 1.397-8.453; p=0.007) were protective factors. Serum calcium level (OR=1.543; 95% CI: 1.005-2.369; p=0.047), BUN level (OR=1.139; 95% CI: 1.032-1.257; p=0.01), thyroid nodule diameter (OR=1.796; 95% CI: 1.140-2.830; p=0.012), and thyroid nodule echogenicity were identified as independent risk factors. Among these, nodule echogenicity was the strongest predictor, with hypoechoic nodules increasing the risk of thyroid cancer by 6.3-fold compared with hyperechoic nodules.

Conclusion: In patients with primary hyperparathyroidism, the likelihood of thyroid cancer is significantly increased in the presence of solid, hypoechoic thyroid nodules containing microcalcifications on ultrasonography. Based on these findings, adopting a different approach to thyroid nodules and expanding the scope of thyroidectomy in patients with primary hyperparathyroidism may be more appropriate.

Keywords: Primary hyperparathyroidism, risk factors, thyroid cancer, thyroid nodule, thyroidectomy

[S-088]

Diagnostic value of microRNA panel in predicting malignancy in thyroid nodules with atypia cytology of undetermined significance

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Objective: The rate of unnecessary surgery remains high in thyroid nodules operated on due to atypia of undetermined significance cytology (Bethesda III-IV). In this study, the diagnostic performance of microRNA expression profiles in predicting malignancy was investigated in patients who underwent surgery and had benign or malignant histopathological outcomes.

Material and Methods: Twenty-eight patients with cytology categorized as atypia of undetermined significance who underwent surgery were retrospectively evaluated. Sixteen patients with benign histopathological results were compared with 12 patients with malignant outcomes. A total of 18 different microRNA expressions were analyzed using the qRT-PCR method. Expression levels were calculated using the ΔCt method. The Mann-Whitney U test was used for intergroup comparisons. Diagnostic performance was evaluated by ROC analysis, and optimal cut-off values were determined using the Youden index. A combined microRNA panel was constructed through multivariate analysis.

Results: A total of 28 patients were included in the study. Histopathological examination revealed benign lesions in 16 patients and malignant lesions in 12 patients. Expression levels of miR-221-3p, miR-155-5p, and miR-21-5p were significantly higher in the malignant group compared to the benign group (p<0.05). In ROC analysis, the area under the curve (AUC) was 0.99 for miR-221-3p, 0.95 for miR-155-5p, and 0.91 for miR-21-5p. In the combined panel analysis evaluating all three microRNAs together, diagnostic performance increased markedly, with the AUC reaching 1.00. This panel demonstrated high sensitivity and specificity in predicting malignancy.

Conclusion: MicroRNA-based panel analysis in thyroid nodules with indeterminate cytology appears to provide high diagnostic accuracy in predicting malignancy. This approach may serve as an adjunct molecular marker strategy that can be integrated into the surgical decision-making algorithm to reduce the rate of unnecessary thyroidectomies.

Keywords: Atypia of undetermined significance, microRNA expression, thyroid nodules

[S-089]

The role of repeat biopsy and TIRADS in predicting malignancy in AUS-diagnosed thyroid nodules in endemic regions

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Objective: Malignancy rates in thyroid nodules diagnosed as AUS (atypia of undetermined significance) range from 13% to 30% in the literature. These rates may differ in iodine-deficiency-endemic regions. AUS-diagnosed nodules are thought to carry higher malignancy risk in endemic areas such as Türkiye. This study evaluated postoperative pathology results of AUS nodules in endemic-region centers lacking molecular testing and assessed the diagnostic value of repeat biopsies.

Material and Methods: Patients who underwent surgery for AUS between 2019 and 2024 were retrospectively reviewed. Demographic data, nodule size, ACR-TIRADS category, number of biopsies, and final pathology results were recorded. Nodules ≥40 mm were excluded. Malignancy rates were compared across TIRADS categories, and the effect of biopsy number was analyzed.

Results: The study included 85 patients. Postoperative pathology revealed malignancy in 36 (42.4%) and benign findings in 49 (57.6%). Mean age was 46.7±12.5 years, with no significant difference between benign and malignant groups (p=0.062). Females comprised 77 patients (90.6%), males 8 (9.4%). Malignancy rates were 44.2% in females and 25.0% in males (p=0.458, not significant). Mean number of biopsies was 2.2±0.8 overall, with no difference between benign and malignant groups (p=0.848). Malignancy rate was 42.9% after one biopsy and 42.3% after two or more (p>0.05, not significant). Mean nodule size was 19.2±8.3 mm, with no significant difference between groups (p=0.240). Mean TIRADS score was 4.2±0.7 overall and significantly higher in the malignant group (p<0.001). TIRADS category showed a significant association with malignancy (p=0.006), with malignancy rates rising markedly as TIRADS score increased. ROC analysis showed an AUC of 0.685 (95% CI: 0.586-0.779) for TIRADS score in predicting malignancy. At a ≥4 threshold, sensitivity reached 97.2% but specificity was only 14.3%. In univariate logistic regression, each 1-point increase in TIRADS score raised malignancy odds significantly (OR 3.97; 95% CI 1.71-9.24; p=0.001).

Conclusion: Repeat biopsies added little value in detecting malignancy in AUS-diagnosed thyroid nodules. In contrast, TIRADS classification showed a strong association with malignancy rates. In iodine-endemic regions like Türkiye, nodules with TIRADS ≥4 after initial biopsy may benefit more from early surgery than from repeated FNA. Larger, multicenter national studies are required to confirm these findings.

Keywords: Thyroid nodule, biopsy, AUS

[S-090]

The effect of tumor size and side on surgical difficulty in laparoscopic transperitoneal adrenalectomy: A retrospective study

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Objective: Laparoscopic adrenalectomy is currently the preferred minimally invasive approach for the surgical treatment of adrenal tumors. Surgical difficulty can vary depending on factors such as tumor size, hormonal activity, and anatomical location. While the influence of tumor size on surgical difficulty is widely accepted, the impact of the location of the adrenal mass on the right or left side of the abdomen on operation time and perioperative outcomes remains a subject of debate.

Material and Methods: This study retrospectively evaluated patients who underwent elective laparoscopic transperitoneal adrenalectomy at a single center over an 18-month period. Demographic data, tumor characteristics, and perioperative outcomes were recorded. Operation time was assessed as the primary indicator of surgical difficulty. Right and left adrenal masses were compared. Multivariate linear regression analysis was performed to identify independent factors affecting operation time.

Results: A total of 23 patients were included in the study. The median tumor size was 27 mm (IQR 18-50), and the median operation time was 80 minutes (IQR 70-85). Tumors located on the right side tended to be larger than those on the left side, but this difference was not statistically significant (median 41.5 mm vs. 25 mm; p=0.28). However, operation time was longer in left adrenalectomies compared to the right side (median 80 min vs. 70 min), and this difference was close to statistically significant in univariate analysis (p=0.067). In multivariate analysis adjusted for tumor size and ASA score, left-sided adrenal masses were independently associated with an increase in operation time of approximately 14 minutes (p<0.05). No significant relationship was found between tumor size and operation time.

Conclusion: This retrospective study revealed that surgical difficulty in laparoscopic transperitoneal adrenalectomy is more closely related to the anatomical location of the tumor than to its size. Left-sided adrenalectomies are associated with longer operation times despite smaller tumor sizes. These findings suggest that tumor side, in addition to tumor size, should be considered in the preoperative surgical planning process.

Keywords: Laparoscopic adrenalectomy, tumor side, surgical difficulty

[S-091]

What has changed in the management of papillary thyroid microcarcinoma in Türkiye over the last decade? Is active surveillance feasible in the near future?

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Objective: The incidence of thyroid cancer has been increasing worldwide; however, disease-specific mortality has remained stable. These clinical observations raise the question of whether more conservative treatment strategies may be appropriate for selected patients. In the literature, there is considerable variability in the management of papillary thyroid microcarcinoma (PTMC). In this survey-based study, we aimed to evaluate how the management of PTMC has changed in Türkiye over the last 10 years and to explore whether active surveillance may be a feasible option in the near future.

Material and Methods: This was a survey-based study conducted in two different periods, in 2014 and 2024, using the same 13-question questionnaire. The survey was distributed to participants via e-mail or WhatsApp using the database of our national society. The questions mainly addressed diagnostic and therapeutic management algorithms for PTMC. In addition, changes in both surgical and conservative approaches over the last decade were evaluated using identical questions in both periods.

Results: A total of 717 multidisciplinary participants completed the survey. For classic-type microcarcinoma confined to a single lobe, the dominant treatment approach was total thyroidectomy in Period 1 (65%), whereas hemithyroidectomy was preferred in Period 2 (66%). In cases where incidental microcarcinoma was detected during hemithyroidectomy, completion thyroidectomy was recommended by 40% of participants in Period 1 and by 17% in Period 2. Radioactive iodine (RAI) ablation for incidental cancers without aggressive features was recommended by 51% in Period 1 and 35% in Period 2. Routine central neck dissection in these cases was recommended by 27% in Period 1 and 19% in Period 2. The recommendation of active surveillance (follow-up without any interventional treatment) increased from 9% in Period 1 to 17% in Period 2. The use of ablative therapies remained similar in both periods (12%).

Conclusion: Over the last decade in Türkiye, there has been a significant reduction in the extent of surgery and in the preference for RAI use in the management of PTMC. Although the rates of non-surgical treatment recommendations have not markedly changed, the preference for active surveillance has doubled. While the widespread implementation of active surveillance in Türkiye does not seem highly likely in the near future due to sociological and medicolegal factors, the ongoing shift of modern surgery toward minimally invasive approaches raises the question of whether active surveillance could become a more accepted strategy in selected patients.

Keywords: Active surveillance, papillary microcarcinoma, Türkiye, thyroidectomy

[S-092]

Surgeon-directed interpretation of contrast-enhanced CT improves parathyroid localization in sestamibi-negative primary hyperparathyroidism

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Objective: Accurate preoperative localization of the pathological parathyroid gland is critical for the success of minimally invasive parathyroidectomy (MIP) in primary hyperparathyroidism (PHPT). Localization, however, remains challenging in patients with negative or non-localizing 99mTc-sestamibi scintigraphy (MIBI). This study evaluated whether surgeon-directed interpretation of contrast-enhanced neck computed tomography (CT) improves localization accuracy in this subgroup.

Material and Methods: This retrospective study included PHPT patients who underwent parathyroidectomy between April 2021 and March 2025 and had negative or non-localizing MIBI findings. Preoperative contrast-enhanced neck CT scans were interpreted by an experienced endocrine surgeon and compared with standard radiologist CT reports and ultrasonography (US). Intraoperative findings served as the reference standard. Localization accuracy was compared using the McNemar test, with exact McNemar analysis performed for ectopic adenomas.

Results: Fifty-four patients were included. MIP was successfully completed in 90.7% of cases. Localization accuracy was 48.1% for US, 57.4% for radiologist-interpreted CT, and 90.7% for surgeon-directed CT interpretation ($p<0.001$). Surgeon-directed CT interpretation demonstrated a significantly higher likelihood of correct localization than radiologist reports (odds ratio, 19.0; 95% confidence interval, 2.54-141.93). In patients with ectopic adenomas (n=18), surgeon-directed CT achieved 100% localization accuracy compared with 66.7% for radiologist reports ($p=0.031$). No persistence or recurrence was observed during follow-up.

Conclusion: In scintigraphy-negative PHPT patients, surgeon-directed interpretation of contrast-enhanced CT significantly outperforms standard radiology reporting and ultrasonography, facilitating accurate localization and successful minimally invasive surgery.

Keywords: Primary hyperparathyroidism, parathyroid adenoma, preoperative localization

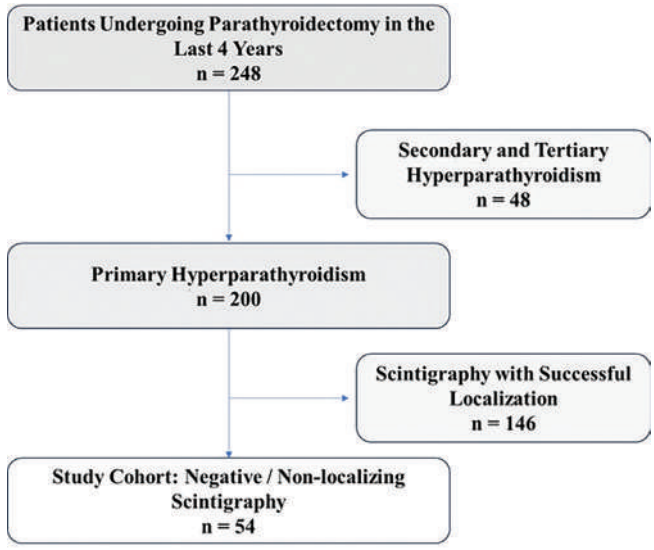


Figure 1. Study flow diagram.

Flow diagram illustrating patient selection. Between April 2021 and March 2025, a total of 248 patients underwent parathyroidectomy at our institution. Patients with secondary or tertiary hyperparathyroidism and those diagnosed with multiple endocrine neoplasia (MEN) syndrome were excluded. The final analysis included 200 patients with primary hyperparathyroidism. Of these, 146 patients with successful lesion localization on 99mTc-sestamibi scintigraphy were excluded, whereas 54 patients with negative or non-localizing scintigraphy findings constituted the study cohort.

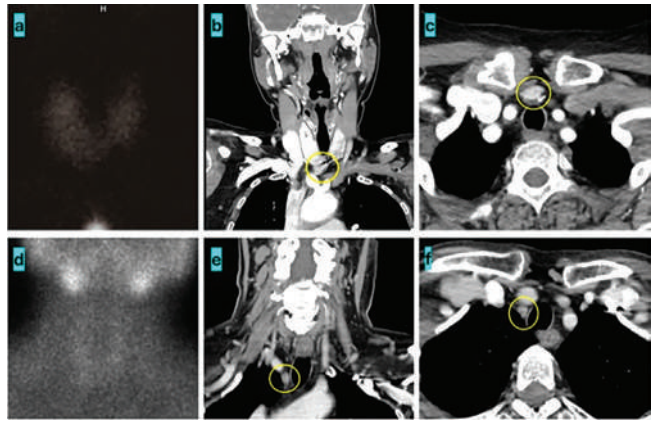


Figure 2. Representative cases of surgeon-directed contrast-enhanced CT interpretation in sestamibi-negative primary hyperparathyroidism.

In Case 1, a 52-year-old female patient had non-localizing ultrasonography and Tc-99m sestamibi scintigraphy (a). Surgeon-directed review of contrast-enhanced neck CT identified an ectopic parathyroid adenoma on coronal and transverse images (b, c; yellow circles), which was excised by minimally invasive parathyroidectomy from the right upper mediastinal thyrothymic ligament (0.89 g). In Case 2, a 70-year-old female patient likewise had non-localizing ultrasonography and scintigraphy (d). Surgeon-directed CT review demonstrated an ectopic adenoma in the right upper mediastinal paratracheal region (e, f; yellow circles), which was removed using a minimally invasive approach (0.20 g). In both cases, the lesions were not identified in the original radiology CT reports.

[S-094]

The relationship between systemic immunoinflammation value, pan immunoinflammation value and neutrophil lymphocyte ratio in thyroid papillary carcinoma

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Objective: Thyroid cancers account for approximately 1% of all malignancies, with papillary thyroid carcinoma (PTC) comprising nearly 80% of cases. Incidence has increased in recent years due to factors such as radiation exposure and iodine deficiency. Benign thyroid diseases, particularly nodular goiter, are closely monitored because of malignant transformation risk, making thyroid disorders a significant outpatient population. Early diagnosis and treatment are essential in benign thyroid disease with suspected malignancy, while prognostic evaluation is critical in PTC. Recently, attention has focused on the relationship between inflammation and cancer. Inflammatory markers derived from routine complete blood counts, including neutrophil-to-lymphocyte ratio (NLR), systemic immune-inflammation index (SII), and pan-immune inflammation value (PIV), reflect systemic inflammatory status. These markers are widely used for diagnostic and prognostic assessment in various malignancies. In this study, patients with papillary thyroid carcinoma were compared with those with benign thyroid disease based on NLR, SII, and PIV parameters overall analysis.

Material and Methods: A total of 140 patients who underwent total thyroidectomy between January 2020 and November 2022 were retrospectively analyzed. Preoperative complete blood count parameters, thyroid-stimulating hormone (TSH) levels, and lymph node invasion status were evaluated.

Results: Patients were classified into papillary thyroid carcinoma (n=70) and benign thyroid disease (n=70) groups. The age range was 18-84 years, with a median age of 48.7 years. The mean age was significantly higher in the PTC group than in the benign group (51.1 vs. 46.3 years, p=0.045). Compared with the benign group, the PTC group demonstrated significantly higher absolute neutrophil and monocyte counts (p<0.001), while no significant difference was observed in absolute lymphocyte counts (p=0.987). TSH levels were significantly higher in the PTC group (p=0.049). The mean NLR was 1.87 in the benign group and 2.35 in the PTC group (p=0.001). Similarly, SII and PIV values were significantly elevated in the PTC group compared with the benign group (687.44 vs. 469.03 and 375.72 vs. 219.97, respectively; p<0.001). Patients with PTC were further subdivided according to lymph node invasion status. While TSH levels did not differ significantly between subgroups (p=0.542), NLR, SII, and PIV values were significantly higher in patients with lymph node invasion (p<0.001, p=0.003, and p=0.008, respectively).

Conclusion: This study is the first to demonstrate an association between papillary thyroid carcinoma and PIV. Elevated TSH, NLR, SII, and PIV levels in patients with PTC suggest that these markers may aid in early diagnosis and prognostic assessment, warranting validation in larger cohorts.

Keywords: Lymph node invasion, neutrophil lymphocyte ratio, pan immune inflammation value, papillary thyroid cancer, systemic immune inflammation value

[S-095]

Biological heterogeneity beyond adenoma size in primary hyperparathyroidism: Insights from secretory efficiency

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Objective: Adenoma size is traditionally considered a surrogate marker of disease severity in primary hyperparathyroidism (pHPT); however, clinical experience suggests marked heterogeneity in biochemical activity and postoperative metabolic outcomes among similarly sized adenomas. We hypothesized that adenoma size alone does not uniformly reflect clinical severity and that phenotype-based characterization may better explain postoperative calcium requirements.

Material and Methods: We conducted a retrospective observational study of patients undergoing parathyroidectomy for pHPT at University of Health Sciences Türkiye, Ankara Etlik City Hospital between December 2022 and February 2023. Ultrasonographic adenoma volume was calculated using the ellipsoid formula. Preoperative biochemical parameters and postoperative calcium replacement data were collected. Intravenous (IV) calcium requirement was defined as the need for IV calcium with or without oral supplementation. Multivariable logistic regression models were constructed to evaluate predictors of IV calcium requirement, including adenoma volume, preoperative PTH, and a secretory efficiency index (PTH per adenoma volume). Model performance was assessed using receiver operating characteristic (ROC) and calibration analyses. Unsupervised phenotyping was performed using Gaussian mixture modeling based on morphologic and biochemical variables.

Results: A total of 126 patients were included (median age 53.5 years; 84.1% female). Adenoma volume demonstrated a moderate correlation with preoperative PTH (⊠=0.44, p<0.001), but substantial variability in PTH levels was observed across similarly sized adenomas. Postoperative IV calcium supplementation was required in 21.6% of patients. In multivariable analysis, adenoma volume independently predicted IV calcium requirement (OR 2.10, 95% CI 1.23-3.58; p=0.007), whereas preoperative PTH did not. Higher secretory efficiency (PTH per unit volume) was independently associated with a lower likelihood of IV calcium requirement (OR 0.48, 95% CI 0.28-0.81; p=0.006). Unsupervised phenotyping identified three distinct disease phenotypes with differing biochemical profiles and postoperative calcium requirements.

Conclusion: Adenoma size correlates only modestly with biochemical severity and fails to capture the biological heterogeneity of primary hyperparathyroidism. Phenotype-based assessment incorporating secretory efficiency and biochemical profiles provides additional insight into postoperative calcium requirements and challenges the conventional size-based paradigm in pHPT.

Keywords: Parathyroid adenoma, parathyroid hormone, parathyroid volume, primary hyperparathyroidism

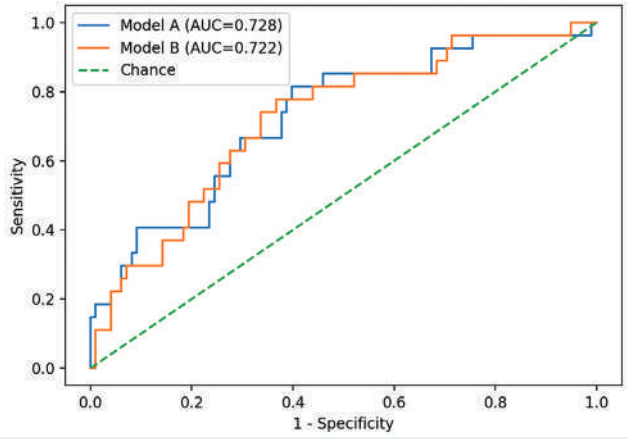


Figure 1. IV calcium requirement: ROC curves.

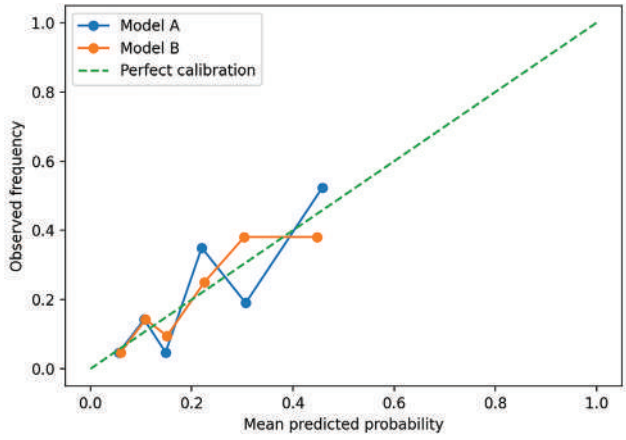


Figure 2. Calibration: IV calcium requirement. Is the predicted risk consistent with the actual risk?

[S-096]

The use of serum phosphorus levels in the early diagnosis of hypocalcaemia developing in patients undergoing total thyroidectomy: A single-centre experience with ROC analysis

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Objective: Post-thyroidectomy hypocalcaemia is a common complication that may prolong hospitalization and impact patient recovery. Although parathyroid hormone (PTH) is the most reliable predictor, limited availability in some centers necessitates alternative markers. Given PTH's role in phosphate metabolism, serum phosphorus has been proposed as a potential early predictor. This study evaluated the diagnostic performance of serum phosphorus levels in predicting hypocalcaemia during the early and late postoperative periods following total thyroidectomy.

Material and Methods: In this retrospective observational study, 402 patients who underwent total thyroidectomy between 2019 and 2024 were evaluated. Demographic data and postoperative laboratory results were reviewed retrospectively. Postoperative serum phosphorus levels at 24 hours and serum calcium levels at 48 hours were analysed; PTH measurements were not included in the evaluation as they were not routinely available. Hypocalcaemia was defined as serum calcium levels <8.0 mg/dL, and hyperphosphataemia was defined as serum phosphorus levels >4.5 mg/dL. The diagnostic performance of serum phosphorus levels in predicting hypocalcaemia was evaluated using ROC analysis, and the optimal cut-off value was determined using the Youden index. Data from 321 patients with complete data were included in the ROC analysis.

Results: Postoperative hypocalcaemia occurred in 220 of 402 patients (54.7%). While no significant association was observed between hypocalcaemia and hyperphosphataemia at 24 hours (p=0.377), a strong and statistically significant relationship emerged at 48 hours (p<0.001), with hyperphosphataemia more frequent among hypocalcaemic patients. ROC analysis demonstrated that 48-hour phosphorus levels had moderate discriminatory ability for predicting hypocalcaemia (AUC=0.73; 95% CI: 0.62-0.84), with 59% sensitivity and 78% specificity at a cut-off of 4.2 mg/dL. In contrast, 24-hour phosphorus levels showed limited predictive performance (AUC=0.59). Paired analysis further revealed significant postoperative changes in phosphorus levels at both 24 and 48 hours compared to preoperative values (p<0.001). Overall, although early biochemical alterations were evident, clinically meaningful predictive value was primarily observed at 48 hours.

Conclusion: Hypocalcaemia following total thyroidectomy is a clinically significant complication that requires early prediction, and PTH is considered the strongest predictor. However, the inability to routinely measure PTH in every centre has necessitated the investigation of alternative parameters. The literature suggests that serum phosphorus levels may be a potential early indicator. In our study, early biochemical changes in phosphorus levels were detected; however, clinically meaningful performance in predicting hypocalcaemia was demonstrated particularly at 48 hours postoperatively. Therefore, serum phosphorus levels, when evaluated together with calcium, can be used as an auxiliary parameter in hypocalcaemia risk classification.

Keywords: Hyperphosphataemia, hypocalcaemia, total thyroidectomy

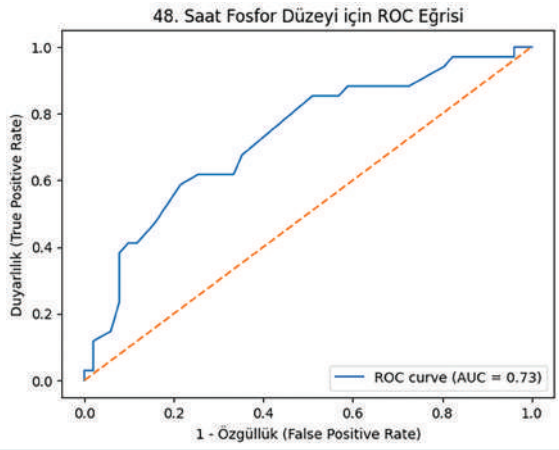


Figure 1. ROC curve for phosphorus level at 48 hours

In the ROC analysis, postoperative phosphorus levels at 48 hours were found to be moderately to well discriminatory for hypocalcaemia (AUC=0.73).

Table 1. ROC analysis results

Parameters	24. when phosphorus → 48. when hypocalcaemia	48. when phosphorus → 48. when hypocalcaemia
AUC	0.59	0.73
95% confidence interval	0.49-0.70	0.62-0.84
Optimal cut-off	≈4.3 mg/dL	≈4.2 mg/dL
Sensitivity	%47	%59
Specificity	%71	%78
Distinctiveness	Limited	Moderate-good
Clinical usability	Low	High

ROC analysis of serum phosphorus levels at 24 and 48 hours postoperatively in predicting hypocalcaemia. Phosphorus levels at 48 hours have moderate to good discriminatory power (AUC=0.73), whereas phosphorus levels at 24 hours have limited diagnostic value (AUC=0.59).

[S-097]

Evaluation of postoperative complications following surgical treatment of Graves' disease: A single-center experience

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Objective: Graves' disease (GD) is the most common cause of hyperthyroidism. Surgical treatment offers more rapid disease control compared with medical therapy and radioactive iodine. However, thyroidectomy for GD has been associated with higher rates of hypoparathyroidism and vocal cord paralysis (VCP) compared to other benign thyroidectomy indications. Nevertheless, surgery can be performed safely in high-volume centers. This study aimed to evaluate the postoperative outcomes and complications of patients operated on for GD at our institution.

Material and Methods: Postoperative data of patients diagnosed with GD and surgically treated between 2016 and 2025 were retrospectively analyzed. All procedures were performed under intraoperative nerve monitoring (IONM) guidance. In cases of signal loss or a >50% decrease in baseline amplitude on the initial side, I obectomy/hemithyroidectomy or contralateral subtotal lobectomy (SL) was performed. Total thyroidectomy (TT) was completed in the remaining patients. Patients were evaluated in terms of postoperative complications and surgical outcomes.

Results: A total of 253 patients (81 males, 172 females) with a mean age of 42.0±12.9 years were included. Due to signal loss or significant amplitude reduction on the initial side, surgery was terminated as lobectomy in 4 patients (1.6%), and contralateral subtotal resection was performed in 4 patients (1.6%). One patient underwent TT with central and therapeutic left lateral neck dissection due to papillary thyroid carcinoma with lateral metastasis. TT was completed in 244 patients (96.4%). IONM was used intermittently in 200 patients (79.1%) and continuously in 53 patients (20.9%). Postoperative unilateral VCP occurred in 26 patients (10.3%) (5.2% per nerve at risk). VCP was temporary in 21 patients (8.3%) and permanent in 4 patients (1.6%) (temporary 4.2% and permanent 0.8% per nerve). Among the four patients who underwent lobectomy, three developed VCP and subsequently underwent completion thyroidectomy after recovery of vocal cord function. The mean recovery time for temporary VCP was 8.6 weeks. Of the four patients who underwent contralateral SL, one required completion thyroidectomy after vocal cord recovery, while no recurrence was observed in the remaining three patients. Patients who underwent lobectomy and/or contralateral SL were excluded from hypoparathyroidism analysis. Postoperative hypoparathyroidism developed in 65 patients (26.5%), of whom 60 (24.5%) had transient and 5 (2%) had permanent hypoparathyroidism. The mean recovery time for transient hypoparathyroidism was 6.3 weeks.

Conclusion: TT for GD can be performed safely with acceptable complication rates in experienced centers. In cases of signal loss on the initial side, staged thyroidectomy or contralateral SL represents an effective strategy to prevent bilateral vocal cord paralysis.

Keywords: Graves' disease, hypoparathyroidism, vocal cord paralysis

[S-098]

Clinical predictors of malignancy and EU-TIRADS sonographic risk stratification in Bethesda III thyroid nodules

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Objective: Management of thyroid nodules with Bethesda category III cytology remains controversial because of variable malignancy risk and limited access to molecular testing. Ultrasound-based risk stratification using the European Thyroid Imaging Reporting and Data System (EU-TIRADS) may assist clinical decision-making after indeterminate cytology.

Material and Methods: This retrospective cohort study evaluated adult patients with an initial fine-needle aspiration biopsy (FNAB) diagnosis of Bethesda category III. Clinical, cytological, sonographic, and histopathological data were analysed. EU-TIRADS categories were reassigned according to European Thyroid Association criteria, and malignancy risk was assessed using final histopathology. Independent predictors were assessed using multivariable logistic regression.

Results: In total, 519 patients were included, of whom 385 proceeded to surgery. Malignancy was confirmed in 72.2% of operated nodules, consistent with selective surgical referral. When malignancy was attributed only to nodules that underwent surgery due to an initial or persistent Bethesda category III cytology result, the malignancy rate across the entire cohort was 40.5%. After repeat FNAB, benign cytology was observed in all EU-TIRADS 2 nodules (100%, 9/9) and in 48.4% (74/153) of EU-TIRADS 3 nodules, compared with 17.2% (22/128) of EU-TIRADS 4 nodules and only 8.2% (4/49) of EU-TIRADS 5 nodules. Malignancy rates were similar between single and repeated Bethesda III nodules across EU-TIRADS categories (EU-TIRADS 3: 46.0% vs. 52.5%; EU-TIRADS 4: 64.4% vs. 74.2%; EU-TIRADS 5: 84.6% vs. 81.5%). In multivariable analysis, EU-TIRADS 4 (OR 2.57, 95% CI 1.42-4.63) and EU-TIRADS 5 (OR 5.49, 95% CI 2.40-12.55) were strong independent predictors of malignancy, while increasing age (OR 0.97 per year, 95% CI 0.95-0.99) and thyroiditis (OR 0.35, 95% CI 0.19-0.62) were associated with lower risk.

Conclusion: EU-TIRADS classification is the strongest determinant of malignancy in Bethesda category III nodules, while repeat FNAB adds limited prognostic value, particularly in high-risk nodules. Incorporating ultrasound risk patterns together with clinical factors may enable more individualised management and help avoid unnecessary diagnostic procedures.

Keywords: Endocrine surgery, fine-needle aspiration biopsy, indeterminate cytology, ultrasound risk assessment, surgical decision-making

[S-099]

Impact of primary malignancy type on the risk of malignancy in thyroid incidentalomas detected on FDG-PET/CT: A retrospective analysis

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Objective: With the increasing use of FDG-PET/CT imaging, the detection of incidentally identified hypermetabolic thyroid nodules has become more frequent. Accurate prediction of malignancy risk in these nodules may help prevent unnecessary invasive procedures while avoiding missed clinically significant cancers. This study aimed to evaluate factors predicting malignancy in thyroid incidentalomas and to investigate the effect of the type of accompanying primary malignancy on malignancy risk.

Material and Methods: Between January 2023 and December 2025, 10,823 patients who underwent 18F-FDG PET/CT for non-thyroid-related indications were retrospectively reviewed. Among them, 443 patients with focal or diffuse FDG uptake in the thyroid gland were considered to have incidentalomas. Of these, 95 patients with 102 thyroid nodules who had nodules detected on ultrasonography and underwent further diagnostic evaluation (US, FNAB, and/or surgery) were included. Demographic data (age, sex), PET/CT indication, thyroid uptake pattern (focal/diffuse), lesion SUV_{max} values, ultrasonographic findings (nodule size and ACR TI-RADS score), FNAB results, and histopathological findings (if operated) were analyzed. Patients were grouped according to PET/CT indication as either "investigational purposes" or "known primary malignancy."

Results: Among the 95 patients included in the study, 88 had a single nodule and 7 had two nodules. The mean age was 62.9±12.6 years, and 68.4% were female. Of the total 102 nodules, 39.2% were classified as malignant, 52.0% as benign, and 8.8% as indeterminate.The malignancy rate was highest in the primary lung cancer group (75%) and in the investigational group (54%), and lowest in the breast cancer group (12.5%). The difference between groups was statistically significant (p=0.007) (Table 1). After excluding indeterminate nodules, univariate analysis identified ACR TI-RADS category, SUV_{max} level, and primary tumor type as factors associated with malignancy (Table 1). Variables found to be significant in univariate analysis were included in multivariate analysis. In multivariate analysis, lung origin of the primary tumor (p=0.034), higher SUV_{max} value (p=0.033), and higher ACR TI-RADS score (p=0.001) were determined to be independent risk factors for malignant outcomes in thyroid incidentalomas (Table 2).

Conclusion: In thyroid incidentalomas detected on FDG-PET/CT, malignancy risk is associated not only with metabolic and sonographic characteristics but also with the type of primary malignancy. Particularly in patients with lung cancer, FDG-avid thyroid nodules carry a significantly higher risk of malignancy.

Keywords: Thyroid incidentaloma, FDG-PET/CT, papillary thyroid cancer

Table 1. Results of benign and malignant nodules only

Variable	Benign (n=53)	Malignant (n=40)	p-value
US nodule diameter (mm)	23.3±10.1; 23.0 (8.0-56.0)	21.7±15.3; 17.0 (4.5-63.0)	0.089
ACR TI-RADS category, n (%)			<0.001
2	17 (32.1)	0 (0.0)	
3	25 (47.2)	7 (17.5)	
4	11 (20.8)	14 (35.0)	
5	0 (0.0)	19 (47.5)	
PET/CT SUV_{max} (n=93)	5.4±3.9; 4.4 (1.3-19.5)	15.0±12.7; 10.1 (2.9-47.5)	<0.001
Primary group (predefined 4 groups), n (%)			0.007
Investigational	16 (42.1)	19 (65.5)	
Breast	14 (36.8)	2 (6.9)	
Colorectal	6 (15.8)	2 (6.9)	
Lung	2 (5.3)	6 (20.7)	

Table 2. Multivariate logistic regression (n=67; reference: breast)

Variable	OR (95% CI)	p-value
Lung (vs. breast)	47.03 (1.34-1652.33)	0.034
Investigational (vs. breast)	9.36 (0.63-139.34)	0.105
Colorectal (vs. breast)	1.14 (0.00-514.85)	0.966
SUV_{max} (per 1-unit increase)	1.17 (1.01-1.34)	0.033
ACR TI-RADS score (per 1-unit increase)	3.10 (1.57–6.12)	0.001

[S-100]

Analysis of patients with malignancy detected on postoperative histopathology despite benign fine-needle aspiration biopsy: A single-center experience after 2009

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Objective: Fine-needle aspiration biopsy (FNAB) is the standard diagnostic method for the preoperative evaluation of thyroid nodules. However, false-negative cytology remains a clinically significant limitation. This study aimed to evaluate the clinical and pathological characteristics of patients who underwent surgery after 2009 and were found to have malignancy on final postoperative histopathology despite a preoperative benign FNAB result.

Material and Methods: In this retrospective, single-center study, the institutional thyroid surgery database was reviewed. Among 2.322 patients who underwent thyroid surgery after 2009, 734 patients had been reported as having benign FNAB results. Patients with malignancy detected on final postoperative histopathology were included in the study. Papillary carcinoma, papillary microcarcinoma, follicular carcinoma, and medullary carcinoma were classified as malignant. A nodule-based analysis was performed.

Results: A total of 153 patients were included in the study. The mean age was 51.2±11.5 years (range, 13-78), and 112 patients (73.2%) were female. Postoperative histopathological examination revealed papillary microcarcinoma in 140 patients (91.5%), papillary carcinoma in 6 patients (3.9%), follicular carcinoma in 5 patients (3.3%), and medullary carcinoma in 2 patients (1.3%). Among the 734 patients with benign FNAB results, malignancy was detected in the same biopsied nodule in 23 patients (3.1%), whereas 130 patients (17.7%) had malignancy detected in a non-biopsied nodule. Of the 23 patients with malignancy in the same nodule, 17 (73.9%) had nodules measuring ≥4 cm in diameter.

Conclusion: In this selected cohort, the vast majority of malignancies detected after surgery despite benign FNAB results were papillary microcarcinomas. Our findings demonstrate that benign cytology does not completely exclude thyroid malignancy, particularly in patients operated on for multinodular goiter. In line with the literature, the false-negative rate appears to increase in large thyroid nodules (≥4 cm) with benign FNAB results. Therefore, surgical decision-making should not rely solely on cytological findings but should integrate clinical and radiological risk factors.

Keywords: Fine needle aspiration biopsy, thyroid nodules, thyroid cancer

[S-101]

Determinants of inpatient admission following minimally invasive adrenalectomy: Insights from a high-volume outpatient adrenal surgery center

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Objective: Outpatient adrenalectomy is a new concept in adrenal surgery and suitable patients may be discharged same day without increased complication and readmission rates. Same-day surgery decreases costs with similar patient satisfaction, however, it is not appropriate for every adrenalectomy patient. The aim of this study is to understand the factors that affect the decision for inpatient admission following minimally-invasive adrenalectomy.

Material and Methods: Patients undergoing minimally-invasive adrenalectomy at a single institution from January 2016 to September 2023 were included. Demographic information, medical comorbidities, surgical indication, mass functionality and size, estimated blood loss, and admission status were obtained retrospectively. Significant predictive values in univariate analysis were studied in logistic regression for multivariate analysis. Patients who underwent bilateral adrenalectomy or open surgery were excluded from the study.

Results: A total of 288 patients were included. Outpatient adrenalectomy was performed in 163 patients (56.6%), with 125 (43.4%) admitted post-operatively. Most patients were female (n=166, 57.6%) and underwent laparoscopic transperitoneal adrenalectomy (196, 68.1%) vs. retroperitoneoscopic (63, 21.9%) and robotic transperitoneal adrenalectomy (29, 10.1%). Male patients were admitted more often than female patients (52.5% vs. 36.7%, OR: 1.44, p=0.008). In univariate analysis, higher age (p=0.024), higher estimated blood loss (p<0.001), history of liver disease (p=0.023), operation for suspected cancer or pheochromocytoma (p<0.001), operation type (p=0.009), and conversion to open (p=0.045) were all significantly associated with inpatient admission. In multivariate analysis, history of liver disease (p=0.041, OR: 10.12, 95% CI: 1.10-93.19), higher estimated blood loss (p=0.041, OR: 1.003, 95% CI: 1.000-1.006), laparoscopic transabdominal adrenalectomy compared to laparoscopic retroperitoneal (p=0.046, OR: 0.49, 95% CI: 0.24-0.99) and robotic transabdominal (p=0.019, OR: 0.27, 95% CI: 0.09-0.81) and operation for suspected cancer or pheochromocytoma (p<0.001, OR: 3.22, 95% CI: 1.69-6.14) were significantly predictive of inpatient admission.

Conclusion: Patients undergoing minimally invasive adrenalectomy with history of liver disease, greater intraoperative blood loss, and operation for suspected cancer or pheochromocytoma were more likely to be admitted postoperatively. Laparoscopic transabdominal adrenalectomy was more often associated with inpatient admission compared to retroperitoneoscopic and robotic transabdominal adrenalectomy.

Keywords: Adrenalectomy, minimally invasive surgery, outpatient surgery

[S-102]

Prevalence and effectiveness of nerve monitoring use in thyroid surgery in Türkiye

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Objective: Recurrent laryngeal nerve (RLN) injury is one of the most important complications in thyroid surgery that increases morbidity. The presence of anatomical integrity of the recurrent laryngeal nerve does not necessarily indicate physiological continuity. This may lead to unrecognized nerve injury and consequently serious complications. Intraoperative neuromonitoring (IONM) is a widely used method to reduce this risk. The aim of this study was to evaluate the frequency of IONM use, perceptions, knowledge and education levels, adherence to guidelines, and technical competence of surgeons performing thyroid surgery in Türkiye.

Material and Methods: This cross-sectional survey study was conducted among surgeons involved in thyroid surgery. A total of 160 surgeons responded to the questionnaire. The survey inquired about surgical specialty and subspecialty interests, type of institution, annual number of thyroid surgeries, frequency of IONM use, reasons for its use, knowledge of guidelines, legal awareness, and technical competence.

Results: Only 12% of the participants were exclusively engaged in endocrine surgery. A substantial proportion of the surgeons were working in university hospitals, and approximately 20% of the participants were high-volume surgeons (≥100 thyroid surgeries per year). More than half of the participants (55.6%) reported that there was no IONM device available at their institution. The routine use rate of IONM among participants was 85.6%, and 91.2% believed that IONM reduces the risk of RLN injury. Forty-three percent of surgeons reported having previously attended a formal course on IONM, and 93% of those who attended such a course stated that they used IONM in accordance with guidelines. Seventy-seven percent reported receiving technical or company support for device setup. Only 28% of surgeons stated that they were able to both identify and resolve technical problems. In cases of signal loss, the majority of participants adopted guideline-recommended strategies, including immediate staged surgery (17.5%) or continuation based on signal recovery, with staged surgery if the signal did not return (66.2%).

Conclusion: To the best of our knowledge, there is no regional study in Türkiye or in the international literature evaluating the prevalence and effectiveness of IONM use in thyroid surgery. This study demonstrates that IONM is used at high rates in thyroid surgery in Türkiye and that the vast majority of surgeons strongly believe in its protective effect. However, there is a need for improvement in terms of cost, device accessibility, and technical independence. Structured training programs and technical standardization may further enhance the safe and effective use of IONM.

Keywords: Experience, education, intraoperative neuromonitoring, thyroid surgery, Türkiye

[S-103]

Comparison of primary repair and autologous fibrin matrix-supported repair in recurrent laryngeal nerve reconstruction: An experimental rat model

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Objective: Primary anastomosis is the standard surgical approach for recurrent laryngeal nerve (RLN) injuries; however, functional recovery remains variable. This study aimed to compare the effects of primary repair and autologous fibrin matrix-supported primary repair on nerve regeneration and functional outcomes using an experimental rat model.

Material and Methods: Twenty-seven female Wistar albino rats were randomly allocated into three groups:Group 1 (Control): Nerve transection without repair Group 2 (Primary Repair): End-to-end microsurgical repair Group 3 (Fibrin Matrix): Primary repair supported with autologous fibrin matrixAll animals underwent preoperative and postoperative endoscopic vocal cord evaluations. After the recovery period, tissue samples were obtained from the nerve repair site and bilateral vocal cords. Histopathological analyses included assessment of axonal density, fascicular organization, inflammation, and tissue reaction.

Results: No major complications affecting the experimental protocol were observed during the surgical and follow-up periods. Endoscopic evaluations suggested a more pronounced trend toward functional improvement in the fibrin matrix group. Histopathological analyses are currently ongoing, and quantitative results will be presented at the congress.

Conclusion: Preliminary findings indicate that autologous fibrin matrix application may provide potential benefits in RLN regeneration. Completion of histopathological and statistical analyses is expected to yield more definitive results. This approach may contribute to the development of biologically supported strategies in peripheral nerve repair.

Keywords: Recurrent laryngeal nerve, fibrin matrix, nerve regeneration

[S-104]

Analysis of factors associated with surgical pathology outcomes in thyroid nodules with atypia of undetermined significance cytology

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Objective: Thyroid nodules are common in adults and can be detected in up to 50% of individuals with high-resolution ultrasonography. Although most nodules are benign, they carry an estimated malignancy risk of 5-15%.Fine-needle aspiration biopsy (FNAB) and the Bethesda classification system guide clinical management; however, Bethesda category III (AUS/FLUS) nodules have heterogeneous malignancy risk and remain challenging to manage. Identifying clinical and ultrasonographic predictors of malignancy in AUS/FLUS nodules is therefore essential. In this study, we aimed to evaluate demographic and ultrasonographic factors associated with surgical pathology outcomes in thyroid nodules with AUS/FLUS cytology.

Material and Methods: Between January 1, 2016 and December 31, 2025, 209 patients with AUS/FLUS cytology on thyroid FNAB who underwent lobectomy or total thyroidectomy were retrospectively evaluated. Clinical and ultrasonographic factors associated with malignancy on surgical pathology were analyzed. Age, sex, nodule size, and ultrasonographic features (echogenicity, composition, and microcalcifications) were recorded. Categorical variables were compared using chi-square or Fisher's exact test, and continuous variables were analyzed with Student's t-test or Mann-Whitney U test. Significant variables were entered into multivariable logistic regression to identify independent predictors. A p-value <0.05 was considered statistically significant.

Results: A total of 209 patients who were operated on between 2016 and 2025 for thyroid nodules reported as atypia of undetermined significance (AUS/FLUS) on fine-needle aspiration biopsy were retrospectively analyzed to evaluate malignancy risk and factors associated with surgical pathology outcomes. The mean age of the patients was 51.8 years, with an age range of 21-83 years. Of the total cohort, 178 patients were female (85.1%) and 31 were male (14.8%). According to the surgical pathology results, malignancy was detected in 75 patients (35.8%), while 134 patients (64.2%) had benign pathology. The malignant group consisted of 65 females and 10 males, whereas the benign group included 113 females and 21 males; there was no statistically significant association between sex and malignancy (p=0.98). Similarly, no significant difference was found between age and malignancy (p=0.10). On ultrasonographic evaluation, hypoechogenicity (p=0.008), presence of microcalcifications (p=0.003), and a predominantly solid component (p=0.012) were significantly associated with malignancy. Although nodule size was greater in the malignant group, this difference did not reach statistical significance (p=0.27).

Conclusion: The malignancy rate in thyroid nodules with AUS/FLUS cytology is clinically significant. Hypoechogenicity, the presence of microcalcifications, and a predominantly solid component on ultrasonography are strong predictors of malignancy. These findings support that a surgical approach may be an appropriate management strategy in radiologically suspicious AUS/FLUS nodules.

Keywords: Atypic of undetermined significance (AUS/FLUS), fine-needle aspiration biopsy, thyroid nodule

[S-105]

Predictive value of nodule size, FNAB and TIRADS for malignancy in thyroid nodules ≥4 cm

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Objective: The accuracy of ultrasonography (US) and fine-needle aspiration biopsy (FNAB) findings in predicting malignancy in large thyroid nodules remains controversial. Therefore, current guidelines recommend surgical intervention for thyroid nodules ≥4 cm regardless of FNAB and US findings. The aim of this study was to determine the malignancy rates in patients who underwent lobectomy for nodules ≥4 cm and to evaluate the correlation between nodule size, FNAB and US findings, and overall malignancy rates.

Material and Methods: This is a retrospective, single-center study. Patients who underwent lobectomy for thyroid nodules ≥4 cm at University of Health Sciences Türkiye, Gaziosmanpaşa Training and Research Hospital between 2020 and 2025 were included. Socio-demographic data, comorbidities, preoperative ultrasonography (US) findings (according to TIRADS), ultrasonographic nodule dimensions, FNAB results (based on the Bethesda classification), postoperative pathology results, and the definitive nodüle size according to the surgical specimen were documented. The data were analyzed using SPSS software and p<0.05 was considered statistically significant.

Results: A total of 90 patients were included in the study, and the histopathological evaluation of surgical spesimen was malignant in 19 patients (21.1%). Statistically, TIRADS risk category was the only variable independently associated with malignancy. Nodules in the low-risk TIRADS group had a significantly lower risk of malignancy (OR=0.19; 95% CI: 0.060-0.603; p=0.005). In contrast, ultrasonographic nodule size parameters (width and length) were not associated with malignancy rates (p=0.742 and p=0.710, respectively). Age and gender were also not significant predictors of malignancy.When the discriminatory values of size variables were evaluated using ROC analysis, the area under the curve values for both nodule width and length showed no discriminative ability (AUC=0.496 and 0.448, respectively). These findings indicate substantial overlap in the size distribution of benign and malignant nodules.

Conclusion: This study demonstrates that, within a surgical cohort limited to thyroid nodules ≥4 cm, nodule size is not an independent predictor of malignancy. Ultrasonographic risk stratification is identified as a significant and dominant predictor of malignancy. However, the generalizability of these findings is limited as the study population is restricted to large nodules, and confirmation in larger cohorts encompassing a broader spectrum of nodule sizes is could be valuable.

Keywords: Thyroid cancer, thyroid nodules, large nodules

[S-106]

Prognostic significance of anti-thyroglobulin antibody levels after total thyroidectomy in papillary thyroid carcinoma

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Objective: In papillary thyroid carcinoma (PTC), elevated anti-thyroglobulin antibodies (anti-Tg) following total thyroidectomy complicate biochemical surveillance. Beyond this limitation in follow-up, whether anti-Tg elevation reflects a more aggressive tumor biology remains controversial. This study aimed to evaluate the association between elevated postoperative anti-Tg levels and histopathological aggressiveness, local recurrence, and distant metastasis.

Material and Methods: This retrospective study included 64 patients with PTC who received radioactive iodine (RAI) therapy following total thyroidectomy. Patients were divided into anti-Tg positive (≥115 IU/mL) and anti-Tg negative (<115 IU/mL) groups according to the institutional reference threshold. To ensure comparability between groups, propensity score matching was performed based on age, sex, tumor stage, and 2025 American Thyroid Association (ATA) risk classification. Demographic characteristics, histopathological findings, treatment variables, and oncological outcomes were analyzed comparatively.

Results: After propensity score matching, no significant differences were observed between the groups regarding demographic features, ATA 2025 risk stratification, or TNM stage (Table 1). Histopathological characteristics were largely similar between the groups; however, vascular invasion was significantly more frequent in the anti-Tg positive group compared with the negative group (25% vs. 0%; p=0.005) (Table 2). Although aggressive histological variants and local recurrence rates were higher in the anti-Tg positive group, these differences did not achieve statistical significance. Despite this, the rate of local recurrence was approximately five times higher in anti-Tg positive patients than in anti-Tg negative patients (15.6% vs. 3.1%; p=0.20). Two patients (6.2%) in the anti-Tg positive group developed distant metastases during follow-up at the fourth and sixth postoperative years, while no distant metastases were observed in the anti-Tg negative group. Furthermore, no significant differences were found between groups concerning RAI administration rates, frequency of central or lateral neck dissection, metastatic lymph node burden, or postoperative morbidity (Table 2).

Conclusion: Among patients with comparable baseline clinical and pathological characteristics, postoperative anti-Tg elevation was associated with increased vascular invasion and a tendency toward higher rates of local recurrence and distant metastasis. While some findings did not reach statistical significance, likely due to a limited sample size, the results suggest that anti-Tg positivity may represent both a barrier to biochemical monitoring and a marker of a more aggressive disease phenotype.

Keywords: Anti-thyroglobulin antibodies, papillary thyroid carcinoma, propensity score matching

Table 1. Demographic and baseline clinical characteristics

Variable	Anti-Tg ≥115 (n=32)	Anti-Tg <115 (n=32)	p-value
Age (years)	47 (22-80)	46 (22-75)	0.807
Sex (female)	25 (78.1%)	26 (81.2%)	1.000
ATA 2025 risk category	2 (1-3)	2 (1-3)	0.967
T stage	1 (1-3)	1 (1-3)	0.608
N stage	0 (0-1)	0 (0-1)	0.830
M stage	0 (0-0)	0 (0-0)	1.000

Table 2. Clinicopathological characteristics and treatment outcomes

Variable	Anti-Tg ≥115 (n=32)	Anti-Tg <115 (n=32)	p-value
Tumor size (mm)	17 (9-65)	15 (6-65)	0.602
Aggressive variant	10 (31.2%)	4 (12.5%)	0.134
Multifocality	19 (59.4%)	21 (65.6%)	0.619
Number of foci	2 (0-10)	2 (1-10)	0.497
Intrathyroidal spread	10 (31.2%)	7 (21.9%)	0.578
Presence of capsule	13 (40.6%)	11 (34.4%)	0.802
Thyroid capsule invasion	11 (34.4%)	12 (37.5%)	0.798
Soft tissue invasion	3 (9.4%)	1 (3.1%)	0.614
Lymphovascular invasion (LVI)	14 (43.7%)	13 (40.6%)	0.808
Vascular invasion	8 (25.0%)	0 (0.0%)	0.005
Perineural invasion	3 (9.4%)	4 (12.5%)	0.705
Central neck dissection	30 (93.7%)	30 (93.7%)	1.000
Number of central LNs	4 (0-24)	3 (0-37)	0.710
Positive central LNs	0 (0-6)	0 (0-11)	0.532
Lateral neck dissection	2 (6.2%)	0 (0.0%)	0.493
Positive lateral LNs	0 (0-4)	0 (0-0)	1.000
Contralateral lobe tumor	17 (53.1%)	19 (59.4%)	0.628
Number of contralateral foci	1 (0-5)	1 (0-10)	0.530
Pre-RAI Tg (ng/mL)	0.20 (0.04-18.16)	0.673 (0.04-17.32)	0.0027
Pre-RAI anti-Tg (IU/mL)	358.55 (160-4000)	13.23 (0.9-775)	<0.001
RAI treatment	32 (100%)	28 (87.5%)	0.103
Post-RAI Tg (ng/mL)	0.04 (0-0.06)	0.04 (0.04-3.44)	0.012
Post-RAI anti-Tg (IU/mL)	71.40 (10-1950)	12.40 (0.10-89.80)	<0.001
Recurrence (yes/no)	5 (15.6%)	2 (6.2%)	0.428
Distant metastasis	2 (6.2%)	0 (0%)	0.493
Transient RLN palsy	1 (3.1%)	2 (6.2%)	0.608
Permanent RLN palsy	1 (3.1%)	0 (0%)	1.000
Postoperative hypoparathyroidism	10 (31.2%)	9 (28.1%)	1.000
Permanent hypoparathyroidism	3 (9.4%)	2 (6.2%)	1.000

[S-107]

Ultrasonographic underestimation of parathyroid adenoma size and its functional significance: A Bland-Altman and multivariable analysis

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Objective: The relationship between parathyroid adenoma size, imaging accuracy, and hormonal activity remains incompletely defined. This study evaluated agreement between ultrasonographic (USG) and pathological adenoma measurements and examined the association between adenoma volume and preoperative parathyroid hormone (PTH) levels.

Material and Methods: Patients undergoing parathyroidectomy for primary hyperparathyroidism were retrospectively analyzed. Agreement between USG and pathological adenoma size was assessed using correlation and Bland-Altman analyses, including proportional bias testing. The relationship between adenoma volume and preoperative PTH was evaluated using multivariable linear regression adjusting for age, sex, serum calcium, and vitamin D levels.

Results: A total of 125 patients with paired USG and pathological adenoma measurements were included. Ultrasonographic and pathological adenoma diameters showed moderate correlation (Spearman ⊠ ≈ 0.38, p<0.001). Bland-Altman analysis demonstrated systematic and proportional bias, with increasing underestimation by USG in larger adenomas. In a subset of 87 patients with complete biochemical data, adenoma volume was independently associated with preoperative PTH levels after multivariable adjustment (p<0.01).

Conclusion: Ultrasonography moderately correlates with pathological adenoma size but systematically underestimates larger lesions. Adenoma volume reflects functional disease severity and is independently associated with preoperative PTH levels, supporting its role in preoperative risk stratification.

Keywords: Parathyroid adenome, parathyroid hormone, parathyroid size, parathyroid volume

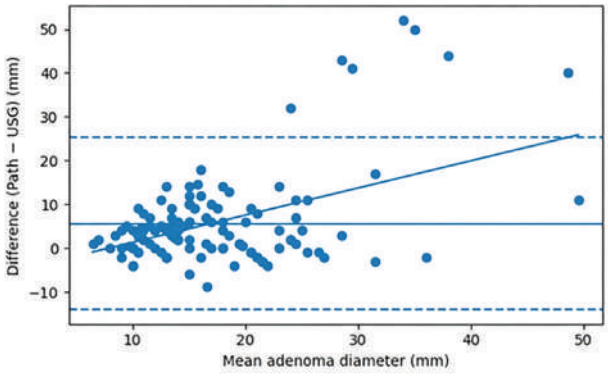


Figure 1. Blant-Altman plot for adenoma diamater (n=125).

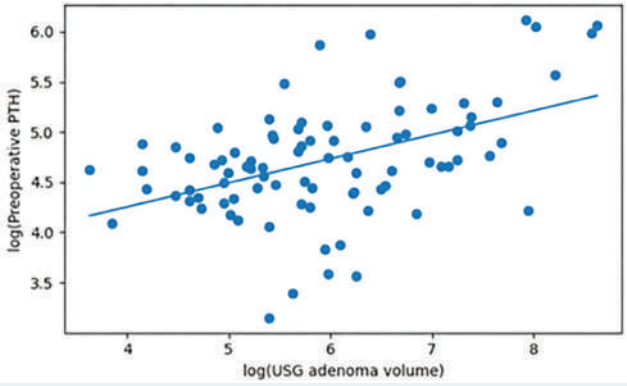


Figure 2. Relationship between adenoma volume and preoperative PTH (n=87).

Table 1. Agreement between ultrasonographic and pathological adenoma size (n=125)

Analysis	Estimate
Spearman correlation (USG vs pathology max diameter)	ρ = 0.38
Mean bias (pathology − USG), mm	≈ +4.3
95% lower limit of agreement, mm	≈ −8.6
95% upper limit of agreement, mm	≈ +17.2
Proportional bias slope (diff ~ mean)	Positive
p value (slope)	< 0.01

[S-108]

Comparison of surgical outcomes between propensity score-matched urgent and elective thyroidectomy in Graves' disease

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Objective: The American Thyroid Association (ATA) guidelines recommend that surgical treatment for Graves' disease be performed electively when appropriate. However, urgent surgical intervention may be necessary in some patients due to uncontrolled hyperthyroidism, thyrotoxic crisis, or severe adverse effects related to antithyroid medications. This study comparatively evaluated the clinical outcomes of urgent and elective thyroidectomy in patients with Graves' disease using a propensity score-matching approach.

Material and Methods: This retrospective study included 69 patients who underwent total thyroidectomy for Graves' disease between 2018 and 2025. Patients were categorized according to the timing of surgery into elective (n=46) and urgent (n=23) groups. To mitigate potential selection bias, propensity score matching was performed. The groups were then compared regarding preoperative medical management, postoperative complications, need for intensive care, and length of hospital stay.

Results: After matching, no significant differences were observed between the groups regarding age or sex (p=0.91). The interval from initial diagnosis to surgical treatment was significantly longer in the elective group compared with the urgent group (p=0.01). The most common indication for urgent thyroidectomy was uncontrolled hyperthyroidism (56.5%, n=13), followed by severe adverse reactions to antithyroid drugs (43.5%, n=10). Among patients who developed drug-related side effects, severe allergic reactions occurred in 4 patients (40%), hepatotoxicity in 3 (30%), and agranulocytosis in 3 (30%). In the urgent group, preoperative use of beta-blockers, steroids, Lugol's solution, and plasmapheresis was significantly higher than in the elective group (p<0.001). None of the patients in the elective group required steroids, Lugol's solution, or plasmapheresis preoperatively. Postoperatively, the urgent group had a significantly higher rate of intensive care unit requirement, and a longer hospital stay (p<0.001). Transient hypoparathyroidism occurred in 9 patients (39%) in the urgent group and in 13 patients (46%) in the elective group (p=0.36). Permanent hypoparathyroidism was observed in only one patient in the elective group, with no significant difference between the groups (p=1.00). No recurrent laryngeal nerve injury or postoperative hematoma was detected in either group.

Conclusion: Patients undergoing urgent thyroidectomy for Graves' disease required more intensive preoperative medical preparation and demonstrated higher rates of postoperative intensive care utilization and longer hospital stays compared with those treated electively. However, the incidence of recurrent laryngeal nerve injury and both transient and permanent hypoparathyroidism was comparable between the groups. These findings suggest that, whenever feasible, achieving a safe euthyroid state and proceeding with elective surgery remains an appropriate strategy.

Keywords: Graves' disease, propensity score matching, urgent thyroidectomy

Table 1. Demographic and clinical characteristics

Variable	Elective (n=46)	Urgent (n=23)	p-value
Age (years, mean ± SD)	38.5±14.6	38.1±15.9	0.91
Time from diagnosis (months, mean ± SD)	49.9±48.1	24.0±32.6	0.01
T3 (pmol/L, mean ± SD)	5.8±2.6	4.9±1.7	0.09
PTH (pg/mL, mean ± SD)	25.8±17.1	21.0±13.6	0.24

Table 2. Preoperative management and postoperative outcome

Variable	Elective (n=46)	Urgent (n=23)	p-value
Beta-blocker use, n (%)	10 (22)	18 (78)	<0.001
Steroid therapy, n (%)	0 (0)	13 (56)	<0.001
Lugol's solution, n (%)	0 (0)	6 (26)	<0.001
Plasmapheresis, n (%)	0 (0)	7 (30)	<0.001
Intensive care requirement, n (%)	2 (4%)	8 (35)	<0.001
Length of hospital stay (days, mean ± SD)	1.4±1.1	4.8±3.2	<0.001
Transient hypoparathyroidism, n (%)	13 (46)	9 (39)	1.00
Permanent hypoparathyroidism, n (%)	0 (0)	3 (13)	0.03

[S-109]

Is "watch-and-wait" safe in mild autonomous cortisol secretion? A comparative analysis of surgical intervention vs. conservative management

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Objective: Management of mild autonomous cortisol secretion (MACS) remains controversial, with conservative monitoring often preferred for uncomplicated cases. This study aimed to compare the long-term metabolic and radiological outcomes of adrenalectomy versus conservative management to evaluate the safety of surveillance.

Material and Methods: Seventy MACS patients were retrospectively analyzed. Patients were stratified into the surgical group, treated with laparoscopic/retroperitoneoscopic adrenalectomy, and the medical group managed conservatively. Primary endpoints included hypertension control, diabetes parameters, and BMI; secondary endpoints included tumor progression, DST trends, and changes in bone mineral density (BMD).

Results: In the surgical group (n=26) (median follow-up: 14 months, 95% CI: 18.03-37.57), the median number of anti-hypertensive medications decreased significantly from 1 to 0 (p=0.001). Lumbar T-scores improved from -2.15 to -1.15 (p=0.009), and LDL levels decreased (p=0.004). Post-operative ACTH elevation (p<0.001) confirmed axis recovery. Median steroid withdrawal time was 3 months, showing a positive correlation with pre-op DST levels (p=0.029). Conversely, the medical group (n=44) (median follow-up: 41 months, 95% CI: 44.18-72.45) exhibited progression: 11.4% showed tumor enlargement, 20.5% had hormonal worsening (increased DST), and 34.1% required increased anti-hypertensive medication, with 9.1% developing *de novo* hypertension.

Conclusion: Adrenalectomy significantly reduces hypertensive burden, improves bone density, and reverses metabolic risks in MACS. In contrast, conservative management is associated with evident radiological and metabolic progression. Our findings suggest the "watch-and-wait" strategy is not benign; early surgical intervention should be considered a superior alternative to prevent disease progression in eligible patients.

Keywords: Endocrinsurgery, MACS, adrenalgland, watch and worry, cardiometabolic outcome

Table 1. Baseline characteristics of medical vs. surgical groups

Variable	Medical group (n=44)	Surgical group (n=26)	p-value
Age (median, CI)	64 (59.15-64.66)	54 (50.35-58.64)	—
Sex	Female: 36 (81.8%) • Male: 8 (18.2%)	Female: 24 (92.3%) • Male: 2 (7.7%)	—
Adenoma size (cm)	2.9 (2.56-3.07)	3.75 (2.78-3.85)	0.081
DST cortisol (µg/dL)	3.1 (2.96-3.84)	3.5 (3.88-8.31)	0.058
Hypertension prevalence	28 (63.6%)	13 (50%)	0.459
New-onset hypertension	4 (9.1%)	0	0.148
Blood pressure control	Controlled: 21 (47.4%) • Uncontrolled: 4 (9.1%) • ≥3 drugs: 3 (6.8%)	Controlled: 14 (53.8%) • No HT: 12 (46.2%)	0.082
Osteoporosis	10 (22.7%)	13 (50%)	0.19
Cardiovascular disease	None: 33 (75%) • MI: 7 (15.9%) • AF: 1 (2.2%) • HF: 2 (4.4%)	None: 21 (80.8%) • CAD: 5 (19.2%)	0.579
Symptoms	Fatigue: 65.9% • Muscle weakness: 34.1% • Weight gain: 27.3% • Central obesity: 36.4%	—	—
BMI (kg/m²)	30 (29.07-32.35)	29.15 (27.44-32.55)	—
ACTH (pg/mL)	9.75 (8.68-14.73)	7.25 (6.73-20.05)	—
Cortisol (µg/dL)	13.5 (12.8-15.87)	14.9 (10.31-21.56)	—
HbA1c (%)	5.90 (5.86-6.56)	6 (5.77-6.6)	—
DHEAS (µg/dL)	56 (52.96-88.81)	59 (38.47-63.24)	—
Z-score	-0.2 (-0.33-0.9)	-0.99 (-1.53-0.08)	—
T-score	-1.5 (-1.6—0.32)	-2.15 (-2.48—-1.21)	—

Table 2. Follow-up characteristics and trends in the medically managed group (n=44)	
Variable	**Values**
Adenoma progression	Increased: 5 (11.4%) • Stable: 38 (86.4%) • Regression: 1 (2.3%)
DST trend	Stable suppressed: 8 (18.2%) • Stable non-suppressed: 29 (58.1%) • Progression: 9 (20.5%) • Remission: 1 (2.3%)
New-onset hypertension	4 (9.1%)
Blood pressure control	Controlled: 21 (47.4%) • Uncontrolled: 4 (9.1%) • ≥3 drugs: 3 (6.8%)
Antihypertensive medication trend	Increase: 15 (34.1%) • Stable: 12 (27.1%) • Decrease: 1 (2.4%) • Not using: 16 (36.4%)
Antidiabetic medication trend	Increase: 12 (27.3%) • Stable: 7 (15.9%) • Decrease: 1 (2.3%) • Not using: 24 (52.5%)
Statin use trend	No statin: 28 (63.6%) • Increase: 11 (25%) • Stable: 5 (11.4%)
Follow-up duration (months)	41 (44.18-72.45)

Table 3. Surgical outcomes: pre- vs. post-operative changes and comparisons between groups			
Parameter	**Pre-op (median)**	**Post-op (median)**	**p-value**
BMI	29.15 (27.44-32.55)	27.3 (26.13-30.98)	**0.008**
ACTH	7.25 (6.73-20.05)	29.45 (25.61-41.36)	**<0.001**
Cortisol	14.9	12.45	0.60
HbA1c	6	6	0.291
DHEAS	59	53	0.570
Z-score	-0.99	0.35	0.06
T-score	-2.15	-1.15	**0.009**
LDL (mg/dL)	136	110	**0.004**
Total cholesterol	225.5	203	0.099
Antihypertensive medication count	1 (0.53-1.7)	0 (0.078-0.57)	**0.001**
Antidiabetic medication count	0 (0.29-0.94)	0 (0.21-0.78)	0.180
Steroid withdrawal time (months)	—	3 (1.78-8.24)	—
Correlation: pre-op DST vs. steroid withdrawal time	—	Moderate positive correlation	**p=0.029**

[S-110]

Prevalence of hyperthyroidism and predictive risk factors after hemithyroidectomy

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Objective: In low-risk thyroid cancers and nodular goiter, lobectomy is preferred to reduce surgical complications and avoid lifelong thyroid hormone replacement. However, postoperative hypothyroidism can occur, which may require thyroid hormone replacement. Information regarding the frequency, predictive risk factors, and clinical characteristics of hypothyroidism after hemithyroidectomy has not been extensively studied. This study investigates the incidence, natural course, and contributing factors of hypothyroidism after hemithyroidectomy.

Material and Methods: In our clinic, 312 patients who underwent hemithyroidectomy between 2017 and 2026 were included in the study. Patients were analyzed in terms of age, gender, thyroid antibody levels, pre- and post-operative TSH levels, ultrasound reports, histopathological diagnosis, residual thyroid volume after resection, and time to diagnosis of hypothyroidism. Data were analyzed using stepwise logistic regression, chi-square test, and Fisher's exact test. In univariate analysis, variables associated with hypothyroidism (at a significance level of $p<0.1$) were included in multivariate analysis; odds ratios (OR) and 95% confidence intervals (CI) were calculated. Two-sided $p<0.05$ was considered statistically significant.

Results: In our study, 132 (42.3%) patients developed postoperative hypothyroidism. Compared to the euthyroidism group, the mean preoperative TSH was higher in the hypothyroidism group, and serum TSH >2.88 µIU/mL was predictive of hypothyroidism. Additionally, remaining thyroid volume ≤4.0 mL was also a predictor of hypothyroidism. In univariate logistic regression analysis, preoperative serum TSH >2.88 µIU/mL was significantly associated with the probability of postoperative hypothyroidism ($p=0.001$). Other variables [thyroid autoimmunity (TPOAb, TgAb (+)], remaining thyroid volume, thyroiditis findings on ultrasound) were found to be associated with postoperative hypothyroidism. The mean time from surgery to the development of hypothyroidism was 1.5±0.3 years.

Conclusion: This study showed that 42.3% of patients would develop hypothyroidism after hemithyroidectomy. High preoperative serum TSH levels and residual thyroid volume after surgery appear to be independent predictors of hypothyroidism development after hemithyroidectomy. In this context, these two characteristics may be sufficient to guide close monitoring after thyroid surgery.

Keywords: Hemithyroidectomy, hypothyroidism, prevalence

Table 1. Baseline characteristics of patients with postoperative euthyroidism and hypothyroidism

Characteristics	Patients with postoperative hypothyroidism (n=132)	Patients with postoperative euthyroidism (n=180)	p
Gender • Female (n=210) • Male (n=112)	 94 38	 116 74	0.032
TSH, µIU/mL Preoperative Median (P 25, P75)	2.88 (1.84, 3.94)	1.32 (0.92, 1.78)	0.001
Thyroid autoimmunity • TgAb (+) (n=21) • TPOAb (+) (n=28)	 18 20	 3 8	0.032
Remaining thyroid volume, mL Median (P 25, P75)	 3.1 (2.76, 3,56)	 4.3 (3.46, 5.31)	0.012
US findings • Consistent with thyroiditis (n=62) • Diffuse homogeneous (n=250)	 43 86	 19 164	0.023

Data are presented as mean ± standard deviation, n (%) or median (P 25, P 75).

[S-111]

The role of preoperative imaging in predicting malignancy in non-functional adrenal masses

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Objective: In non-functional adrenal masses, the decision for surgery is determined by multiple factors, including tumor size, radiological characteristics, growth pattern and the estimated risk of malignancy. This study aimed to identify objective radiological criteria that have guided the indication for adrenalectomy in patients with non-functional adrenal masses at our institution over the past two decades.

Material and Methods: All patients who underwent adrenalectomy at the Endocrine Surgery Department of İstanbul University, İstanbul Faculty of Medicine, between January 1, 2005, and December 31, 2024, were retrospectively reviewed to identify those with non-functional adrenal masses. Clinical, demographic, surgical, and histopathological data were obtained from operative records, patient files, and the hospital information system. Preoperative computed tomography (CT), magnetic resonance imaging (MRI), and positron emission tomography/computed tomography (PET/CT) scans were independently re-evaluated by radiologists and nuclear medicine specialists, blinded to the final pathological results. CT scans recorded tumor size, attenuation values in Hounsfield units (HU), and contrast enhancement patterns. MRI assessments included signal characteristics, heterogeneity, margin irregularity, and diffusion restriction. PET/CT scans documented SUV_{max} values. The diagnostic performance of these parameters in predicting malignancy was analyzed by comparison with final histopathology.

Results: During the study period, 506 patients underwent adrenalectomy, and 129 cases involving non-functional adrenal masses were included in the analysis. The mean age was 51.7 years; 55% of these cases were incidentally detected, while 45% presented with symptoms. The overall malignancy rate among non-functional lesions was 20% (26/129). Receiver operating characteristic (ROC) analysis of tumor size identified a cut-off value of 44.5 mm, resulting in an area under the curve (AUC) of 0.72 (95% CI: 0.62-0.82). Lesions exceeding this threshold were associated with a 3.5-fold increase in malignancy risk ($p<0.001$) (Table 1). Computed tomography imaging revealed a strong association between attenuation values greater than 20 Hounsfield units (HU) and malignancy, with an AUC of 0.73 (95% CI: 0.62-0.83), corresponding to approximately a fivefold increased risk ($p<0.001$). Magnetic resonance imaging (MRI) demonstrated that heterogeneity, irregular margins, and diffusion restriction were significantly associated with malignant pathology.Positron emission tomography/computed tomography imaging showed significantly higher SUV_{max} values in malignant lesions compared with benign masses ($p=0.003$) (Table 2). Furthermore, the rate of malignancy was significantly higher in non-functional masses compared with functional tumors [26/129 (20.2%) vs. 10/377 (2.7%); $p<0.001$].

Conclusion: In non-functional adrenal masses, tumor size and CT attenuation values are the most powerful and objective predictors of malignancy. MRI and PET/CT findings serve as complementary tools, particularly in indeterminate cases, enhancing diagnostic accuracy. Integrating multimodal imaging with clinical evaluation may facilitate more rational and safer decision-making regarding patient selection for surgery.

Keywords: Malignite prediction, non-functional adrenal mass, preoperative imaging

Table 1. Distribution of benign and malignant cases according to the 44.5-mm tumor size cut-off in non-functional adrenal masses

Tumor size	Benign (n=103)	Malignant (n=26)	Total
≤44.5 mm	59	11	70
>44.5 mm	44	15	59

Table 2. Comparison of demographic, surgical, and imaging findings between benign and malignant non-functional adrenal masses

Feature	Benign (n=103)	Malignant (n=26)	p-value
Age (mean ± SD, min-max)	50.3±12.7 (19-77)	54.6±13.8 (24-78)	0.129
Sex (F/M)	66/37	9/17	0.012
Side (right/left/bilateral)	49/54/0	15/11/0	0.482
Surgical approach (open/laparoscopic)	11/92	12/14	0.0001
CT attenuation (HU, mean ± SD)	23.4±17.2 (-30-65)	39.6±28.7 (8-120)	0.087
Largest diameter on MRI (mm, mean ± SD)	56.8±28.3 (14-132)	64.5±34.1 (22-148)	0.361
Margin characteristics on MRI	Regular: 62.5% Lobulated: 25.3% Irregular: 12.2%	Regular: 28.0% Lobulated: 24.0% Irregular: 48.0%	0.030
Tumor heterogeneity on MRI	Homogeneous: 47.6% Heterogeneous: 52.4%	Heterogeneous: 100%	0.041
Signal drop on out-of-phase imaging	Yes: 34.0% No: 66.0%	Yes: 19.2% No: 80.8%	0.652
Diffusion restriction on MRI	Yes: 24.3% No: 75.7%	Yes: 92.3% No: 7.7%	0.001
T2 signal intensity	Hyperintense: 30.1% Hypointense: 34.0% Intermediate: 35.9%	Hyperintense: 46.2% Hypointense: 15.3% Intermediate: 38.5%	0.428
Contrast enhancement on MRI	Yes: 55.3% No: 44.7%	Yes: 80.8% No: 19.2%	0.217
SUV_{max} on PET/CT (mean ± SD)	6.1±6.1 (0-28.5)	13.7±12.7 (0-55.8)	0.003

[S-112]

The impact of age, clinical, and biochemical parameters on quality of life and cognitive function after parathyroidectomy in primary hyperparathyroidism

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Objective: Primary hyperparathyroidism (PHPT) is associated not only with classical biochemical abnormalities but also with impairments in quality of life and cognitive function. The observation of these effects, even in patients considered clinically "asymptomatic", has become an area of increasing debate. This study aimed to evaluate changes in quality of life and cognitive performance following parathyroidectomy and to investigate the demographic, biochemical, and clinical factors associated with these changes.

Material and Methods: This prospective observational study included 50 adult patients who underwent parathyroidectomy for PHPT at the Endocrine Surgery Department of İstanbul University, İstanbul Faculty of Medicine, between May 1, 2023, and May 1, 2025. Patients with severe systemic disease or psychiatric comorbidities were excluded. Clinical, laboratory, and surgical data were recorded. Quality of life and cognitive function were assessed at two time points: Preoperatively and six months postoperatively, using validated patient-reported outcome measures (PROMs), including the short form-36 (SF-36), primary hyperparathyroidism quality of life questionnaire (PHPQoL), Pasieka symptom score (PAS), and mini-mental state examination (MMSE). Associations between PROM scores and demographic and biochemical parameters were analyzed.

Results: Following parathyroidectomy, the PAS score significantly decreased from 46.22±24.54 to 25.68±14.68 ($p<0.001$), while the SF-36 score increased from 60.50±24.75 to 74.15±14.70 ($p<0.001$). Similarly, the PHPQoL score improved from 54.50±22.57 to 69.19±17.54 ($p<0.001$), and the MMSE score rose from 25.06±2.48 to 27.56±2.27 ($p<0.001$) (Table 1). The most pronounced improvements were observed in fatigue, bone and joint pain, weakness, and irritability. Notably, even patients considered clinically asymptomatic demonstrated impaired baseline quality of life, accompanied by significant postoperative recovery. Lower vitamin D levels ($R^2=0.362$; $p=0.026$), reduced glomerular filtration rate (GFR) ($R^2=0.362$; $p=0.008$), and female sex ($R^2=0.362$; $p=0.013$) were associated with poorer baseline quality of life. Conversely, greater postoperative improvement in quality of life was associated with younger age ($p=0.007$), higher GFR ($p=0.022$), higher T-scores ($p=0.031$), and elevated preoperative PTH levels ($p=0.028$). PAS analysis demonstrated a positive correlation between older age and symptom improvement ($\rho=0.347$; $p=0.014$), whereas PHPQoL scores showed a negative association with age.

Conclusion: Parathyroidectomy results in significant improvements in both quality of life and cognitive function in patients with PHPT, including those regarded as clinically asymptomatic. Routine implementation of PROMs may strengthen surgical decision-making and contribute to individualized risk-benefit assessments. Consideration of demographic and biochemical factors appears important in predicting the magnitude of surgical benefit.

Keywords: Parathyroidectomy, primary hyperparathyroidism, quality of life

Table 1. Preoperative and postoperative PROM scores

Scale	Preoperative	Postoperative	p-value
PAS	46.22±24.54	25.68±14.68	<0.001
SF-36	60.50±24.75	74.15±14.70	<0.001
PHPQoL	54.50±22.57	69.19±17.54	<0.001
MMSE	25.06±2.48	27.56±2.27	<0.001

Table 2. Factors associated with changes in quality of life scores: correlation and multivariable linear regression analyses

Correlation analysis

Parameter	Pasieka	Correlation coefficient (ρ)	p-value	Strength
Age	Mean score	0.347	0.014	Weak-moderate
GFR	Mean score	-0.417	0.003	Weak-moderate
Hypercalciuria	Mean score	0.287	0.043	Weak
Parameter	**PHPQoL**	**Correlation coefficient (ρ)**	**p-value**	**Strength**
Age	Physical mean score	-0.376	0.007	Weak-moderate
Age	Mental mean score	-0.326	0.021	Weak-moderate
Age	Mean score	-0.330	0.019	Weak-moderate
Vitamin D	Mean score	-0.286	0.047	Weak
Femoral T-score	Physical mean score	0.344	0.014	Weak-moderate
Femoral T-score	Mean score	0.306	0.031	Weak-moderate
GFR	Physical mean score	0.323	0.022	Weak-moderate

Multivariable linear regression analysis

Survey – outcome	p-value	R^2/adjusted R^2	Parameter	p-value
PHPQoL - physical mean score	0.0161	0.407/0.251	Age PTH	0.02 0.028
PHPQoL - mean score	0.0135	0.415/0.26	Age PTH	0.034 0.025
Pasieka - mean score	0.0377	0.369/0.203	---	---

[S-113]

Surgical approach to adrenal masses: Single-center adrenalectomy outcomes

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Objective: Adrenal gland pathologies include functional tumors that may cause severe metabolic disturbances due to hormonal activity, as well as non-functional masses with malignant potential or risk of progression. In recent years, advances in imaging modalities and surgical techniques have led to significant changes in the diagnostic and therapeutic approaches to adrenal masses. The aim of this study was to present our clinical experience with adrenalectomy procedures performed at our institution.

Material and Methods: Medical records of 149 patients who underwent adrenalectomy at Ankara Bilkent City Hospital between January 2020 and December 2025 were retrospectively reviewed. Categorical variables were analyzed using the chi-square test. Receiver operating characteristic (ROC) curve analysis was performed to determine the optimal tumor size cut-off value for predicting malignancy.

Results: Of the 149 patients, 54 (36.2%) were male and 95 (63.8%) were female. The mean age was 50.58 years, and the mean body mass index (BMI) was 30.74 kg/m². The average length of hospital stay was 4.65 days. A laparoscopic approach was used in 84.6% of cases, while 15.4% underwent open surgery. Tumors were located on the right side in 35.6% (n=53) and on the left side in 64.4% (n=96) of patients. The mean tumor weight was 115.72 grams. Functional tumors were identified in 63.8% (n=95) of patients. According to the Clavien-Dindo classification, 91.3% of patients experienced grade II complications, 7.4% grade III, 0.7% grade IV, and 0.7% grade V complications. Pathological evaluation revealed adenoma in 43.6% (n=65), carcinoma in 10.7% (n=16), other benign pathologies in 24.8% (n=37), and pheochromocytoma in 20.8% (n=31) of cases. Functional status analysis demonstrated that 92.3% of adenomas were functional, whereas 81.3% of carcinomas were non-functional. ROC curve analysis showed that tumor size had a statistically significant predictive value for malignancy, with an area under the curve (AUC) of 0.746 (p=0.001). A tumor size cut-off value of 7.5 cm provided acceptable discriminatory power in differentiating malignant from benign lesions.

Conclusion: With appropriate patient selection and a multidisciplinary approach, adrenal surgery can be safely performed with low morbidity and acceptable complication rates. The increasing use of minimally invasive surgical techniques offers significant advantages in terms of reduced hospital stay and improved perioperative recovery. Our findings support adrenalectomy performed in experienced centers as an effective and reliable treatment option for the surgical management of adrenal masses.

Keywords: Adrenalectomy, adrenal tumor, adenoma

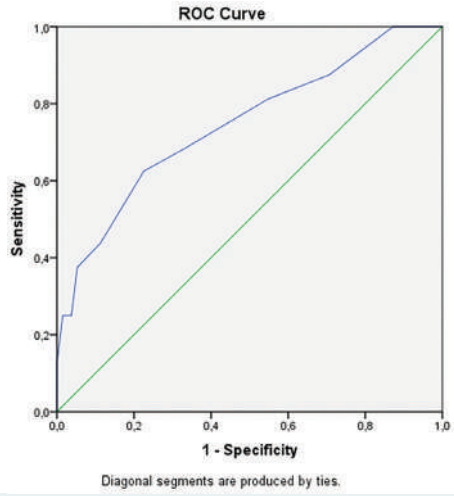


Figure 1. ROC curve analysis for tumor length.

Table 1. Distribution of selected descriptive characteristics of the patients

		Functional status			
		Functional	Non-functional		
		Numbers	(%)*	Numbers	(%)*
Pathology (n=149)**					
	Adenoma	60	92.3	5	7.7
	Carcinoma	3	18.8	13	81.3
	Other benign pathologies	5	13.5	32	86.5
	Pheochromocytoma	27	87.1	4	12.9

χ^2=84.686, p<0.001 row percentage chi-square test.

[S-114]

Investigation of factors associated with the development of postoperative normocalcemic hyperparathyroidism in patients operated for parathyroid adenoma

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Objective: Parathyroid adenoma is the most common cause of primary hyperparathyroidism in surgically treated patients. Although serum calcium levels usually normalize after surgery, parathyroid hormone (PTH) levels may remain persistently elevated in a subset of patients during the postoperative period. The aim of this study was to investigate the factors associated with the development of postoperative normocalcemic hyperparathyroidism.

Material and Methods: Patients who underwent surgery for primary hyperparathyroidism between 2016 and 2026 were retrospectively evaluated. Patients operated on for MEN-1 syndrome, parathyroid hyperplasia or carcinoma, as well as those with persistent postoperative hypercalcemia, were excluded. A total of 353 patients were included in the study. Serum calcium and PTH levels at postoperative 3 months were analyzed. Patients with postoperative normocalcemic hyperparathyroidism were classified as Group-1, while those whose PTH levels returned to normal were classified as Group-2. Preoperative demographic data, bone densitometry scores, alkaline phosphatase (ALP), vitamin D, calcium and PTH levels, adenoma volumes calculated based on postoperative measurements, and the presence of ectopic localization were analyzed.

Results: Of the patients, 286 (81.1%) were female and 67 (18.9%) were male. Persistent postoperative PTH elevation was observed in 70 (19.8%) patients, whereas PTH levels normalized in 283 (80.2%) patients. In Group-1, 19 (27.1%) patients were male, compared to 48 (17.0%) patients in Group-2 (p=0.51). Mean preoperative PTH levels were 294.7 pg/mL in Group-1 and 204.5 pg/mL in Group-2, with higher preoperative PTH levels being significantly associated with postoperative normocalcemic hyperparathyroidism (p<0.001). Among 55 patients with preoperative ALP levels above 147 IU/L, 17 (30.9%) developed normocalcemic hyperparathyroidism, whereas this condition was observed in only 45 (18.4%) of 244 patients with ALP levels below 147 IU/L (p=0.039). Mean preoperative vitamin D levels were significantly lower in Group-1 compared to Group-2 (17.8 ng/mL vs. 22.6n g/mL, respectively, p=0.024). Ectopic adenoma localization was detected in 6 (8.6%) patients in Group-1 and 21 (7.4%) patients in Group-2 (p=0.745). No statistically significant difference was found between the groups in terms of bone mineral density scores (p=0.790). Postoperative normocalcemic hyperparathyroidism was observed in 5 (17.9%) of 28 patients with bone densitometry scores below -3 and in 55 (20.5%) of 268 patients with scores above -3 (p=0.931). Mean preoperative calcium levels were 11.3 mg/dL in Group-1 and 11.2 mg/dL in Group-2, with no significant difference between the groups (p=0.741). Among 326 patients with calculated adenoma volumes, mean adenoma volume was 2298.7 mm^3 in Group-1 and 1900.8 mm^3 in Group-2 (p=0.514).

Conclusion: This study demonstrates that higher preoperative PTH and ALP levels and lower vitamin D levels are significantly associated with the development of postoperative normocalcemic hyperparathyroidism.

Keywords: Parathyroid adenoma, parathyroidectomy, normocalsemic hyperparathyroidism

[S-115]

Immune-inflammatory markers and clinicopathological features in papillary thyroid cancer

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Objective: Papillary thyroid carcinoma (PTC) is the most common type of thyroid malignancy and generally has a favourable prognosis. However, features such as lymph node metastasis, multifocality, and histopathological variants can alter clinical behaviour and influence treatment planning. In recent years, immune-inflammation indices [neutrophil-lymphocyte ratio (NLR), platelet-lymphocyte ratio (PLR), systemic immune-inflammation index (SII), etc.], which can be easily calculated from peripheral blood tests, have been increasingly studied in surgical oncology. These markers may provide practical contributions to preoperative assessment due to their low cost, rapidity, and accessibility. However, studies on the relationship between these indices and lymph node metastasis and tumour size in PTK are limited and conflicting. Therefore, in this study, the relationship between immune-inflammation and nutritional indices and clinical-pathological characteristics and tumour size in PTK was evaluated using both logistic and linear regression analyses.

Material and Methods: The data of 178 patients with papillary thyroid carcinoma who underwent surgery were retrospectively analysed (age 46.5±13.4; female 77.5%). Clinical data and preoperative complete blood count were used to calculate SII, NLR, PLR, monocyte-lymphocyte ratio (MLR), platelet index value (PIV), and prognostic nutritional index (PNI). Logistic regression was applied for pathological outcomes such as multifocality, lymphovascular and capsular invasion, and central and lateral lymph node metastasis; linear regression was applied for tumour size.

Results: According to logistic regression, univariate analysis found MLR (p=0.007) and PNI (p=0.043) to be significant for multifocality, but multivariate analysis did not reveal any independent relationships. For histopathological variant, SII (p=0.008), NLR (p=0.008), MLR (p=0.038) and PIV (p=0.003) were associated at the univariate level, but these associations disappeared in multivariate analysis. For central lymph node metastasis, only PLR showed a significant relationship in multivariate analysis (p=0.028; OR=0.949; 95% CI 0.906-0.994). For lateral metastasis, MLR was significant in multivariate analysis (p=0.048), but this finding should be interpreted with caution due to the small number of events. In linear regression, only PLR was inversely related to tumour size (B=-0.011; p=0.025; 95% CI -0.021 to -0.001).

Conclusion: In our study, the preoperative immune-inflammation index PLR emerged as the sole marker associated with both central lymph node metastasis and tumour size. Independent associations for other indices were not confirmed by multivariate analysis. PLR may have potential value as an additional biomarker in the clinical setting for preoperative risk assessment and surgical strategy planning in PTK. Larger, multicentre, and standardised studies are required to establish the generalisability of these findings.

Keywords: Thyroid neoplasms, papillary thyroid cancer, clinicopathologic characteristics

Table 1. Clinical pathological characteristics with logistics and linear regression analyses

	Markers	Univariate p	Univariate effect (OR/B, 95% GA)	Multivariate p	Multivariate effect (OR/B, 95% GA)
Multifocality	MLR	0.007	OR=5.820 (5.86-77.27)	0.269	OR=517.88 (0.006-35386)
	PNI	0.043	OR=0.916 (0.841-0.997)	0.162	OR=0.856 (0,856-1.072)
Histopathologic variant	SII	0.008	OR=0.998 (0.997-1.000)	0.601	OR=0.998 (0.996-1.001)
	NLR	0.008	OR=0.565 (0.370-0.862)	0.380	OR=0.865 (0.273-3.309)
	MLR	0.038	OR=0.011 (<0.001-0.787)	0.455	OR=0.013 (<0.001-655.36)
	PIV	0.003	OR=0.997 (0.995-0.999)	0.996	OR=1.000 (0.997-1.008)
Central LN metastasis	MLR	0.023	OR=2760.77 (3.020-2524575)	—	—
	PLR	0.386	OR=0.993 (0.976-1.007)	0.028	OR=0.949 (0.906-0.994)
Lateral LN metastasis	MLR	0.216	OR=627.11 (0.023-16784589)	0.048	—
Tumour diameter (lineer)	PLR	0.025	B=-0.011 (-0.021 – -0.001)	—	—

[S-117]

Transcutaneous laryngeal ultrasonography for postoperative vocal cord evaluation after thyroid and parathyroid surgery

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Objective: Recurrent laryngeal nerve injury is a major complication of thyroid and parathyroid surgery and may cause vocal cord movement impairment (VCMI), which can be symptomatic or silent. Early postoperative evaluation is essential. Flexible nasolaryngoscopy (FNL) is the reference standard but may be limited by invasiveness and practical constraints. Transcutaneous laryngeal ultrasonography (TLUS) has emerged as a non-invasive alternative, although its diagnostic performance remains controversial.

Material and Methods: This observational study included patients undergoing thyroid or parathyroid surgery between October 2025 and January 2026. Patients younger than 18 years or with known vocal cord pathology were excluded. All patients underwent preoperative and postoperative FNL. Postoperative TLUS was performed in a blinded manner by an experienced radiologist. VCMI was defined as reduced, asymmetric, or absent vocal cord mobility. TLUS performance was evaluated using FNL as the reference standard.

Results: A total of 102 patients were included. Postoperative FNL identified VCMI in 4 patients (3.9%). TLUS suggested VCMI in 1 patient (1.0%), while laryngeal landmarks were visualized in all patients (100%). Using FNL as the reference standard, TLUS demonstrated a specificity of 99.0%, a negative predictive value of 96.0%, and an overall diagnostic accuracy of 95.1%. No true-positive cases were observed, and sensitivity could not be meaningfully assessed.

Conclusion: TLUS is a feasible, non-invasive adjunct for postoperative vocal cord assessment after thyroid and parathyroid surgery. Its high specificity and negative predictive value support confirmation of normal vocal cord mobility, but limited sensitivity necessitates FNL in suspected cases.

Keywords: Flexible nasolaryngoscopy, transcutaneous laryngeal ultrasound, vocal cord palsy

[S-118]

Comparison of vascular closure methods in laparoscopic adrenalectomy: Energy-based vessel sealing devices and the effect of clip use on clinical outcomes

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Objective: Laparoscopic surrenalectomy is the gold standard technique in the surgery of adrenal gland pathologies. During the operation, the safe closure of the adrenal vein and vascular structures is one of the fundamental elements of surgical success. The most commonly used methods for this purpose include energy-based vessel sealing devices (EBVD) and clips. Thisstudy aimed to compare vascular closure methods using EBVD systems and clips in patients undergoing laparoscopic adrenalectomy in terms of clinical parameters.

Material and Methods: The retrospective study included patients who underwent laparoscopic or retroperitoneoscopic adrenalectomy by a single surgeon at a single center between September 2024 and February 2026. Patients were divided into two groups based on the closure method used: The EBDK group and the clip group. The Ligasure system was used for EBDK in all patients (Valleylab, Boulder, CO). Demographic data, tumor size, preoperative clinical diagnosis, lateralization, pathology results, and complication status were evaluated. Continuous variables were compared using median values. The largest diameter reported radiologically was used in the tumor size analysis.

Results: A total of 21 patients were included in the study. There were 11 patients (52.4%) in the clip group and 10 patients (47.6%) in the EBDK group.The median age was 52 years (IQR 43-64). The mass was located on the right side in 11 patients (52.4%) and on the left side in 10 patients (47.6%).Three patients had primary hyperaldosteronism (14.3%), six had pheochromocytoma (28.6%), and 12 had Cushing's syndrome or mild autonomous cortisol release (57.1%) were present. The median age in the clip group was 61 years (IQR 45.5-64), and in the EBDK group it was 48 years (IQR 41.5-56.5), with no significant difference between the groups (p=0.17). The median mass diameter was similar between the two groups [4.2 (2.9-5.0) cm vs. 3.5 (2.1-5.75) cm, p=0.97]. There were no significant differences between the groups in terms of gender distribution (p=0.31), lesionside (p=0.39), and surgical indication (p=0.62). Conversion was observed in 1 patient (9.1%) in the clip group, while no conversion was observed in the EBDK group (p=1.00).

Conclusion: In this retrospective analysis, no significant difference was observed between EBDK and clip-based vascular closure methods during laparoscopic surrenalectomy in terms of demographic characteristics, tumor size, and early clinical outcomes. Both methods appear to be safe and feasible.

Keywords: Laparoscopic adrenalectomy, vascular closure methods

[S-119]

Optimizing surgical management of renal hyperparathyroidism: Insights from a single-center experience

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Objective: Secondary and tertiary hyperparathyroidism are frequent complications in patients with end-stage renal disease and are often refractory to medical therapy. Surgical treatment remains the only definitive option in cases resistant to pharmacological management.

Material and Methods: We retrospectively reviewed 480 patients who underwent parathyroid surgery between June 2020 and June 2025. Among them, 26 had renal hyperparathyroidism, and after applying exclusion criteria, 14 patients were included in the final analysis. Demographics, surgical strategies, perioperative biochemical data, complications, and follow-up outcomes were assessed.

Results: The study population consisted of 14 patients, including 10 males and 4 females. Patient age ranged from 23 to 61 years, dialysis duration ranged from 2 to 21 years, and length of hospital stay ranged from 3 to 28 days. Surgical approaches included subtotal parathyroidectomy (n=5), total parathyroidectomy (n=4), and purge parathyroidectomy (n=5). Preoperatively, parathyroid hormone levels were markedly elevated and showed a substantial postoperative decline, accompanied by improvements in serum calcium and phosphorus levels. Recurrent laryngeal nerve palsy and disease recurrence were observed in none of the patients with long-term follow-up. Postoperative hypocalcemia requiring intravenous calcium therapy was observed in 5 patients, three of whom had undergone purge parathyroidectomy and two total parathyroidectomy.

Conclusion: Parathyroidectomy represents an effective and reliable therapeutic option for patients with renal hyperparathyroidism refractory to medical management. The choice of surgical approach should be individualized according to patient-specific factors and may require intraoperative modification based on operative findings.

Keywords: End-stage renal disease, purge parathyroidectomy, secondary hyperparathyroidism, renal hyperparathyroidism

Table 1. Demographic and clinical data of all patients

Variable	SPTX (n=5)	TPTX (n=4)	PPTX (n=5)
Sex (male/female), n	2/3	3/1	5/0
Age, years (range)	29-61	23-53	26-43
ASA class, median (range)	3 (2-3)	3 (3-4)	3 (3-4)
Duration of dialysis, years (range)	4-21	8-14	2-10
Length of hospital stay, days (range)	3-7	3-15	6-28
Postoperative bleeding requiring reoperation, n	0	0	2
Recurrent laryngeal nerve palsy, n	0	0	0
Recurrence, n	0	0	0
Persistent SHPT, n	0	0	1
Intravenous calcium supplementation, n	0	2	3
Follow-up, months (range)	6-41	3-36	1-46

[S-120]

Intraoperative identification of parathyroid glands using indocyanine green (ICG) during total thyroidectomy and its prospective evaluation on functional outcomes

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Objective: Post-thyroidectomy hypocalcemia is a significant complication associated with intraoperative injury or devascularization of the parathyroid glands. Reliable intraoperative identification of parathyroid glands remains an area of ongoing investigation. In this study, the effect of intraoperative indocyanine green (ICG) fluorescence imaging performed prior to thyroid dissection on parathyroid identification and postoperative functional outcomes was prospectively evaluated.

Material and Methods: In this prospective cohort study, 50 patients undergoing total thyroidectomy were included. In all cases, ICG fluorescence imaging was performed before initiating thyroid dissection, and parathyroid glands were assessed using a 0-2 perfusion scoring system. Early parathyroid function was analyzed using serum parathyroid hormone (PTH) and corrected calcium levels measured within the first 24 hours postoperatively. Low PTH was defined as <15 pg/mL, and hypocalcemia was defined as corrected calcium <8.6 mg/dL. Persistent hypocalcemia and/or the need for calcium ± calcitriol replacement at 6 months was considered prolonged hypoparathyroidism.

Results: Seventy-six percent of patients were female, with a mean age of 59.1±11.0 years. The most common pathology was papillary thyroid carcinoma (64%). Approximately three parathyroid glands were identified intraoperatively on average. At least one well-perfused gland (score 2) was detected in 92.1% of patients with available ICG data.Within the first 24 hours postoperatively, low PTH (<15 pg/mL) occurred in 30% of patients. Higher early postoperative PTH levels were observed in patients in whom at least one well-perfused gland was identified. Early hypocalcemia (corrected calcium <8.6 mg/dL) was observed at a limited rate.Parathyroid tissue was identified in 20% of thyroidectomy specimens. At 6-month follow-up, prolonged hypocalcemia and/or the need for replacement therapy was observed in 4% of patients.

Conclusion: Pre-dissection intraoperative ICG fluorescence imaging enabled a high rate of parathyroid identification. The presence of at least one well-perfused gland was associated with early postoperative parathyroid function. The low rate of prolonged hypocalcemia suggests that intraoperative perfusion assessment may contribute to the preservation of parathyroid function. Our findings support the use of ICG as a reliable and practical adjunct for parathyroid identification during total thyroidectomy.

Keywords: Total thyroidectomy, indocyanine green fluorescence, parathyroid preservation

[S-121]

Papillary thyroid cancer in Graves disease: More than expected, less than feared but when to be suspicious?

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Objective: The coexistence of Graves' disease (GD) and papillary thyroid carcinoma (PTC) remains a subject of clinical debate. Although PTC is frequently detected incidentally after thyroidectomy for GD, its true prevalence, clinicopathological behavior, and reliable preoperative predictors remain poorly defined in routine clinical practice.

Material and Methods: This single-center retrospective cohort study included 602 patients who underwent thyroidectomy between 2020 and 2025. Patients were categorized into three groups: GD with PTC (GD+PTC, n=51), GD without malignancy (GD-only, n=109), and sporadic PTC (PTC-only, n=442). Demographic, biochemical, radiological, surgical, and pathological data were analyzed. Univariate and multivariate logistic regression analyses were performed to identify factors associated with PTC development in GD.

Results: The prevalence of PTC among GD patients was 31.9%. Compared with sporadic PTC, GD-associated tumors were significantly smaller (median 5 mm vs. 12 mm, p<0.001) and demonstrated fewer aggressive features, including lymphatic invasion, capsular invasion, multifocality, bilaterality, and lymph node metastasis (all p<0.01). Patients with GD+PTC were younger and exhibited a lower female predominance than those with sporadic PTC. When compared with GD-only patients, the GD+PTC group had significantly lower thyroid-stimulating immunoglobulin (TSI) levels (median 3.8 vs. 7.65 IU/L, p=0.007) and a higher prevalence of ultrasound-detected thyroid nodules (64.7% vs. 27.5%, p<0.001). In multivariate analysis, the presence of ultrasound-detected nodules (OR 3.56, p=0.003) and lower TSI levels (OR 0.95, p=0.03) independently predicted PTC in GD.

Conclusion: Papillary thyroid carcinoma is relatively common among surgically treated GD patients but typically presents as microcarcinoma with less aggressive histopathological features. Ultrasound-detected thyroid nodules represent the strongest preoperative predictor of malignancy, while lower TSI levels may identify a distinct risk profile. These findings support meticulous ultrasonographic evaluation and a low threshold for fine-needle aspiration biopsy in selected GD patients.

Keywords: Graves disease, papillary thyroid cancer, thyroid-stimulating immunoglobulin, thyroidectomy

[S-123]

Surgical treatment and long-term follow-up outcomes in parathyroid carcinoma: A single-center experience

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Objective: Parathyroid carcinoma is a rare endocrine malignancy associated with high morbidity. This study aimed to evaluate the clinical presentation, biochemical parameters, surgical approaches, and follow-up outcomes of patients diagnosed with parathyroid carcinoma.

Material and Methods: A total of 16 patients diagnosed with parathyroid carcinoma were included in the study. Demographic characteristics, presenting symptoms, preoperative biochemical values, imaging modalities, surgical techniques, and follow-up durations were retrospectively analyzed.

Results: Twelve patients (75%) were female and four (25%) were male. The mean age was 59 years (range: 39-84). Nine patients (56%) were asymptomatic at presentation, and the most common symptom was bone pain. Preoperative biochemical evaluation revealed mean serum calcium (Ca) of 11.9 mg/dL, parathyroid hormone (PTH) level of 717.4 pg/mL, and alkaline phosphatase (ALP) level of 374.4 U/L. Lesion localization was achieved using preoperative ultrasonography and scintigraphy in most patients, while F-18 choline PET/CT or 4D-CT was used in selected cases. Four-gland exploration was performed in 10 patients (62.5%), and minimally invasive parathyroidectomy in 6 patients (37.5%). Parathyroid tissue was intrathyroidal in two patients and mediastinal in one patient. Concomitant thyroidectomy was performed in eight patients (50%), and additional unilateral central neck dissection was performed in two patients (12%). Intraoperative suspicion of parathyroid carcinoma occurred in four patients (25%), who subsequently underwent concomitant thyroidectomy, and two of them also received unilateral central neck dissection. Secondary surgery related to parathyroid carcinoma was required in four patients (25%): three underwent thyroidectomy and one underwent supraclavicular lymph node excision. Intraoperative nerve monitoring was used in most patients. Fourteen patients had available follow-up data, with a mean follow-up duration of 46.7 months (range: 6-108); two patients had no regular follow-up data. During follow-up, recurrence was observed in one patient (6%). One patient died due to disease-related causes, and two patients died from causes unrelated to parathyroid carcinoma.

Conclusion: Elevated PTH and Ca levels accompanied by bone symptoms are important clinical indicators in patients with parathyroid carcinoma. Accurate preoperative localization and adequate resection during primary surgery are critical in reducing the risk of recurrence. Long-term close biochemical and radiological follow-up is essential for disease control.

Keywords: Parathyroid, carcinoma, thyroidectomy, recurrence, mortality

[S-124]

The prognostic value of preoperative HALP score in papillary thyroid carcinoma and its relationship with tumor aggressiveness

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Objective: Papillary thyroid carcinoma (PTC) is the most common thyroid malignancy and generally has a favorable prognosis. However, factors such as lateral lymph node metastasis and multifocality increase the risk of recurrence. This study aims to analyze the predictive value of the HALP score, consisting of hemoglobin, albumin, lymphocyte, and platelet values, on tumor aggressiveness and histopathological features in patients diagnosed with PTC.

Material and Methods: The study included 100 patients diagnosed with PTK histopathologically. HALP scores were calculated using the patients' preoperative complete blood count and biochemical parameters. The low and high HALP score groups were compared in terms of age, gender, tumor size, multifocality, lymphovascular invasion (LVI), BRAF mutation status, and lateral neck lymph node metastasis.

Results: The analyses revealed a positive correlation between the low HALP score group and the size of the primary tumor and the presence of multifocal foci. In particular, patients with lateral neck lymph node positivity were found to have significantly lower HALP scores compared to the control group. Although age and gender distribution were homogeneous across groups, it was noted that low HALP scores were more strongly associated with poor prognosis in the older age group. Furthermore, low HALP scores were also observed in aggressive variants with lymphovascular invasion positivity and BRAF mutation.

Conclusion: This study demonstrates that a low preoperative HALP score is directly associated with aggressive clinical course parameters such as larger tumor size, multifocality, and lateral lymph node metastasis in patients with PTK. The HALP score, being a low-cost, easily accessible, and non-invasive method, can be used as a helpful biomarker in predicting the need for lateral neck dissection during the surgical planning phase and in identifying high-risk patients.

Keywords: Papillary thyroid carcinoma, HALP score, prognosis indicator

Table 1. Comparison of numerical data for patients with low and high HALP scores

	Low HALP (n=46)	High HALP (n=54)
Age (average)	59	45
Gender (male/female)	57% female	64% male
Tumor size (mm, average)	27	16
Number of focuses (single/multifocal)	29% multi-focused	96% multi-focused
LN metastasis (+/-)	80% LN metastasis +	13% LN metastasis +
Lymphovascular invasion (+/-)	34% LVI +	13% LVI +
BRAF mutation (+/-)	11% BRAF +	2% BRAF +

Among the 100 patients whose data were evaluated, it was determined that patients with low HALP scores had significantly higher tumor size, multifocality, lymph node metastasis rate, and LVI rate.

[S-125]

Comparative evaluation of the effects of polyethylene glycol, monobasic sodium phosphate, and sennoside A-B calcium solutions used for pre-colonoscopy bowel preparation on colonic mucosa, serum TAS/TOS levels, and serum IL-6 levels

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Objective: Oxidative stress-induced DNA damage is considered to have precancerous potential and has therefore been widely studied in relation to various drugs, chronic diseases, and cancers, particularly colorectal cancer. Colonoscopy plays a key role in the diagnosis and management of colorectal and other intestinal diseases and requires effective bowel cleansing. Polyethylene glycol 3350 (PEG), monobasic sodium phosphate (NaP), and sennoside A-B calcium are among the most commonly used bowel preparation agents, with several studies comparing their efficacy and clinical adverse effects. However, the data comparing their effects on oxidative stress and pro-inflammatory responses at both systemic and intestinal mucosal levels are limited. This study aimed to evaluate the effects of PEG, NaP, and sennoside A-B calcium on serum and intestinal mucosal oxidative stress parameters and the pro-inflammatory cytokine interleukin-6 (IL-6).

Material and Methods: Seventy-six patients were randomly assigned to receive PEG, NaP, or sennoside A-B calcium for bowel preparation. Venous blood samples were collected before and after bowel preparation, and sigmoid colon mucosal biopsy specimens were obtained during colonoscopy. Serum levels of white blood cell count (WBC), C-reactive protein (CRP), total antioxidant status (TAS), total oxidant status (TOS), oxidative stress index (OSI), and IL-6 were measured. In tissue samples, TAS, TOS, and OSI levels were analyzed. All measurements were performed using ELISA and spectrophotometric methods. Statistical analyses were conducted using SPSS software, and changes in serum parameters were expressed as delta (Δ) values.

Results: No statistically significant differences were observed among the groups regarding serum delta values of IL-6, TAS, TOS, or OSI ($p>0.05$). A statistically significant difference was detected in TOS levels of sigmoid colon mucosal tissue among the bowel preparation agents ($p=0.043$); however, this difference did not remain significant in subgroup analyses. The most notable difference was observed between the NaP and sennoside A-B calcium groups, with higher tissue TOS levels in the NaP group. No significant correlations were found between serum inflammatory markers and oxidative stress parameters.

Conclusion: Short-term use of PEG, NaP, and sennoside A-B calcium does not appear to induce a significant systemic oxidative stress or pro-inflammatory response. Although a difference in mucosal TOS levels was observed among the agents, but this finding was not observed in subgroup analyses. Overall, the results indicate that these agents have comparable short-term safety profiles; nevertheless, the potential biochemical effects of bowel preparation solutions should be taken in consideration.

Keywords: Bowel preparation, oxidative stress, polyethylene glycol, sodium phosphate, sennoside A-B calcium

Table 1. Tissue OSI, TAS, and TOS values according to bowel preparation solutions

	Polietilen Glikol 3350 n=29 (38, 2 %) Ort. ±ss. Medyan (min-maks)	Monobazik Sodyum Fosfat n=23 (30, 3%) Ort. ±ss. Medyan (min-maks)	Sennozit A-B Kalsiyum n=24 (31, 5%) Ort. ±ss. Medyan (min-maks)	p değeri
OSI Arbitrary unit A. U (Doku)	7, 75 ± 4, 638 7, 56 (0, 616 - 17, 59)	7, 80 ± 5, 00 6, 94 (1, 06 - 21, 74)	7, 816 ± 5, 57 6, 762 (0, 07 - 25, 65)	0, 969
TAS mmol Askorbik asit Equiv /L (Doku)	0, 796± 1, 080 0, 465 (0, 165 - 4, 62)	0, 853± 0, 994 0, 474 (0, 23- 4, 48)	0, 75± 0, 836 0, 468 (0, 147 - 4, 12)	0, 845
TOS umol H2O2 Equiv /L (Doku)	3, 55± 1, 51 3, 43 (1, 17- 10, 4)	3, 82± 1, 09 3, 78 (1, 56- 6, 57)	3, 44± 1, 58 3, 27 (0, 105 - 9, 88)	0, 043

Table showing the distribution and comparison of OSI, TAS, and TOS values measured in sigmoid colon mucosal tissue samples according to solution groups.

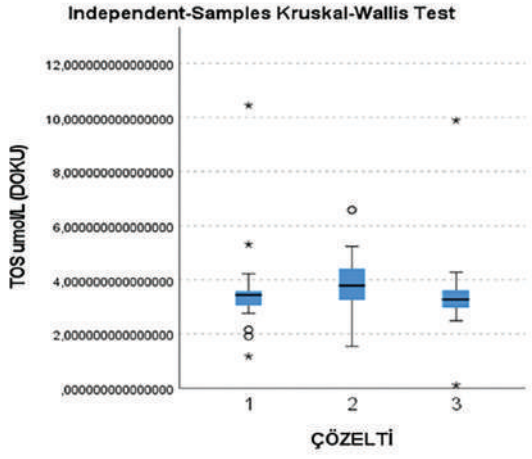


Figure 1. Comparison of sigmoid colon mucosal TOS values.

Figure showing the distribution and comparison of total oxidant status (TOS) values measured in sigmoid colon mucosal tissue samples obtained during colonoscopy according to solution groups.

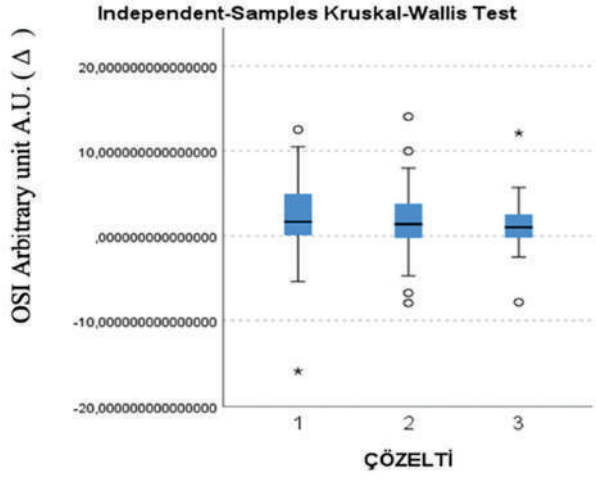


Figure 2. Comparison of serum OSI (Δ) values.

Figure showing the distribution and comparison of serum oxidative stress index OSI (Δ) values according to solution groups.

Figure showing the statistical distribution and comparison of IL-6 (Δ), OSI (Δ), TAS (Δ), and TOS (Δ) values according to solution groups.

	Polietilen Glikol 3350 n=29 (38, 2 %)		Monobazik Sodyum Fosfat n=23 (30, 3%)		Sennozit A-B Kalsiyum n=24 (31, 5%)		p değeri
	Ort. ±ss	Medyan (min-maks)	Ort. ±ss	Medyan (min-maks)	Ort. ±ss	Medyan (min-maks	
IL-6 ng/L (Δ)	-7, 8. ±40, 38	-1, 455 (-144, 25 – 42)	-35, 9. ±81, 7	-8, 6 (-318, 5 - 16, 6)	-5, 93. ± 34	-1, 85 (-88, 5-106, 9)	0, 303
OSI Arbitrary unit A. U (Δ)	2. 21 ± 5, 49	1, 61 (-15, 98 - 12, 4)	1, 69± 4, 973	1, 33 (-7, 94 - 14)	1, 36± 3, 5	0, 977 (-7, 85 - 12, 06)	0, 724
TAS mmol Askorbik asit Equiv /L (Δ)	0, 31± 0, 27	0, 28 (-0, 05- 1, 17)	0, 387 ± 0, 238	0, 335 (0, 03 - 0, 985)	0, 41± 0, 32	0, 361 (-0, 144 - 1, 1)	0, 225
TOS mmol Askorbik asit Equiv /L (Δ)	4, 48± 6, 39	2, 605 (-5, 27- 21, 709)	4, 36± 8, 32	2, 48 (-9, 47-22, 05)	2, 91± 4, 77	1, 756 (-4, 26 -18, 465)	0, 759

Figure showing the statistical distribution and comparison of IL-6 (Δ), OSI (Δ), TAS (Δ), and TOS (Δ) values according to solution groups.

[S-126]

Comparison of sennoside, sodium phosphate, and polyethylene glycol use in pre-colonoscopy colon cleansing: A multicenter experience

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Objective: Colonoscopy is a procedure in which the entire large intestine is examined via a monitor using a flexible fiberoptic camera inserted through the anus. Today, colonoscopy is widely used as both a diagnostic and therapeutic method for large intestine diseases. For the procedure to be performed effectively, preparations must begin at least 24 hours prior. Sennoside-containing laxatives, polyethylene glycol, and oral sodium phosphate are methods used for bowel cleansing. In this multicenter retrospective study, we aimed to find the most suitable and patient-acceptable method for bowel cleansing.

Material and Methods: Patients aged 18-90 years who underwent elective colonoscopy at the General Surgery Endoscopy Unit of Afyonkarahisar Health Sciences University and the Endoscopy Unit of Afyonkarahisar State Hospital between December 15, 2023, and March 15, 2024, were included in the study. Exclusion criteria included: patients who had previously undergone gastrointestinal surgery, patients who had received or were currently receiving oncological treatment, patients with serious cardiac comorbidities, patients with uncontrolled diabetes mellitus, and patients with chronic renal failure. A total of 219 patients were included in the study. Adequate bowel preparation was assessed by the endoscopist using the Boston bowel readiness scale (BBPS).

Results: A total of 219 patients were included in the study. Fifty-one patients were in group 1 using polyethylene glycol, 87 patients were in group 2 using sodium phosphate, and 81 patients were in group 3 using sennoside. There was no statistically significant difference in the total BBPS score for colon cleansing in all three groups. Abdominal pain during bowel cleansing was observed in 30 patients (37%) in group 3, 9 patients (17.6%) in group 1, and 16 patients (18.4%) in group 2. Sixty-eight patients (84%) in group 3, 53 patients (60.9%) in group 2, and 31 patients (60.8%) in group 1 stated that they could perform bowel cleansing again with the same medications.

Conclusion: Effective bowel cleansing is the most important factor for an optimal colonoscopy procedure. In our study, no difference was observed in BBPS scores across all colon segments, and sennoside tablets were shown to be as effective as other solutions in bowel cleansing. A study by Savit et al. found that the effectiveness of sennoside tablets in bowel cleansing was less than that of NaP solution. This may be due to the assignment of the lowest possible value to the groups for missing data, or it may be because a higher dose of sennoside tablets was used in our study.

Keywords: Colonoscopy, colon cleansing

[S-127]

Precision and diagnostic power in endoscopy: An experience of 7.593 patients

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Objective: Endoscopic biopsy is a gold-standard method for diagnosing gastrointestinal system diseases. The biopsy rate, histopathological distribution, and malignancy detection capacity of endoscopies performed in our clinic serve as critical metrics for evaluating diagnostic reliability and public health implications. This study retrospectively analyzes endoscopy results obtained from an extensive patient series.

Material and Methods: A total of 7,593 patients who underwent endoscopy at the University of Health Sciences Türkiye, Ankara Etlik City Hospital, Department of General Surgery between October 2022 and October 2025 were evaluated. Patient demographics, biopsy rates, and histopathological diagnoses were recorded. Findings were summarized using frequencies and percentages.

Results: The mean age of the participants was \$51.3\pm 14.6\$ years, with a median age of 52. Of the cases, 36.7% (n=2.786) were male and 63.3% (n=4.807) were female (Table 1). Biopsies were performed in 97.5% (n=7.402) of all patients (Table 2). Histopathological examination showed no neoplasia in 98.6% of the cases. The rate of lesions that were malignant or possessed malignant potential was 1.1%. Adenocarcinoma was the most common malignancy (0.7%); additionally, rare tumors such as carcinoid tumors (0.15%), signet ring cell adenocarcinoma (0.08%), and gastrinoma were identified (Table 3).

Conclusion: The exceptionally high biopsy rate of 97.5% in this extensive series demonstrates our clinic's systematic and meticulous approach to endoscopic diagnosis. Although the overall malignancy rate was low, the identification of adenocarcinoma as the most frequent histological type is consistent with the literature. Furthermore, the detection of rare tumors—including carcinoid tumors, signet ring cell adenocarcinoma, and gastrinoma—underscores the importance of large-scale endoscopic biopsy applications in early malignancy detection and their contribution to public health. These results provide robust data supporting both the diagnostic reliability and the scientific value of our clinical practice.

Keywords: Biopsy, clinical experience, endoscopy, gastrointestinal system tumors, histopathology

Table 1. Demographic characteristics

Özellik	Değer	Yüzde (%)
Yaş ortalaması	51,3 ± 14,6	-
Ortanca yaş	52	-
Erkek	2786	36,7
Kadın	4807	63,3
Toplam	7593	100

Table 2. Biopsy implementation rate

	Sayı	Yüzde (%)
Biyopsi alınan	7402	97,5
Biyopsi alınmayan	191	2,5
Toplam	7593	100

Table 3. Histopathology results

Histopatoloji	Sayı	Yüzde (%)
Neoplazma rastlanmamıştır	7297	98,6
Adenokarsinom (tüm tipler)	50	0,7
Karsinoid tümör	11	0,15
Malign neoplazi (tip belirtilmemiş)	14	0,19
Taşlı yüzük hücreli adenokarsinom	6	0,08
Atipik karsinoid tümör	3	0,04
Gastrinoma	1	0,01
GIST (malignite potansiyeli belirsiz)	1	0,01
Skuamoz hücreli karsinom	1	0,01
Skuamoz intraepitelyal düşük dereceli neoplazi	1	0,01
Benign neoplazi	3	0,04
Tübüler adenom	3	0,04
İntestinal tip adenom	2	0,02
Glandüler displazi (yüksek derece)	3	0,04
Neoplazi belirsiz	10	0,13
Toplam	7402	100

[S-128]

Polyp detection rate in follow-up colonoscopy after acute diverticulitis and evaluation of clinical-laboratory findings: A single-center retrospective study

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Objective: Screening the colon for neoplasia following an episode of acute diverticulitis is a standard approach in clinical practice, the necessity of this procedure is currently debated in updated guidelines, particularly for uncomplicated cases. Aim of this study is to evaluate follow-up colonoscopy findings in patients followed up with a diagnosis of acute diverticulitis and to investigate clinical and laboratory parameters that may predict the presence of polyps.

Material and Methods: Patients who underwent a CT-confirmed acute diverticulitis between 2015 and 2025 were retrospectively analyzed. Patients aged ≥18 years who underwent follow-up colonoscopy were included in the study. Those with a history of complete colonoscopy within the two years preceding admission, those who had undergone prior endoscopic polypectomy, and those with diagnosis of inflammatory bowel disease were excluded. Patients were divided two groups: Those with polyps/adenomas detected during follow-up colonoscopy (n=15) and those with no pathology other than diverticula (n=123). Demographic characteristics, diverticulitis location, modified-Hinchey classification, complicated/uncomplicated distinction, CT-colonoscopy interval, and laboratory parameters at the time of the acute attack (WBC, neutrophil, lymphocyte, hemoglobin, platelet) were recorded. P-value of <0.05 was considered significant in statistical analyses.

Results: Demographic and clinical spectrum of the study cohort (n=138), no colorectal malignancy was detected in follow-up colonoscopies, while the prevalence of premalignant lesions (polyps/adenomas) was observed to be 10.9% (n=15). Comparative analysis between groups, demographic data such as age (p=0.262), gender, and anatomical location didn't demonstrate a statistically determining effect on the presence of polyps. Regarding clinical staging, notable finding was that all neoplastic formations were clustered in the uncomplicated (Hinchey 1a) group (p=0.063). When the predictive value of inflammatory markers was examined, WBC, hemoglobin, and platelet levels exhibited a similar distribution in both groups. It was confirmed that systemic inflammatory indices frequently discussed in literature, such as the neutrophil-lymphocyte ratio (NLR) and platelet-lymphocyte ratio (PLR), did not reach statistical significance in predicting pathological findings in follow-up colonoscopy (p=0.120 and p=0.575).

Conclusion: Our ten-year data indicate that the risk of colorectal cancer is considerably low in patients with acute diverticulitis whose radiological diagnosis has been confirmed by CT. Furthermore, inflammatory markers such as NLR and PLR at the time of the acute attack weren't found to have clinical determinacy in predicting the presence of polyps in the long term. These findings support the view that routine follow-up colonoscopy can be planned with a selective approach within existing screening programs, particularly in young patients and those without additional risk factors.

Keywords: Acute diverticulitis, follow-up colonoscopy, polyp

Table 1. Comparison of laboratory parameters between groups

Parameter	All patients (n=138)	Polyp detected (n=15)	Diverticula (n=123)	p
WBC	11.3 (9.7-14.3)	10.4	11.4	77
Neutrophil	8.1 (6.5-10.1)	6.5	8.3	37
Lymphocyte	1.9 (1.5-2.7)	2.1	1.9	858
Hemoglobin	13.2 (12.0-14.3)	12.1	13.4	85
Platelet	264.5 (220.0-315.8)	263	268	246
NLR	3.88 (2.88-5.88)	3.67	4.22	120
PLR	123.3 (96.3-175.8)	119.0	125.4	575

Table 2. Demographic and clinical characteristics of patients with acute diverticulitis				
Variable	**All patients (n=138)**	**Polyp detected (n=15)**	**Diverticula (n=123)**	**p**
Age (years) (mean ± SD)	54.4±15.1	58.7±16.0	53.9±14.9	262
Age groups n (%)				
<50 years	56 (40.6)	4 (26.7)	52 (42.3)	377
≥50 years	82 (59.4)	11 (73.3)	71 (57.7)	
Age groups n (%)				
<40 years	22 (15.9)	1 (6.7)	21 (17.1)	505
≥40 years	116 (84.1)	14 (93.3)	102 (82.9)	
Age groups n (%)				
<65 years	104 (75.4)	9 (60.0)	95 (77.2)	610
≥65 years	34 (24.6)	6 (40.0)	28 (22.8)	
Gender n (%)				
Female	74 (53.6)	8 (53.3)	66 (53.7)	1.000
Male	64 (46.4)	7 (46.7)	57 (46.3)	
Location n (%)				
Right colon	17 (12.3)	2 (13.3)	15 (12.2)	1.000
Left colon	121 (87.7)	13 (86.7)	108 (87.8)	
Hinchey classification n (%)				
1a	115 (83.3)	15 (100)	100 (81.3)	0.211*
1b	3 (2.2)	0 (0)	3 (2.4)	
2	20 (14.5)	0 (0)	20 (16.3)	
Diverticulitis groups n (%)				
Uncomplicated	115 (83.3)	15 (100)	100 (81.3)	0.063**
Complicated	23 (16.7)	0 (0)	23 (18.7)	
Comorbidity n (%)				
Absent	84 (60.9)	6 (40.0)	78 (63.4)	0.091**
Present	54 (39.1)	9 (60.0)	45 (36.6)	
Time to colonoscopy (months) median (IQR)	3.0 (2.0-3.0)	2.0 (1.5-3.0)	3.0 (2.0-3.0)	182

[S-129]

Clinical management of ERCP-related perforations: A 10-year high-volume single-center experience

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Objective: ERCP-related perforations are serious complications that require early diagnosis and appropriate treatment strategies due to their high morbidity and mortality risk despite their low incidence. The aim of this study was to evaluate the clinical characteristics, management approaches, and outcomes of perforations occurring after ERCP based on a 10-year single-center experience.

Material and Methods: In this retrospective single-center study, a total of 4,480 ERCP procedures performed at the Marmara University Faculty of Medicine, Department of General Surgery between January 1, 2016 and January 1, 2026 were reviewed. Patients aged ≥18 years who developed perforation after ERCP were included in the study. Perforations were categorized according to the Stapfer classification. Demographic characteristics, time to diagnosis, treatment modalities applied, and clinical outcomes were analyzed.

Results: Among a total of 4.480 ERCP procedures, 11 perforations were identified (incidence: 0.25%). The mean age of the patients was 61.9±18.4 years, and 54.5% were female. According to the Stapfer classification, perforations were distributed as type I in 1 patient (9.1%), type II in 1 patient (9.1%), and type IV in 9 patients (81.8%). Perforation was diagnosed within the first 6 hours in 63.6% of cases. The treatment strategy was planned based on perforation type and clinical follow-up; 72.7% of patients were managed conservatively, 9.1% underwent percutaneous interventions, and 18.2% required operative management. Surgical intervention was limited to high-grade perforations, whereas low-grade perforations were mostly treated successfully with conservative management. The median length of hospital stay was 7 days (IQR: 3.5-9), and the 30-day mortality rate in the perforation group was 9.1%.

Conclusion: Our high-volume center experience demonstrates that the majority of ERCP-related perforations are low-grade and that a type-based management approach allows a substantial proportion of patients to be safely treated without surgical intervention. Early diagnosis, close clinical monitoring, and individualized treatment planning are key determinants in improving clinical outcomes.

Keywords: ERCP, perforation, stapfer

Table 1. Baseline characteristics and procedure-related parameters

Total number of ERCP procedures	4480
Number of perforations (n)	11
Perforation incidence (%)	0.25
Mean age (years)	61.9±18.4
Female sex, n (%)	6 (54.5)
Diagnosis within first 6 hours, n (%)	7 (63.6)
Precut, n (%)	7 (63.6)
Sphincterotomy, n (%)	8 (72.7)

Table 2. Management according to the stapfer classification

Stapfer type (n, %)	Conservative	Endoscopic	Percutaneous	Surgical	Total
Type I (1, 9%)	0	0	0	1	1
Type II (1, 9%)	0	0	0	1	1
Type III (0, 0%)	0	0	0	0	0
Type IV (9, 82%)	8	0	1	0	9
Total	8	0	1	2	11

[S-130]

Complications and surgical marginal difference in lesions treated with endoscopic mucosal resection (EMR) and its relationship with lesion size: A retrospective review

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Objective: Endoscopic resection techniques are minimally invasive methods developed as alternatives to surgery in the treatment of early-stage intramucosal neoplasms and submucosal lesions of the gastrointestinal (GI) tract. Among these techniques, endoscopic mucosal resection (EMR) is widely used for the removal of granular, flat, and sessile polypoid lesions. The aim of this study was to statistically evaluate the potential effect of lesion size on the development of intraprocedural complications (bleeding/bleeding risk control) and surgical margin status in patients undergoing EMR.

Material and Methods: A total of 39 cases with colon–rectum–localized lesions resected using the EMR technique in our clinic were retrospectively analyzed. The variables examined included tumor size, presence of intraprocedural complications (absent/present), and surgical margin status (negative/positive). In addition, Paris classification and histopathological diagnoses of the lesions were evaluated. For statistical analysis, differences in the mean rank of tumor size according to the presence of complications were analyzed using the Mann-Whitney U test. Mean tumor size values between groups were also compared using the Independent Samples t-test. Differences in the mean rank of tumor size according to surgical margin status were analyzed using the Mann-Whitney U test. Frequencies and cross-tabulations were used for Paris classification and histopathological diagnoses.

Results: According to the Paris classification, most lesions were type 1s, and adenomatous lesions constituted the majority of histopathological diagnoses. Lesions with intraprocedural complications had significantly larger tumor sizes than those without complications, as confirmed by both rank-based and parametric analyses (p=0.006). In contrast, lesion size was not significantly associated with surgical margin status.

Conclusion: This retrospective analysis indicates that lesion size in EMR is associated with intraprocedural complications and the need for additional endoscopic interventions, with larger lesions carrying a higher complication risk. However, lesion size was not significantly related to surgical margin positivity, suggesting that complete resection can be achieved regardless of lesion size when appropriate techniques are used by experienced endoscopists. Overall, EMR is a safe and effective alternative to surgery for early-stage gastrointestinal lesions, although increased caution is warranted in larger lesions.

Keywords: EMR, colonoscopy, colon cancer

[S-131]

Endoscopic evaluation and pathologic outcomes in patients with FDG uptake in the gastrointestinal tract on PET/CT: Analysis of 152 cases

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Objective: FDG uptake throughout the gastrointestinal (GI) tract on PET/CT is a common finding in clinical practice. Such uptake may reflect physiologic activity or inflammatory/benign processes, but it can also indicate concomitant premalignant or malignant pathology. In particular, varying uptake patterns (focal, diffuse, segmental) and heterogeneous SUV_{max} values may complicate decision-making regarding the need for endoscopic evaluation. The aim of this study was to characterize uptake patterns and anatomic distribution in patients with GI FDG uptake on PET/CT who underwent endoscopic assessment and to determine the malignancy rate based on histopathologic results.

Material and Methods: A retrospective analysis was performed of 152 patients who demonstrated GI FDG uptake on PET/CT and subsequently underwent endoscopic evaluation. Demographic characteristics (age, sex), type of endoscopy performed (upper GI endoscopy and/or colonoscopy), PET/CT uptake pattern (focal/diffuse/segmental), anatomic distribution of uptake, SUV_{max} values, and endoscopic biopsy/histopathologic findings were recorded.

Results: The mean age was 60.1±11.2 years, and 51.3% of patients were female. Upper GI endoscopy was performed in 65.1% and colonoscopy in 52.6% of patients. On PET/CT, the FDG uptake pattern was focal in 41.4%, diffuse in 40.1%, and segmental in 18.4%. The mean SUV_{max} was 7.22±4.55. Regarding anatomic distribution, uptake was most frequently observed in the stomach (81.6%), followed by the colon (45.4%) and the rectum/rectosigmoid (9.2%) (ileum 2.0%, esophagus 1.3%, duodenum 1.3%). Histopathologic evaluation revealed malignancy in 5 patients (3.3%), whereas benign/normal findings were observed in 147 patients (96.7%).

Conclusion: In patients with GI FDG uptake on PET/CT who underwent endoscopic evaluation, the malignancy rate was low (3.3%). The predominance of gastric involvement and the heterogeneity of uptake patterns support interpreting PET/CT findings in the context of the overall clinical picture and individualizing endoscopic indication based on symptoms, risk profile, and uptake characteristics.

Keywords: FDG uptake, gastrointestinal tract, malignancy

Table 1. Clinical, primary disease, imaging, and pathological characteristics of patients with gastrointestinal FDG uptake on PET/CT who underwent endoscopic evaluation (n=152)

Variable	Value
Age, years	60.1 ± 11.2
Sex	
Female	78 (51.3%)
Male	74 (48.7%)
Endoscopic procedures	
Gastroscopy performed	99 (65.1%)
Colonoscopy performed	80 (52.6%)
At least one endoscopic procedure performed	152 (100%)
Pattern of gastrointestinal uptake on PET/CT	
Focal	63 (41.4%)
Diffuse	61 (40.1%)
Segmental	28 (18.4%)
Anatomical location of gastrointestinal uptake on PET/CT*	
Stomach	124 (81.6%)
Colon	69 (45.4%)
Rectum / rectosigmoid	14 (9.2%)
Ileum	3 (2.0%)
Esophagus	2 (1.3%)
Duodenum	2 (1.3%)
Other	3 (2.0%)
Pathological results	
Malignant pathology	5 (3.3%)
Non-malignant / benign / normal findings	147 (96.7%)
SUV_{max}	7.22 ± 4.55
Primary disease	n (%)
Breast cancer	34 (22.4%)
Lung cancer (lung carcinoma + lung nodule)	20 (13.2%)
Lymphoma (all subtypes) (DLBCL, Hodgkin lymphoma, and others)	9 (5.9%)
Renal cell carcinoma (RCC) (rcc + RCC)	7 (4.6%)
Multiple myeloma	6 (3.9%)
Cervical cancer	5 (3.3%)
Bladder cancer	5 (3.3%)
Endometrial cancer	4 (2.6%)
Plasmacytoma	3 (2.0%)
Ovarian cancer	3 (2.0%)
Laryngeal cancer	2 (1.3%)
Unknown primary / evaluation for primary focus	1 (0.7%)
Other	43 (28.3%)
Total	152 (100%)

Table 2. Clinical, PET/CT, and histopathological characteristics of cases with malignant pathology detected on endoscopic evaluation (n=5)

Primary disease	Site of uptake on PET/CT	SUV_{max}	Histopathological diagnosis
Unknown primary/ evaluation for primary focus	Stomach (fundus + corpus)	2.00	Signet ring cell carcinoma
Lung cancer	Stomach (fundus)	3.50	Gastrointestinal metastasis of the primary malignancy
Breast cancer	Sigmoid colon	10.00	Adenocarcinoma
Breast cancer	Stomach (fundus + corpus)	5.90	Gastrointestinal metastasis of the primary malignancy
Bladder cancer	Duodenum (2nd portion)	17.80	Carcinoma

[S-132]

Accuracy of preoperative tumor localization in colorectal cancer: Comparison of colonoscopy and computed tomography with surgical localization

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Objective: Surgical treatment of colorectal cancer depends on oncologically appropriate resection and adequate surgical margins. Accurate preoperative localization of the tumor using colonoscopy and computed tomography (CT) plays a crucial role in surgical planning. Evaluating the concordance between preoperative imaging and intraoperative findings is essential to assess the reliability of localization methods. This study aimed to compare tumor localization reported by preoperative colonoscopy and CT with intraoperative findings in patients undergoing surgery for colorectal cancer.

Material and Methods: This retrospective study included patients who underwent surgery for colorectal cancer between 2020 and 2025 at Marmara University Faculty of Medicine, Department of General Surgery. Tumor localization reported by preoperative colonoscopy and CT was compared with intraoperative findings, which were accepted as the gold standard. Concordance rates were analyzed both segmentally and according to right-left colon classification. Statistical analysis was performed using the chi-square test, and $p<0.05$ was considered statistically significant.

Results: The mean age of the patients was 63.7 years, with a balanced gender distribution (51.9% male), and the mean body mass index was 26.7 kg/m². Bowel preparation was adequate in 80% of patients (n=789). Colonoscopic findings from 786 patients and CT findings from 730 patients were compared with intraoperative localization.Overall concordance between colonoscopy and surgical localization was 75.2% (591/786), while concordance between CT and surgical localization was 80.1% (585/730) ($p<0.001$ for both). Segmental analysis demonstrated the highest concordance in rectal tumors (colonoscopy: 90.9%; CT: 91.9%). The lowest concordance for colonoscopy was observed in the descending colon (37.0%). In both modalities, splenic and hepatic flexures, as well as ascending and descending colon segments, showed lower concordance rates compared to other segments. According to right-left colon classification, left-to-left concordance for colonoscopy was 98.5%, and right-to-right concordance was 91.8%, both statistically significant ($p<0.001$).

Conclusion: Previous studies have reported colonoscopic localization accuracy rates ranging from 70% to 90%, with higher error rates in the right colon. Our findings are consistent with the literature and emphasize the importance of careful evaluation, particularly in flexural regions and ascending-descending colon segments. When necessary, additional localization methods should be considered to optimize surgical planning.

Keywords: Colonoscopy, colon cancer, tomography

[S-133]

Findings, histopathology, and *Helicobacter pylori* prevalence in upper gastrointestinal endoscopy: A single-center retrospective epidemiological analysis

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Objective: To determine the distribution of endoscopic findings and histopathological diagnoses in upper gastrointestinal endoscopies (EGD), the rate of *Helicobacter pylori* (*H. pylori*) positivity, and the subtypes of polyps and malignancies.

Material and Methods: EGD procedures performed at a single center between 02.01.2020 and 30.10.2025 were retrospectively analyzed in a cross-sectional manner. Demographic data, endoscopy report findings, and biopsy pathology reports were evaluated. Results were presented as n (%). Polyps were subgrouped according to histopathology; malignancies were classified into subtypes, and the presence of neuroendocrine tumors (NETs) was assessed.

Results: A total of 11,258 EGDs (unique patients: 10.567) were analyzed; 60.0% of the cases were female. The mean age was 50.7±14.4 years, with a median of 51 (41-61). The most frequent findings in endoscopy reports were gastritis 36.2% (n=4.078), antral gastritis 28.0% (n=3.155), pangastritis 10.8% (n=1.219), duodenitis/bulbitis 8.8% (n=989), and ulcer 8.7% (n=975). Polyps were reported in 3.8% of cases (n=430). Pathology reports were available for 11.242 cases. Histopathological evaluation revealed chronic gastritis in 90.0% (n=10.119), active gastritis in 61.5% (n=6.913), intestinal metaplasia in 7.6% (n=854), atrophy in 6.8% (n=765), and dysplasia in 1.4% (n=157). *H. pylori* positivity was 59.4% (n=6.681). A polyp diagnosis was reported in 648 cases; the most common subtypes were adenomatous polyp/adenoma 56.2% (n=364) and hyperplastic polyp 29.0% (n=188); high-grade dysplasia was observed in 10 adenomas (2.7%). Malignancy was detected in 337 cases (3.0%), most frequently adenocarcinoma (n=162) and squamous cell carcinoma (n=85).

Conclusion: In this large single-center series, the spectrum of gastritis and the *H. pylori* burden were prominent. Premalignant changes and adenomatous polyps were observed at a notable frequency; these findings support the importance of a standardized biopsy approach and *H. pylori* eradication strategies.

Keywords: Gastritis, *Helicobacter pylori*, gastric polyp

[S-134]

Clinical benefit of upper gastrointestinal endoscopy in patients with a positive fecal occult blood test

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Objective: Fecal occult blood testing (FOBT) is widely used for colorectal cancer screening worldwide. In our country, FOBT is performed biennially in individuals aged 50-70 years within the national colorectal cancer screening program. Colonoscopy is recommended for patients with a positive FOBT; however, the necessity of adding upper gastrointestinal endoscopy remains controversial. We retrospectively analyzed endoscopy and colonoscopy procedures performed in our clinic between January 2024 and November 2025 to evaluate whether upper gastrointestinal investigation is required in FOBT-positive patients with no abnormal colorectal findings.

Material and Methods: Endoscopy and colonoscopy procedures performed in our clinic between January 2024 and November 2024 were reviewed. A total of 1.280 patients who underwent procedures during this period were included in the study. Patients were divided into two groups according to the indication for the procedure: those who underwent the procedure due to a positive fecal occult blood test (FOBT) (n=276) and those who underwent the procedure for other complaints or indications (n=1.004). The primary outcome measures of the study were the detection rates of colorectal cancer and upper gastrointestinal tract cancer. Pearson's chi-square test was used for intergroup comparisons of proportions; Fisher's exact test was applied when the expected cell count was <5. To assess the association between FOBT positivity and cancer detection, odds ratios (ORs) with 95% confidence intervals (CIs) were calculated. A p-value <0.05 was considered statistically significant.

Results: Colorectal cancer was detected in 23 of 276 patients (8.3%) in the FOBT-positive group and in 55 of 1.004 patients (5.5%) in the other-indications group. The detection rate was significantly higher in the FOBT-positive group (p=0.04), and FOBT positivity was associated with increased colorectal cancer detection (OR =1.57, 95% CI: 0.94–2.61) (Table 1). Gastric cancer was identified in 3 patients (1.1%) in the FOBT-positive group and in 20 patients (2.0%) in the other-indications group. No significant difference was observed between the groups (p=0.27), and FOBT positivity was not associated with gastric cancer detection (OR =0.54, 95% CI: 0.16-1.84) (Table 2).

Conclusion: Our findings confirm FOBT as an effective screening tool for colorectal cancer but demonstrate no significant association with upper gastrointestinal malignancies, indicating limited predictive value. Routine upper gastrointestinal endoscopy may not be necessary in all FOBT-positive patients; instead, evaluation should be individualized based on symptoms and risk factors.

Keywords: Fecal occult blood test, colorectal neoplasms, gastroscopy/upper gastrointestinal endoscopy, colonoscopy, screening

Table 1. Detection of colorectal cancer according to FOBT status

	Colorectal cancer (+)	Colorectal cancer (-)	Total	p-value	OR (95% CI)
FOBT positive (FOBT +)	23 (8.3%)	253 (91.7%)	276		
Other indications	55 (5.5%)	949 (94.5%)	1004	0.04*	1.57 (0.94-2.61)

*: Pearson chi-square test.

Table 2. Detection of upper gastrointestinal tract cancer according to FOBT status

	Upper GI cancer (+)	Upper GI cancer (-)	Total	p-value	OR (95% CI)
FOBT positive (FOBT +)	3 (1.1%)	273 (98.9%)	276		
Other indications	20 (2.0%)	984 (98.0%)	1004	0.27*	0.54 (0.16-1.84)

*: Fisher's exact test.

[S-135]

The effectiveness of needle-knife fistulotomy, papillotomy, and transpancreatic sphincterotomy in elderly patients with difficult papilla cannulation during ERCP

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Objective: Endoscopic retrograde cholangiopancreatography (ERCP) is the primary treatment approach for disorders affecting the pancreatobiliary tree, including gallstone removal and resolution of benign and malignant biliary tract obstruction. Of all basic endoscopic methods, ERCP carries the highest risk of complications and mortality. The European Society for Gastrointestinal Endoscopy (ESGE) defines difficult cannulation as cannulation time >5 minutes, contact with the papilla >5 times, or accidental cannulation into the pancreatic duct ≥1 time (the so-called "5-5-1" rule). Associated comorbidities and gallstone rates may increase with age. The aim of this study was to compare the effects of needle-knife fistulotomy (group 1, n=38), papillotomy (group 2, n=22), and transpancreatic sphincterotomy (group 3, n=22) in elderly patients with difficult cannulation during ERCP.

Material and Methods: ERCP procedures performed in our surgical endoscopy unit between January 2024 and February 2026 were retrospectively reviewed. Our study included patients over 65 years of age, procedures where selective papillary cannulation was not possible, and cases undergoing needle-knife fistulotomy, papillotomy, and transpancreatic sphincterotomy. Patients who underwent needle-knife fistulotomy, papillotomy, and transpancreatic sphincterotomy but could not be cannulated in the first session (29 patients) were included in the second session (96 hours to 1 week later). Since selective cannulation was performed in these patients in the second session, it was considered a continuation of the procedure.

Results: A total of 82 out of 602 ERCP procedures performed in the surgical endoscopy unit were included in the study. In the evaluation of the groups, there were no statistically significant differences between age, gender, body mass index, comorbidities, diagnosis, follow-up, preoperative AST, ALT, GGT, total bilirubin levels, and MRCP imaging ($p<0.05$). The non-cannulation rate was 11%. There were no statistically significant differences in non-cannulation, diverticulum, papilla types, rectal indomethacin, and minor papillae in the study ($p>0.05$). There was a statistically significant difference between group 3 and the other groups in terms of double-guide wire and pancreatic stent placement during ERCP ($p<0.001$) (Table 1). There was no statistically significant difference in the overall number of complications ($p>0.05$). In subanalysis, the rate of pancreatitis was higher in group 3, and a significant difference was observed ($p=0.046$). Perforation was present in one patient; due to Stapher type 4 (Table 2).

Conclusion: In elderly patients where papilla cannulation is difficult during ERCP, needle-knife fistulotomy, papillotomy, and transpancreatic sphincterotomy techniques can increase the success rate of cannulation with tolerable complication rates.

Keywords: Endoscopic retrograde cholangiopancreatography (ERCP), needle-knife fistulotomy, papillotomy and transpancreatic sphincterotomy, difficult cannulation

Table 1. Clinical and laboratory characteristics of the patients

	Total	Needle-knife sphincterotomy (Group 1, n=38)	Papillotomy (Group 2, n=22)	Transpancreatic sphincterotomy (Group 3, n=22)	p-value
Age	77.1 (7.2)	77.3 (7.1)	76.7 (8.7)	77 (5.9)	0.952
Sex (female/male)	51/31	19/19	18/4	14/8	0.052
BMI	26.2 (4.4)	25.6 (4.5)	27.6 (3.5)	25.7 (5)	0.244
Comorbidity	44 (53%)	23 (28%)	7 (8.5%)	14 (17.1)	0.68
Diagnosis					0.631
Cholangitis	39 (47.5%)	21 (25.6%)	8 (9.8%)	10 (12.2%)	
-Stone	23 (%28)				
-Malignancy	16 (19.5%)				
Choledocholithiasis	24 (29.3%)	8 (9.8%)	8 (9.8%)	8 (9.8%)	
Pancreatic tumor	6 (7.3%)	4 (4.9%)		2 (2.4%)	
Tracking time	5.6 (0.1-27)	6.6 (0.1-27)	5.9 (1.7-20.3)	5.3 (1-18.9)	0.947
AST	42.5 (106)	56.5 (11-557)	28 (14-315)	44.5 (15-325)	0.130
ALT	62 (152)	77.5 (5-1040)	26 (10-247)	97 (11-315)	0.142
ALP	173 (350)	292 (45-1600)	86 (14-446)	213 (46-1609)	0.01
GGT	337(341)	398 (387)	213 (247)	349 (322)	0.137
Total bilirubin	1.5 (0.3-44.5)	2.9 (0.3-44.5)	0.71 (0.31-20.5)	1.97 (0.37-3.02)	0.075
Direct bilirubin	0.69 (0.05-24.5	1.65 (0.13-24.5)	0.26 (0.5-12.2)	0.68 (0.5-15.8)	0.007

Table 2. Complications

	Total	Needle-knife fistulotomy (Group 1)	Papillotomy (Group 2)	Transpancreatic sphincterotomy (Group 3)	p-value
Preoperative MRCP	80 (98.8%)	38 (46.9%)	22 (27.6%)	20 (24.7%)	0.259
Non-cannulation rate	9 (11%)	3 (3.7%)	4 (4.9%)	2 (2.4%)	0.545
Diverticul	19 (23.1%)	5 (6.1%)	8 (%9.8)	6 (%7.3)	0.118
Papil type	3 (1-4)	3 (1-4)	4 (1-4)	3 (1-4)	0.196
Minor papilla	1 (1.2%)			1 (1.2%)	0.196
Double guide wire	18 (21.9%)	3 (3.7%)	1 (1.2%)	14 (17.1%)	<0.001
Pancreatic stent	9 (11%)			9 (11%)	<0.001
Rectal indometazin	65 (79.2%)	26 (31.7%)	19 (23.1%)	20 (24.3%)	0.111
Complications					0.233
Pancreatitis	22 (26.6%)	9 (11%)	3 (3.7)*	10 (12.2%)*	(0.046)
Perforation	1 (1.2%)	1 (1.2%)			
Mior bleeding	4 (4.9%)	2 (2.4%)	1 (1.2%)	1 (1.2%)	
Cardiac	2 (2.4%)	1 (1.2%)	1 (1.2%)		
Migration	1 (1.2%)	1 (1.2%)			

[S-136]

Association between pancreatic attenuation index and disease severity in post-ercp pancreatitis: A single-center retrospective cohort study

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Objective: Pancreatitis is characterized by inflammation of the pancreas and may follow a mild and self-limited course or be associated with severe systemic complications and mortality. Although the most common causes are biliary stones and alcohol use, endoscopic retrograde cholangiopancreatography (ERCP), which is increasingly used for diagnosis and treatment, has become an important cause of pancreatitis. Post-ERCP pancreatitis occurs in 3-15% of cases and may lead to significant morbidity. In recent years, the parenchymal structure and fat content of the pancreas have been shown to be associated with the development of acute pancreatitis. Decreased pancreatic attenuation on computed tomography (CT) has been linked to pancreatic steatosis and is thought to increase susceptibility to inflammation. In this study, we aimed to evaluate the relationship between the pancreatic attenuation index measured on pre-ERCP CT and the development and severity of post-ERCP pancreatitis.

Material and Methods: In this single-center retrospective cohort study, patients who developed post-ERCP pancreatitis between January 2021 and December 2025 were included. Demographic, clinical, and radiological data were retrospectively obtained from hospital records. The diagnosis of post-ERCP pancreatitis and the severity of pancreatitis were determined according to the Cotton criteria. The pancreatic attenuation index was calculated by dividing the mean Hounsfield unit (HU) values measured from the pancreas and spleen on non-contrast CT images.

Results: A total of 24 patients who developed post-ERCP pancreatitis were evaluated. According to the Cotton criteria, 70.8% of patients were classified as having mild pancreatitis and 29.2% as having moderate-severe pancreatitis. Among procedure-related factors, the only variable significantly associated with pancreatitis severity was difficult cannulation (p=0.03). No significant association was found between pancreatitis severity and precut sphincterotomy, pancreatic duct cannulation, or pancreatic stent placement (p>0.05). In radiological evaluation, the pancreatic attenuation index was compared between mild and moderate-severe pancreatitis groups. The mean PAI was 0.84±0.19 in the mild group and 1.02±0.13 in the moderate-severe group, with no statistically significant difference between the groups (p=0.14).

Conclusion: In this study, the pancreatic attenuation index measured on CT was not significantly associated with disease severity in patients who developed post-ERCP pancreatitis, whereas difficult cannulation was the only factor linked to severity. These findings suggest that procedure-related factors may be more influential than radiological markers of pancreatic fat content in predicting severity. Larger prospective studies are needed to clarify the impact of pancreatic parenchymal characteristics on clinical outcomes.

Keywords: Pancreatic attenuation index, pancreatitis severity, post-ERCP pancreatitis

Table 1. Demographic, clinical, and laboratory characteristics of patients who developed post-ERCP pancreatitis

Variable	Value
Age (years), mean ± SD	47.5±15.2
Body mass index (kg/m²), mean ± SD	26.7±4.9
Sex, n (%)	
Female	19 (79.2%)
Male	5 (20.8%)
Smoking, n (%)	
Yes	4 (16.7%)
No	20 (83.3%)
Alcohol use, n (%)	
Yes	0 (0.0%)
No	24 (100%)
Diabetes mellitus, n (%)	
Yes	1 (4.2%)
No	23 (95.8%)
Hyperlipidemia, n (%)	
Yes	0 (0.0%)
No	24 (100%)
Indication for ERCP, n (%)	
Stone	18 (75.0%)
Other (malignancy, complication management, hydatid cyst)	6 (25.0%)
History of pancreatitis, n (%)	
Yes	2 (8.3%)
No	22 (91.7%)
Previous ERCP history, n (%)	
Yes	3 (14.3%)
No	21 (85.7%)
Pre-ERCP amylase (U/L), median (IQR)	58 (39.0)
Pre-ERCP lipase (U/L), median (IQR)	37 (17.3)
Pre-ERCP CRP (mg/L), median (IQR)	3.5 (15.0)
Pre-ERCP total bilirubin (mg/dL), median (IQR)	0.7 (2.5)
Pre-ERCP direct bilirubin (mg/dL), median (IQR)	0.45 (2.42)

Table 2. Procedural characteristics of ERCP, radiological parameters, and pancreatitis severity

Variable	Value
Difficult cannulation, n (%)	
Yes	6 (25.0%)
No	18 (75.0%)
Precut sphincterotomy, n (%)	
Yes	15 (62.5%)
No	9 (37.5%)
Pancreatic duct cannulation, n (%)	
Yes	2 (8.3%)
No	22 (91.7%)
Stent placement, n (%)	
Yes	7 (29.2%)
No	17 (70.8%)
Balloon sweeping, n (%)	
Yes	19 (79.2%)
No	5 (20.8%)
Severity of pancreatitis, n (%)	
Mild	17 (70.8%)
Moderate/severe	7 (29.2%)
Pancreatic HU, median (IQR)	44 (6.5)
Splenic HU, median (IQR)	47.5 (3.2)
PAI, median (IQR)	0.92 (0.12)
Post-ERCP hemoglobin (g/dL), median (IQR)	12.1 (1.9)
Post-ERCP amylase (U/L), median (IQR)	1346 (2420)
Post-ERCP lipase (U/L), median (IQR)	2097 (3238)
Post-ERCP CRP (mg/L), median (IQR)	36 (70)

[S-137]

Polypectomy rate and characteristics of polyps in upper gastrointestinal system endoscopy: A retrospective study

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Objective: Upper gastrointestinal system (UGIS) polyps are detected infrequently during esophagogastroduodenoscopy (EGD). Data on the prevalence, characteristics, and dysplasia risk of these lesions remain limited compared with colorectal polyps. This study aimed to determine the polypectomy rate of UGIS polyps in our center and to evaluate their clinical, endoscopic, and histopathological features.

Material and Methods: The medical records of 2.095 patients who underwent EGD between January 2022 and January 2024 were retrospectively reviewed. A total of 110 patients (5.3%) with endoscopically detected polyps who underwent polypectomy were included. Demographic, clinical, endoscopic and histopathologic features were analyzed.

Results: The median age was 65 years (range: 33-86), and 64.5% were female. Hyperplastic polyps were the most common type (70.9%). Dysplasia was identified in 5 patients (4.5%), all of whom had adenomatous or hyperplastic polyps. Dysplastic polyps were significantly larger than non-dysplastic polyps (median 10 mm vs. 5 mm, $p<0.001$) and were more frequently associated with intestinal metaplasia ($p<0.001$) and *H. pylori* infection ($p=0.014$). ROC analysis revealed that polyp size strongly predicted the presence of dysplasia (AUC 0.947; 95% CI: 0.891-1.000; $p<0.001$), with an optimal cut-off value of 7.5 mm (sensitivity 100%, specificity 82.9%).

Conclusion: In our cohort, UGIS polyps were detected in approximately 5% of EGDs, and most were benign. Polyp size, *H. pylori* infection, and intestinal metaplasia were significantly associated with dysplasia. Given the malignant potential of adenomatous polyps and the size-dependent risk of dysplasia, complete endoscopic removal of incidentally detected UGIS polyps is advisable.

Keywords: Adenomatous, dysplasia, esophagogastroduodenoscopy

[S-138]

Performance of ChatGPT-based artificial intelligence in the diagnosis of gastritis on endoscopic antral images: A comparison with histopathology

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Objective: This study aimed to evaluate the diagnostic performance of ChatGPT plus-based artificial intelligence (AI) in detecting gastritis and identifying other lesions on gastric antral endoscopic images, and to compare its performance with endoscopist assessment and histopathological findings.

Material and Methods: A total of 49 consecutive patients who underwent antral biopsy during upper gastrointestinal endoscopy for dyspeptic symptoms were included. Patients with prior gastric surgery, previous biopsies for non-dyspeptic indications, or established diagnoses were excluded. During endoscopy, the antral region was evaluated by an experienced endoscopist for the presence of gastritis and other lesions. Subsequently, two to four antral images per patient were uploaded to a language-vision AI model (ChatGPT plus) for image-based evaluation. AI assessments focused on the presence or absence of gastritis and additional endoscopic findings. Histopathological examination of antral biopsy specimens was accepted as the reference standard. Diagnostic performance of endoscopist and AI evaluations was compared using sensitivity, specificity, and accuracy rates.

Results: The mean age of the patients was 53.9±15.5 years (range: 21-85), with 30 females (61.2%) and 19 males (38.8%). Histopathology revealed a high prevalence of gastritis. Endoscopist assessment demonstrated high sensitivity (92.9%) but very low specificity (4.8%), with an overall accuracy of 55.1%. In contrast, AI assessment showed lower sensitivity (32.1%) but higher specificity (61.9%), with an accuracy of 44.9%. While endoscopist evaluation was effective in detecting gastritis, it tended toward overdiagnosis. AI demonstrated limited sensitivity but relatively better discrimination of non-gastritis cases. Partial agreement between AI and histopathology was observed for non-gastritis additional findings.The AI system identified pigmented lesions in 14 of 49 antrum-pylorus images (28.6%); however, none were confirmed histopathologically, and all were classified as false positives. These misclassifications were localized to the antrum-pylorus junction and were attributed to the physiologically dark appearance of the pyloric lumen, highlighting an important limitation of color-based AI interpretation.

Conclusion: Standard ChatGPT plus is inferior to endoscopist evaluation for diagnosing antral gastritis. Given its widespread public use, caution is warranted due to the potential for misleading interpretations and false-positive findings.

Keywords: Gastritis, artificial intelligence, endoscopy, antrum, histopathology



Figure 1. The dark appearance of the gastric antrum-pylorus.

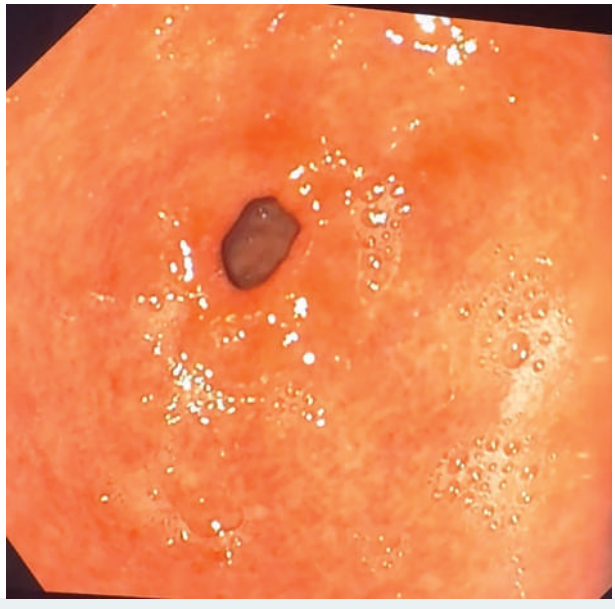


Figure 1. The dark appearance of the gastric antrum-pylorus.

[S-139]

Endoscopic management of colonic polyps and frequency of malignancy

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Objective: The detection and endoscopic removal of colorectal polyps is one of the fundamental steps in reducing the development of colorectal cancer. The selection of different resection techniques according to polyp size and morphology is of critical importance in terms of complete resection success, bleeding risk, and the quality of pathological assessment. The aim of this study is to describe the distribution of polyp numbers, the polypectomy techniques applied, and the histopathological classification of polyps in patients who underwent colonoscopic polypectomy in our endoscopy unit in 2025.

Material and Methods: Prospectively recorded data of 127 patients who underwent colonoscopic polypectomy in our unit between January 1 and December 31, 2025 were retrospectively analyzed. The mean age was 53.3 years (range: 26-89). Polypectomy technique was selected according to polyp size: Cold-snare for polyps <1 cm, hot-snare for polyps ≥1 cm, and hot-snare after submucosal adrenaline injection for polyps >3 cm. Patients with familial adenomatous polyposis (FAP) and attenuated FAP who underwent diagnostic polypectomy, as well as biopsies from unresectable broad-based polyps, were excluded to ensure a homogeneous study population.

Results: A total of 210 polyps were treated in 127 patients. Most patients had solitary polyps, while a minority had multiple lesions. The majority of polyps were removed using hot-snare techniques, with cold-snare used for smaller lesions and adrenaline-assisted hot-snare for larger polyps. Tubular adenoma was the most common histopathological diagnosis. Adenocarcinoma was detected in 11 polyps, and margin positivity was observed in three cases requiring oncologic surgical management. Specimens could not be retrieved in 15 polyps, and these patients were managed with close follow-up.

Conclusion: In conclusion, the vast majority of polypectomies performed in our clinic over one year consisted of adenomas, which are premalignant lesions. The main limitations of this study are the lack of reporting on complications, polyp localization, size distribution, and follow-up outcomes, which precluded analysis of the impact of technical selection on clinical outcomes. The use of cold- or hot-snare techniques according to polyp size, as well as adrenaline injection for large polyps, are key factors influencing the success and safety of the procedure. In particular, the security of surgical margins in cases with detected adenocarcinoma is of vital importance for subsequent treatment planning.

Keywords: Colorectal polyps, polypectomy

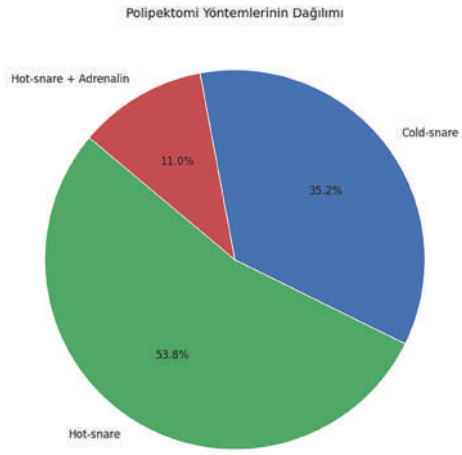


Figure 1. Distribution of polypectomy techniques.

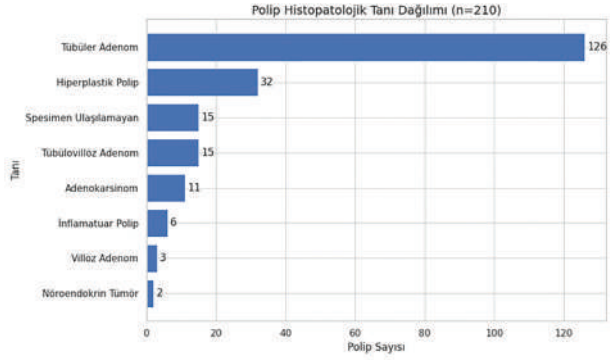


Figure 2. Histopathological diagnosis of polyps.

[S-140]

Colonoscopy and pathology findings in symptomatic patients: Colorectal cancer frequency and localization in patients under 45 – a five-year single-center series

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Objective: This study aims to describe colonoscopy and pathology findings in symptomatic patients, to evaluate the frequency and age-related trends of colorectal cancer (CRC) in patients under 45 years, and to present CRC localization by integrating pathology and endoscopy report data.

Material and Methods: Colonoscopy procedures performed between 02.01.2020 and 30.10.2025 were retrospectively analyzed (n=9795). Demographic data, findings from colonoscopy reports, and bowel preparation quality were recorded; from pathology reports, adenoma subtypes (tubular, tubulovillous, villous, serrated), hyperplastic polyps, and CRC diagnoses were extracted. CRC localization was determined from pathology reports and supplemented with colonoscopy reports for missing segments. CRC and adenoma rates were compared between patients aged <45 and ≥45 years.

Results: The median age was 56 years (IQR 47-65), and 52.5% of the cases were female. Pathology reports were available for 6,784 cases (69.2%). According to pathology, CRC was detected in 217 cases (2.2%) and adenomas in 1605 cases (16.4%). Among adenomas, tubular adenomas were 1235 (12.6%), tubulovillous adenomas 225 (2.3%), pure villous adenomas 59 (0.6%), serrated lesions 34 (0.35%), and hyperplastic polyps 733 (7.5%). In the <45 years age group, CRC was found in 20/2,032 cases (0.98%) versus 197/7763 cases (2.54%) in patients ≥45 years ($p=3.3\times10^{-8}$). CRC rates increased with age, reaching 4.25% in patients ≥70 years. When CRC localization was assessed using both pathology and colonoscopy reports, the most frequent sites were the rectum (n=95) and sigmoid colon (n=51); the proportion of cases with unspecified segments decreased from 17.5% to 10.6%.

Conclusion: In the symptomatic population, the CRC rate under 45 years of age is low but not zero (0.98%) and shows a significant increase with age. The predominance of distal CRC and the marked rise after age 50 suggest that age alone may not be sufficient as a threshold in symptomatic patients. Standardized reporting of lesion localization and bowel preparation quality is recommended.

Keywords: Colonoscopy, early-onset colorectal cancer, colonic polyp

[S-141]

Inguinal hernia repair in the geriatric population: The impact of preoperative risk profile and operative timing on clinical outcomes

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Objective: Inguinal hernia management in the geriatric population is challenging due to comorbidities and abdominal wall degeneration. While emergency surgery carries high risks, elective repair is considered safer. We aimed to evaluate the impact of operative timing on clinical outcomes in patients aged over 65.

Material and Methods: A total of 197 patients aged 65 and over who underwent inguinal hernia repair in our clinic between January 2024 and December 2025 were analyzed retrospectively. Demographic data, ASA scores, and urgency of operation (elective/emergency) were recorded. Emergency cases requiring organ resection were excluded. Postoperative local morbidities (surgical site infection, seroma/hematoma) and systemic complications (pulmonary/cardiac issues) were analyzed. Fisher's Exact and Mann-Whitney U tests were used for statistical analysis ($p<0.05$ considered significant)

Results: Of the 197 patients, 98% were male, with a mean age of 72.8 (±5.7) years. 25.9% (n=51) were in the ASA 3-4 group. Operations were performed under elective conditions in 93.4% (n=184) and emergency conditions in 6.6% (n=13). The overall morbidity rate was 2.5% (n=5). In the emergency group, 50% of complications were systemic (cardiopulmonary issues) and 50% were local, whereas the only complication in the elective group was surgical site infection (local) ($p<0.001$). All morbidities occurred in ASA 3-4 patients ($p=0.001$). The complication rate was 30.8% in emergency surgery versus 0.5% in elective cases ($p<0.001$). Mortality occurred in 3 cases (1.5%), all of whom were high-risk (ASA III-IV) patients operated on under emergency conditions. The mortality rate was 23.1% in the emergency group and 0% in the elective group ($p<0.001$). The operation time was significantly longer in emergency cases (101.5 vs. 72.3 min, $p=0.015$).

Conclusion: Although inguinal hernia repair in geriatric patients is often delayed due to comorbidities and increased surgical risks, our study confirms that elective surgery can be performed safely with low morbidity and mortality, consistent with the literature. Even in high-risk (ASA III-IV) patients, elective interventions are associated with significantly lower complication and mortality rates compared to emergency surgery. The marked increase in systemic complications and mortality in emergency surgeries highlights the decisive effect of operative timing on clinical outcomes. Therefore, ensuring appropriate patient optimization and not delaying elective surgery in the geriatric population is critical to preventing potential emergency interventions and associated risks.

Keywords: Geriatric population, inguinal hernia, emergency surgery, elective repair, ASA score

Table 1. Comparison of clinical outcomes according to operative timing

Parameter	Emergency (n=13)	Elective (n=184)	p-value
Complication rate	30.8 (n=4)	0.5 (n=1)	<0.001
Mortality rate	23.1 (n=3)	0.5 (n=1)	<0.001
Operation time (min)	101.5 (+-42)	72.3 (+-29)	0.015

[S-142]

Evaluation of the morphological effects of preoperative botulinum toxin A injection in complex ventral hernias

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Objective: Preoperative botulinum toxin A (BTA) injection facilitates midline closure in complex ventral hernias by inducing temporary lateral abdominal wall paralysis. This study aimed to evaluate the morphological effects of BTA injection on the abdominal wall using radiological parameters.

Material and Methods: This retrospective study included six patients who underwent BTA injection in November-December 2025. All patients received 300 U of BTA (Botox®, Allergan), diluted in 150 cc saline and administered under ultrasound guidance. Injections were performed bilaterally into the lateral abdominal muscles at three points. Pre- and post-injection computed tomography scans were analyzed. Defect width and area, lateral muscle thickness and length, Carbonell index, loss of domain (LOD-Tanaka index), and component separation index (CSI) were compared.

Results: The mean age was 64.6±14.9, and the mean body mass index was 32.9±4.7. The mean interval between BTA injection and follow-up imaging was 29.1±8.1 days. Lateral muscle thickness decreased significantly on both sides (37.4% on the right and 31.9% on the left, p=0.031). Lateral muscle length increased by 17.8% on the right side (p=0.031) and by 11.1% on the left side (p=0.063). Mean defect width showed a significant reduction, whereas changes in defect area and LOD ratios were not statistically significant. No significant differences were observed in Carbonell index or CSI values.

Conclusion: Preoperative BTA injection induces significant morphological changes in the abdominal wall, particularly decreased lateral muscle thickness and increased muscle length. These parameters may serve as useful radiological markers for assessing response to BTA in complex ventral hernia patients.

Keywords: Botulinum toxin A, complex ventral hernia, perhabilitation

Pre- and post BTA results

Parameter	Pre-BTA (Mean ± SD)	Post-BTA (Mean ± SD)	Mean Change	Percentage Change (%)	p
Defect Width (mm)	145.8 ± 55.5	124.8 ± 51.5	−21.0 mm	−15.3%	0.031
Defect area (cm²)	193.2 ± 128.1	179.8 ± 142.4	−13.4 cm²	−12.4%	0.156
LOD (tanaka %)	34.2 ± 19.8%	24.7 ± 13.1%	−9.5 points	−21.9%	0.080
Right muscle thickness (mm)	25.8 ± 10.0	15.3 ± 3.2	−10.5 mm	−37.4%	0.031
Left muscle thickness (mm)	23.0 ± 8.8	14.5 ± 2.4	−8.5 mm	−31.9%	0.031
Right muscle length (mm)	163.0 ± 34.6	190.3 ± 36.3	+27.3 mm	+17.8%	0.031
Left muscle length (mm)	174.7 ± 26.2	192.5 ± 21.8	+17.8 mm	+11.1%	0.062
Carbonell index	0.90 ± 0.64	0.90 ± 0.60	0.00	+9.4%	1.000
CSI	0.23 ± 0.12	0.23 ± 0.11	0.00	+2.6%	1.000

[S-143]

Long-term outcomes of laparoscopic inguinal hernia repair: A retrospective analysis of 2137 patients

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Objective: Laparoscopic inguinal hernia repair is widely performed today due to its advantages over open surgery, such as less postoperative pain, shorter recovery time, and earlier mobilization. In particular, the totally extraperitoneal (TEP) and transabdominal preperitoneal (TAPP) techniques provide successful outcomes with appropriate patient selection. However, studies evaluating long-term outcomes in large patient series are limited. The aim of this study is to evaluate demographic data, applied surgical techniques, and long-term recurrence rates in a large series of patients who underwent laparoscopic inguinal hernia repair.

Material and Methods: In this retrospective, single-center study, a total of 2137 patients who underwent surgery for laparoscopic inguinal hernia were evaluated. Of these patients, 1753 underwent surgery for unilateral inguinal hernia, while 384 underwent surgery for bilateral inguinal hernia.

Results: Among the unilateral cases, 150 patients were female and 1603 were male, while in the bilateral group, 20 patients were female and 364 were male. The mean age was 51 years for male patients and 46 years for female patients. Of the unilateral inguinal hernia cases, 921 were right-sided and 832 were left-sided. Among the bilateral hernia cases, 55 patients underwent repair using the transabdominal preperitoneal (TAPP) technique, while the remaining patients were treated with the totally extraperitoneal (TEP) approach; in unilateral cases, 78 patients underwent TAPP repair and the others were treated with the TEP technique. Follow-up data were obtained by contacting patients using hospital registry records. Due to various reasons, 375 patients could not be reached and were therefore excluded from the study. Among the patients included in follow-up, the duration of follow-up ranged from 3 to 85 months, with a mean follow-up period of 54±3.4 months. Recurrence was detected in 24 of the 1378 patients (1.7%) who underwent unilateral laparoscopic inguinal hernia repair. In the bilateral laparoscopic inguinal hernia repair group, recurrence occurred in 9 of 384 patients (2.3%). In both groups, long-term recurrence rates after laparoscopic repair were observed to be low.

Conclusion: In this study based on a large patient series, laparoscopic inguinal hernia repair was found to be successful with low recurrence rates during long-term follow-up. It was concluded that, with appropriate patient selection and proper surgical technique, the laparoscopic approach can be safely preferred as a standard method in inguinal hernia surgery.

Keywords: Inguinal hernia, laparoscopy, hernia repair

[S-144]

Clinical impact of different mesh types on outcomes in laparoscopic TAPP inguinal hernia repair

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Objective: Laparoscopic transabdominal preperitoneal (TAPP) repair is widely used in inguinal hernia surgery due to fewer wound complications and faster recovery. Surgical success depends not only on technique but also on mesh properties. Mesh weight, pore size, elasticity, and fixation influence inflammatory response, nerve irritation, fibrosis, and postoperative pain. Self-gripping meshes reduce fixation trauma, 3D meshes improve anatomical adaptation, and heavyweight polypropylene meshes provide strong support. However, comparative real-world data are limited. This study evaluated the clinical impact of three mesh types on postoperative outcomes.

Material and Methods: This retrospective single-center cohort study was conducted at Mersin City Training and Research Hospital, Department of General Surgery. A total of 156 patients who underwent elective laparoscopic TAPP inguinal hernia repair were included. Patients were divided into three groups according to mesh type: Self-gripping mesh (ProGrip type), 3D anatomical mesh, and standard heavyweight polypropylene mesh. Demographic data, operative time, hospital stay, postoperative pain scores (VAS at 24 hours), analgesic requirement, complications (seroma, hematoma), chronic pain (>3 months), and recurrence rates were recorded. Continuous variables were expressed as mean ± standard deviation and compared using ANOVA or Kruskal-Wallis tests. Categorical variables were analyzed with the chi-square test. A p-value <0.05 was considered statistically significant.

Results: A total of 156 patients who underwent laparoscopic TAPP repair were included in the study (ProGrip n=52, 3D mesh n=51, standard polypropylene mesh n=53). The groups were comparable in terms of age, sex, BMI, ASA score, and bilateral hernia rates (p>0.05).Operative time was significantly shorter in the ProGrip group (48±9 minutes) compared to the other groups (55±11 and 58±12 minutes, respectively; p=0.002). Length of hospital stay did not differ among groups.In the early postoperative period, 24-hour VAS pain scores were lower in the ProGrip group (3.1±1.0 vs. 3.8±1.1 and 4.2±1.3; p=0.001). Analgesic requirement was also lower in this group (27%; p=0.03). Rates of seroma and hematoma were similar.Chronic pain occurred less frequently in the ProGrip group (3.8% vs. 5.9% and 11.3%; p=0.04). No significant difference was observed in recurrence rates.

Conclusion: Use of self-gripping mesh in laparoscopic TAPP inguinal hernia repair was associated with shorter operative time, lower early postoperative pain scores, reduced analgesic requirement, and a lower rate of chronic pain. Complication and recurrence rates were similar among groups. These findings indicate that mesh characteristics influence postoperative comfort and suggest that patient-tailored mesh selection may enhance recovery without compromising surgical safety or long-term durability.

Keywords: Laparoscopic inguinal hernia repair, mesh types, postoperative pain

Table 1. Demographic and operative characteristics

Variable	ProGrip mesh (n=52)	3D Mesh (n=51)	Standard PP mesh (n=53)	p
Age (years)	54±13	56±12	55±14	0.78
Male (%)	90%	88%	92%	0.81
BMI (kg/m²)	27.1±3.2	26.8±3.5	27.3±3.1	0.69
ASA ≥ III (%)	21%	24%	23%	0.93
Bilateral hernia (%)	19%	22%	21%	0.88
Operative time (min)	48±9	55±11	58±12	0.002
Length of hospital stay (days)	1.2±0.5	1.3±0.6	1.4±0.6	0.17

Data are presented as mean ± SD or percentages (%). Continuous variables were compared using ANOVA or the Kruskal-Wallis test, and categorical variables were analyzed with the chi-square test. A p-value <0.05 was considered statistically significant.

Table 2. Postoperative clinical outcomes

Outcome	ProGrip mesh	3D mesh	Standard PP mesh	p
VAS pain (24 h)	3.1±1.0	3.8±1.1	4.2±1.3	0.001
Analgesic requirement (%)	27%	35%	43%	0.03
Seroma (%)	4%	6%	8%	0.61
Hematoma (%)	2%	4%	4%	0.74
Chronic pain (>3 months)	3.8%	5.9%	11.3%	0.04
Recurrence	0	1 (2.0%)	1 (1.9%)	0.82

[S-145]

Laparoscopic management of recurrent and multirecurrent inguinal hernias: Is the transabdominal preperitoneal approach a safe harbor?

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Objective: The laparoscopic transabdominal preperitoneal approach is widely accepted as an effective technique, particularly in bilateral and recurrent inguinal hernias. This study aimed to evaluate the demographic characteristics, hernia types, mesh strategies, and early clinical outcomes of patients who underwent TAPP repair between November 2022 and September 2025.

Material and Methods: A retrospective analysis was performed on 172 patients who underwent TAPP repair during the study period. Postoperative follow-up evaluations were conducted on day 5, day 10, and at 1, 3, and 6 months. No drains were used. After discharge, patients were prescribed non-steroidal anti-inflammatory drugs (NSAIDs), a proton pump inhibitor, and antibiotic prophylaxis targeting skin flora.

Results: Of the 172 patients, 44 (25.6%) were female and 128 (74.4%) were male. Eighty-three patients (48.3%) underwent surgery for recurrent hernia, and bilateral repair was performed in 54 patients (31.4%). Femoral hernia was detected in 4 patients (2.3%) and obturator hernia in 1 patient (0.6%). In two patients initially diagnosed preoperatively with inguinal hernia, intraoperative exploration revealed an incisional hernia at the inferior edge of a previous incision, which was successfully repaired using the TAPP technique in the same session. The mean length of hospital stay was 1.1 days (range: 1-4 days). In 93 patients, 3D Prolene mesh was used, and fixation was not required in 62 of these cases. In 76 patients, a prepared 15×10 cm Prolene mesh was applied, with fixation performed in 67 cases. Three patients with a history of multiple previous operations (3-7 prior surgeries, mean 5) required dual mesh repair due to the inability to perform adequate peritoneal dissection. Seroma developed in 19 patients (11.0%), predominantly in scrotal hernias. Postoperative ecchymosis was observed in 2 patients (1.2%) and managed conservatively. Persistent groin pain lasting up to 6 months occurred in 2 patients (1.2%), with no radiologic evidence of recurrence. Additionally, 32 patients (18.6%) reported intermittent stabbing-type groin pain, particularly in cold weather. During follow-up, no recurrence, surgical site infection, or mesh reaction was observed.

Conclusion: Despite the high proportion of recurrent and bilateral cases, TAPP repair demonstrated short hospitalization, acceptable complication rates, and absence of early recurrence, supporting its role as a safe and effective approach in complex inguinal hernia management.

Keywords: Inguinal hernia, recurrent hernia, TAPP repair

Summary Table. Demographics, operative characteristics, and early outcomes of 172 patients undergoing TAPP repair (2022-2025)

Title	Variable	Value
Demographics	Total patients	172
	Female	44 (25.6%)
	Male	128 (74.4%)
Hernia characteristics	Bilateral hernia	54 (31.4%)
	Recurrent hernia	83 (48.3%)
	Femoral hernia	4 (2.3%)
	Obturator hernia	1 (0.6%)
	Intraoperative incisional hernia (preoperatively diagnosed as inguinal)	2 (1.2%)
Operative details	Mesh: 3D Prolene	93 (54.1%)
	└ No fixation (3D)	62
	Mesh: 15×10 cm Prolene (prepared and used)	76 (44.2%)
	└ Fixation applied (15×10)	67
	Dual mesh	3 (1.7%)
	Drain	None
Clinical outcomes	Length of stay	Mean 1.1 days (1-4)
	Seroma	19 (11.0%)
	Ecchymosis (postoperative bleeding)	2 (1.2%)
	Groin pain lasting up to 6 months	2 (1.2%)
	Intermittent "stabbing-type" pain in cold weather	32 (18.6%)
	Recurrence	0
	Surgical site infection	0
	Mesh reaction	0

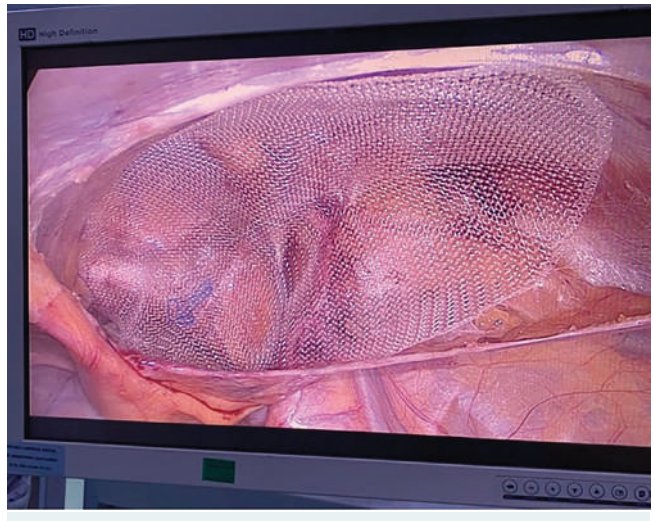


Figure 1. Right inguinal fixation-free repair using 3D Prolene mesh (TAPP approach).

[S-146]

Preoperative biomarkers predicting bowel resection in incarcerated groin hernias

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Objective: Incarcerated groin hernias are common surgical emergencies associated with increased morbidity and mortality, particularly in elderly patients. Strangulation may impair bowel perfusion, leading to ischemia and necrosis and increasing the need for bowel resection and postoperative complications. Therefore, identifying patients at risk for bowel resection in the preoperative period is clinically important. In addition to clinical examination and imaging, biochemical markers related to inflammation and ischemia have gained attention as potential predictive tools. The aim of this study was to compare preoperative C-reactive protein (CRP), lactate, white blood cell count (WBC), and the red cell distribution width-to-albumin (RDW/albumin) ratio between patients who required bowel resection and those who did not, and to evaluate their predictive value.

Material and Methods: This retrospective, single-center study included 138 patients who underwent emergency surgery for incarcerated groin hernias. Patients were divided into two groups according to intraoperative findings: Those who required bowel resection and those who did not. Preoperative CRP, lactate, WBC, and RDW/albumin ratio were recorded. Continuous variables were expressed as median and interquartile range (IQR). Comparisons between groups were performed using the Mann-Whitney U test, and $p<0.05$ was considered statistically significant.

Results: The median age was 68.5 years (IQR: 58-77), and 71% of patients were male. Inguinal hernias accounted for 79% of cases and femoral hernias for 21%. Bowel resection was required in 24 patients (17.4%), while 114 patients (82.6%) did not require resection. Preoperative CRP, lactate, and RDW/albumin ratio were significantly higher in the resection group compared with the non-resection group (all $p<0.001$). In contrast, WBC levels did not differ significantly between groups ($p=0.665$).Mesh repair was performed in 125 patients (90.6%). Warm compress application was used in 12 patients (8.7%), none of whom required bowel resection. No significant differences in preoperative CRP, lactate, WBC, or RDW/albumin ratio were observed between patients with and without warm compress application ($p>0.05$).

Conclusion: Preoperative detection of bowel ischemia in incarcerated groin hernias remains challenging, and leukocytosis may not always be present; therefore, WBC alone has limited predictive value. In contrast, CRP, lactate, and RDW/albumin ratio appear to be more closely associated with intestinal ischemia and systemic inflammation. These biomarkers, when interpreted alongside clinical and radiological findings, may assist in predicting the need for bowel resection. Further prospective studies with larger cohorts are required to confirm these findings.

Keywords: Incarcerated, inguinal hernias, ischemia

[S-147]

A single-center analysis comparing the transabdominal preperitoneal approach and the Lichtenstein technique: Operative time and postoperative pain

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Objective: The impact of surgical techniques used in inguinal hernia repair on postoperative patient comfort and operative time remains a subject of ongoing debate. The aim of this study was to compare operative time and postoperative pain scores in patients who underwent inguinal hernia repair using the transabdominal preperitoneal (TAPP) and Lichtenstein techniques at the University of Health Sciences Türkiye, İzmir Tepecik Education and Research Hospital between 2020 and 2025.

and Material and Methods: A total of 204 patients who underwent surgery for inguinal hernia between 2020 and 2025 were included in the study. Patients were divided into two groups according to the surgical technique performed: TAPP (n=104) and Lichtenstein (n=100). Demographic characteristics, operative time, history of prior intra-abdominal surgery, and postoperative VAS pain scores on postoperative days 1 and 7 were retrospectively evaluated. Statistical analyses were performed using Student's t-test and chi-square tests, and a p-value <0.05 was considered statistically significant.

Results: The demographic and operative characteristics of both groups are presented in the table below. The mean age was significantly higher in the Lichtenstein group compared with the TAPP group (61.9±10.5 vs. 50.7±13.9 years, $p<0.001$). Female patients were significantly more prevalent in the open surgery (Lichtenstein) group ($p=0.01$). A history of intra-abdominal surgery was also markedly higher in the Lichtenstein group ($p<0.001$). Although the operative time was longer in the TAPP group, this difference did not reach statistical significance. Postoperative VAS pain scores on postoperative days 1 and 7 were significantly lower in the TAPP group ($p<0.05$). This difference highlights the impact of the minimally invasive surgical technique on postoperative pain outcomes.

Conclusion: The TAPP technique requires a longer operative time compared with the Lichtenstein method. However, the significantly lower postoperative VAS pain scores indicate that the minimally invasive approach provides a substantial advantage in terms of patient comfort. The Lichtenstein technique was more frequently preferred, particularly in elderly patients, women, and those with a history of intra-abdominal surgery. These findings underscore the importance of individualizing the choice of surgical technique based on patient-specific characteristics.

Keywords: Inguinal hernia, Lichtenstein repair, TAPP approach

Table 1. Comparison of the demographic and operative characteristics of the TAPP and Lichtenstein groups

Variable	Lichtenstein (n=100)	TAPP (n=104)	p-value
Age (years, mean ± SD	61.9±10.5	50.7±13.9	< 0.001*
Female (%)	15.0	2.0	0.01*
Operative time (min, mean ± SD)	110.0±18.2	120.0±20.3	0.08
VAS score, postoperative day 1	6.0	5.2	0.02*
VAS score, postoperative day 7	5.0	3.5	0.001*
History of intra-abdominal surgery (%)	70.0	14.0	<0.001*
Complications (%)	6.0	1.9	0.16

[S-148]

Preoperative inflammatory indices are associated with hernia complexity in inguinal hernia repair

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Objective: Accurate preoperative identification of complicated inguinal hernias remains challenging, particularly in the absence of overt clinical signs. Systemic inflammatory indices derived from routine blood tests may reflect underlying disease severity and ischemic burden, yet their quantitative association with hernia-related complications remains incompletely defined.

Material and Methods: Patients undergoing inguinal hernia repair were identified from a prospectively maintained institutional database. A total of 312 patients were included and stratified into complicated (n=193) and non-complicated (n=119) hernia groups. Preoperative demographic variables, ASA classification, and inflammatory indices—including the systemic inflammatory response index (SIRI), systemic immune-inflammation index (SII), neutrophil-to-lymphocyte ratio, and platelet-to-lymphocyte ratio—were analyzed. Subgroup analyses were performed across complicated hernia phenotypes (incarceration, obstruction, strangulation). Multivariable logistic regression models were constructed to evaluate independent associations between inflammatory indices and hernia complexity, adjusting for age, ASA class, body mass index (BMI), lactate dehydrogenase (LDH), and total protein levels.

Results: A total of 312 patients were included, of whom 193 (61.9%) presented with complicated inguinal hernias and 119 (38.1%) with non-complicated hernias; among complicated cases, 67 were incarcerated, 74 obstructed, and 52 strangulated. Patients with complicated hernias had a higher BMI compared with non-complicated cases (27.9±3.3 vs. 24.3±2.9 kg/m²; p<0.0001) and were more likely to have advanced ASA class (p=0.0004). Preoperative inflammatory indices were significantly elevated in the complicated group, including SIRI (2.65±3.81 vs. 1.85±2.01; p=0.016), SII (960.6±1111.3 vs. 635.6±580.9; p=0.001), neutrophil-to-lymphocyte ratio (3.73±4.0 vs. 2.84±2.6; p=0.03), and platelet-to-lymphocyte ratio (159.6±105.0 vs. 126.1±67.1; p=0.002). Among complicated subtypes, strangulated hernias demonstrated significantly higher inflammatory indices compared with obstruction and incarceration, particularly for SII (mean difference -1821.7, p=0.0001). In multivariable analysis, BMI (OR 6.95, 95% CI 3.70–13.06; p<0.0001) and ASA class (OR 2.14, 95% CI 1.31-3.48; p=0.002) were independently associated with hernia complication status, while SIRI showed a borderline association (OR 1.91, 95% CI 0.95-3.82; p=0.068).

Conclusion: Complicated inguinal hernias are characterized by significantly higher preoperative systemic inflammatory indices and adverse clinical profiles. Quantitative elevations in SIRI and SII correlate with disease severity, particularly in strangulated hernias. These findings support the role of inflammation-based biomarkers as adjunctive indicators of hernia complexity and perioperative risks.

Keywords: Inguinal hernia, systemic inflammation, risk stratification

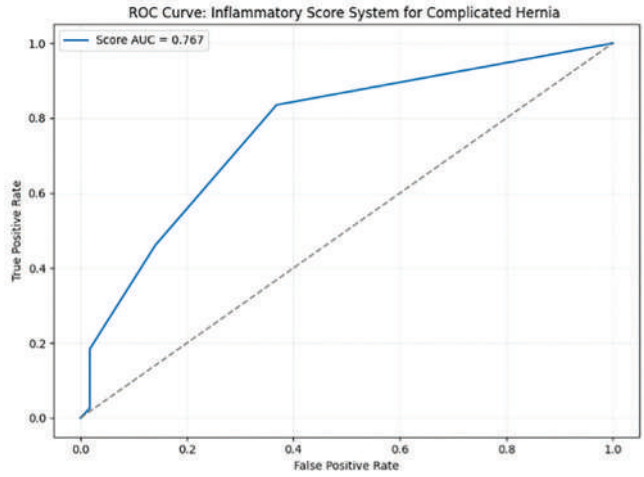


Figure 1. Receiver operating characteristic curve of the inflammatory score for predicting complicated inguinal hernia.

Receiver operating characteristic (ROC) curve demonstrating the diagnostic performance of the inflammatory score system in predicting complicated inguinal hernias. The area under the curve (AUC) was 0.767, indicating good discriminatory ability in differentiating patients with and without hernia-related complications.

Table 1. Multivariable logistic regression analysis including the systemic inflammatory response index (SIRI)

Variable	OR	CI lower	CI upper	p-value
Const	5.6638	3.3222	9.6556	0.00001
Age	1.3393	0.8887	2.0185	0.1627
ASA	2.1368	1.3111	3.4826	0.0023
BMI (kg/m²)	6.9477	3.6960	13.0602	0.00001
SIRI	1.9065	0.9528	3.8150	0.0683
LDH	0.6838	0.4419	1.0581	0.0879
Total protein	0.7921	0.5306	1.1826	0.2544

[S-149]

Five-year outcomes of posterior component separation (TAR) in complex ventral hernias

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Objective: Large and complex ventral hernias require advanced surgical techniques. Posterior component separation with transversus abdominis release (TAR) aims to restore anatomy and improve functional outcomes. This study evaluated five-year outcomes of TAR regarding demographics, defect characteristics, perioperative results, functional recovery, and recurrence etiology.

Material and Methods: Fifty-five patients who underwent TAR between 2020 and 2025 were retrospectively reviewed. Patients with preoperative CT-measured defects <8 cm were also operated on; intraoperative measurements were frequently larger. Demographics, comorbidities (hypertension, diabetes mellitus, dyslipidemia), ASA scores, preoperative CT and intraoperative defect sizes, operative time and length of stay, postoperative complications, Carolina scores (0, 6, 12 months), etiology (primary large hernia, recurrent hernia, incisional hernia after malignancy surgery), and recurrence were analyzed. Obesity was defined as BMI ≥30 kg/m².

Results: Mean age was 59.6±10.5 years; 69.1% were female. Hypertension (49.1%), diabetes (32.7%), and dyslipidemia (25.5%) were common. ASA distribution was II 58.2%, III 32.7%, IV 5.5%, and I 3.6%. Preoperative CT underestimated true defect size compared with intraoperative measurement (9.1±4.0 vs. 15.6±5.3 cm; p<0.001). Carolina scores improved significantly at 12 months (p<0.001). Recurrence occurred in 3 patients (5.5%); all were obese, with a significant association between obesity and recurrence (p=0.031).

Conclusion: TAR provides reliable repair with significant functional improvement for complex ventral hernias. Preoperative CT may underestimate true defect size and should be interpreted cautiously. The significant association between obesity and recurrence highlights the importance of preoperative weight optimization.

Keywords: Ventral hernia, transversus abdominis release (TAR), obesity

Table 1. Five-year TAR series: Key demographics, operative data and outcomes

Variable	Value
Number of patients (n)	55
Age (mean ± SD)	59.6±10.5
Sex (female/male)	38 (69.1%)/17 (30.9%)
Comorbidities (HT/DM/dyslipidemia)	27 (49.1%)/18 (32.7%)/14 (25.5%)
ASA (I/II/III/IV)	2 (3.6%)/32 (58.2%)/18 (32.7%)/3 (5.5%)
Preop CT defect (cm, mean ± SD)	9.1±4.0
Intraop defect (cm, mean ± SD)	15.6±5.3
CT vs. intraop mismatch (p)	p<0.001
Operation time (min, mean ± SD)	102±31
Length of stay (days, mean ± SD)	5.7±2.6
Postop complications (n)	Wound dehiscence: 2; Seroma: 1; SSI: 1
Recurrence (n, %)	3 (5.5%)
Recurrence-obesity association (p)	p=0.031
Carolina score improvement at 12 months (p)	p<0.001
Follow-up duration	1-4 years (mean ≈ 2.5 years)
Etiology (primary/recurrent/incisional hernia after malignancy surgery)	24 (43.6%)/24 (43.6%)/7 (12.7%)

[S-150]

Recurrence risk stratification in IPOM repair: Findings from a 55-patient cohort

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Objective: The aim of this study is to identify the clinical and anatomical variables associated with recurrence in patients undergoing hernia repair with intraperitoneal onlay mesh (IPOM) technique and to establish predictive threshold values.

Material and Methods: A retrospective cohort of 55 patients who underwent IPOM repair was analyzed. Normality was assessed using the Shapiro-Wilk test. Continuous variables were compared with the Mann-Whitney U test and categorical variables with the chi-square test. Variables significant in univariate analysis were entered into a multivariable logistic regression model. Receiver operating characteristic (ROC) analysis was performed for significant continuous variables to determine optimal cut-offs.

Results: The median age was 59 years, and 71% of patients were female; the median body mass index (BMI) was 30.5 kg/m². Most cases were incisional hernias (81.8%). Early recurrence (<6 months) occurred in 7% (n=4), and recurrence within two years occurred in 15% (n=8). In univariate comparisons, the recurrence group had a larger defect size (11 cm vs. 3.4 cm, p<0.001) and higher BMI (36.6 vs. 29.7 kg/m², p=0.013). In multivariable analysis, defect size (OR 1.063, 95% CI 1.017-1.105; p=0.006) and BMI (OR 1.491, 95% CI 1.008-1.791; p=0.045) were independent predictors of recurrence. ROC analysis identified an optimal cut-off of 8.4 cm for defect size (AUC 0.907, p<0.001) and 32.55 kg/m² for BMI (AUC 0.779, p<0.001).

Conclusion: Recurrence after IPOM repair is strongly associated with larger defect size and elevated BMI. Defect size ≥8.4 cm and BMI ≥32.55 kg/m² may help identify high-risk patients and guide tailored follow-up and preventive strategies.

Keywords: IPOM, ventral hernia, recurrence, defect size, body mass index

[S-151]

Umb-RADS: A standardized ultrasound-based scoring system to guide surgical strategy in umbilical hernia repair

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Objective: Decision-making between primary repair and mesh use in umbilical hernia surgery remains heterogeneous in daily clinical practice despite existing guidelines. Although ultrasonography (US) is widely used for preoperative evaluation, there is no standardized reporting or scoring system that directly supports surgical strategy. The aim of this study was to develop and evaluate Umbilical Hernia Reporting and Data System (Umb-RADS), a novel ultrasound-based scoring system designed to predict the need for mesh repair using preoperative sonographic findings.

Material and Methods: This retrospective study included patients who underwent elective umbilical hernia repair at University of Health Sciences Türkiye, İzmir City Hospital General Surgery Clinic between January 1, 2024 and August 31, 2025. Emergency surgeries and cases with concomitant additional procedures were excluded. A total of 174 patients were analyzed. Preoperative ultrasound reports were reviewed, and four parameters were recorded: Defect diameter, positivity during the Valsalva maneuver, presence of bowel or mesentery within the hernia sac, and irreducibility. Mesh use was defined as the dependent variable. Logistic regression analysis was performed to assess the association between ultrasound parameters and mesh requirement. Odds ratios (ORs) were used to assign weighted scores and construct the Umb-RADS system. Diagnostic performance was evaluated using receiver operating characteristic (ROC) analysis, and the optimal cut-off value was determined by the Youden index. Statistical significance was set at p<0.05.

Results: Mesh repair was performed in 77% of patients, while 23% underwent primary repair. Defect diameter ≥22 mm was identified as the strongest independent predictor of mesh requirement (OR: 3.21; 95% CI: 1.13-9.17; p=0.028). Valsalva positivity demonstrated a strong association with mesh use but did not reach statistical significance (OR: 2.26; p=0.075). The presence of bowel or mesentery within the hernia sac (OR: 1.87) and irreducibility (OR: 1.20) were positively associated with mesh requirement but were not statistically significant. ROC analysis of the Umb-RADS total score yielded an area under the curve (AUC) of 0.66. At a cut-off value of ≥2 points, the positive predictive value for mesh requirement was 85.9%.

Conclusion: Umb-RADS is a standardized, ultrasound-based scoring system that provides moderate but clinically meaningful discriminative power in predicting mesh requirement for umbilical hernia repair using only preoperative imaging data. Rather than replacing surgical judgment, Umb-RADS functions as an objective and reproducible decision-support tool that may improve preoperative planning, surgeon–radiologist communication, and patient counseling.

Keywords: Radiological, umblycal hernia

[S-152]

Safety and clinical applicability of total extraperitoneal (TEP) repair in inguinal hernia patients with previous lower abdominal surgery

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Objective: The aim of this prospective observational study was to evaluate the technical feasibility,safety profile, and clinical outcomes of total extraperitoneal (TEP) inguinal hernia repair in patients with a history of prior lower abdominal surgery. Adhesions that may develop in the preperitoneal space following lower abdominal surgery can complicate TEP dissection and raise concerns regarding an increased risk of perioperative complications. This study aimed to demonstrate, using objective clinical data, that TEP repair can be safely performed in this specific patient population.

Material and Methods: A total of 159 patients were prospectively enrolled in this study conducted at the General Surgery Clinic of University of Health Sciences Türkiye, Ankara Etlik City Hospital between February 2025 and September 2025. Patients were categorized into three groups: (1) those who underwent open Lichtenstein repair, (2) TEP patients without a history of prior lower abdominal surgery, and (3) TEP patients with a history of prior lower abdominal surgery. Demographic characteristics, hernia type and laterality, intraoperative findings (particularly the presence of peritoneal defects), postoperative complications, quality-of-life scores assessed using EQ-5D and EQ-VAS, and time to return to work were recorded. Data were analyzed using appropriate parametric and non-parametric statistical tests.

Results: Total extraperitoneal (TEP) repair was performed in 65.4% of the patients (n=104), while 31.4% (n=50) underwent open Lichtenstein repair. The rate of peritoneal defects was significantly higher in the TEP group with a history of prior lower abdominal surgery ($p<0.001$); however, no adverse effect was observed on procedural completion rates or overall complication rates.All peritoneal defects were identified intraoperatively and successfully managed with primary repair. Seroma formation was significantly more frequent in the open surgery group ($p<0.001$). Length of hospital stay ($p=0.033$) and time to return to work ($p<0.001$) were significantly shorter in the laparoscopic groups. In terms of quality-of-life assessment, EQ-5D and EQ-VAS scores were significantly higher in the TEP groups compared with the open surgery group ($p=0.020$ and $p<0.001$, respectively). Quality-of-life scores in the TEP group with a history of lower abdominal surgery were comparable to those in the TEP group without such history ($p>0.05$). The overall recurrence rate was 0.6%, and recurrence was observed exclusively in the open surgery group.

Conclusion: Despite increased technical complexity, total extraperitoneal (TEP) repair in patients with a history of prior lower abdominal surgery is a safe, feasible, and clinically advantageous option In this patient population, complication rates, recurrence rates, and quality-of-life outcomes are comparable to those observed in TEP patients without a history of lower abdominal surgery. In contrast, preference for open Lichtenstein repair in a similar patient profile appears to be associated with higher seroma rates, increased morbidity, and prolonged recovery and return-to-work periods. When performed by experienced surgical teams, TEP may be considered among standard treatment options,not merely as a minimally invasive technique but as an effective approach that supports patient safety,quality of life, and functional recovery.

Keywords: Inguinal hernia, lower abdominal surgery, quality of life, total extraperitoneal repair

Table 1. Distribution of hernia localization according to surgical techniques

Grup	Sağ	Sol	Bilateral	Toplam (n, %)
Grup 1 (Lichtenstein)	33 (66.0%)	13 (26.0%)	4 (8.0%)	50 (31.4%)
Grup 2 (TEP)	22 (37.93%)	20 (34.48%)	16 (27.59%)	58 (36.5%)
Grup 3 (Alt Batın Cerrahisi Geçirmiş TEP)	32 (62.75%)	11 (21.57%)	8 (15.69%)	51 (32.1%)
Genel Toplam	87 (54.7%)	44 (27.7%)	28 (17.6%)	159 (100%)

Table 2. Distribution of previous lower abdominal surgery incision (scar) types by sex

Skar tipi	Erkek n	Kadın n	Toplam n
Pfannenstiel insizyon skarı	2	4	6
McBurney (ipsilateral)	17	2	19
Pararektal (ipsilateral)	6	0	6
Göbek altı median kesi (GAM)	3	0	3
Prostatektomi (robotik + lap.)	14	0	14
Diğer insizyon skarları	3	0	3
Genel Toplam	45	6	51

Table 3. Inguinal hernia surgical techniques performed in the study population

Ameliyat Tekniği	n	%
Lichtenstein	50	31.45
TEP	58	36.48
Konv. Mesh (Alt batın cerrahisi geçirmiş TEP sonrası)	2	1.26
Konv. TAP (Alt batın cerrahisi geçirmiş TEP sonrası)	3	1.89
Alt batın cerrahisi geçirmiş TEP	46	28.93
Genel Toplam	159	100.0

Table 4. Statistical comparison of clinical, surgical, and functional outcomes between groups

Değişken	F	p değeri	Grup 1 – Grup 2	Grup 1 – Grup 3	Grup 2 – Grup 3	Yorum
Ameliyat süresi	0.454	0.636	ns	ns	ns	Fark yok
Kanama	3.011	0.052	ns	ns	ns	Eğilim var (p≈0.05)
Periton yırtığı	170.374	<0.001	p<0.001	p<0.001	p<0.001	En sık Grup 3'te
Clavien–Dindo skoru	1.893	0.154	ns	ns	ns	Benzer
Yatış süresi	3.483	0.033	p<0.05	ns	ns	Grup 1 > Grup 2
Seroma	12.677	<0.001	p<0.001	p<0.001	ns	Grup 1 > (2, 3)
Hematom	2.037	0.134	ns	ns	ns	Benzer
İYE	0.856	0.427	ns	ns	ns	Fark yok
Cerrahi enfeksiyon	0.821	0.442	ns	ns	ns	Fark yok
Nüks	1.060	0.349	ns	ns	ns	Fark yok
Memnuniyet	19.064	<0.001	p<0.001	p<0.001	ns	Laparoskopik > Açık
Hareket	2.125	0.123	ns	ns	ns	Fark yok
Öz bakım	3.557	0.031	p<0.05	ns	ns	Grup 1 < Grup 2
Olağan aktivite	1.411	0.247	ns	ns	ns	Fark yok
Ağrı	2.131	0.122	ns	ns	ns	Fark yok
Anksiyete	2.166	0.118	ns	ns	ns	Fark yok
VAS	8.869	<0.001	p<0.001	p<0.001	ns	Grup 1 < (2, 3)
İşe dönüş süresi	54.594	<0.001	p<0.001	p<0.001	ns	Grup 1 > (2, 3)
EQ5D indeksi	3.991	0.020	p<0.05	ns	ns	Grup 1 < Grup 2
Yaş	0.811	0.446	ns	ns	ns	Fark yok
Cinsiyet	7.064	0.001	ns	p<0.01	p<0.05	Grup 3'te kadın oranı yüksek
BMI	1.271	0.283	ns	ns	ns	Fark yok

Table 5. Postoperative complications

Değişken	Kategori	n	%
Clavien–Dindo skoru	1	149	93.7
	2	9	5.7
	3	1	0.6
Cerrahi enfeksiyon	Var	15	9.4
	Yok	144	90.6
Nüks	Var	1	0.6
	Yok	158	99.4
Seroma	Var	57	35.8
	Yok	102	64.2
Hematom	Var	10	6.3
	Yok	149	93.7
İYE	Var	3	1.9
	Yok	156	98.1
Mesh enfeksiyonu	Var	0	0
	Yok	159	100

[S-153]

Patient-reported outcomes of botulinum toxin A application in the prehabilitation of abdominal wall hernias

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Objective: Preoperative botulinum toxin A (BTA) application is increasingly used in the management of complex abdominal wall hernias. While its morphological effects on abdominal wall muscles and surgical facilitation have been well documented, patient reported outcomes following BTA administration have not been systematically evaluated. This study aimed to assess patient-reported symptoms and experiences after preoperative BTA application.

Material and Methods: This retrospective study included nine patients received BTA in November-December 2025. A total dose of 300 U BTA (Botox®, Allergan), diluted in 150 cc saline, was administered under ultrasound guidance. Injections were performed bilaterally into the lateral abdominal muscles at three points, with 8-9 cc per muscle. Patients were evaluated 3-4 weeks after injection. Patient-reported outcomes included pain at injection, respiratory symptoms, changes in abdominal contour, bowel habits, urinary symptoms, and limitations in daily or physical activities.

Results: The mean age was 63.9±16.3, the mean body mass index was 32.2±4.4. Mild injection-related pain (mean VAS: 4) was reported by 33% of patients. Transient respiratory discomfort occurring between days 7 and 14 after injection and lasting a mean of 8.5 days was observed in 22%. Abdominal wall relaxation and contour change was reported by 78%. Constipation developed in 44%, while urinary symptoms and limitation in daily activities were each reported by one patient.

Conclusion: Preoperative BTA application appears to be a safe and well-tolerated prehabilitation strategy with minimal impact on patient comfort. Although injection-related pain is negligible, clinicians should be aware of possible delayed respiratory symptoms and changes in bowel habits.

Keywords: Incisional hernia, patient reported outcomes, prehabilitation

[S-155]

Comparison of TAPP and TEP in inguinal hernia surgery

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Objective: Transabdominal preperitoneal (TAPP) and total extraperitoneal (TEP) repairs are among the most frequently employed techniques in adult inguinal hernia surgery. Nevertheless, there remains a lack of well-defined indications regarding the preferential selection of one approach over the other in routine clinical practice.

Material and Methods: A retrospective analysis was conducted on 344 patients who presented to Necmettin Erbakan University Faculty of Medicine Hospital between January 2018 and December 2024. Patients were divided into two groups according to the selected surgical technique: The TAPP group (n=160) and the TEP group (n=184). These two groups were statistically analyzed, and operative time, patient satisfaction, and early postoperative complication rates were compared.

Results: The rate of early complications (seroma, hematoma, and surgical site infection) was significantly higher in the TAPP group compared with the TEP group (p<0.001). According to the model results, the TAPP technique increased the risk of developing early complications by approximately 6.6-fold, independent of age and the presence of cardiac comorbidities. Each one-year increase in age was associated with a 6.9% increase in the risk of complications. Operative time was significantly longer in the TAPP group than in the TEP group (p<0.001), with the TAPP technique increasing operative duration by a mean of 23.28 minutes compared with TEP. Satisfaction analysis demonstrated higher patient satisfaction in the TEP group (97% vs. 85%), along with higher pain levels and a greater need for pain-related consultations in the TAPP group.

Conclusion: Both TAPP and TEP are safe and effective techniques for the surgical management of adult inguinal hernias. Nevertheless, the present findings strongly support TEP as the preferred approach, given its significantly shorter operative time, lower intraoperative trauma risk, and superior postoperative comfort with respect to pain. Our results indicate that, following an appropriate learning curve built upon initial experience with TAPP, the stepwise adoption of the TEP technique leads to a marked improvement in surgical safety and a substantial reduction in complication rates. Accordingly, TEP should be considered the first-line laparoscopic technique in centers with adequate surgical expertise.

Keywords: Inguinal hernia, laparoscopic inguinal hernia repair, TAPP, TEP

Table 1. Logistic regression analysis (dependent variable: Early complication)

Variable	B	Std. err	z	p	Exp(B)	95% CI lower	95% CI upper
Constant	-7.129	1.146	-6.22	0.000	0.001	0.000	0.008
TAPP	1.882	0.426	4.42	<0.001	6.566	2.850	15.128
Age	0.067	0.017	3.94	<0.001	1.069	1.034	1.105
Cardiac	1.769	0.523	3.38	0.001	5.862	2.104	16.335

Table 2. Linear regression analysis (dependent variable: Operative time)						
Variable	**B**	**Std. err**	**t**	**p**	**95% CI lower**	**95% CI upper**
const	6.585	8.936	0.74	0.462	-10.991	24.162
TAPP	23.281	1.596	14.59	0.0	20.142	26.421
BMI	0.818	0.322	2.54	0.011	0.185	1.451
ASA score	7.189	1.393	5.16	0.0	4.45	9.929
Male sex	1.838	1.893	0.97	0.332	-1.886	5.563
Pulmonary	11.485	3.806	3.02	0.003	3.999	18.97

[S-156]

The predictive utility of the systemic immune-inflammation index for bowel resection in incarcerated hernias: A five-year single-centre retrospective study introduction

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Objective: Emergency surgery for incarcerated hernias presents a considerable clinical challenge, particularly when strangulation leads to intestinal ischaemia requiring bowel resection. Advanced age and specific hernia subtypes have been identified as risk factors for resection. Inflammatory biomarkers including the neutrophil-to-lymphocyte ratio have shown predictive value in strangulated hernias. The systemic immune-inflammation index (SII), determined by the formula platelet × neutrophil/lymphocyte, integrates three haematologic components reflecting systemic inflammatory activation and has shown prognostic significance in various surgical and inflammatory conditions. This study evaluated whether SII can predict bowel resection in incarcerated hernias.

Material and Methods: This retrospective, single-centre study analysis encopassed 247 consecutive patients who underwent emergency surgery for incarcerated hernias over five years. Age, sex, hernia subtype, and preoperative laboratory parameters were recorded. SII was calculated from admission blood tests. The Mann-Whitney U test and chi-square test were used for comparisons. ROC analysis assessed predictive performance. Multivariable logistic regression including age, sex, hernia type, and SII was performed to determine independent predictors.

Results: Bowel resection was performed in 45 patients (18.21%). Patients requiring resection were significantly older and had higher SII values. ROC analysis revealed moderate predictive efficacy (AUC =0.683). There was a statistically significant association between hernia type and resection status (χ^2=8.75, df=2, p=0.013). Age and SII remained independent predictors in multivariable analysis.

Conclusion: SII seems to be a useful adjunctive biomarker for predicting bowel resection in incarcerated hernias. The incorporation of inflammatory indicators into risk stratification models may improve perioperative decision-making.

Keywords: Bowel resection, incarcerated hernia, systemic immune-inflamation Index

Table 1. Hernia type and bowel resection rates			
Hernia type	**No resection**	**Resection**	**Resection rate (%)**
Inguinal/femoral	109	29	26.6%
Umblical/ epigastric	54	3	5.5%
Incisional	39	13	33.3%

Table 2. Multivariable logistic regression			
Variable	**Odds ratio**	**95% CI**	**p**
Age (per year)	1.027	1.002 -1.052	0.033
SII	1.00016	1.00003-1.00030	0.017
Male sex	0.434	0.201-0.933	0.033
Hernia Type 2	0.223	0.069-0.719	0.012
Hernia Type 3	0.807	0.336-1.935	0.631

[S-157]

Prehabilitation in complex abdominal wall hernia treatment: A case series of transversus abdominis release following botulinum toxin A and progressive pneumoperitoneum

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Objective: Repair of complex abdominal wall hernias presents significant challenges due to loss of domain (LOD). This study aims to present the outcomes of three patients treated with transversus abdominis release (TAR) following prehabilitation with botulinum toxin A (BTA) and progressive pneumoperitoneum (PPP).

Material and Methods: Three patients underwent preoperative BTA and PPP. BTA (300 U, dilued within 150 cc saline) was administered under ultrasound guidance to the lateral abdominal muscles at three points bilaterally. PPP was indicated for patients with an LOD index >25% (Tanaka method) and administered via an intraabdominal catheter. Subsequently, all patients underwent TAR repair with double 30x30 cm polyprolene mesh reinforcement and panniculectomy.

Results: The patients (ages 78, 71, and 60; BMIs 33.3, 35.1, and 39.9 kg/m²) presented with incisional hernias (EHS classification M3-5W2,W3) and LOD indices of 66%, 32%, and 34%, respectively. PPP was initiated 19–42 days after BTA injection. Total insufflated volumes ranged from 7 to 9 liters over a period of 9 to 14 days. No complications occurred during the prehabilitation phase. Postoperatively, one patient developed pleural effusion (Clavien-Dindo II) during hospital stay. Length of hospital stay was 13, 5, and 15 days, respectively. One patient developed a subcutaneous seroma requiring aspiration at one month.

Conclusion: Preoperative BTA and PPP facilitate fascial closure in complex incisional hernias. Combining these prehabilitation strategies with component separation techniques constitutes an effective treatment modality for giant hernias involving loss of domain.

Keywords: Botulinum toxin A, complex abdominal wall hernia, progressif pnomoperitoneum

[S-159]

Reducing unnecessary preoperative testing: ATASAGUN (Algorithm-based triage-anesthesia surgical evaluation guideline usage network) decision-support framework

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Objective: A substantial proportion of laboratory and imaging tests requested during preoperative anesthetic preparation for elective surgery contribute little to clinical decision-making while leading to increased healthcare costs, additional workload.Key factors underlying this problem include the passive use of clinical guidelines, fragmented decision-making between anesthesia and surgical teams, and insufficient integration of risk-based triage mechanisms into routine clinical practice. In this study, we evaluated the effectiveness of the ATASAGUN (Algorithm-based Triage-Anesthesia Surgical Evaluation Guideline-integrated Decision Support Network) model, which integrates guideline-based recommendations into algorithmic triage and facilitates decision-support communication between anesthesia and surgical teams, in reducing unnecessary test ordering during preoperative anesthetic evaluation.

Material and Methods: This study is a retrospective, comparative analysis conducted in adult patients scheduled for elective surgery. Patients who underwent preoperative anesthesia evaluation within the specified time frame were included. Patients were divided into two groups based on the approach used in the preoperative evaluation process.The ATASAGUN group consisted of patients evaluated according to the ATASAGUN clinical decision support framework, which integrates guideline recommendations with algorithmic triage and is based on decision-supported communication between anesthesia and surgical teams. The conventional evaluation group included patients who underwent preoperative evaluation based on individual clinical decisions in standard anesthesia outpatient clinic practice. Primary outcome measures: Number and rate of non-indicated investigations. Total preoperative evaluation cost. Secondary outcome measures: Rate of delay or cancellation on the day of surgery. Need for additional investigations. Perioperative complications. Data were obtained from hospital information management system records. Appropriate parametric or non-parametric tests were used in the statistical analysis, and a $p<0.05$ value was accepted as the statistical significance level.

Results: No significant differences were found between the groups in terms of demographic characteristics, ASA classifications, and types of surgical intervention in the patients included in the study. In patients evaluated with the ATASAGUN model, a significant reduction in requests for non-indicative laboratory and diagnostic tests was observed compared to the conventional evaluation group. This reduction was particularly more pronounced in low- and medium-risk patients.

Conclusion: This retrospective analysis demonstrated that the ATASAGUN model, which integrates guideline recommendations with algorithmic triage to provide decision-supported communication between anesthesia and surgical teams, significantly reduced unnecessary diagnostic orders during the preoperative anesthetic preparation process. The ATASAGUN approach offers a clinical decision support framework that optimizes resource utilization without negatively impacting clinical safety. The findings suggest that transforming the passive use of guidelines in preoperative assessment into algorithmic and integrated decision support systems can significantly contribute to cost-effective and sustainable healthcare delivery.

Keywords: Preoperative assessment, unnecessary procedures, patient safety

[S-160]

Access to healthcare services and patient perception in the post-earthquake period: A cross-sectional survey study

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Objective: This study aims to evaluate the functioning of the healthcare system in the aftermath of a major earthquake, focusing on patients' perceptions, experiences, and ethical dimensions rather than the organization of services. The main focus of the study is to reveal the impact of earthquake conditions on individuals' access to healthcare services, the informed consent process, perceptions of privacy, sense of justice, and trust in healthcare workers from the patient's perspective and through a humanistic lens.

Material and Methods: This cross-sectional survey study included 72 participants who received healthcare services in the post-earthquake period. The survey form consisted of Likert-type questions assessing socio-demographic characteristics, direct exposure to the earthquake, healthcare access processes, informed consent and privacy experience, perceived fairness in service delivery, and trust in healthcare workers. Likert items were analyzed categorically into 1-2, 3, and 4-5 point groups, considering their ordinal structures. Findings were addressed not only through quantitative distributions but also through a holistic interpretation that considered the social and ethical context.

Results: Post-earthquake participant responses reveal that healthcare access has become significantly more difficult, with many experiencing delays in appointment and diagnostic services. This situation demonstrates that systemic intensity and uncertainty, beyond physical infrastructure losses, directly impair the overall patient experience. Although the informed consent process remains relatively positive regarding staff attitudes, extraordinary conditions like overcrowding and time pressure can undermine perceptions of privacy and autonomous decision-making. The heterogeneous distribution of perceptions concerning data protection further highlights the inherent fragility of maintaining ethical standards in disaster conditions. While fairness in service delivery is generally perceived, noteworthy resource shortages prevent many from obtaining necessary medical care. Nevertheless, the high level of trust in healthcare professionals proves that human agency remains the decisive factor in patient experience despite the system's structural challenges.

Conclusion: Post-earthquake responses reveal that healthcare access has become significantly more difficult, with many experiencing delays in appointments and diagnostics. This suggests that systemic intensity and uncertainty, beyond physical infrastructure losses, directly impair patient experiences. While informed consent remains relatively positive regarding staff attitudes, overcrowding and time pressure can undermine privacy and autonomous decision-making. The heterogeneous perception of data protection further highlights the fragility of ethical standards during disasters. Although fairness in service delivery is generally perceived, noteworthy resource shortages prevent many from obtaining necessary care. Nevertheless, high trust in healthcare professionals proves that the human factor remains decisive in patient experience despite structural systemic challenges.

Keywords: Access to healthcare, disaster ethics, earthquake, patient perspective, perception of justice

Table 1. Participants' socio-demographic, application, and earthquake impact characteristics

PARAMETRE	DEĞER
Yaş (yıl)	41,2 ± 14,1
Cinsiyet	
Kadın	40 (%55,6)
Erkek	29 (%40,3)
Belirtmek istemiyorum	3 (%4,2)
Eğitim Düzeyi	
İlkokul / Ortaokul	18 (%25,0)
Lise	21 (%29,2)
Üniversite	26 (%36,1)
Lisansüstü	7 (%9,7)
Başvuru Tipi	
Acil	29 (%40,3)
Poliklinik	40 (%55,6)
Yatış / Servis	3 (%4,2)
Alınan Hizmet Türü	
Muayene	34 (%47,2)
Tetkik / Görüntüleme	17 (%23,6)
Ameliyat	8 (%11,1)
Yara bakımı / Pansuman	9 (%12,5)
Diğer	4 (%5,6)
Depremden Etkilenme	
Barınma sorunu yaşadı (Evet)	38 (%52,8)
Ev / iş kaybı yaşadı (Evet)	31 (%43,1)
Birinci derece yakın kaybı / ağır etkilenme (Evet)	27 (%37,5)

Table 2A. Access to and processes for health services after an earthquake

PARAMETRE	1–2 n (%)	3 n (%)	4–5 n (%)
Son 1 ayda uykusuzluk / yoğun kaygı artışı	18 (%25,0)	17 (%23,6)	37 (%51,4)
Sağlık hizmetlerine ulaşım benim için zordu	28 (%38,9)	14 (%19,4)	30 (%41,7)
Tetkik / görüntüleme için bekleme sürem uzundu	21 (%29,2)	16 (%22,2)	35 (%48,6)
Deprem öncesine göre sağlık hizmetine erişimim daha zordu	14 (%19,4)	12 (%16,7)	46 (%63,9)
Deprem sonrası sağlık sistemiyle iletişimim daha zordu	19 (%26,4)	18 (%25,0)	35 (%48,6)
Randevu/başvuru sürecinde belirgin gecikme yaşadı (Evet)	33 (%45,8)	–	–

Table 2B. Access to and processes for health services after an earthquake

Gecikme süresi (yalnızca gecikme yaşayanlar)	N: KİŞİ SAYISI
0–3 gün	9 (%27,3)
4–7 gün	11 (%33,3)
8–14 gün	8 (%24,2)
≥15 gün	5 (%15,2)
Ameliyat / işlem planı ertelendi (Evet)	14 (%19,4)

Table 3A. Informed consent, awareness, and perception of privacy

PARAMETRE	1–2 n (%)	3 n (%)	4–5 n (%)
Yapılacak işlem / ameliyat anlaşılır dille anlatıldı	8 (%11,1)	14 (%19,4)	50 (%69,4)
Riskler ve olası komplikasyonlar yeterince açıklandı	11 (%15,3)	16 (%22,2)	45 (%62,5)
Alternatif tedavi seçenekleri anlatıldı	14 (%19,4)	18 (%25,0)	40 (%55,6)
Soru sormam için yeterli zaman tanındı	9 (%12,5)	15 (%20,8)	48 (%66,7)
Karar verirken kendimi baskı altında hissetmedim	10 (%13,9)	17 (%23,6)	45 (%62,5)
Onam formunu okumaya fırsat buldum	12 (%16,7)	14 (%19,4)	46 (%63,9)
Muayene / tedavi sırasında mahremiyetim korundu	9 (%12,5)	13 (%18,1)	50 (%69,4)
Kalabalık nedeniyle özel bilgileri paylaşırken çekindim	31 (%43,1)	18 (%25,0)	23 (%31,9)
Deprem koşulları nedeniyle mahremiyetin korunması zorlaştı	14 (%19,4)	16 (%22,2)	42 (%58,3)

Table 3B. Perception of justice, resource insufficiency, and trust in healthcare workers

PARAMETRE	1–2 n (%)	3 n (%)	4–5 n (%)
Hizmet sunumunda önceliklendirme adil yapıldı	14 (%19,4)	18 (%25,0)	40 (%55,6)
Kaynak yetersizliği nedeniyle gereken hizmeti alamadığımı düşündüm	33 (%45,8)	17 (%23,6)	22 (%30,6)
Doktoruma / ekibime güvendim	6 (%8,3)	12 (%16,7)	54 (%75,0)
Sağlık çalışanları bana saygılı ve onur kırıcı olmayan tutumla yaklaştı	5 (%6,9)	11 (%15,3)	56 (%77,8)

Talbe 4A. Relationship between experiencing housing problems due to earthquakes and perception of access to health

Sağlık Hizmetine Erişim Algısı Arasındaki İlişki

Barınma Sorunu	1–2	3	4–5	p değeri
Hayır	12	6	9	
Evet	23	7	15	
Toplam	35	13	24	0,75

Table 4B. Relationship between loss of a first-degree relative and increase in stress and anxiety symptoms

Stres ve Kaygı Belirtilerindeki Artış Arasındaki İlişki

Birinci Derece Yakın Kaybı	1–2	3	4–5	p değeri
Hayır	14	14	20	
Evet	12	1	11	
Toplam	26	15	31	0,034

Table 5. Comparative literature table

Çalışma	Odağı	Tasarım / Veri Kaynağı	Çıktı tipi	Bizim çalışmamızdan farkı
Süer MS, Ergüder E, Demir S, Balaş Ş. (2025)	Kahramanmaraş depremi sonrası **bilimsel yanıtın** bibliyometrik haritalanması	Bibliyometrik analiz	Yayın eğilimleri, ağlar, temalar	Hasta deneyimi/etik algı ölçümü yok; literatür ekosistemini tanımlar (biz hasta perspektifini dolduruyoruz).
Varolgüneş S. (2025)	Kahramanmaraş depremleri üzerine akademik üretim: eğilimler/boşluklar/politika	Bibliyometrik analiz (2023–2025 dokümanlar)	Tema ve boşluk analizi	Sağlık hizmeti/hasta deneyimi odağı sınırlı; daha geniş "kriz yönetimi/toplumsal etki" çerçevesi.
Orak Y. ve ark. (2023)	Türkiye deprem(ler)inin sağlık hizmetlerine etkisi ve enfeksiyon tehditleri	Narrative review	Sağlık sistemi etkileri (genel çerçeve)	Hasta algısı/etik süreçler (onam–mahremiyet–adalet–güven) nicel olarak ölçülmez.
Yılmaz S. (2024)	Acil sağlık hizmetleri ve kitlesel yaralanma yönetimi: literatür derlemesi/derleme	Derleme/derleme niteliğinde "compilation"	Triage, acil yönetim dersleri	Hasta deneyimi/etik algı yerine operasyonel-acil yönetim odaklı.
Zaman S. ve ark. (2023)	Non-epicenter hastanede ilk günlerde hizmet yanıtı (pediatrik olgular)	Retrospektif (125 olgu)	Klinik/operasyonel hizmet verisi	Hasta algısı/etik boyut yok; hizmet yükü ve yanıt kapasitesi düzeyinde.
Kurt NG. ve ark. (2023)	Ankara şehir hastanesi acil servisine başvuran depremzedelerin değerlendirilmesi (geniş seri)	Retrospektif (acil servis başvuruları)	Demografi, başvuru nedenleri, sonuçlar	Hasta deneyimi/etik algı ölçümü yok; sağlık sistemi temasının klinik kaydı.
Tülüce D. ve ark. (2025)	Deprem sonrası kronik hastalık yönetiminde **hasta deneyimleri**	Nitel (qualitative) çalışma	Temalar/deneyimler	Hasta deneyimine yakın; ancak bizim çalışmadaki gibi "erişim + onam + mahremiyet + adalet + güven"i aynı çerçevede nicel dağılımla sunmaz.
Bizim çalışma (2026)	Deprem sonrası sağlık sisteminin **hasta gözünden** değerlendirilmesi	Kesitsel anket (72 kişi); Likert 1–2/3/4–5 + seçili p-analiz	Erişim, onam, mahremiyet, adalet, güven	Literatürdeki "operasyonel/retrospektif" boşluğunu hasta-etik ekseninde tamamlar; insani

[S-161]

The impact of preoperative imaging modalities on lesion localization accuracy in patients undergoing pancreaticoduodenectomy

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Objective: Accurate preoperative localization of periampullary lesions is essential for optimal surgical planning and determination of resection strategy in patients undergoing pancreaticoduodenectomy (Whipple procedure). Variability in imaging modalities may influence localization accuracy and intraoperative decision-making.

Material and Methods: A retrospective analysis was conducted of 106 pancreaticoduodenectomies performed over a two-year period at a tertiary referral center. Forty-three patients with complete preoperative imaging data were included. Imaging modalities were categorized as endoscopic ultrasonography combined with magnetic resonance imaging (EUS+MRI), EUS combined with computed tomography (EUS+CT), MRI alone, MRI+CT, and EUS+MRI+CT. Preoperative lesion localization was compared with intraoperative findings and confirmed by postoperative pathological assessment. Concordance rates were calculated descriptively.

Results: Preoperative imaging consisted of EUS+MRI in 12 patients, EUS+CT in 9, MRI alone in 9, MRI+CT in 8, and EUS+MRI+CT in 5 patients. Overall concordance between preoperative imaging and intraoperative localization was observed in 34 patients (79%), whereas discordance occurred in 9 patients (21%). Among discordant cases, MRI alone was used in 5 patients and EUS+MRI in 4 patients. A higher proportion of localization discrepancies was noted in patients evaluated with MRI as a single modality. Histopathological examination revealed adenocarcinoma in 38 patients and intraductal papillary mucinous neoplasm in 5 patients.

Conclusion: Preoperative imaging demonstrates a high overall localization accuracy in periampullary lesions. However, reliance on a single imaging modality—particularly MRI alone—may be associated with increased localization discrepancies. These findings support the integration of multimodal imaging strategies to optimize surgical planning and highlight the importance of intraoperative correlation in pancreaticoduodenectomy.

Keywords: Pancreaticoduodenectomy, imaging, localization

Table 1.

Imaging modality	Patient (n)	Concordant (n)	Discordant (n)	Discordance (%)
EUS+MRI	12	8	4	33.3
EUS+CT	9	9	0	0
Only MRI	9	4	5	55.6
MRI+CT	8	8	0	0
EUS+MRI+CT	5	5	0	0
TOTAL	43	34	9	21

[S-162]

Can inflammation indexes predict difficult cholecystectomy in patients over the age of 65?

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Objective: Laparoscopic cholecystectomy is the standard surgical method in symptomatic gallstone disease. However, increased comorbidity load and more pronounced inflammatory response in elderly patients increase the risk of technical difficulty. Difficult cholecystectomy is associated with conversion, subtotal (bail-out) surgery or prolonged operation time, which can lead to increased morbidity and mortality. In this study, it was aimed to determine the factors associated with difficult cholecystectomy in patients aged ≥65 years and to evaluate the predictive value of CRP/albumin ratio (CAR).

Material and Methods: Between January 2015 and June 2025, 726 patients aged ≥65 who underwent laparoscopic cholecystectomy in a single center were reviewed retrospectively. Demographic data, ASA score, surgical urgency, laboratory parameters and perioperative variables were recorded. CAR was calculated as CRP (mg/L)/albumin (g/dL); NLR was determined as neutrophil/lymphocyte ratio. Difficult cholecystectomy was defined as conversion and/or subtotal surgery and/or operation time ≥120 minutes. Independent predictors were evaluated with multivariate logistic regression analysis. The separative power was calculated with ROC analysis.

Results: The median age of a total of 726 patients was 70 (67-74) years and 35.7% were male. Difficult cholecystectomy rate was determined as 38.0%. The conversion rate was 13.1% and the most common cause was insecure/uncertain anatomy (89.5%). Male gender, emergency surgery, acute cholecystitis, ASA ≥III and anticoagulant use were significantly higher in the difficult group (all $p<0.001$). CRP and CAR values were significantly high in the difficult group ($p<0.001$). In the difficult group, the duration of the operation, the length of the hospital stay, the need for intensive care and the mortality of 30 days were significantly higher ($p<0.01$). In the multivariate analysis, acute cholecystitis (aOR 8.79; $p=0.004$) was found to be independent predictors for male gender (aOR 1.44; $p=0.039$) and log(CAR) (aOR 1.45; $p<0.001$). The distinguishing power of the model was AUC=0.727. In the ROC analysis, the distinguishing power of the CAR was medium (AUC=0.700).

Conclusion: Difficult cholecystectomy is associated with clinically significant poor results in patients aged ≥65 years. Acute cholecystitis and male sex, as well as the independent predictor of CAR, supports a laboratory-based practical preoperative risk stratification approach. It can contribute to the CAR clinical decision process in terms of safety-oriented surgical planning in elderly patients.

Keywords: Difficult laparoscopic cholecystectomy, inflammation markers, CRP/albumin ratio (CAR), neutrophic/lymphocyte ratio,

[S-163]

Could a low preoperative prognostic nutritional index value be an indicator of clinically relevant postoperative pancreatic fistula?

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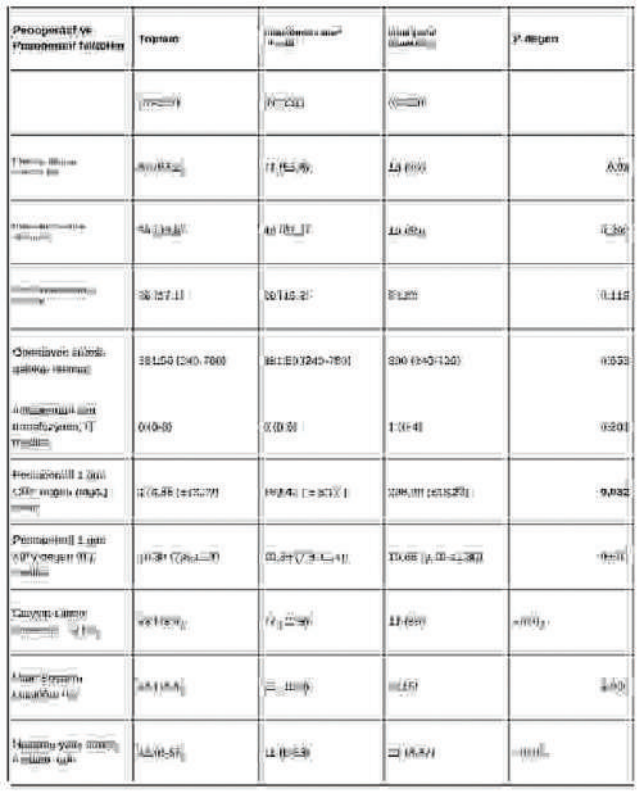
Objective: Numerous risk factors, including preoperative malnutrition, have been identified as being associated with clinically relevant postoperative pancreatic fistula (CR-POPF) formation after pancreaticoduodenectomy (PD). However, limited information exists regarding the relationship between preoperative prognostic nutritional index (PNI) values, as an indicator of preoperative immuno-nutritional status, and CR-POPF formation. In this study, we aimed to investigate clinicopathological factors associated with CR-POPF formation, focusing specifically on preoperative PNI values, in a cohort undergoing PD.

Material and Methods: This retrospective study included a total of 152 patients who underwent PD at the Department of General Surgery, Ondokuz Mayıs University Faculty of Medicine, between January 2018 and February 2023. We classified pancreatic fistula formation as BL and CR-POPF according to the categorization of the International Pancreatic Fistula Study Group. The cohort was divided into two groups based on the development of CR-POPF, and demographic, preoperative, intraoperative, and postoperative findings, including final pathology, were compared using univariate analysis. Statistically significant parameters ($p<0.1$) were evaluated using multivariate binary logistic regression analysis. The primary endpoint of the study was CR-POPF, while the secondary endpoint was Grade 3-4 serious postoperative complications according to the Clavien-Dindo classification.

Results: CR-POPF was observed in 13.1% (n=20) of the cohort. PNI was significantly higher in the control group ($p<0.05$). In univariate analysis, soft pancreatic remnant tissue [odds ratio (OR): 0.291; $p<0.05$], pathological diagnosis other than ductal adenocarcinoma of the pancreatic head (OR: 2.577; $p>0.05$), preoperative PNI value (OR: 0.909; $p<0.05$), and postoperative serum CRP level (OR: 1.007; $p<0.05$) met the inclusion criteria for multivariate analysis among clinicopathological factors identified as associated with CR-POPF. Soft pancreatic remnant tissue and PNI were identified as independent risk factors for the development of CR-POPF, respectively (OR, 0.255; 95% CI, 0.076-0.852; p=0.026 and OR, 0.890; 95% CI, 0.808-0.980; p=0.018).

Conclusion: In this study, soft pancreatic remanent tissue and low preoperative PNI values were independent risk factors for the development of CR-POPF in patients undergoing PD. The advantage of determining the preoperative PNI level in patients scheduled for PD is that, in addition to other prognostic factors, it can contribute to CR-POPF risk stratification and perioperative patient management.

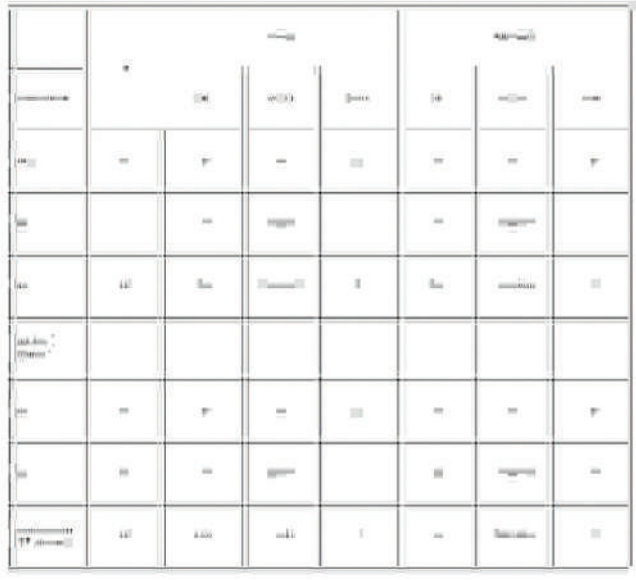
Keywords: Prognostic nutritional index, pancreatic fistula, pancreaticoduodenectomy



Perioperative factors and postoperative outcomes associated with the development of CR-POPF after PD

*Comparison of risk factors in the fistula group (Grade B and C) and the fistula group according to ISGPF definition. *Diagnoses other than pancreatic adenocarcinoma and chronic autoimmune pancreatitis were defined as high-risk pathologies.*

Comparison of risk factors between fistula-free (0 and BL) and fistula groups (Grade B and C) according to ISGPF definition, and univariate and multivariate analyses.



*ISGPF: International Study Group of Pancreatic Fistula, CRP: C-reactive protein, PNI: Prognostic nutritional index, (OR: Odds ratio), CI: Confidence interval) *Diagnoses other than pancreatic adenocarcinoma and chronic autoimmune pancreatitis were defined as high-risk pathologies.*

[S-164]

Analysis of factors predicting recurrence in liver hydatid cyst surgery: An experience of 164 cases

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Objective: Cystic echinococcosis (CE) is a significant parasitic disease that poses a public health threat in endemic regions. The development of recurrence after surgery for liver hydatid cysts (LHC) is a primary factor that limits treatment success and increases morbidity. This study aims to identify the preoperative and intraoperative risk factors predisposing to recurrence in patients undergoing surgery for LHC.

Material and Methods: Data from 164 patients operated on with a diagnosis of LHC at our center between 2019 and 2025 were retrospectively analyzed. Patients were divided into two groups: those who developed recurrence (n=35, 21.3%) and those without recurrence (n=129). Demographic data, preoperative findings, cyst morphology, laboratory parameters, surgical techniques performed, and postoperative outcomes were compared. Statistical analyses were conducted using chi-square tests and appropriate parametric/non-parametric tests; a p-value of <0.05 was considered statistically significant.

Results: The mean age of the patients included in the study was 46.92±15.99 years. No statistically significant differences were found between the groups regarding demographic characteristics, number of cysts, cyst diameter, localization, or surgical approach (p>0.05). However, eosinophil levels in the recurrence group (0.46±0.94) were found to be statistically significantly higher compared to the non-recurrence group (0.25±0.33) (p=0.041). The recurrence rate was 47.4% in patients who experienced intraoperative cyst content spillage, whereas this rate was 17.9% in those without spillage (p=0.008). In multivariate logistic regression analysis, intraoperative spillage was identified as an independent risk factor, increasing the risk of recurrence by 3.9 times. Detailed recurrence analysis revealed that 91.4% (n=32) of recurrences developed in the same segment as the primary cyst, and the mean time to recurrence was 13.37±10.79 months. Furthermore, 45.7% of patients with recurrence required repeat surgery or the PAIR procedure.

Conclusion: The most critical factor predicting recurrence in LHC surgery is the presence of intraoperative spillage rather than the radicality of the surgical technique employed. To minimize recurrence rates, surgical precision and technical measures to prevent the dissemination of cyst contents into the abdominal cavity are of vital importance. The 21.3% recurrence rate in our series was associated with large cyst diameters and a high density of complicated cases. Larger series and long-term follow-up results may provide further guidance in determining recurrence risks and optimizing surgical strategies.

Keywords: Echinococcosis, hydatid cyst, relapse

Table 1. Comparison of demographic, clinical, and operative characteristics between patients with and without recurrence of hepatic hydatid disease

	Study group (n=164)	Group 1 (no recurrence) (n=129)	Group 2 (recurrence) (n=35)	p-value
Age (years)	46.92±15.99	46.70±16.57	47.71±13.79	0.662
Gender				
Female	78 (47.6%)	62 (48.1%)	16 (45.7%)	0.805
Male	86 (52.4%)	67 (51.9%)	19 (54.3%)	
Comorbidity				
No	127 (77.4%)	99 (76.7%)	28 (80%)	0.683
Yes	37 (22.6%)	30 (23.3%)	7 (20%)	
BMI	27.1±17.54	27.49±19.66	25.67±4.08	0.971
Cyst infection/cholangitis				
Absent	113 (68.9%)	91 (70.5%)	22 (62.9%)	0.384
Present	51 (31.1%)	38 (29.5%)	13 (37.1%)	
Localization				
Right lobe	94 (57.3%)	70 (54.3%)	24 (68.6%)	
Left lobe	32 (19.5%)	29 (22.5%)	3 (8.6%)	0.221
Bilateral	29 (17.7%)	22 (17.1%)	7 (20%)	
Central/perihilar	9 (5.5%)	8 (6.2%)	1 (2.4%)	
Max cyst diameter (cm)	11.37±10.24	11.74±11.43	10±2.92	0.697
Number of cysts				
Single	100 (61%)	81 (62.8%)	19 (54.3%)	0.360
Multiple	64 (39%)	48 (37.2%)	16 (45.7%)	
Gharbi classification				
1-2-3	142 (86.6%)	115 (81%)	2 (19%)	0.088
4-5	22 (13.4%)	14 (63.6%)	8 (36.4%)	

Table 1. Continued

	Study group (n=164)	Group 1 (no recurrence) (n=129)	Group 2 (recurrence) (n=35)	p-value
History of PAIR/surgery				
No	117 (71.3%)	94 (72.9%)	23 (65.7%)	0.406
Yes	47 (28.7%)	35 (27.1%)	12 (34.3%)	
Preop albendazole treatment				
No	39 (23.8%)	32 (24.8%)	7 (20%)	0.554
Yes	125 (76.2)	97 (75.2)	28 (80%)	
Suspicion of biliary tract relationship in preoperative imaging				
No	106 (64.6%)	81 (62.8%)	25 (71.4%)	0.343
Yes	58 (35.4%)	48 (37.2%)	10 (28.6%)	
Preop ERCP performed				
No	122 (74.4%)	93 (72.1%)	29 (82.9%)	0.196
Yes	42 (25.6%)	36 (27.9%)	6 (17.1%)	
Eosinophil (x10^9/L)	0.41±0.85	0.25±0.33	0.46±0.94	0.041
Serology				
Negative	39 (23.8%)	30 (23.3%)	9 (25.7%)	0.762
Positive	125 (76.2%)	99 (76.7%)	26 (74.3%)	
Serology titer (IHA)				
1/160	39 (23.8%)	30 (23.3%)	9 (25.7%)	
1/320	19 (11.6%)	14 (10.9%)	5 (14.3%)	
1/640	21 (12.8%)	18 (14%)	3 (8.6%)	0.914
1/1280	71(43.3%)	56 (43.4%)	15 (42.9%)	
1/2560	14 (8.5%)	11 (8.5%)	3 (8.6%)	
Surgical technique				
Open	145 (88.4%)	113 (87.6%)	32 (91.4%)	0.530
Laparoscopic	19 (11.6%)	16 (12.4%)	3 (8.6%)	
Operation type				
Cystotomy + drainage	96 (58.5%)	75 (58.1%)	21 (60%)	
Total pericystectomy	12 (7.3%)	8 (6.2%)	4 (11.4%)	
Partial pericystectomy	44 (26.8%)	34 (26.4%)	10 (28.6%)	0.226
Segmentectomy/ hepatectomy	12 (7.3%)	12 (9.3%)	0	
Intraop cyst content spillage				
No	145 (88.4%)	119 (82.1%)	26 (17.9%)	0.003
Yes	19 (11.6%)	9 (47.4%)	10 (52.6%)	
Intraop bile duct comm. + repair				
No	117 (71.3%)	88 (68.2%)	29 (82.9%)	0.089
Yes	47 (28.7%)	41 (31.8%)	6 (17.1%)	
Omentopexy				
No	92 (56.1%)	68 (52.7%)	24 (68.6%)	0.094
Yes	72 (43.9%)	61 (47.3%)	11 (31.4%)	

Table 1. Continued

	Study group (n=164)	Group 1 (no recurrence) (n=129)	Group 2 (recurrence) (n=35)	p-value
Postoperative biliary fistula development				0,09
No	128 (78%)	97 (75.2%)	31 (88.6%)	
Yes	36 (22%)	32 (24.8%)	4 (11.4%)	
Postoperative abscess development				0.927
No	102 (62.2%)	80 (62%)	22 (62.2%)	
Yes	62 (37.8%)	49 (38%)	13(37.1%)	
Length of Hospital stay (days)	11.35±8.52	11.48±8.4	10.85±9.06	0.251
Readmission				0.865
No	142 (86.6%)	112 (86.8%)	30 (85.7%)	
Yes	22 (13.4%)	17 (13.2%)	5 (14.3%)	
Follow-up/recurrence time (months)		24.67±18.145	13.37±10.79	

Data are presented as mean ± standard deviation or number (percentage). BMI: Body mass index, PAIR: Puncture, aspiration, injection, and re-aspiration, ERCP: Endoscopic retrograde cholangiopancreatography, IHA: Indirect hemagglutination test. Statistical significance was defined as $p<0.05$.

Table 2. Clinical characteristics, Gharbi classification, and management outcomes of patients with recurrent hepatic hydatid disease (n=35)

Clinical characteristics of recurrence	n=35 (%)
Recurrence type	
Same segment	32 (91.4%)
Different segment	3 (8.6%)
Recurrence stage (Gharbi)	
Stage 1	7 (20%)
Stage 2	7 (20%)
Stage 3	5 (14.3%)
Stage 4	5 (14.3%)
Stage 5	11 (31.4)
Need for re-intervention (PAIR/ surgery)	
No	19 (54.3%)
Yes	16 (45.7%)
Time to recurrence (months)	
Mean (±SD)	13.37 (±10.79)

Data are presented as number (percentage) unless otherwise specified. SD: Standard deviation, PAIR: Puncture, aspiration, injection, and re-aspiration. Time to recurrence is presented as mean ± SD.

[S-165]

Investigation of the effect of a single-dose corticosteroid administration prior to major hepatectomy on postoperative complications

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Objective: Major hepatectomy leads to excessive activation of systemic inflammatory pathways, thereby increasing the incidence of posthepatectomy liver failure and various postoperative complications. Given the known anti-inflammatory properties of corticosteroids, it has been hypothesized that these agents may attenuate the inflammatory response and reduce complication rates. This study aimed to evaluate the effects of a single preoperative dose of methylprednisolone on postoperative complications, laboratory parameters, and mortality in patients undergoing major hepatectomy.

Material and Methods: This randomized, controlled, double-blind, and prospective clinical study was conducted at the Department of General Surgery, Ankara University Faculty of Medicine. A total of 41 patients and living donors who underwent major hepatectomy were included. Participants were divided into two main groups: Those receiving a single preoperative dose of 250 mg methylprednisolone (St^+) and those not receiving steroids (St^-); additionally, patient and donor subgroups were analyzed separately. Operative time, intraoperative blood loss, number and removal time of drains, complication types, laboratory parameters (ALT, AST, total/direct bilirubin, INR, hemoglobin, leukocyte count, CRP), and lengths of stay in the intensive care unit and hospital were compared. Data were analyzed using SPSS 22.0 software, and the Mann-Whitney U, Kruskal-Wallis, and chi-square tests were applied. A p-value <0.05 was considered statistically significant.

Results: Evaluation of all cases revealed that the 90-day overall complication rate was 31.6% in the St^- group and 40.9% in the St^+ group (p=0.746). In the patient subgroup, the complication rate was 44.4% in St^- patients and 57.1% in St^+ patients (p=0.680), while in the donor subgroup, the rates were 20% and 12.5%, respectively (p=0.671). Mortality occurred exclusively in the St^+ patient group, with three deaths (13.6%), whereas no mortality was observed in the St^- group (p=0.235). While postoperative CRP and leukocyte levels showed generally similar trends between groups, an upward tendency in CRP levels on postoperative day 5 was noted in the St^+ group (p=0.059). No significant differences were detected in ALT, AST, bilirubin, or INR levels.

Conclusion: A single preoperative dose of methylprednisolone demonstrated a tendency to attenuate the early postoperative inflammatory response and to maintain liver enzyme levels closer to normal following major hepatectomy. However, it did not significantly alter the overall complication rate, and mortality occurred only in patients who did not receive steroids. These findings suggest that preoperative corticosteroid administration may represent a safe and potentially protective option when applied to appropriately selected patients. Nevertheless, larger randomized controlled trials are required to confirm these effects.

Keywords: Major hepatectomy, corticosteroid, complication

[S-166]

Evaluation of the association between disease severity and postoperative complications in acute cholecystitis surgery using clinical and biochemical parameters

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Objective: Acute cholecystitis is a surgical condition with a wide spectrum of clinical severity, in which postoperative complication risk increases as disease severity progresses. Although the Tokyo Guidelines 2018 are widely used for severity classification, the contribution of clinical and biochemical markers to predicting postoperative complications remains unclear. This study aimed to evaluate the association between disease severity according to the Tokyo Guidelines 2018 and postoperative complications, and to assess the predictive value of inflammatory and nutritional indices in patients undergoing surgery for acute cholecystitis.

Material and Methods: Patients who underwent surgery for acute cholecystitis between January 1, 2024 and December 31, 2025 were retrospectively analyzed. Patients who underwent elective cholecystectomy (n=262), percutaneous cholecystostomy (n=27), or concomitant surgical procedures (n=25) were excluded. A total of 136 patients were included. Patients were classified as Grade I-III according to the Tokyo Guidelines 2018. Demographic data, clinical timing variables, operative time, length of hospital stay, and postoperative complications were recorded. Preoperative laboratory parameters were used to calculate NLR, PLR, CAR, PNI, SII, RAR, and CALLY indices. Non-parametric statistical tests were applied. Receiver operating characteristic (ROC) analysis was performed for parameters associated with postoperative complications. Statistical significance was set at p<0.05.

Results: Fifty-two patients (38.2%) were classified as Grade I, 52 (38.2%) as Grade II, and 32 (23.5%) as Grade III acute cholecystitis. Advanced age and prolonged symptom-to-admission time were significantly associated with higher Tokyo grades (p<0.001). As disease severity increased, operative time, length of hospital stay, and postoperative complication rates increased significantly (p<0.001 and p=0.034, respectively) (Table 1).PNI values were significantly lower in patients who developed postoperative complications (p=0.018). Although CAR values tended to be higher in patients with complications, this difference was not statistically significant (p=0.090). No significant differences were observed for NLR, PLR, or SII. ROC analysis showed that PNI had moderate discriminative ability for predicting postoperative complications (AUC=0.678). A cut-off value of ≤41.0 yielded a sensitivity of 70% and a specificity of 62%. The discriminative ability of CAR was limited (AUC=0.628) (Figure 1). No 30-day mortality was observed.

Conclusion: In acute cholecystitis surgery, disease severity according to the Tokyo Guidelines 2018 is significantly associated with clinical course and postoperative complications. Postoperative complication risk appears to be more strongly related to the patient's nutritional reserve, reflected by PNI, rather than to classical inflammatory indices. These findings suggest that nutritional status should be considered in perioperative risk assessment.

Keywords: Acute cholecystitis, Tokyo grade, postoperative complication

Table 1. Association between acute cholecystitis severity according to the Tokyo Guidelines 2018 and clinical course and postoperative outcomes

Variable	Grade I	Grade II	Grade III	p
Number of patients, n (%)	52 (38.2)	52 (38.2)	32 (23.5)	—
Age (years)	↓	↑	↑↑	<0.001
Symptom-to-admission time (days)	↓	→	↑	<0.001
Length of hospital stay (days)	↓	↑	↑↑	<0.001
Operative time (min)	↓	↑	↑↑	<0.001
Postoperative complication, n (%)	3 (5.8)	6 (11.5)	8 (25.0)	0.034

Note: Arrows indicate relative trends across increasing Tokyo grades.

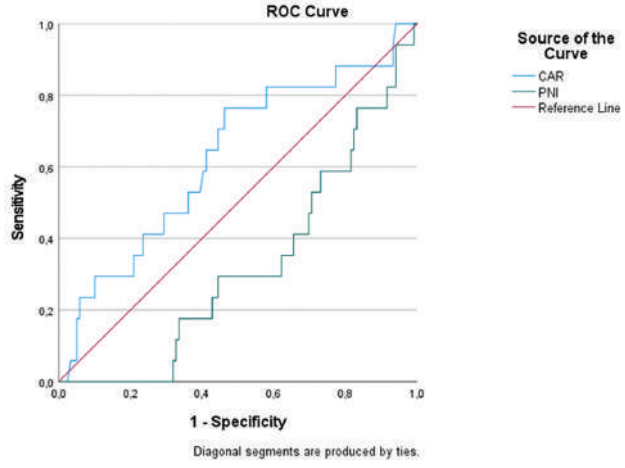


Figure 1. ROC curves for PNI and CAR in predicting postoperative complications.

[S-167]

Predictive value of the RDW/albumin ratio for clinically relevant pancreatic fistula in elderly patients undergoing pancreaticoduodenectomy

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Objective: Clinically relevant postoperative pancreatic fistula (CR-POPF) remains one of the leading causes of morbidity following pancreaticoduodenectomy. In addition to technical surgical factors, biochemical markers reflecting systemic inflammation and physiological reserve may contribute to risk prediction. The red cell distribution width/albumin ratio (RDW/Alb) is a composite parameter reflecting inflammatory status and hepatic protein synthesis. This study aimed to investigate whether the RDW/Alb ratio has a stronger predictive value for postoperative complications, particularly in elderly patients undergoing Whipple surgery.

Material and Methods: This single-center retrospective study included 140 patients who underwent pancreaticoduodenectomy for pancreatic head and periampullary malignancies. Patients were divided into two groups: <70 years and ≥70 years. Preoperative RDW-CV (%) and serum albumin (g/L) values were used to calculate the RDW/Alb ratio. To evaluate the age-dependent effect of this biomarker, an interaction variable (RDW/Alb × age; RAR×age) was created and incorporated into the regression model. The primary outcome was the development of clinically relevant postoperative pancreatic fistula (CR-POPF). Continuous variables were analyzed using appropriate statistical tests, while categorical variables were compared using chi-square analysis. Logistic regression analysis was performed to identify independent risk factors. A p-value <0.05 was considered statistically significant.

Results: CR-POPF developed in 30 of 140 patients (21.4%). The incidence of CR-POPF was similar between age groups (<70 years: 22.4% vs. ≥70 years: 20.3%; p=0.768). Elderly patients had significantly higher RDW/Alb ratios (0.426±0.082 vs. 0.375±0.078; p<0.001). In this group, albumin levels were lower while RDW values were higher (p<0.01). Operative time was longer in patients who developed CR-POPF (p=0.002). Soft pancreatic texture and a narrow Wirsung duct were associated with fistula development (p=0.031 and p=0.034, respectively). Length of hospital stay was markedly prolonged in patients with CR-POPF. The RDW/Alb ratio did not differ between patients with and without CR-POPF (p=0.927). In logistic regression analysis, operative time (OR=1.007, 95% CI 1.003-1.012; p=0.002) and a narrow pancreatic duct (OR=2.57, 95% CI 1.07-6.16; p=0.034) were identified as independent risk factors. The RAR×age variable showed a trend toward increased complication risk but did not reach statistical significance (p=0.072).

Conclusion: Technical and anatomical factors remain the primary determinants of CR-POPF development. Although the RDW/Alb ratio was higher in elderly patients, it was not an independent predictor of fistula. The observed trend with the RAR×age interaction suggests that the prognostic value of inflammatory biomarkers may increase with age, warranting validation in larger cohorts.

Keywords: Pancreaticoduodenectomy, pancreatic fistula, RDW/albumin ratio, elderly patients, postoperative complications

Table 1. Baseline demographic, clinical and laboratory characteristics according to age group

Variable	<70 years (n=76)	≥70 yaş (n=64)	p-value
Age (years)	56.3±8.5	74.2±3.2	<0.001
Sex (male/female)	45 (59.2%)/31 (40.8%)	33 (51.6%)/31 (48.4%)	0.364
Operative time (min)	370.6±98.3	403.1±93.1	0.120
Albumin (g/L)	39.0±4.4	36.7±4.2	**0.002**
Preop RDW-CV (%)	14.37±1.69	15.39±1.97	**0.001**
RDW/Alb ratio	0.375±0.078	0.426±0.082	**<0.001**
Creatinin (mg/dL)	0.78±0.24	0.94±0.29	**0.001**
Total lymph node count	27.2±12.8	22.8±8.2	0.094
Type of surgery (PPPD/classical PD)	31 (40.8%)/45 (59.2%)	20 (31.3%)/44 (68.8%)	0.243
Tumor Type			0.515
Pancreas	37 (48.7%)	26 (40.6%)	
Distal bile duct	7 (9.2%)	10 (15.6%)	
Ampulla of vater	25 (32.9%)	19 (29.7%)	
Duodenum	1 (1.3%)	3 (4.7%)	
Others	6 (7.9%)	6 (9.4%)	
Pancreatic texture (soft / firm)	36 (47.4%)/40 (52.6%)	31 (48.4%)/33 (51.6%)	0.900
Wirsung duct diameter (narrow / dilated)	23 (30.3%)/53 (69.7%)	14 (21.9%)/50 (78.1%)	0.262
CR-POPF	17 (22.4%)	13 (20.3%)	0.768
Major complication (Clavien-Dindo ≥3)	20 (26.3%)	23 (35.9%)	0.219
30-day mortality	3 (3.9%)	9 (14.1%)	0.033

Table 2. Multivariate logistic regression (for CR-POPF)			
Variable	**OR (ExpB)**	**95% CI**	**p-value**
Operative time	1.007	1.003-1.012	0.002
Narrow wirsung duct	2.57	1.07-6.16	0.034
RAR × age group (interaction)	4.00	0.88-18.13	0.072
Preoperative	1.000	0.999-1.001	0.771

[S-168]

Xanthogranulomatous cholecystitis mimicking gallbladder cancer: The role of preoperative hematological and inflammatory markers

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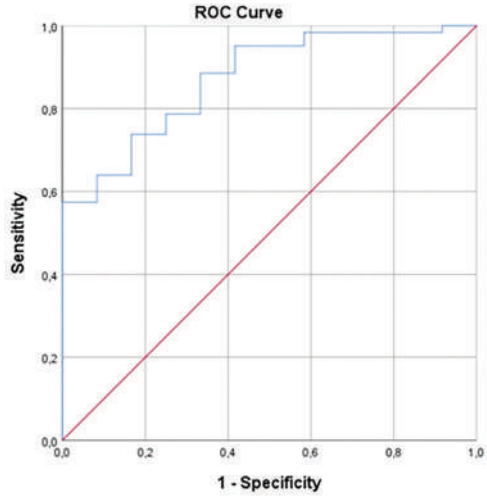
Objective: Xanthogranulomatous cholecystitis (XGC) is an inflammatory disease that can clinically and radiologically mimic gallbladder cancer (GBC), making preoperative differentiation challenging. This study aimed to compare preoperative hematological and inflammatory parameters in patients diagnosed with XGC and GBC and to evaluate the diagnostic value of these parameters in differential diagnosis.

Material and Methods: This single-center retrospective study included patients who underwent cholecystectomy between January 2018 and December 2025 at İstanbul Fatih Sultan Mehmet Training and Research Hospital and were postoperatively diagnosed with XGC or GBC based on histopathological examination. Patients were divided into two groups: XGC and GBC. Demographic characteristics, preoperative complete blood count, and biochemical parameters were recorded. Neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR), monocyte-to-lymphocyte ratio (MLR), systemic immune-inflammation index (SII), hemoglobin–albumin–lymphocyte–platelet (HALP) score, and modified HALP (mHALP) score were calculated. Intergroup comparisons were performed using appropriate statistical tests.

Results: A total of 73 patients were included in the study, of whom 61 were diagnosed with XGC and 12 with GBC. No significant differences were observed between the groups in terms of demographic characteristics or most hematological and inflammatory parameters. However, preoperative albumin levels, HALP scores, and mHALP scores were significantly lower in the gallbladder cancer group. Multivariate analysis identified the HALP score as an independent marker for differentiating XGC from GBC. ROC analysis demonstrated that a HALP score below 0.58 was associated with an increased likelihood of GBC.

Conclusion: Preoperative differentiation between XGC and GBC remains clinically challenging. Hematological and inflammatory parameters obtained preoperatively—particularly the HALP score—may be useful in distinguishing between these two conditions. A HALP score below 0.58 appears to be a clinically valuable cut-off for predicting GBC.

Keywords: Xanthogranulomatous cholecystitis, gallbladder cancer, cholecystectomy



AUCs	P value	95% CI	Cut-off	Sensitivity (%)	Specificity (%)
0,872	<0,001	0,776-0,968	0,58	73,8	83,3

AUC: Area under the curve

Figure 1. ROC curve analysis of the HALP score

Table 1. Comparison of preoperative hematological and inflammatory biomarkers between groups

	XGC (n=61)	GBC (n=12)	p-value	Odds ratio	p-value
White blood cell count (10^3/µL), mean ± SD	8.8±2.75	8.1±3.09	0.173		
Neutrophil count (10^3/µL), mean ± SD	5.6±2.89	5.1±2.90	0.341		
Lymphocyte count (10^3/µL), mean ± SD	2.3±0.85	2.2±1.03	0.371		
Monocyte count (10^3/µL), mean ± SD	0.5±0.19	0.5±0.16	0.418		
Platelet count (10^3/µL), mean ± SD	281.8±78.76	247.8±43.33	0.166		
Hemoglobin (g/dL), mean ± SD	13.2±1.61	12.4±1.54	0.113		
MPV (fL), mean ± SD	8.3±1.37	8.1±1.25	0.579		
RDW (%), mean ± SD	14.3±1.40	15.1±1.61	0.116		
INR, mean ± SD	1.0±0.10	0.9±0.07	0.806		
Albumin (g/dL), mean ± SD	4.1±0.46	3.7±0.33	*0.001	0.648	0.605
CRP (mg/L), mean ± SD	28.4±53.73	10.9±9.00	0.374		
NLR, mean ± SD	3.1±3.22	3.1±3.80	0.888		
PLR, mean ± SD	136.4±63.19	132.1±56.28	0.941		
MLR, mean ± SD	0.2±0.16	0.2±0.19	0.448		
SII, mean ± SD	846.6±783.51	722.7±789.42	0.405		
SIRI, mean ± SD	1.8±2.58	1.8±2.76	0.812		
CAR, mean ± SD	6.9±12.68	3.1±2.84	0.503		
HALP score, mean ± SD	1.0±0.66	0.4±0.19	*<0.001	0.008	*0.019
mHALP score, mean ± SD	36,671±17,522	25,966±14,869	*0.048	1.000	0.206

[1]: Mann–Whitney U test, [2]: Student's t-test.
* $p<0.05$ was considered statistically significant. XGC: Xanthogranulomatous cholecystitis, GBC: Gallbladder cancer. Significant variables were evaluated using binary multivariate logistic regression analysis.

[S-170]

Predictive value of an intraoperative gallbladder scoring system for surgical difficulty and postoperative outcomes in laparoscopic cholecystectomy

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Objective: Laparoscopic cholecystectomy (LC) is the gold standard surgical treatment for gallbladder diseases. This study aimed to evaluate the effectiveness of an intraoperative gallbladder scoring system in predicting surgical difficulty and perioperative outcomes in patients undergoing LC. Accurate estimation of surgical difficulty in gallbladder dissection (LC) is crucial for optimizing surgical planning, patient information, and postoperative outcomes. Various preoperative and intraoperative factors, such as gallbladder wall thickness, adhesions, scleroatrophic changes, and the anatomy of Calot's triangle, have been identified as determinants of difficult LC. However, preoperative scoring systems may not fully capture the dynamic intraoperative findings that ultimately determine the complexity of the procedure. In this context, intraoperative gallbladder scoring systems have been developed to provide an objective, real-time assessment of surgical difficulty. Studies from different geographic regions have validated and adapted intraoperative scoring systems, confirming predictive values for difficult dissection and conversion to open surgery.

Material and Methods: A total of 798 patients who underwent elective LC for cholecystopathy (symptomatic cholelithiasis, gallbladder polyps, and adenomyomatosis) performed by a single surgeon at our institution between March 2019 and February 2024 were retrospectively analyzed. Demographic characteristics, ASA scores, and predisposing factors were recorded. The degree of intraoperative gallbladder adhesions was graded on a scale from 0 to 4 operative time, drain usage, conversion to open surgery, and postoperative complications were evaluated. The relationship between the intraoperative gallbladder score and surgical outcomes was statistically analyzed.

Results: The mean age of the patients was 51 years, and 61% were female. The intraoperative gallbladder score was 1 in 45.9% of patients, 2 in 26.3%, 3 in 15.1%, and 4 in 10.5%. Drain placement was required in 33.1% of cases. The conversion rate to open surgery was 2.1%. The postoperative complication rate was 1.1%. A statistically significant association was found between increasing intraoperative gallbladder scores and drain usage, postoperative complications, and conversion to open surgery ($p<0.05$). No significant association was observed between the intraoperative score and the need for ERCP.

Conclusion: The intraoperative gallbladder scoring system is a reliable and practical method for predicting surgical difficulty and adverse perioperative outcomes in LC. Its routine use may support surgical decision making and improve patient safety and surgical outcomes.

Keywords: Laparoscopic cholecystectomy, intraoperative scoring, surgical difficulty, conversion

Table 1. Relationship between intraoperative gallbladder scoring system and surgical outcomes

Intraoperative GB score	0	1	2	3	4	Total	p-value
No. of patients n (%)	18 (2.2)	366 (45.9)	209 (26.3)	121 (15.1)	84 (10.5)	798 (100)	
Drain usage n (%)	–	2 (0.6)	63 (30.1)	114 (95.8)	84 (100)	264 (33.0)	<0.001
Complications n (%)	–	1 (0.5)	1 (0.2)	3 (2.5)	4 (4.8)	9 (1.1)	0.002
Conversion from LC to OC n (%)	–	–	1 (0.2)	5 (4.1)	11 (13.1)	17 (2.2)	<0.001
ERCP requirement n (%)	–	–	1 (0.2)	1 (0.8)	1 (1.2)	3 (0.4)	0.321
Total adverse outcomes* n (%)	–	1 (0.5)	3 (1.4)	9 (7.4)	3 (0.4)	–	<0.001

[S-171]

The effect of preoperative biliary drainage methods on multidrug-resistant microorganism colonization in rectal swabs in pancreatic head tumors

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Objective: Obstructive jaundice is a common clinical finding in patients with pancreatic head tumors, and preoperative biliary drainage is frequently performed before surgery. However, randomized controlled trials have shown that preoperative biliary drainage does not provide uniform benefit for all patients and may increase postoperative complication rates. Biliary drainage procedures can alter the biliary and gastrointestinal microbiota, leading to increased bacterial colonization. Previous studies have demonstrated that preoperative biliary drainage is associated with increased bile colonization and that multidrug-resistant microorganisms may adversely affect postoperative morbidity and long-term survival. Data evaluating the relationship between different preoperative biliary drainage methods and rectal multidrug-resistant microorganism colonization remain limited. This study aimed to assess the impact of preoperative biliary drainage methods on multidrug-resistant microorganism colonization detected by rectal swab screening in patients with pancreatic head tumors.

Material and Methods: This retrospective, single-center observational study included patients who underwent surgical treatment for pancreatic head tumors between 2020 and 2025 at University of Health Sciences Türkiye, Başakşehir Çam and Sakura City Hospital. A total of 145 patients were included. Patients were classified according to the preoperative biliary drainage method as endoscopic retrograde cholangiopancreatography, percutaneous transhepatic cholangiography, or no preoperative biliary drainage. Patients with multiple drainage procedures or unclear classification were excluded. Preoperative rectal swab samples were obtained according to the institutional infection control protocol. Multidrug-resistant microorganism colonization was defined as detection of extended-spectrum beta-lactamase producing Enterobacterales, carbapenem-resistant gram-negative bacteria, or vancomycin-resistant enterococci. Categorical variables were analyzed using chi-square or Fisher's exact tests, and a p-value below zero point zero five was considered statistically significant.

Results: Multidrug-resistant microorganism colonization was most frequently observed in patients who underwent endoscopic biliary drainage. Colonization rates were forty-two point nine percent in the endoscopic group, twenty-one point six percent in the percutaneous group, and four point nine percent in patients without biliary drainage. A statistically significant difference in colonization rates was observed among the groups. Compared with patients without biliary drainage, the risk of multidrug-resistant microorganism colonization was significantly higher in the endoscopic drainage group.

Conclusion: Preoperative biliary drainage is significantly associated with multidrug-resistant microorganism colonization detected by rectal swab screening in patients with pancreatic head tumors, particularly when endoscopic retrograde cholangiopancreatography is used. These findings suggest that preoperative biliary drainage decisions should consider biliary decompression together with the risk of antibiotic resistance and infection-related complications overall.

Keywords: Pancreatic head tumors, preoperative biliary drainage, multidrug-resistant microorganisms, rectal swab, ERCP

Table 1. Rectal MDR colonization according to preoperative biliary drainage methods

Group	MDR (+) n/N (%)	MDR (−) n/N (%)
ERCP	3/7 (42.9)	4/7 (57.1)
PTC	8/37 (21.6)	29/37 (78.4)
No drainage	2/41 (4.9)	39/41 (95.1)

[S-172]

Perforations following endoscopic retrograde cholangiopancreatography: Experience at a tertiary care center

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Objective: Perforations occurring after endoscopic retrograde cholangiopancreatography (ERCP) are rare but serious complications that can have a fatal course. This study aimed to evaluate the clinical characteristics, treatment approaches, and factors associated with mortality in patients diagnosed with ERCP perforation at a tertiary care center.

Material and Methods: In this retrospective study, patients diagnosed with post-ERCP perforation at University of Health Sciences Türkiye, Ankara Etlik City Hospital between October 2022 and June 2025 were screened. Demographic data, ERCP indication and type, imaging findings, treatment method (surgical vs. non-surgical), intensive care need, complications (Clavien–Dindo classification), and mortality were analyzed. Surgical and non-surgical groups were compared in terms of clinical outcomes. Potential predictors of mortality were evaluated using logistic regression analysis.

Results: A total of 20 patients were included in the study. The mean age was 61.2±18.3 years, and 65% of the patients were female. The most common indication for ERCP was choledocholithiasis (75%), and 80% of the procedures were therapeutic. The detection rate of free air on computed tomography was 85%. Sixty-five percent of the patients required intensive care. The overall mortality rate was 25%. Fifteen patients were treated non-surgically, and five patients were treated surgically. The mortality rate in patients who underwent surgical treatment was significantly higher than in the non-surgical group (60% vs. 13%, p=0.038). The Clavien-Dindo complication score was also higher in the surgical group (4.60 vs. 3.13, p=0.002). The need for intensive care and length of hospital stay tended to be higher in the surgical group. In the logistic regression analysis, the treatment approach applied was found to be associated with mortality.

Conclusion: ERCP perforations are serious complications that carry a high risk of morbidity and mortality, despite being rare, as reported in the literature. The mortality rate identified in this study was consistent with previously published series. The higher mortality rate in patients undergoing surgical treatment appears to be related to the more severe clinical presentation of these patients and the fact that they are usually referred for surgery at an advanced stage, rather than the adverse effects of the surgical approach. Our findings emphasize the critical importance of early diagnosis and patient selection in the management of ERCP perforations. While non-surgical approaches can be successful in appropriately selected cases, surgical intervention should not be delayed in cases of clinical deterioration or failure of conservative treatment. A multidisciplinary approach and timely treatment strategy play a decisive role in improving clinical outcomes.

Keywords: Clinical outcomes, conservative treatment, endoscopic retrograde cholangiopancreatography, perforation from ERCP, surgical treatment

Table 1.

Variable	n (%) or Mean ± SD
Age (years)	61.2 ± 12.8
Sex	
• Female	13 (65.0 %)
• Male	7 (35.0 %)
ASA score	
• I	3 (15.0 %)
• II	8 (40.0 %)
• III	9 (45.0 %)
Charlson Comorbidity Index (CCI)	2.55 ± 2.31
Glasgow–Imrie Score	2.75 ± 1.45
ERCP indication	
• Choledocholithiasis	15 (75.0 %)
• Neoplasia	1 (5.0 %)
• Pancreatitis	1 (5.0 %)
• Cholangitis	1 (5.0 %)
• Echinococcus	1 (5.0 %)
• Revisional	1 (5.0 %)
Purpose of ERCP	
• Therapeutic	16 (80.0 %)
• Diagnostic	4 (20.0 %)
Sphincterotomy	14 (70.0 %)
Precut sphincterotomy	4 (20.0 %)
Balloon dilatation	6 (30.0 %)
CT finding (free air present)	17 (85.0 %)
WBC (cells/mm³)	11 325 ± 5 339
CRP (mg/L)	67.1 ± 59.5
Follow-up time (days)	16.6 ± 10.3
Length of hospital stay (days)	28.3 ± 19.1
Recognition delay (hours)	20.15 ± 43.39
Interval from diagnosis to treatment (hours)	1.11 ± 3.36
ICU requirement	13 (65.0 %)
Mortality	5 (25.0 %)

Table 2. Baseline demographic and clinical characteristics of patients with ERCP-related perforation (n=20)

Variable	Non-surgical (n = 15) Mean ± SD	Surgical (n = 5) Mean ± SD	*t*	*p* (2-tailed)
Age (years)	62.9 ± 14.4	56.2 ± 3.1	1.01	0.325
Sex (male %)	33%	40%	−0.26	0.800
Cause score	1.60 ± 1.45	2.20 ± 1.79	−0.76	0.459
Therapeutic indication (%)	80%	80%	0.00	1.000
Sphincterotomy (yes %)	67%	80%	−0.54	0.597
Precut (%)	13%	40%	−1.28	0.217
Balloon dilatation (%)	33%	20%	0.54	0.597
Stapfer classification	2.53 ± 1.13	2.20 ± 1.30	0.55	0.587
Recognition time (h)	24.7 ± 49.3	6.4 ± 10.4	0.81	0.428
Interval to treatment (h)	1.54 ± 3.91	0.0 ± 0.0	0.86	0.400
ICU requirement (%)	53%	100%	−1.98	0.063
Mortality (%)	13%	60%	−2.24	**0.038**
Length of stay (days)	23.6 ± 14.0	42.2 ± 26.8	−2.04	0.056
Clavien–Dindo grade	3.13 ± 0.83	4.60 ± 0.55	−3.64	**0.002**
ASA score	2.40 ± 0.74	2.00 ± 0.71	1.06	0.303
Charlson Comorbidity Index	3.00 ± 2.42	1.20 ± 1.30	1.57	0.134
Glasgow-Imrie score	2.73 ± 1.53	2.80 ± 1.30	−0.09	0.932
WBC (cells/μL)	10,539 ± 3,547	13,684 ± 9,061	−1.15	0.265
CRP (mg/L)	55.3 ± 42.1	102.6 ± 92.4	−1.60	0.126
CT free air present (%)	87%	80%	0.34	0.735

Table 3. Comparison of surgical vs. non-surgical ERCP perforation cases (n=20)

Predictor	Score	χ^2	*df*	*p*-value
Surgical approach	7.200		3	**0.066**
• T-tube drainage	4.356		1	**0.037**
• Debridement	0.131		1	0.718
• HJ	3.158		1	0.076
Intervention type	10.044		4	**0.040**
• Stent	3.590		1	0.058
• Percutaneous	3.268		1	0.071
• Hemoclips	1.176		1	0.278
Cause of ERCP	7.200		5	0.206
Stapfer classification	4.762		3	0.190
ASA score	1.333		2	0.513
Charlson Comorbidity Index (CCI)	2.064		1	0.151
Age	0.110		1	0.740
Sex	0.073		1	0.787
Sphincterotomy	0.317		1	0.573
Precut	0.000		1	1.000
Balloon dilatation	2.857		1	0.091
Glasgow–Imrie score	0.679		1	0.410
WBC (cells/µL)	0.049		1	0.825
CRP (mg/L)	0.017		1	0.897

Table 4. Binary logistic regression analysis for predictors of mortality (n=20)

Çalışma (Yıl)	Tasarım / Kapsam	Perforasyon sınıflaması	Yönetim yaklaşımı (özet)	Mortaliteit / Ana mesaj
ESGE Kılavuz (2020)	Avrupa kılavuzu; iatrojenik endoskopik perforasyonların tanı/ tedavisi	ERCP perforasyonlarında sınıflama/şiddet-temelli yaklaşım (Stapfer mantığı)	**Erken tanı + sınıflama + seçilmiş olguda nonoperatif/endoskopik kapama**, yakın izlem; uygun olmayanlarda cerrahi	**"Olguların çoğu** dikkatli seçilirse **nonsurgikal** yönetilebilir" vurgusu
ASGE Kılavuz (2017)	ERCP advers olayları kılavuzu	Perforasyon yönetim prensipleri (genel)	Erken tanı ve uygun yönetim morbidite/mortaliteyi azaltır; algoritmik yaklaşım önerilir	Perforasyon dâhil komplikasyonlarda **"erken fark et–hızlı yönet"** prensibi
Sistematik derleme & meta-analiz (2025, Stapfer temelli)	Stapfer sınıflamasıyla ERCP perforasyonlarının tedavi/sonuçlarını derleyen SR/MA	**Stapfer I–IV**	Tip bazlı yönetim ve sonuç karşılaştırmaları; endoskopik ve konservatif yaklaşımlar seçilmiş hastada öne çıkıyor	Tip/şiddet ve zamanlama ile sonuçların değiştiğini vurgular
Plecic ve ark. (2024, J Clin Med)	Tek merkez deneyimi (ERCP perforasyonları)	Tip-temelli değerlendirme (Stapfer yaklaşımı)	Konservatif/endoskopik tedavi uygun hastada; cerrahi seçilmiş ağır olguda	Mortalitenin literatürde **%8–23** aralığında bildirildiğini ve seçilimin önemli olduğunu vurgular
Taşar ve ark. (2023, Türkiye)	Tek merkez; konservatif vs cerrahi erken sonuçlar	Stapfer tip dağılımı verilmiş	Cerrahi grupta daha ağır olgular; LOS daha uzun	Mortalitenin tanı/ tedavi gecikmesi ile ilişkili olduğuna dikkat çeker; mortalite **~%15.6**
Yılmaz ve ark. (2025, Türkiye çok merkezli)	Çok merkez gözlemsel; ERCP sonuçları/komplikasyonlar	Perforasyon nadir; literatür aralığı tartışılmış	Konservatif tedavinin vurgulandığı, cerrahinin seçilmiş gruba ayrıldığı yaklaşım	Perforasyon insidansı düşük; literatürde mortalitenin yüksek olabildiğini (bazı serilerde çok yüksek) not eder
Boonstra ve ark. (2024, Review/Update)	Güncel derleme	Stapfer sınıflaması yaygın	Erken tanı + sınıflama ile "hemen tedavi" (endoskopik kapama seçenekleri dâhil)	ERCP perforasyonlarının <1% ve mortalitenin anlamlı olabileceğini, erken müdahalenin kritik olduğunu vurgular
Emori (2025, GIE – yönetim odaklı)	Klinik odaklı güncel yazı	—	İşlem sırasında tanı + floroskopi/endoskopi bulgularıyla erken yakalama	İntraprocedural tanının ciddi advers olayları azaltabileceği vurgusu
Bu çalışma (2025)	Tek merkez, retrospektif; Etlik Şehir Hastanesi, Ekim 2022–Haziran 2025 (n=20)	Klinik ve radyolojik bulgulara dayalı değerlendirme	Non-cerrahi ve cerrahi yaklaşımlar karşılaştırıldı; cerrahi tedavi daha ağır klinik tabloya sahip hastalarda uygulandı	Genel mortalite **%25**; cerrahi grupta mortalite daha yüksek olup bu durumun tedavi yönteminden ziyade **klinik şiddet ve hasta seçimi** ile ilişkili olduğu gösterildi

[S-173]

Retrospective analysis of factors predicting conversion from laparoscopy to open surgery in xanthogranulomatous cholecystitis surgery

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Objective: Xanthogranulomatous cholecystitis (XGC) is a rare variant of gallbladder disease characterised by extensive fibrosis and inflammation that can mimic malignancy. This pathological process causes significant technical difficulties and high conversion rates during laparoscopic cholecystectomy. The aim of this study is to determine the preoperative clinical, laboratory, and radiological factors that predict conversion from laparoscopic surgery in patients with XGC based on pathology results and to analyse surgical outcomes.

Material and Methods: In this retrospective study, 159 patients who underwent surgery at Ankara Bilkent City Hospital between 2019 and 2025 and were histopathologically diagnosed with XGC were retrospectively examined. Patients were divided into two groups: those who underwent successful laparoscopic cholecystectomy (Group 1, n=126) and those who started laparoscopically but converted to open surgery (Group 2, n=33). Patients' demographic data, comorbidities, preoperative laboratory parameters, and ultrasonographic findings were recorded. Additionally, the duration of the operation, length of hospital stay, reasons for conversion, and postoperative complications were evaluated.

Results: Of the total 159 patients, 91 (57.2%) were male and 68 (42.8%) were female. The conversion rate in our study was determined to be 20.7% (33/159). The mean age of patients in the conversion group (Group 2) (63.48±10.89/55.11±13.08, p=0.001), CRP levels (48.56±56.64/18.65±41.16, p<0.001), ALP (p=0.018), and direct bilirubin (p=0.018) levels were statistically significantly higher than those in Group 1. Lymphocyte counts were significantly lower in the conversion group (p=0.004). Preoperative ultrasound revealed mucosal irregularities in more patients in the conversion group (%30.3/%10.3, p=0.01). In the conversion group, the operation time (90.75/51.03 min, p<0.001) and hospital stay (6.06/2.38 days, p<0.001) were longer, and the complication rate was higher (p<0.001). The most common reason for conversion was difficulty in exploration (87.9%, n=29).

Conclusion: The conversion rate is high in cases of xanthogranulomatous cholecystitis, and conversion is associated with a significantly increased operative time, prolonged hospital stay, and a higher complication rate. In XGC cases, advanced age, high preoperative CRP, ALP, and direct bilirubin levels, and the presence of mucosal irregularities on ultrasound are important predictive factors for conversion from laparoscopic to open surgery. In patients with these risk factors, the surgical strategy should be carefully planned during the preoperative period, taking into account the likelihood of surgical difficulty and conversion, and patient consent should be detailed accordingly.

Keywords: Xanthogranulomatous cholecystitis, laparoscopic cholecystectomy, conversion, risk factors

Table 1.

	Total cohort	Group 1 (laparoscopic) (n=126)	Group 2 (conversion) (n=33)	p
Age	56.84±13.07	55.11±13.08	63.48±10.89	**0.001**
Gender				
Female	68 (42.8%)	56 (44.4%)	12 (36.4%)	0.436
Male	91 (57.2%)	70 (55.6%)	21 (63.6%)	
DM				
No	128 (80.5%)	102 (81%)	26 (78.8%)	0,807
Yes	31 (12.9%)	24 (19%)	7 (21.2%)	
HT				
No	103 (64.8%)	81 (64.3%)	22 (66.7%)	0.841
Yes	56 (35.2%)	45 (35.7%)	11 (33.3%)	
WBC (x10^9/L)	7.97±2.61	8.03±2.43	7.72±3.23	0.131
Neutrophil (x10^9/L)	5.11±2.32	5.09±2.1	5.18±3.07	0.624
lymphocyte (x10^9/L)	2.03±0.67	2.11±0.67	1.71±0.63	**0.004**
PLT(x10^9/L)	301.82±103.49	297.52±92.81	318.24±137.4	0.742
AST (U/L)	30.1±30.4	27.6±21.85	39.66±50.99	0.936
ALT (U/L)	47.61±64.09	46.2±59.15	53±81.09	0.264
ALP (U/L)	124.51±99.73	111.27±72.98	175.06±158.06	0.018
GGT (U/L)	101.55±149.77	99.82±155.58	108.15±127.09	0.858
T.Bilirubin (mg/dL)	0.77±0.5	0.76±0.51	0.83±0.48	0.229
D.Bilirubin (mg/dL)	0.29±0.24	0.27±0.2	0.39±0.34	0.018
CRP (mg/dL)	24.86±46.24	18.65±41.16	48.56±56.64	**<0.001**
USG gallstone				
No	9 (5.7%)	8 (6.3%)	1 (3%)	0.686
Yes	150 (94.3%)	118 (93.7%)	32 (97%)	
Gallstone size (mm)	9.71±8.18	9.94±8.2	8.83±8.16	0.409

Table 1. Continued

	Total cohort	Group 1 (laparoscopic) (n=126)	Group 2 (conversion) (n=33)	p
Mucosal irregularity				
No	136 (85.5%)	113 (89.7%)	23 (69.7%)	**0.01**
Yes	23 (14.5%)	13 (10.3%)	10 (30.3%)	
Intramural/nodular lesion				
No	155 (97.5%)	122 (96.8%)	33 (100%)	0.581
Yes	4 (2.5%)	4 (3.2%)	-	
Diffuse wall thickening				
No	34 (21.4%)	28 (22.2%)	6 (18.2%)	0.812
Yes	125 (78.6%)	98 (77.8%)	27 (81.8%)	
Wall thickness (mm)	5.41±2.91	5.36±2.97	5.59±2.73	0.691
Suspicion of malignancy				
No	139 (87.4%)	109 (86.5%)	30 (90.9%)	0.768
Yes	20 (12.6%)	17 (13.5%)	3 (9.1%)	
Operation duration (min)	59.27±19.91	51.03±8.74	90.75±19.2	**<0.001**
Hospitalization time (days)	3.14±3.23	2.38±2.2	6.06±4.65	**<0.001**
Complication				
No	142 (89.3%)	120 (95.2%)	22 (66.7%)	
Wound infection	10 (6.3%)	3 (2.4%)	7 (21.2%)	
Bleeding	2 (1.3%)	-	2 (6.1%)	**<0.001**
Bile leakage	3 (1.9%)	1 (0.8%)	2 (6.1%)	
Intra-abdominal infection	1 (0.6%)	1 (0.8%)	-	
Other organ injury	1 (0.6%)	1 (0.8%)	-	

[S-174]

The effect of the CA19-9×NLR index on survival in pancreatic ductal adenocarcinoma: A retrospective single-center experience

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Objective: The prognostic value of using systemic inflammation markers together with tumor markers in pancreatic ductal adenocarcinoma (PDAC) is gaining increasing attention. This study aimed to investigate the effect of an index created by multiplying CA19-9 and the neutrophil/lymphocyte ratio (NLR) on overall survival (OS) and disease-free survival (DFS).

Material and Methods: Patients who underwent Whipple procedures between 2020 and 2023 were retrospectively reviewed. Of the total 114 patients, 66 were excluded from the study due to pathology results indicating other malignancies such as ampulla or choledochal cancer, or benign causes such as pancreatitis and benign cystic lesions. A total of 48 PDAC patients were included in the study. The CA19-9×NLR index was calculated for each patient, and a logarithmic transformation was applied due to the skewed distribution. Survival analyses were performed using the Kaplan-Meier method; for visual comparison, patients were divided into low and high index groups based on the median log-index and compared using the log-rank test. Considering that CA19-9 levels may be affected by cholestasis, the independent effect of the index was evaluated using total bilirubin-adjusted Cox regression analysis.

Results: The mean age of the patients was 67.2 years, with 21 males and 27 females. In the Kaplan-Meier analysis based on median values, although the mean OS was longer in the low index group (33 vs. 27 months), no statistically significant difference was found between the groups (log-rank p=0.823). No significant difference was observed between the groups in terms of DFS (≈20 months; log-rank p=0.753). In the Cox regression analysis adjusted for total bilirubin, the log-index did not show an independent effect on OS (HR=1.11; 95% CI 0.69-1.78; p=0.667) or DFS (HR=1.00; 95% CI 0.63-1.60; p=0.996).

Conclusion: The relationship between the CA19-9×NLR index and survival in PDAC patients has not been demonstrated. The findings suggest that the prognostic use of this index needs to be validated in larger, multicenter cohorts

Keywords: CA19-9, pancreatic ductal adenocarcinoma

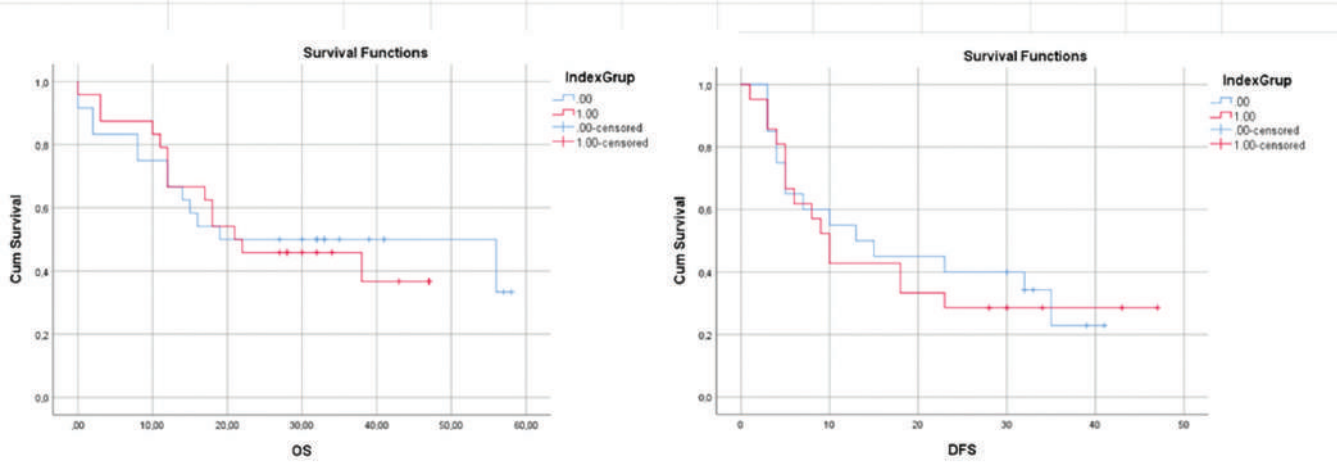


Figure 1. OS/DFS.

[S-175]

The safety of laparoscopic cholecystectomy in octogenarian patients: A comparison of perioperative outcomes between complicated and uncomplicated cases

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Objective: With the increasing size of the geriatric population, gallstone disease is being encountered more frequently in patients aged 80 years and older (octogenarians), making the safety of surgical management in this age group increasingly important. The aim of this study is to evaluate the perioperative outcomes of laparoscopic cholecystectomy in octogenarian patients with symptomatic cholelithiasis and to compare outcomes between complicated and uncomplicated cases.

Material and Methods: This retrospective study included patients aged ≥80 years who underwent laparoscopic cholecystectomy for symptomatic cholelithiasis at the General Surgery Clinic of the University of Health Sciences Türkiye, Fatih Sultan Mehmet Training and Research Hospital between January 2011 and January 2026. Patients were stratified into two groups: The uncomplicated group, comprising patients presenting with biliary colic, and the complicated group, consisting of those diagnosed with acute cholecystitis, acute biliary pancreatitis, or obstructive jaundice. Demographic characteristics, operative duration, timing of surgery, conversion to open surgery, and mortality rates were analyzed and compared between the two groups.

Results: A total of 56 patients were included in the study. The mean age was 81.8±2.94 years, and 53.6% of the patients were female. The complicated group consisted of 33 patients (58.9%), while the uncomplicated group included 23 patients (41.1%). The rate of emergency surgery was significantly higher in the complicated group (p=0.034). The mean operative time was significantly longer in complicated cases compared to uncomplicated cases (86.8±47.8 min vs. 66.3±35.2 min; p=0.036). Although the conversion rate was higher in the complicated group, the difference did not reach statistical significance (21.2% vs. 4.3%; p=0.123). No postoperative complications were observed in any patient. Mortality occurred in a single case within the complicated group (3%).

Conclusion: Laparoscopic cholecystectomy is generally a safe and effective treatment option in octogenarian patients with symptomatic cholelithiasis. However, cases with complicated gallstone disease were associated with significantly longer operative times and a higher rate of conversion to open surgery, although the latter did not reach statistical significance. These findings suggest that surgical planning should be undertaken with greater caution in complicated cases and that surgeons should be prepared for potential intraoperative challenges.

Keywords: Gall bladder, laparoscopic cholecystectomy, octogenarian

Table 1. Demographic and perioperative clinical characteristics of the study population

Variable	All patients (n=56)	Uncomplicated group (n=23)	Complicated group (n=33)	p-value
Age, years (mean±SD)	81.8±2.94	81.3±2.38	2.1±3.31	0.452
Sex, n (%)				0.712
Female	30 (53.6)	13 (56.5)	17 (51.5)	
Male	26 (46.4)	10 (43.5)	16 (48.5)	
Modified Charlson Comorbidity Index (mean±SD)	5.6±0.99	5.5±1.07	5.6±0.95	0.710
ASA score, n (%)				0.511
1	1 (1.8)	1 (4.3)	0	
2	21 (37.5)	8 (34.8)	13 (39.4)	
3	32 (57.1)	14 (60.9)	18 (54.5)	
4	2 (3.6)	0	2 (6.1)	
Clinical presentation, n (%)				<0.001*
Biliary colic	23 (41.1)	23 (100)	0	
Acute cholecystitis	22 (39.3)	0	22 (66.7)	
Acute biliary pancreatitis	7 (12.5)	0	7 (21.2)	
Obstructive jaundice	4 (7.1)	0	4 (12.1)	
Timing of surgery, n (%)				0.034*
Emergency	7 (12.5)	0	7 (21.2)	
Elective	49 (87.5)	23 (100)	26 (78.8)	
Operative time, minutes (mean±SD)	78.3±43.94	66.3±35.28	6.8±47.84	0.036*
Parkland grading scale, n (%)				0.269
Grade 1	5 (8.9)	4 (17.4)	1 (3.0)	
Grade 2	16 (28.6)	8 (34.8)	8 (24.2)	
Grade 3	10 (17.9)	3 (13.0)	7 (21.2)	
Grade 4	10 (17.9)	4 (17.4)	6 (18.2)	
Grade 5	15 (26.8)	4 (17.4)	11 (33.3)	
Type of surgery, n (%)				0.123
Laparoscopic cholecystectomy	48 (85.7)	22 (95.7)	26 (78.8)	
Conversion to open surgery	8 (14.3)	1 (4.3)	7 (21.2)	
Postoperative hospital stay, days (mean±SD)	2.5±3.35	1.7±1.12	3.1±4.21	0.426
Complications, n (%)	0	0	0	—
Mortality, n (%)	1 (1.8)	0	1 (3.0)	1.000

[S-176]

Prediction of early recurrence/metastasis in pancreatic/periampullary tumors using machine learning models and its association with lymph node and surgical margin status

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Objective: Early recurrence or distant metastasis within the first six months after resection of pancreatic and periampullary tumors reflects aggressive tumor biology and is critical for guiding adjuvant treatment and follow-up strategies. This study aimed to evaluate the predictability of early recurrence/metastasis using machine learning models based on routinely available preoperative clinical and laboratory data and to assess the relationship of lymph node status and surgical margin status with oncological outcomes.

Material and Methods: This single-center retrospective cohort included 128 patients who underwent surgery between 2023 and 2025 (Whipple n=100, distal pancreatectomy n=13, total pancreatectomy n=7, subtotal pancreatectomy n=8). Preoperative model inputs consisted of age, ECOG performance status, ASA score, presence of jaundice, tumor location, and laboratory parameters including albumin, CRP, CA 19-9, NLR, SII, CAR, and PNI. Three models—logistic regression, random forest, and gradient boosting—were developed and compared. Model performance was evaluated using the area under the receiver operating characteristic curve (ROC-AUC). Recurrence and metastasis patterns were analyzed according to lymph node and surgical margin status.

Results: Early recurrence or metastasis occurred in 21.6% of patients. ROC-AUC values were 0.802 for logistic regression, 0.849 for gradient boosting, and 0.881 for random forest, which demonstrated the highest discriminative performance. Across models, the most influential predictors were NLR, preoperative albumin, ECOG score, SII, and PNI, whereas CA 19-9 showed a relatively limited contribution. Lymph node positivity was identified in 67 patients, and surgical margin positivity in 27 patients. Recurrence/metastasis developed in 19 of 90 margin-negative patients (21.1%) and in 3 of 50 lymph node–negative patients (6.0%). Postoperative mortality was observed in 30 patients (22.8%), with 5 deaths (3.9%) directly attributable to surgical complications. Most recurrences occurred within the first six months, while late mortality was predominantly related to disease progression. Kaplan-Meier analysis demonstrated significantly worse survival in patients with early recurrence.

Conclusion: In resectable pancreatic and periampullary tumors, preoperative inflammatory and nutritional markers—particularly NLR, SII, CAR, PNI, and albumin—along with clinical performance scores are strong predictors of early recurrence and survival. In this cohort, CA 19-9 remained a weak standalone tumor marker. Machine learning analyses using random forest and gradient boosting showed that accurate risk prediction can be achieved using simple, routinely available clinical data. These findings support the use of multivariable models over single biomarkers and suggest that early risk stratification may enable individualized treatment and surveillance strategies.

Keywords: Early recurrence, inflammatory biomarkers, machine learning, pancreatik cancer, survival prediction

Table 1. Strongest predictive parameters

Parameter	Clinical significance	Predictive strength
NLR	Systemic inflammation	High
SII	Immune-inflammatory response	High
Albumin	Nutritional status	High
PNI	Immuno-nutritional status	High
ECOG	Functional status	Moderate-High
CA 19-9	Tumor marker	Low

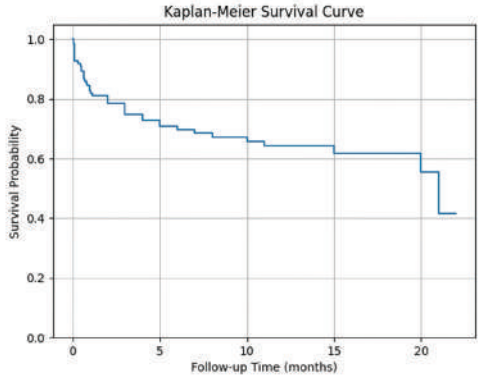


Figure 2. Kaplan-Meier survival curve.

The y-axis represents survival probability, and the x-axis represents follow-up duration (months).

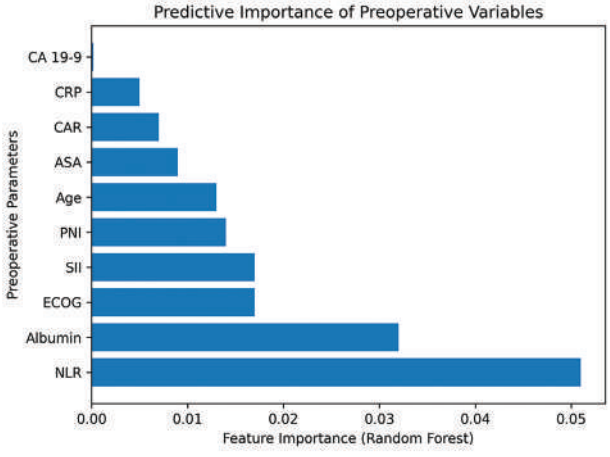


Figure 1. Strongest predictive parameters.

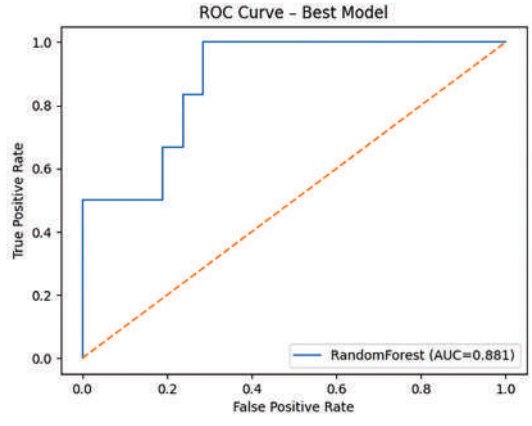


Figure 3. ROC curve (random forest, AUC =0.881).

The ROC curve illustrates the relationship between the true positive rate and the false positive rate; the dashed line represents random classification.

[S-177]

Efficacy of the lipid test in liver hydatid cyst surgery

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Objective: After surgery for hepatic hydatid cyst, biliary fistula is one of the most common causes of morbidity, especially in patients undergoing conservative surgical procedures. Persistent bile leakage prolongs hospital stay and leads to the need for additional interventions. In this study, we aimed to evaluate the effectiveness of the biliary lipid test (BLT), performed via intraoperative transcystic lipid injection, on postoperative biliary complications.

Material and Methods: A total of 122 patients who underwent open surgery for hepatic hydatid cyst between January 2011 and January 2024 were retrospectively analyzed. The patients were divided into two groups: The BLT group (n=65) and the control group (n=57), in which only conventional visual inspection was performed. In the BLT group, following cholecystectomy, a catheter was inserted into the cystic duct, and a lipid solution was injected via the transcystic route under distal common bile duct clamping. The orifices where lipid droplets were observed were ligated with 5/0 Prolene sutures. A total of 200 leakage points were sutured.

Results: No postoperative bile leakage lasting longer than one week was observed in the BLT group. In contrast, a significantly higher rate of persistent biliary fistula was detected in the control group. Additionally, the length of hospital stay was found to be shorter in the BLT group. Transcystic lipid injection, combined with distal clamping, enabled effective identification of leakage points, and suturing of these sites prevented postoperative bile leakage.

Conclusion: The biliary lipid test (BLT), performed via transcystic lipid injection, is an effective, low-cost method that can be applied using standard surgical equipment to reduce the development of persistent biliary fistula in hepatic hydatid cyst surgery. Further prospective randomized controlled studies are required to support these findings.

Keywords: Bile leak, transcystic lipid injection, hydatid cyst

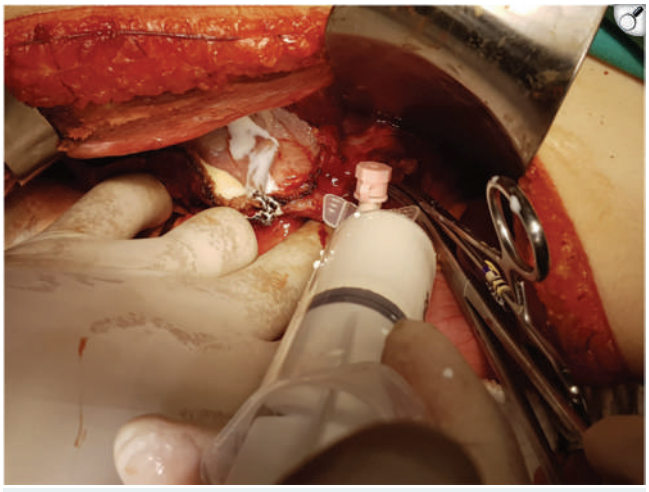


Figure 1. Transcystic lipid injection.
Displaying the orifices at the site of lipid solution injection.

Table 1. Comparison of bile leakage

Variables	Categories	BLT group (n = 65)			No-BLT group (n = 57)		
		Leakage	No leakage	P	Leakage	No leakage	P
ERC							
	Postop	7 (100.0)	0 (0.0)	<0.001*	9 (100.0)	0 (0.0)	<0.001*
	None	5 (8.8)	52 (91.2)		11 (66.7)	34 (75.6)	
	Preop	1 (100.0)	0 (0.0)		2 (66.7)	1 (33.3)	
Preop LFT							
	Normal	9 (17.3)	43 (82.7)	<0.274	18 (39.1)	28 (60.9)	0.865
	High	4 (30.8)	9 (69.2)		4 (36.4)	7 (63.6)	
Orifice obliteration							
	Yes	11 (26.2)	31 (73.8)	0.115	15 (60.0)	10 (40.0)	0.003
	None	2 (8.7)	21 (91.3)		7 (21.9)	25 (78.1)	
Orifice count							
	1	4 (44.4)	5 (55.6)	0.287	1 (25.0)	3 (75.0)	0.338
	2–3	5 (29.4)	12 (70.6)		12 (70.6)	5 (29.4)	
	4–5	1 (10.0)	9 (90.0)		2 (50.0)	2 (50.9)	
	6–7	0 (0.0)	4 (100.0)		0 (0.0)	0 (0.0)	
	8–10	1 (50.0)	1 (50.0)		0 (0.0)	0 (0.0)	
Bile drainage over 100 cc							
	Yes	6 (85.7)	1 (14.3)	<0.001*	8 (88.9)	1 (11.1)	<0.001*
	None	7 (12.1)	51 (87.9)		14 (29.2)	34 (70.8)	
Day of drain removal							
	Lower than 10	13 (20.0)	52 (80.0)		13 (27.7)	34 (72.3)	<0.001*
	Greater than 10	0 (0.0)	0 (0.0)		9 (90.0)	1 (10.0)	
Recurrence							
	Yes	1 (4.5)	21 (95.5)	0.057	12 (50.0)	12 (50.0)	0.132
	None	12 (27.9)	31 (72.1)		10 (30.3)	23 (69.7)	

Comparison of leakage between the BLT group and the no-BLT group

[S-178]

Systemic and local determinants in the development of biochemical pancreatic leakage in pancreaticoduodenectomy: A single-center experience

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Objective: Biochemical postoperative pancreatic fistula (POPF) after pancreaticoduodenectomy is not classified as a clinical fistula according to ISGPS 2016; however, it reflects pancreatic anastomotic healing and local surgical risk. Identifying determinants of biochemical POPF may contribute to more rational surgical planning and postoperative surveillance. This study aimed to evaluate the association between preoperative inflammatory and nutritional indices and biochemical POPF and to compare these systemic parameters with local anatomical factors such as pancreatic texture and main pancreatic duct diameter.

Material and Methods: Patients who underwent classical Whipple pancreaticoduodenectomy between January 1, 2016 and December 31, 2025 were retrospectively reviewed. Patients with missing clinical, laboratory, or imaging data and those operated under emergency conditions were excluded. Analyses were performed on 72 patients. Preoperative inflammatory and nutritional indices (NCR, CAR, CALLY, PNI, SII, NLR, PLR, and LMR) were calculated. Pancreatic texture was classified as soft or hard, and main pancreatic duct diameter was measured using preoperative imaging. Biochemical POPF was defined according to ISGPS 2016 criteria.

Results: The median age of the cohort was 67 years, 55.6% of patients were male, the median body mass index was 25.4 kg/m², and the median main pancreatic duct diameter was 5.0 mm (Table 1). The incidence of biochemical POPF was 22.2%. Patients who developed biochemical POPF had a significantly higher rate of soft pancreatic texture and a smaller main pancreatic duct diameter (Table 2; $p<0.001$ and $p=0.004$). In contrast, none of the preoperative inflammatory or nutritional indices showed a significant association with biochemical POPF (all $p>0.05$). No significant differences were observed between groups regarding age, body mass index, operative time, or perioperative blood transfusion.

Conclusion: Biochemical POPF after pancreaticoduodenectomy appears to be independent of systemic inflammatory and nutritional status and is primarily determined by local pancreatic anatomical characteristics. These findings suggest that local factors should be prioritized over systemic indices when assessing biochemical POPF risk.

Keywords: Pancreaticoduodenectomy, biochemical pancreatic leak, pancreatic texture

Table 1. Demographic and clinical characteristics of the study population (n=72)

Variable	Value
Age, median (IQR), years	67 (14)
Male sex, n (%)	40 (55.6)
Body mass index, median (IQR), kg/m²	25.4 (6.6)
Main pancreatic duct (wirsung) diameter, median (IQR), mm	5.0 (5.0)
Operative time, median (IQR), min	255 (95)
Length of hospital stay, median (IQR), days	21 (15)
Soft pancreatic texture, n (%)	13 (18.1)
Perioperative blood transfusion, n (%)	42 (58.3)
Biochemical POPF, n (%)	16 (22.2)
Major morbidity, n (%)	8 (11.1)
30-day mortality, n (%)	4 (5.6)

IQR: Interquartile range, POPF: Postoperative pancreatic fistula.

Table 2. Comparison of local and surgical variables according to biochemical POPF development

Variable	No POPF (n=56)	Biochemical POPF (n=16)	p
Main pancreatic duct (wirsung) diameter, median (IQR), mm	5.0 (5.0)	3.0 (3.0)	0.004
Soft pancreatic texture, n (%)	5 (8.9)	8 (50.0)	<0.001
Operative time, median (IQR), min	255 (95)	260 (90)	0.467
Perioperative blood transfusion, n (%)	35 (62.5)	7 (43.8)	0.251

POPF: Postoperative pancreatic fistula, IQR: Interquartile range.

[S-179]

Can preoperative FIB-4 score predict cholecystectomy difficulty? A retrospective single-center analysis

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Objective: Cholecystectomy is one of the most frequently performed operations in general surgery, and surgical difficulty and postoperative outcomes can vary depending on patient characteristics. The FIB-4 score, which non-invasively assesses liver fibrosis, provides indirect information about systemic inflammation and hepatic reserve. The aim of this study is to evaluate whether the preoperative FIB-4 score can predict the difficulty of cholecystectomy.

Material and Methods: A retrospective analysis was performed on 509 patients who underwent cholecystectomy at a single center. Demographic data, preoperative laboratory parameters, and FIB-4 scores were recorded. Surgical difficulty indicators included operation time, length of hospital stay, conversion to open surgery, and postoperative complications. Patients were divided into three groups based on their FIB-4 score: <1.3,1.3–2.67, and >2.67. Continuous variables were presented as median (IQR) as they did not show a normal distribution and were compared using the Kruskal-Wallis test. Categorical variables were analyzed using the chi-square test. Logistic regression analysis was performed for postoperative complications.

Results: Of the patients, 327(64.2%) were women and 182 (35.8%) were men, with a median age of 50 years (IQR: 40-60). A significant increase in operation time was observed with increasing FIB-4 score ($p<0.05$). Similarly, hospital stay was significantly longer in the high FIB-4 group ($p<0.001$). In logistic regression analysis, the FIB-4 group was identified as an independent risk factor for the development of postoperative complications (OR=2.16, 95% CI: 1.13-4.10, p=0.018). The postoperative complication rate was 1.5% in the FIB-4 <1.3 group, while it was 6.1% and 6.3% in the 1.3-2.67 and >2.67 groups, respectively. A significant difference was found between the groups ($\chi^2=8.02$, p=0.018; Fisher p=0.013). Although the conversion rate was higher in the FIB-4 >2.67 group (6.3%), no statistically significant difference was found between the groups (p=0.47).

Conclusion: The preoperative FIB-4 score appears to be associated with surgical difficulty and postoperative morbidity during cholecystectomy. This simple and easily calculable parameter can be considered a helpful tool in preoperative risk stratification and surgical planning. Further, prospective studies are needed to confirm these findings.

Keywords: Cholecystectomy, risk assessment, postoperative complications

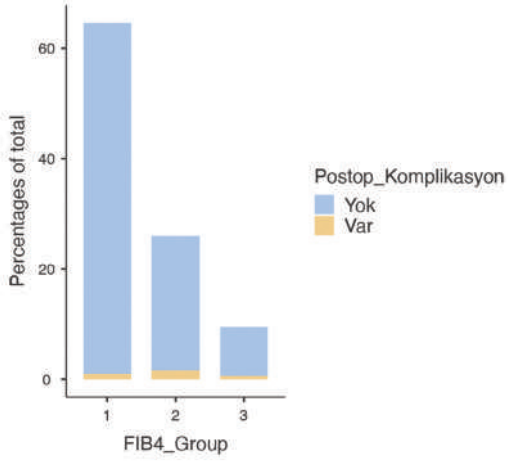


Figure 1. FIB-4 scores are classified (<1.3, 1.3-2.67, >2.67) according to the occurrence of complications in postoperative components.

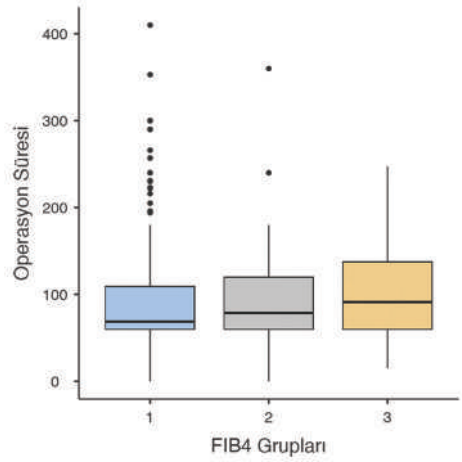


Figure 2. Distribution of operation times (min) according to FIB-4 score groups (<1.3, 1.3-2.67, >2.67).

Comparison of demographic characteristics, surgical parameters, and postoperative outcomes according to FIB-4 score groups.

Table 1.

Variable	<1.3 (n=328)	1.3-2.67 (n=132)	>2.67 (n=48)	p-value
Age, median (IQR)	45 (36-53)	61 (53-68)	66.5 (55-74)	<0.001
Operation time (min), median (IQR)	69 (60-109)	79 (60-120)	91.5 (60-138)	<0.001
Length of hospital stay (days), median (IQR)	3 (2-4)	4 (2-6)	5 (3-9)	0.017
Postoperative complications, n (%)	5 (1.5)	8 (6.1)	3 (6.3)	0.018
Conversion, n (%)	10 (3.0)	4 (3.0)	3 (6.3)	0.47

[S-180]

Impact of cholecystectomy on serum lipid profiles: A retrospective study

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Objective: Although the relationship between gallstone disease and lipid metabolism is well established, there are limited data in the literature regarding changes in serum lipid profiles following cholecystectomy. This study aimed to evaluate the effect of cholecystectomy by comparing preoperative and postoperative serum lipid profiles of patients who underwent laparoscopic cholecystectomy at a secondary care hospital.

Material and Methods: This retrospective single-center study was conducted by reviewing the medical records of patients who underwent elective laparoscopic cholecystectomy between 2022 and 2024. Preoperative and postoperative levels of total cholesterol, low-density lipoprotein cholesterol (LDL-C), high-density lipoprotein cholesterol (HDL-C), and triglycerides levels were recorded. Preoperative and postoperative lipid parameters were compared.

Results: A total of 196 patients with a mean age of 46.4±11.8 (18–76) years were included in the study. Of these, 146 (74.5%) were female and 50 (25.5%) were male. At one-year, HDL-C increased significantly from 50.25±10.3 mg/dL to 52.3±11.4 mg/dL, while LDL-C decreased from 128 (111-153) mg/dL to 123 (100-143) mg/dL. In contrast, total cholesterol increased from 196 (173-225) mg/dL to 211 (175-229) mg/dL (p=0.014, p<0.001, and p=0.014, respectively). Triglyceride levels were comparable before and after surgery.

Conclusion: Several changes in the serum lipid profile were observed following cholecystectomy. The decrease in LDL-C levels accompanied by an increase in HDL-C levels suggests that cholecystectomy may have favorable effects on lipid metabolism. The observed increase in total cholesterol appears to be primarily attributable to the rise in the HDL-C fraction. These findings indicate that cholecystectomy may exert a potentially protective effect on atherogenic lipid fractions.

Keywords: Cholecystectomy, cholesterol levels, lipid profile

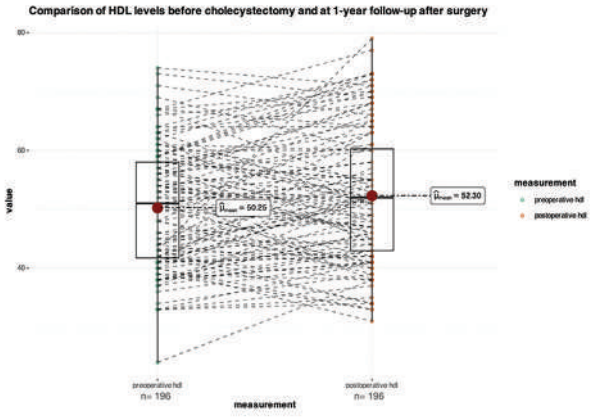


Figure 1. Comparison of HDL-C levels before cholecystectomy and at 1-year follow-up after surgery.

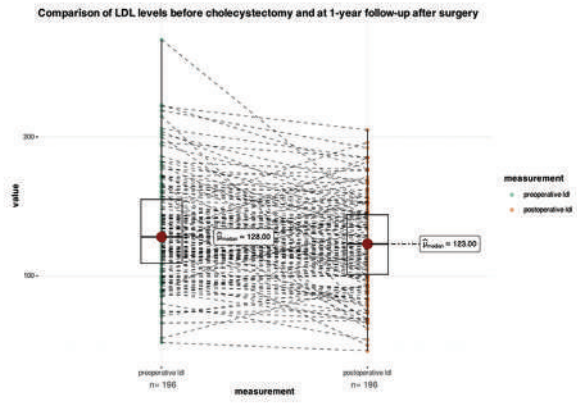


Figure 2. Comparison of LDL-C levels before cholecystectomy and at 1-year follow-up after surgery.

Table 1. Demographic parameters of study population

Variables	n=196
Age (years)	46.4±11.8
Gender Female, n (%) Male, n (%)	 146 (74.5) 50 (25.5)

Table 2. Comparison of lipid parameters at baseline and 12 months after cholecystectomy

Variables	Baseline	12 months	p
Urea (mg/dL)	28.3±10.9	29.5±10.7	0.051
Creatinine (mg/dL)	0.67 (0.59-0.77)	0.74 (0.60-0.82)	0.173
Total cholesterol (mg/dL)	196 (173-225)	211 (175-229)	0.014
LDL-C (mg/dL)	128 (111-153)	123 (100-143)	<0.001
HDL-C (mg/dL)	50.2±10.3	52.30±11.4	0.014
Triglicerid (mg/dL)	127 (96-165)	129 (95-178)	0.142

[S-181]

Comparison of early cholecystectomy and stepwise surgical approaches in elderly patients with acute cholecystitis in terms of clinical outcomes

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Objective: Determining the surgical treatment strategy in elderly patients with acute cholecystitis involves significant clinical challenges due to increased comorbidity burden and decreased surgical tolerance. This study aimed to compare the effects of early cholecystectomy and stepwise surgical approaches on perioperative clinical outcomes in elderly patients with acute cholecystitis.

Material and Methods: The Tokyo Guidelines 2018 (TG18) criteria were used for the diagnosis of acute cholecystitis. Patients with a Charlson comorbidity index (CCI) score ≥5 were evaluated. The Mann-Whitney U test was used for the comparison of continuous variables, and the chi-square or Fisher's exact test was used for the analysis of categorical variables. Statistical significance was set at $p<0.05$.

Results: A total of 125 patients were included in the study. The mean age of patients in Group 2 was significantly higher than that in Group 1 (79.1±5.8 years vs. 74.1±2.4 years; $p<0.001$). In Group-1, 85.5% (n=65) and in Group-2, 87.8% (n:43) of patients had a CK score ≥5, and no significant difference was observed between the groups in terms of additional diseases ($p=1.000$). Leukocyte counts at presentation were 14.9±5.1×10⊠/L in Group 1 and 13.5±5.8×10⊠/L in Group 2, and the difference was not statistically significant ($p=0.084$). No significant differences were found between the groups in terms of C-reactive protein levels (164.0±106.1 mg/L vs. 192.8±112.4 mg/L; $p=0.197$) and procalcitonin levels ($p=0.332$). The rate of perioperative complications (bleeding, bile leakage, bile duct injury, infection) was 12.0% in both groups (n=9 in Group 1; n=6 in Group 2), and no significant difference was found between the groups ($p=1.000$). The length of hospital stay was significantly longer in Group 2 compared to Group 1 (7.7±3.8 days vs. 7.1±4.7 days; $p=0.046$). When discharge and mortality outcomes were evaluated, 71 patients (93.5%) in Group 1 were discharged, while 5 patients (6.5%) died. In Group 2, 47 patients (95.9%) were discharged, while 3 patients (6.1%) died. No statistically significant difference was found between the groups in terms of discharge and mortality rates ($p=1.000$).

Conclusion: In elderly patients with acute cholecystitis, a staged surgical approach yields similar clinical outcomes to early cholecystectomy in terms of perioperative complications, discharge, and mortality rates, despite the older age profile. In addition to similar mortality and complication rates, the shorter hospital stay suggests that early cholecystectomy may be considered a priority as an effective and rational treatment strategy in suitable patients.

Keywords: Acute cholecystitis, early cholecystectomy, percutaneous cholecystostomy

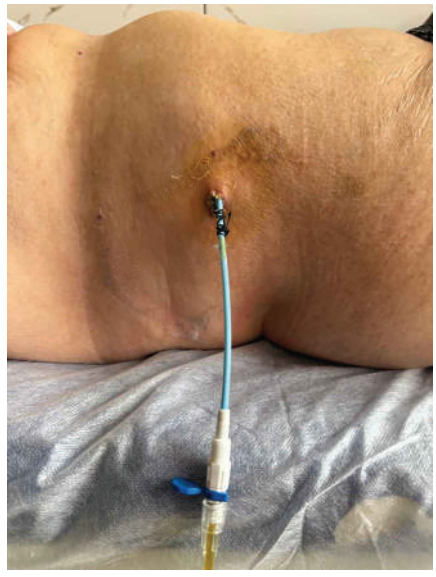


Figure 1. Percutaneous cholecystostomy catheter.

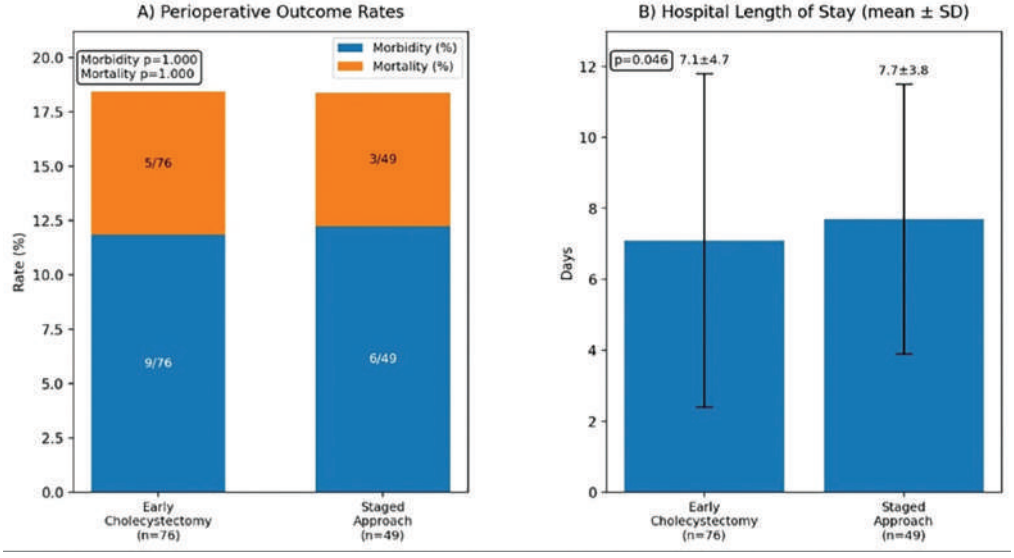


Figure 2. Perioperative outcomes of early cholecystectomy and staged approach.

[S-182]

The effect of early enteral nutrition after pancreaticoduodenectomy on systemic immuno-inflammation index

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Objective: This study aimed to evaluate the effect of early enteral nutrition on the postoperative systemic immune-inflammatory index (SII) in patients undergoing pancreaticoduodenectomy (Whipple procedure).

Material and Methods: Patients diagnosed with malignancy who underwent Whipple procedure between January 2022 and December 2025 were retrospectively reviewed. Patients were divided into two groups according to the time of initiation of enteral feeding: Early feeding (24-48 hours postoperatively) and late feeding (≥72 hours). SII [platelets × neutrophils/lymphocytes] was calculated using hematological parameters on days 3, 5, and 7 postoperatively. Following the evaluation of distribution tests, the groups were compared using the Mann-Whitney U test, and $p<0.05$ was considered significant.

Results: A total of 46 patients were included in the study (early: n=21, late: n=25). On postoperative day 3, the median SII value was 1704(411-8779) in the early feeding group and 3134 (612-6553) in the late feeding group (p=0.07). On postoperative day 5, the median SII values were found to be 1707 (548-4509) and 2789 (427-7244), respectively (p=0.04). On postoperative day 7, the median SII values were found to be 1278 (602-5153) and 2998 (739-7813), respectively (p=0.04). The median SII was lower in the early feeding group on postoperative days 3, 5, and 7. At all time points, patients who received early feeding showed a lower inflammatory response, and this difference persisted throughout the postoperative period. This difference was also found to be statistically significant on postoperative days 5 and 7.

Conclusion: ERAS protocols also report that early enteral feeding after the Whipple procedure shortens postoperative hospital stay, infection rates, and improves bowel function, and there are publications in the literature supporting this. In our study, early enteral feeding after the Whipple procedure showed a quantitative trend towards reducing systemic inflammation and had a statistically significant effect on SII. Based on these data, there is a need for evaluation of the clinical implications of initiating early enteral feeding in patients and for larger, prospective studies based on the data presented.

Keywords: Whipple, feeding, inflammation

[S-183]

Effect of early (≤72 hours) versus interval (≥4 weeks) laparoscopic cholecystectomy on major complications in acute calculous cholecystitis: A systematic review and meta-analysis

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Objective: In acute calculous cholecystitis, the timing of laparoscopic cholecystectomy is central to both patient safety and system-level efficiency. Comparisons between early surgery (≤72 hours from admission) and delayed/interval surgery (≥4 weeks) remain challenging due to heterogeneous study designs and outcome reporting. We aimed to systematically evaluate whether early laparoscopic cholecystectomy influences major complications compared with an interval strategy.

Material and Methods: A PRISMA-based systematic search was planned across PubMed, Web of Science, and Cochrane CENTRAL using "acute cholecystitis", "early", "within 72 hours", "admission", "delayed/interval", and "laparoscopic cholecystectomy". Randomized controlled trials (RCTs) and controlled cohort studies, including propensity score matched (PSM) analyses, were eligible. Early surgery was defined as admission-to-surgery ≤72 hours, and interval surgery as ≥4 weeks (most commonly 6-12 weeks). The primary outcome was major complication (Clavien-Dindo ≥III). When Clavien-Dindo was not reported, major events equivalent to CD≥III were standardized (reoperation, interventional drainage/procedures, severe biliary complications requiring ERCP/PTC, ICU admission/organ failure/septic shock, major bile duct injury, and death). Secondary outcomes included overall complications, bile duct injury, bile leak/collection, conversion, length of stay, readmission/recurrent biliary events, mortality, and operative time. Random-effects models were planned for meta-analysis. Risk of bias was assessed with RoB2 for RCTs and ROBINS-I for observational studies.

Results: Included studies were largely RCT-driven, and interval surgery was typically performed at 6–12 weeks. Overall, early cholecystectomy demonstrated at least a comparable safety profile to the interval approach with respect to major complications. Standardizing major events using CD ≥III-equivalent criteria improved cross-study comparability in reports lacking formal Clavien-Dindo grading. Beyond safety, early surgery offers practical advantages by achieving definitive treatment during the index admission, with potential reductions in total length of stay and in the risk of requiring a second admission or unplanned return due to recurrent biliary events. For rare outcomes such as major bile duct injury, uncertainty persists and confidence intervals may remain wide due to low event counts.

Conclusion: Current evidence suggests that targeting admission-to-surgery ≤72 hours in acute calculous cholecystitis is not associated with an increased burden of major complications (Clavien-Dindo ≥III or equivalent) compared with an interval (≥4 weeks) strategy. Where resources and expertise permit, early laparoscopic cholecystectomy should be considered the default approach, reserving delay for carefully selected patients based on clinical necessity.

Keywords: Acute cholecystitis, early cholecystectomy, interval cholecystectomy

[S-184]

Evaluation of the hepatoprotective effect of kaempferol in an experimental obstructive jaundice model

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Objective: The aim of this study is to investigate the protective effects of kaempferol on liver damage that develops after obstructive jaundice induced by choledochus ligation in rats.

Material and Methods: In the study,24 female Wistar albino rats aged 6-12 months will be used. Inflammatory biomarkers and liver function tests were compared between the Sham Group (n=8), Control Group (n=8) and Kaempferol Groups and the effectiveness of kaempferol in preventing liver damage was investigated. After 12 hours of fasting before the surgical procedure, the animals were given general anesthesia before the procedure, and the choledoch was dissected and isolated in the control and kaempferol groups, and ligation was carried out with 5/0 surgical suture. Liver damage was investigated by laboratory and histological examinations. The study was completed in a total of 7 days. Ketamine, ketoprofen and xylazine were given to the subjects during the follow-up period. At the end of the study, rats were sacrificed with high-dose ketamine and blood and tissue samples were taken.

Results: The study was completed with 20 rats. In the examination, TAS (p<0.001), TOS (p=0.007), ALP (p=0.003), ALT (p=0.002), AST (p=0.002), direct bilirubin (p=0.002) and total bilirubin (p=0.002) levels were significantly lower in the sham group compared to the control and kaempferol groups. No significant difference was noted between the control and kaempferol groups. On the other hand, while a statistically significant difference was observed between the three groups in TNF-α and IL-6, no statisticaly significant difference was noted between the groups in IL-10 levels. In the examination, a significant moderate positive correlation relationship was noted between the TNF-α-IL-6, TNF-α-TOS, and IL-6-IL-10 pairs. In addition, a significant moderate positive correlation relationship was observed between TAS and TOS (p=0.037). While a moderate positive correlation relationship was observed between TAS values and TOS, ALP, ALT, and AST values, a strong positive correlation relationship was noted between AST, D.bilirubin, and T.bilirubin values. On the other hand, a moderate positive correlation relationship was also noted between TOS-ALT.

Conclusion: Obstructive jaundice is associated with increased oxidative stress, as evidenced by strong correlations between oxidative stress markers and bilirubin levels. Kaempferol, a natural flavonoid, has demonstrated potential in mitigating this condition. Our results suggests that Kaempferol molecule can suppress pro-inflammatory biomarkers such as TNF-α and IL-6, exhibit anti-inflammatory action, and demonstrate a protective profile histologically. This may help reduce inflammation and protect tissue. More research, especially large-scale prospective studies, are needed to be sure of what role kaempferol plays in treating obstructive jaundice and the inflammation that comes with it.

Keywords: Kaempferol, liver damage, obstructive jaundice

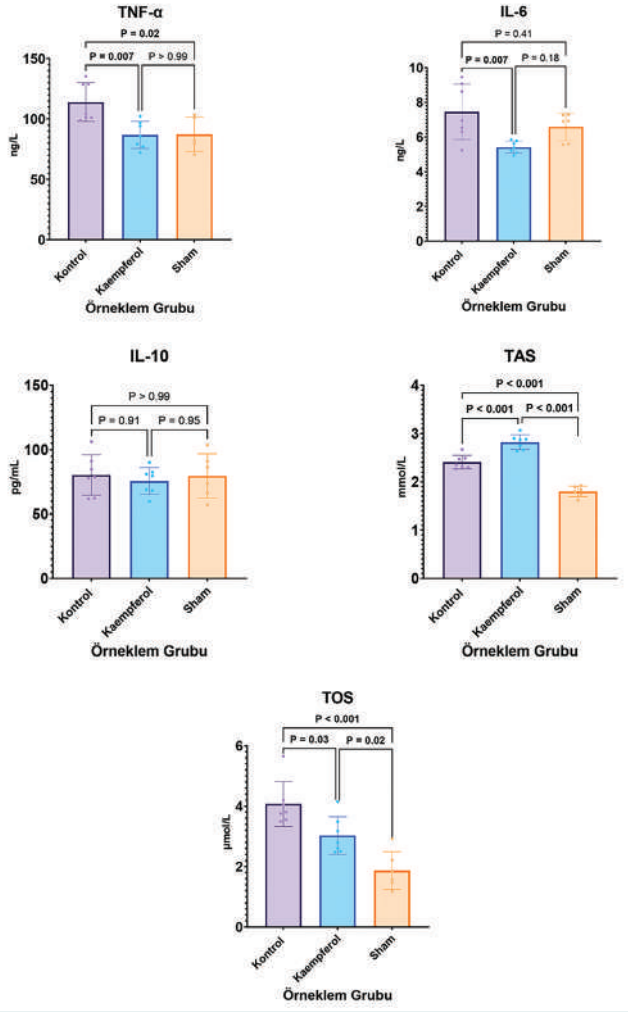


Figure 1. Summary of pairwise comparisons of biomarkers and post-hoc analyses.

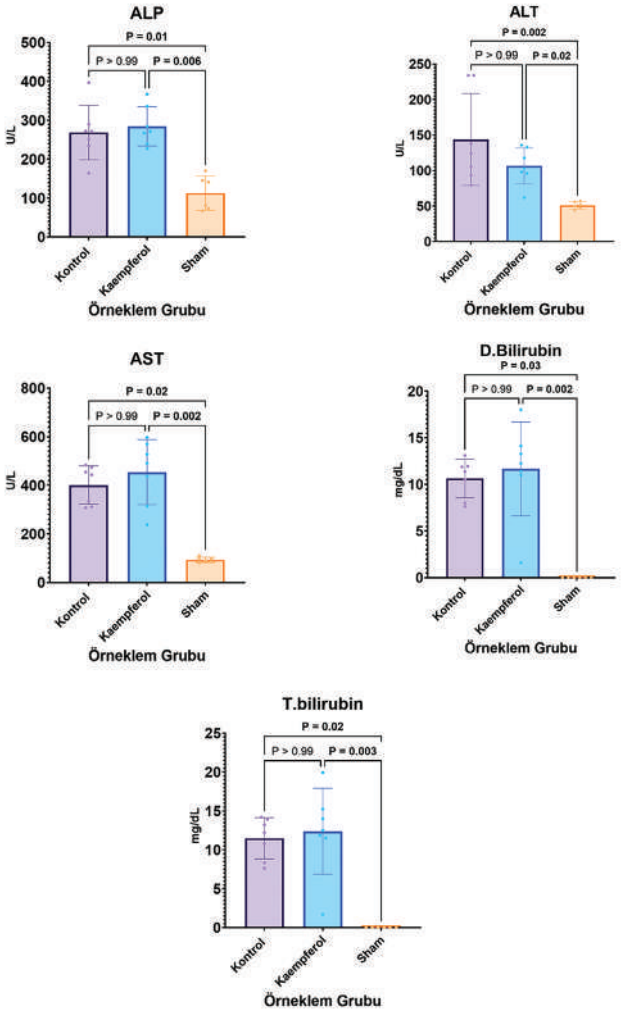


Figure 2. Summary of comparisons of liver function test values and post-hoc analyses.

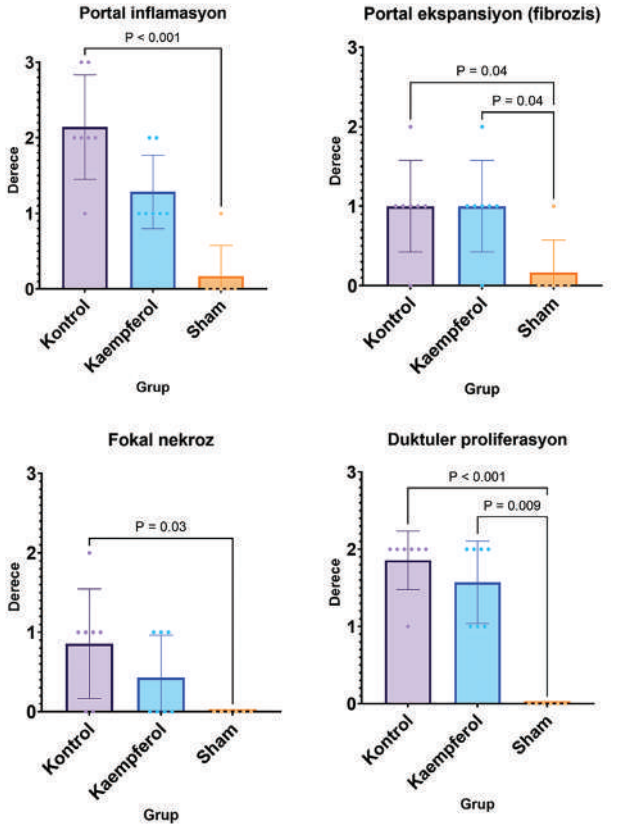


Figure 3. Post-hoc pairwise comparisons of histological findings among the three groups and visual summary.

[S-185]

Quantitative necrosis burden and clinical severity in initial CT scans of biliary necrotizing pancreatitis

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Objective: Necrotizing pancreatitis is associated with high morbidity and mortality, and early prediction of disease severity is crucial for clinical management. This study evaluated the relationship between quantitatively measured pancreatic necrosis rate on initial CT and clinical severity and hospital resource utilization in biliary necrotizing pancreatitis.

Material and Methods: Twenty-three patients with cholelithiasis-related biliary necrotizing pancreatitis were retrospectively reviewed. All underwent contrast-enhanced CT at admission. The necrosis rate was calculated as the two-dimensional ratio of the maximal necrotic area, measured using two perpendicular diameters on the axial slice with the most extensive necrosis, to the total pancreatic area. Severe clinical course and ICU requirement were assessed. Correlations were analyzed using Spearman's rank correlation coefficient (ρ).

Results: Mean age was 58.6±10.2 years; 8 patients (34.8%) were female. Severe clinical course developed in 8 patients (34.8%). Overall mortality was 13.0% (n=3) and occurred exclusively in the severe group. ICU admission was required in 7 patients (30.4%) with a mean ICU stay of 3.1±3.8 days; three patients with ICU stay ≥5 days required inotropic therapy and renal replacement therapy. Interventions were required in 4 patients (17.4%), all in the severe group (3 percutaneous drainage, 1 surgical necrosectomy). All patients with severe clinical course were classified as Balthazar E. Mean CTSI was 6.9±1.8 and mean necrosis rate was 0.33±0.12. A strong positive correlation was observed between necrosis rate and total hospital stay (ρ=0.712; p<0.001), between CTSI and hospital stay (ρ=0.726; p<0.001), and a very strong correlation between necrosis rate and CTSI (ρ=0.957; p<0.001). Pleural effusion was detected in 8 patients (34.8%), of whom 87.5% developed severe clinical course. Length of hospital stay was significantly longer in the severe group. Serum calcium levels were lower in severe cases, while other laboratory parameters showed no significant differences.

Conclusion: Quantitatively measured pancreatic necrosis rate on initial CT strongly reflects disease severity and hospital resource utilization and provides complementary value to CT-based scoring systems for early risk stratification.

Keywords: Necrotizing pancreatitis, biliary pancreatitis, computed tomography

[S-186]

The rationality of shunt surgery must be restored, 25-year experience in portal hypertension surgery

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Objective: The portal vein (PV) is the only venous drainage pathway for nearly all gastrointestinal organs. Portal hypertension (PH), resulting from a pathological increase in PV pressure, affects multiple organ systems. This condition, remain asymptomatic for long periods, is associated with a broad spectrum of symptoms, including esophageal varices carrying a 27% mortality and 4-15% bleeding risk, portal biliopathy (92%), gastroenteropathy, colopathy (60-74%), splenomegaly/hypersplenism (16-23%), ascites (14-20%), and encephalopathy/micro-encephalopathy (32%). Despite its clinical importance, there is currently no universally accepted treatment algorithm for PH. Medical and endoscopic therapies can control variceal bleeding with high (90%) initial success rates. However, as these modalities do not reduce portal pressure, particularly in advanced PH, they are associated with high (43%) recurrence and 63-72% rebleeding rates and are ineffective in other portal hypertensive complications such as gastropathy, colopathy, and biliopathy.

Material and Methods: We retrospectively analyzed 140 patients who presented with PH-related complications despite medical and endoscopic therapies and subsequently underwent surgical treatment. Selective splenorenal shunt surgery was performed in 131 patients (94%), including 102 pediatric and 29 adult patients. Surgical procedures comprised 40 distal and 91 proximal splenorenal shunts (Figure 1). Demographic characteristics, perioperative outcomes, mortality, and long-term shunt patency rates were evaluated.

Results: All pediatric patients and 25 adult patients were non-cirrhotic. No intraoperative mortality occurred. One pediatric patient died following liver transplantation two years later due to progressive cirrhosis. Five adult patients—two in the early postoperative period—died due to sepsis and recurrent bleeding. Shunt patency rates in pediatric and adult patients were 73% and 75% for proximal splenorenal shunts and 89% and 85% for distal splenorenal shunts, respectively. Selective shunt procedures provided durable portal decompression and effective control of PH-related complications.

Conclusion: In complicated PH, effective treatment can only be achieved by diverting high-pressure portal venous blood into the low-pressure systemic circulation, which is possible only surgical shunting or interventional radiological techniques. Selective splenorenal shunts offer simultaneous control of variceal bleeding, hypersplenism, hepatic encephalopathy, gastroenteropathy, and biliopathy, particularly in non-cirrhotic and early-stage cirrhotic patients, while improving quality of life. Despite strong long-term evidence demonstrating their superiority over endoscopic therapies, selective shunt procedures remain underutilized (Table 1). Insistence on repeated endoscopic treatments and delaying surgical intervention, in complicated PH cases may lead to increased morbidity and even mortality, particularly in patients who have limited access to advanced healthcare centers, as is the case in our country. Multidisciplinary collaboration with gastroenterology, surgery, radiology and hematology is essential for optimal management.

Keywords: Esophageal varices, portal hypertension, spleno-renal shunt

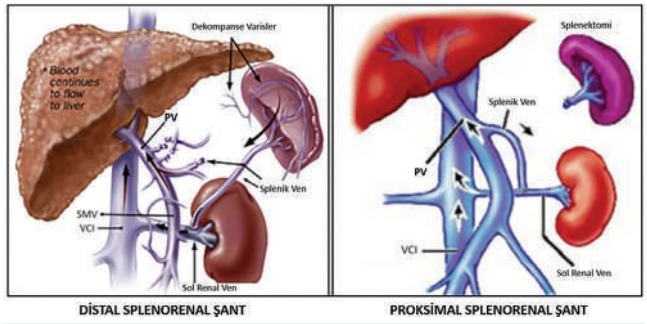
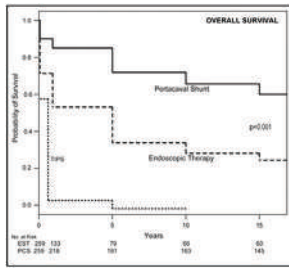


Figure 1. Selective spleno renal shunts.

Disrtal and proximal shunt operations.

Table 1. In randomized controlled trials with follow-up periods exceeding 10 years, the superiority of shunt surgery over medical and endoscopic therapies has been clearly demonstrated



	Selektif Şant	Endoskopi	P
Kanama Kontrolu	% 97	% 27	< 0.05
Tekrarlayan Kanama	% 2-17	% 60-73	< 0.01
Ensefalopati	% 11	% 50	< 0.01
5 Yıl Survival	% 51-85	% 20-50	< 0.05

Marshall J, Orloff MD et al.
Surgery Volume 157, Issue 6 June 2015; 1028-41

Rikkers L.F. et al.
The American J Surgery Volume:165 Jan 1993; 27-33

[S-187]

Impact of vascular resection on postoperative morbidity and mortality in pancreaticoduodenectomy

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Objective: Pancreatic cancer remains one of the most aggressive malignancies and is associated with the highest mortality among gastrointestinal cancers. Surgical resection is the only potentially curative treatment modality. In locally advanced disease, vascular invasion—particularly involving the portal vein and superior mesenteric vessels—constitutes a major determinant of resectability. Advances in surgical techniques have enabled more frequent use of vascular resection and reconstruction during pancreaticoduodenectomy; however, the impact of this approach on postoperative morbidity and mortality remains controversial. This study aimed to evaluate the effect of vascular resection on postoperative outcomes and to identify independent risk factors for mortality.

Material and Methods: Seventy-seven patients who underwent pancreaticoduodenectomy at University of Health Sciences Türkiye, Ankara Etlik City Hospital between January 2024-January 2026 were retrospectively analyzed. Demographic characteristics, intraoperative variables (vascular resection and intraoperative vasopressor use), postoperative interventions (reoperation and invasive radiological procedures), and 90-day mortality were recorded. Patients were divided into two groups according to whether vascular resection was performed. Categorical variables were analyzed using chi-square or Fisher's Exact tests. Multivariable logistic regression analysis was conducted to determine independent predictors of mortality. P-value<0.05 was considered statistically significant.

Results: The mean age of the patients was 65.5±10.3 years (range: 43-87). Fifty-three patients (68.8%) were female and 24 (31.2%) were male. Vascular resection was performed in 12 patients (16%), while 65 patients (84%) underwent pancreaticoduodenectomy without vascular resection. Among the patients who underwent vascular resection, portal vein resection was performed in 8 patients (66%), whereas 4 patients (34%) underwent combined venous resection and superior mesenteric artery resection. The overall 90-day postoperative mortality rate was 25.9% (n=20). In the vascular resection group,mortality occurred in 5 patients (41.6%). Major postoperative morbidity (Clavien-Dindo grade ≥3) was observed in 17 patients overall and in 7 patients (58.3%) who underwent vascular resection. The overall mean intensive care unit (ICU) stay was 6.27 days (range: 4-35), whereas it was 7.5 days (range: 2-27) among patients undergoing vascular resection. Reoperation was required in 4 patients in the vascular resection group and in 7 patients in the-vascular resection group. No statistically significant association was found between vascular resection and postoperative complication severity (p=0.382). A significant association was identified between reoperation and mortality (Fisher's Exact test, p=0.016). In multivariable logistic regression analysis, vascular resection (OR: 2.80, p=0.151), intraoperative vasopressor use (OR: 2.51, p=0.276), and radiological intervention (OR: 3.02, p=0.114) were not identified as independent risk factors for mortality. Although reoperation increased the risk of mortality by 4.28-fold, it remained at the threshold of statistical significance (OR: 4.28; 95% CI: 0.96-19.07; p=0.056).

Conclusion: Vascular resection during pancreaticoduodenectomy was not identified as an independent predictor of mortality. However, the need for reoperation demonstrated a strong association with mortality and may represent an important prognostic indicator. Larger prospective studies are needed to further clarify these findings.

Keywords: Pancreaticoduodenectomy, vascular resection, whipple

Table 1. Surgical characteristics and postoperative morbidity and mortality

Valiable	n	%
Female	53	68.8
Male	24	31.2
No vascular resection	65	84.4
Portal vein resection with anastomosis	8	10.4
Venous + superior mesenteric artery (SMA) resection	4	5.2
90-day mortality (overall)	20	25.9
90-day mortality (vascular resection group)	5	41.6
90-day major morbidity (overall, Clavien-Dindo ≥3)	17	22.1
90-day major morbidity (vascular resection group)	7	58.3

Table 2. Multivariable logistic regression analysis of independent clinical and surgical factors affecting 90-day mortality

Variable	Present n (%)	Absent n (%)	OR	p-value
Vascular resection	12 (15.6%)	65 (84.4%)	2.80	0.151
Postoperative radiological intervention	13 (16.9%)	64 (83.1%)	3.02	0.114
Reoperation	10 (13.0%)	67 (87.0%)	4.28	0.056
Intraoperative vasopressor requirement	59 (76.6%)	18 (23.4%)	2.56	0.276

[S-188]

Clinical outcomes and prognostic factors in patients undergoing whipple procedure for pancreatic head adenocarcinomas

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Objective: Pancreatic head adenocarcinomas are among the gastrointestinal malignancies with the worst prognosis. While pancreatoduodenectomy (Whipple procedure) is the only potential curative treatment option, long-term survival is affected by the histopathological features of the tumor and the systemic treatments administered. This study aims to determine short- and long-term clinical outcomes and independent prognostic factors in a single-center patient series.

Material and Methods: A retrospective analysis was performed on 84 patients who underwent pancreatoduodenectomy due to pancreatic head adenocarcinoma. Neoadjuvant and adjuvant treatment status, tumor size, histological grade, surgical margin status, lymphovascular invasion (LVI), and perineural invasion (PNI) data were recorded. Length of hospital stay (LOS) and 90-day postoperative mortality were analyzed. Overall survival was assessed using the Kaplan-Meier method; independent prognostic factors were determined using Cox regression analysis.

Results: Of the 84 patients, 49 (58.3%) were male and 35 (41.7%) were female. The mean age was 62 years (36-85). The median hospital stay was 12 days (IQR: 9-16). Ninety-day postoperative mortality was 2.4% (n=2). The overall 1-year survival rate was calculated as 64%. Three-year and five-year survival rates were 24% and 21%, respectively. In multivariate Cox analysis, lymphovascular invasion (HR: 4.70; p=0.005), perineural invasion (HR: 2.65; p=0.04), and positive surgical margins (R1 vs. R0; HR: 2.31; p=0.03) were identified as independent poor prognostic factors. When long-term surviving patients (≥5 years; 20% of the cohort) were analyzed separately; this group was observed to be younger, have a lower metastatic lymph node burden, all received adjuvant therapy, and had a significantly higher R0 resection rate. These characteristics were identified as key clinical and pathological factors associated with prolonged survival in pancreatic head adenocarcinomas.

Conclusion: Lymphovascular invasion, perineural invasion, and positive surgical margins are the strongest independent predictors of survival after Whipple procedure in pancreatic head adenocarcinomas. The presence of lymphadenopathy (LVI), in particular, increases the risk of death approximately fivefold. Despite low perioperative mortality, the high prevalence of invasive histopathological features highlights the aggressive biology of these tumors and emphasizes the importance of optimized adjuvant therapy strategies after R0 resection.

Keywords: Pancreatoduodenectomy, lymphovascular invasion, perineural invasion

[S-189]

The role of percutaneous cholecystostomy in high-risk patients aged over 65: A palliative solution or a curative treatment?

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Objective: Laparoscopic cholecystectomy is the gold standard treatment for acute cholecystitis. However, in elderly and high-risk patients, cholecystectomy is associated with a significant risk of morbidity and mortality. In this patient population, percutaneous cholecystostomy represents an important approach for resolving the acute condition, although its long-term effectiveness remains unclear. This study aimed to evaluate the early and long-term outcomes of percutaneous cholecystostomy in high-risk patients.

Material and Methods: Patients who underwent percutaneous cholecystostomy for acute cholecystitis at Kocaeli City Hospital between January 1, 2024 and January 15, 2026. were included in the study. Demographic characteristics of the patients, morbidity and mortality status, removal of the cholecystostomy catheter, symptom recurrence, need for cholecystectomy, and hospital readmission were evaluated.

Results: A total of 67 patients were included in the study. The mean age of the patients was 78.5±7.7 years, and the mean Charlson Comorbidity Index was 4.7±1.8. Clinical improvement without the need for surgical intervention was achieved in 58 patients (86.6%), whereas 9 patients (13.4%) showed no clinical improvement. When patients with and without clinical improvement were compared, no significant differences were found in terms of age (p=0.246) or Charlson comorbidity index (p=0.389). However, patients without clinical improvement had a significantly longer hospital stay (p=0.002) and a significantly higher mortality rate (p=0.011). Post-procedural complications were observed in 15 patients (22.4%). No statistically significant differences were found between patients with and without complications in terms of age (p=0.781), Charlson comorbidity index (p=0.276), or length of hospital stay (p=0.934). Mortality tended to be higher in patients who developed complications; however, this difference did not reach statistical significance (p=0.067).

Conclusion: Percutaneous cholecystostomy, used as a bridging therapy in patients with acute cholecystitis, can be considered a safe and effective treatment option in high-risk patients aged 65 years and older.

Keywords: Percutaneous cholecystostomy, acute cholecystitis, Charlson comorbidity index

[S-190]

Factors affecting recurrence in patients undergoing surgery for hepatic hydatid cyst

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Objective: Hepatic hydatid disease is a common zoonosis caused by Echinococcus granulosus, particularly prevalent among populations engaged in livestock farming and hunting. It has become a significant public health concern in many developing countries. In this patient group, recurrence following conservative surgical treatment remains a major clinical issue. Several factors influencing recurrence have been reported in the literature. In this study, we aimed to investigate the factors associated with recurrence in patients who underwent conservative surgery for hepatic hydatid cysts.

Material and Methods: In this retrospective study, patients who underwent conservative surgical treatment for hepatic hydatid cyst disease at the Department of General Surgery, Ondokuz Mayıs University Faculty of Medicine, between January 1, 2005, and December 31, 2020, were evaluated. Demographic, preoperative, intraoperative, and postoperative data were collected, including the type of conservative surgical procedure performed; cyst characteristics (location, diameter, number, and type); preoperative and postoperative ERCP status; presence of preoperative cystobiliary communication and puncture, aspiration, injection, re-aspiration (PAIR); intraoperative intrabiliary rupture; presence of postoperative biliary fistula; and preoperative and postoperative use of albendazole. Patients were categorized into two groups based on the presence or absence of recurrence following conservative hydatid cyst surgery. Univariate and multivariate logistic regression analyses (using backward stepwise variable selection) were conducted to identify independent factors associated with recurrence. A p-value of <0.05 was considered statistically significant.

Results: Of the 117 patients included in the study, 65 (55.6%) were female. The mean follow-up duration was 146 months (range: 52–233 months), and the mean length of hospital stay was 10 days (range: 5-180 days). Among the 117 patients, 82 (70.1%) underwent drainage with omentopexy as the conservative surgical technique, while 35 (29.9%) underwent drainage alone. Recurrence was detected in 21 patients (17.9%). No statistically significant association was found between recurrence and clinical-demographic characteristics, preoperative laboratory values, surgical procedure, duration of surgery, cyst number, cyst type, cyst location, preoperative ERCP and PAIR procedures, or the presence of cystobiliary communication (Table 1).

Conclusion: There are conflicting findings in the literature regarding factors associated with recurrence. While some studies have reported associations between recurrence and central cyst location, multiple cysts, or cyst types, other studies—similar to ours—have failed to identify any independent risk factors for recurrence. In our study, we investigated the factors affecting recurrence following conservative surgical treatment of hepatic hydatid cysts. Consistent with some previous reports, no independent risk factors for recurrence were identified.

Keywords: Liver, echinococcus, recurrence

Table 1. Patient characteristics

	Total	Recurrence +	Recurrence -	p
N	117	21	96	
Age	44 (18-84)	38 (22-71)	44 (18-84)	0.426
BMI	28.38±3.59	26.12±4.05	25.21±3.48	0.148
Previous abdominal surgery	60 (51.3%)	13 (61.9%)	47 (49%)	0.404
AST	21 (10-184)	22.7 (11-90)	20.5 (10-184)	0.443
ALT	20.4 (7-199)	23.6 (10-133)	19.8 (7-197)	0.482
T.Bilirubin	0.48 (0.16-8.4)	0.49 (0.24-2.3)	0.48 (0.16-8.4)	0.815
GGT	36 (7.4-741)	41.1 (10-240)	34.5 (7.4-741)	0.935
ALP	270 (73-584)	277 (178-513)	266.5 (73-584)	0.396
Eosinophil	0.2 (0.03-4)	0.2 (0.03-1.5)	0.21 (0.03-4)	0.396
Preop ERCP	9 (7.7%)	3 (14.3%)	6 (63%)	0.203
Preop PAIR	15 (12.8%)	5 (23.8%)	10 (10.4%)	0.142
Intrabiliary rupture	7 (6%)	1 (4.8%)	6 (63%)	1
Biliary fistula	48 (3.4%)	2 (2.1%)	2 (9.5%)	0.142
Cyst type				
Type 1	20 (77.1%)	4 (19%)	16 (16.7%)	0.787
Type 2	26 (22.2%)	4 (19%)	24 (22.9%)	
Type 3	58 (49.6%)	12 (57.1%)	46 (47.9%)	
Type 4	13 (11.1%)	1 (4.8%)	12 (12.5%)	
Surgery				
Drainage + omentoplasty	82 (70.1%)	15 (71.4%)	67 (69.7%)	1
Drainage	35 (29.9%)	6 (28.6%)	29 (30.3%)	

[S-191]

Biliary complications following hydatid liver cyst surgery: Comparison of right and left lobe involvement

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Objective: In hydatid liver cysts, the location of cysts in segments anatomically adjacent to the biliary system affects postoperative biliary complications. This study aimed to compare postoperative biliary complication rates and other clinical outcomes according to cyst location.

Material and Methods: Patients who underwent surgery for hydatid liver cysts at Mersin University Faculty of Medicine between 2016 and 2025 were retrospectively reviewed. Patients with recurrent hydatid cysts, emergency cases, and those with cysts in both lobes were excluded. Patients were compared based on dominant cyst localization in the right and left lobes. Patients' demographic data, preoperative parameters, intraoperative data, and postoperative outcomes were evaluated.

Results: One hundred-two patients were included in the study; 69 patients (67.6%) had right lobe involvement, and 33 patients (32.4%) had left lobe involvement. The mean age was 47.98±15.70 years, and no statistically significant differences were found in Gharbi score, preoperative drainage and ERCP rates, lab values, hemagglutination positivity, and surgical method (cystotomy, cystectomy, partial cystectomy). The maximum cyst diameter in the right lobe (9.1 cm) was significantly larger than the left lobe (7.4 cm) (p=0.02). Cavity management methods (omentoplasty, capitonage, intraflexion, marsupialization) differed between groups (p<0.001): The rate of cavity procedures was significantly higher with left lobe localization (75.8% vs. 46.4%; p=0.010). Omentoplasty was the most frequent method in the left lobe (33.3%), while infraflexion was the most frequent method in the right lobe (30.4%). No statistically difference was found between the type of cavity management and the biliary complications. There were no statistically differences between right and left lobes in bile leakage (21.7% vs. 21.2%), biliary fistula (20.3% vs. 21.2%), and biliary abscess (14.5% vs. 6.1%). The development of biliary complications was significantly higher in patients with cyst diameter ≥10 cm [odds ratio (OR)=2.864, p=0.040]. Receiver operating characteristic analysis determined the optimal cut-off value to be ≥7 cm for the right lobe and ≥9 cm for the left lobe. In multivariate analysis, cyst diameter (OR=1.61) and cyst-bile duct communication (OR=1.97) were identified as the strongest predictors of bile leakage, independent of location. Hospital stay was statistically significantly longer in the right lobe (10.7 days) compared to the left lobe (7.8 days) (p=0.041). Clavien-Dindo stage IV complications were observed only in the right lobe group (n=6, 8.7%); however, there were no statistical significance in overall Clavien-Dindo distribution.

Conclusion: In hepatic hydatid cyst surgery, cyst localization significantly affects the choice of cavity management and length of hospital stay. Cyst diameter and bile duct communication are the strongest predictors of biliary complications. Localization-specific risk assessment should guide perioperative decision-making.

Keywords: Biliary complications, cystectomy, hydatid liver cyst

[S-193]

The effect of preoperative biliary drainage methods on intraoperative abdominal culture results in pancreatic head cancer

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Objective: Obstructive jaundice is a common clinical presentation in patients with pancreatic head cancer, and preoperative biliary drainage is therefore frequently performed before surgery. However, its impact on infection-related outcomes remains controversial. Previous studies have shown increased microbial colonization following biliary interventions, particularly within bile cultures, which may adversely influence postoperative outcomes. Because endoscopic and percutaneous drainage interact directly with gastrointestinal flora, procedure-related colonization may facilitate bacterial contamination during surgery. Data directly comparing drainage techniques and intraoperative abdominal culture results are limited. This study aimed to evaluate the effect of different preoperative biliary drainage methods on intraoperative abdominal culture positivity in patients.

Material and Methods: This retrospective, single-center observational study included patients who underwent surgical treatment for pancreatic head cancer between 2020-2025 at University of Health Sciences Türkiye, Başakşehir Çam and Sakura City Hospital. Overall, 145 patients were analyzed. Patients were classified according to preoperative biliary drainage method as endoscopic retrograde cholangiopancreatography, percutaneous transhepatic cholangiography, or no drainage. Individuals with multiple procedures or unclear classification were excluded. Intraoperative abdominal fluid samples were obtained and processed microbiologically. Bacterial growth defined a positive culture. Cases without cultures were excluded. Categorical variables were summarized as numbers and percentages. Comparisons used chi-square or Fisher's exact tests. Odds ratios compared endoscopic drainage with others.

Results: Intraoperative abdominal culture positivity occurred most often after endoscopic drainage. Positive cultures were detected in 80.0% of endoscopic cases, compared with 40.6% after percutaneous drainage and 38.1% without drainage. Differences between groups were statistically significant. When endoscopic drainage was compared with all other patients, the risk of culture positivity was approximately sixfold higher, indicating a strong association between endoscopic biliary intervention and intraoperative contamination. These findings persisted after exclusion of patients lacking cultures, supporting robustness of the observed effect across analyzed subgroups. No additional covariates were included because the study focused on procedure-related exposure and microbiological outcome only here.

Conclusion: Preoperative biliary drainage is significantly associated with increased intraoperative abdominal culture positivity in patients undergoing surgery for pancreatic head cancer, particularly when endoscopic retrograde cholangiopancreatography is used. The observed increase suggests that endoscopic drainage may heighten the likelihood of bacterial contamination during surgery. Consequently, decisions regarding preoperative drainage should consider not only biliary decompression but also potential contamination risk and subsequent infectious complications. Careful patient selection, strict procedural indications, and awareness of microbiological consequences may help mitigate infection-related morbidity while preserving surgical safety and outcomes. This balanced approach may optimize perioperative management strategies in pancreatic head cancer surgery settings.

Keywords: Pancreatic head cancer, preoperative biliary drainage, ERCP, abdominal culture, surgical infection

Table 1. Intraoperative abdominal culture results according to preoperative biliary drainage method

Group	Abdominal culture (+) n/N (%)	Abdominal culture (-) n/N (%)
ERCP	8/10 (80.0)	2/10 (20.0)
PTC	26/64 (40.6)	38/64 (59.4)
No drainage	24/63 (38.1)	39/63 (61.9)

[S-194]

The role of gallbladder volume and ejection fraction in predicting postcholecystectomy symptoms: A prospective observational study

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Objective: Persistent or newly developed symptoms following cholecystectomy are among the main reasons why surgical success does not translate into patient satisfaction. This prospective study investigated whether preprandial and postprandial gallbladder (GB) volumes measured by preoperative ultrasound and the ejection fraction (EF) calculated from these measurements could predict postcholecystectomy symptoms defined within the framework of ROMA III at 1 month postoperatively.

Material and Methods: The study is a prospective, observational research conducted at the General Surgery Clinic of University of Health Sciences Türkiye, Ankara Etlik City Hospital. Preprandial and postprandial GB volumes were measured using preoperative ultrasonography in patients scheduled for elective cholecystectomy; EF was calculated using the standard formula. At 1 month postoperatively, cases were classified as ROMA III positive/negative based on symptom assessment. Diabetes mellitus (DM) was excluded from the protocol due to its potential confounding effect on gallbladder motility and gastrointestinal symptoms. Continuous variables were compared using the Mann-Whitney U test, and categorical variables were compared using Fisher's exact test.

Results: Of the 60 patients enrolled, 8 with DM were excluded because of potential confounding effects on GB motility and gastrointestinal symptoms, leaving 52 patients for analysis. The mean age was 47.4±11.5 years, the mean body mass index (BMI) was 28.4±5.9 kg/m², and 69.2% of the patients were female; 28.8% were normal weight, 42.3% overweight, and 28.8% obese. Ultrasonography demonstrated gallstones in 96.2%, polyps in 11.5%, and sludge in 17.3% of cases. Preoperatively, the mean preprandial GB volume was 13.0±8.4 mL, the postprandial volume was 6.9±5.2 mL, and the ejection fraction (EF) was 40.3±29.1%. No significant differences were observed between ROMA III–positive and negative groups regarding GB volumes, age, BMI, or sex distribution (all p>0.05), while biochemical abnormalities showed a borderline association with ROMA III positivity (71.4% vs. 37.8%; p=0.085). In secondary analyses, EF and percentage EF were significantly higher in patients without preoperative symptoms (p=0.033 and p=0.045), whereas gallbladder volumes were not associated with symptom status; similarly, although EF and percentage EF were higher in patients with postoperative symptoms (p=0.026 and p=0.012), no significant association was found between volume measurements and postoperative symptoms.

Conclusion: These prospective data show that preoperative ultrasound-derived GB volumes and EF are insufficient to predict postoperative symptoms defined by the ROMA-III criteria. The absence of differences in volume and EF between ROMA III positive and negative patients indicates that post cholecystectomy symptoms cannot be explained solely by biliary motility disorders. Secondary analyses linking EF to specific symptom patterns suggest a non-linear, indirect relationship between motility and symptomatology, and that high EF does not ensure symptom absence, supporting a multifactorial pathophysiology. Consistent with prior reports, postoperative symptoms showed a wide prevalence range. Consequently, reliance on GB volume and motility parameters alone appears inadequate for predicting postcholecystectomy symptoms, highlighting the need for more comprehensive clinical models.

Keywords: Ejection fraction, functional gastrointestinal disorders, gallbladder volume, postcholecystectomy symptoms, ROMA III criteria

Tablo 1. Çalışma Popülasyonunun Tanımlayıcı Özellikleri

Değişken	Değer
Hasta sayısı (n)	52
Yaş, yıl (ortalama ± SS)	47,4 ± 11,5
Yaş, medyan (IQR)	49 (40–53)
Cinsiyet, n (%)	
Kadın	36 (69,2)
Erkek	16 (30,8)
Vücut Kitle İndeksi (kg/m²)	
VKİ, ortalama ± SS	28,4 ± 5,9
VKİ, medyan (IQR)	27,0 (24,4–31,1)
Normal kilolu (<25), n (%)	15 (28,8)
Kilolu (25–29,9), n (%)	22 (42,3)
Obez (≥30), n (%)	15 (28,8)
Komorbiditeler, n (%)	
Hipertansiyon	14 (26,9)
Koroner arter hastalığı	2 (3,8)
Kronik böbrek yetmezliği	1 (1,9)
Ultrasonografi Bulguları, n (%)	
Safra kesesinde taş	50 (96,2)
Polip	6 (11,5)
Çamur	9 (17,3)
Safra Kesesi Volümleri	
Preprandiyal volüm (mL), ortalama ± SS	13,0 ± 8,4
Postprandiyal volüm (mL), ortalama ± SS	6,9 ± 5,2
Ejeksiyon fraksiyonu (%), ortalama ± SS	40,3 ± 29,1

Tables 2. 2A. Comparison of patients with ROMA III (–) and ROMA III (+) in terms of continuous variables 2B. Comparison of gallbladder functional parameters according to preoperative and postoperative symptom status

Değişken	ROMA III (–) (n=45)	ROMA III (+) (n=7)	p değeri*
Yaş, yıl	49 (39–53)	48,5 (42–58)	0,53
VKİ (kg/m²)	27,1 (24,1–31,0)	26,1 (25,4–32,7)	0,73
Preprandiyal SK volümü (mL)	11,0 (6,7–16,1)	14,5 (7,8–17,0)	0,62
Postprandiyal SK volümü (mL)	5,0 (3,4–7,3)	5,2 (4,0–7,5)	0,71
Preoperatif semptom şiddeti	2 (2–3)	3 (2–3)	0,18

* Mann–Whitney U testi — değerler medyan (IQR) olarak sunulmuştur. Sürekli değişkenlerin normal dağılıma uymaması nedeniyle karşılaştırmalarda non-parametrik testler tercih edilmiştir.

TABLO 2B. Preoperatif ve Postoperatif Semptom Durumuna Göre Safra Kesesi Fonksiyonel Parametrelerinin Karşılaştırılması

A) Preoperatif semptom durumuna göre

Değişken	Semptom Yok (n=13)	Semptom Var (n=47)	p değeri*
Preprandiyal SK volümü (mL)	15,24 (11,82–21,38)	10,60 (9,70–14,58)	0,060
Ejeksiyon fraksiyonu (EF)	8,99 (5,63–12,92)	3,13 (4,04–6,98)	**0,033**
Yüzde EF (%)	56,43 (39,35–69,61)	33,04 (31,96–46,38)	**0,045**

B) Postoperatif semptom durumuna göre

Değişken	Semptom Yok (n=50)	Semptom Var (n=10)	p değeri*
Preprandiyal SK volümü (mL)	10,20 (10,23–15,33)	15,03 (11,74–17,77)	0,098
Ejeksiyon fraksiyonu (EF)	3,65 (4,21–7,38)	9,58 (6,39–11,57)	**0,026**
Yüzde EF (%)	32,64 (31,91–45,93)	62,86 (45,17–75,49)	**0,012**

* Mann–Whitney U testi, değerler medyan (IQR) olarak sunulmuştur.

Tables 3 and 4. Comparison of ROMA III (–) and ROMA III (+) patients in terms of categorical variables 4. Intergroup comparison of gallbladder volume and ejection fraction according to postcholecystectomy symptom status

Değişken	ROMA III (–) (n=45)	ROMA III (+) (n=7)	Test	p değeri
Kadın cinsiyet, n (%)	32 (71,1)	4 (57,1)	Fisher	0,15
Hipertansiyon, n (%)	12 (26,7)	2 (28,6)	Fisher	1,00
Ek hastalık varlığı, n (%)	25 (55,6)	4 (57,1)	Fisher	1,00
Biyokimya anormalliği, n (%)	17 (37,8)	5 (71,4)	Fisher	0,085
WBC/CRP anormalliği, n (%)	6 (13,3)	2 (28,6)	Fisher	0,35
USG'de taş, n (%)	43 (95,6)	7 (100)	Fisher	1,00

Değişken	Grup	N	Mean Rank	Sum of Ranks
PREPRANDİYAL	YOK	13	38,58	501,50
	VAR	47	28,27	1328,50
	Total	**60**		
YUZDE EF	YOK	13	39,08	508,00
	VAR	47	28,13	1322,00
	Total	**60**		
EF	YOK	13	39,62	515,00
	VAR	47	27,98	1315,00
	Total	**60**		
POSTPRENDDİYAL	YOK	13	29,08	378,00
	VAR	47	30,89	1452,00
	Total	**60**		

Table 5. A comparative evaluation of gallbladder functional parameters and FGID literature in predicting postcholecystectomy symptoms

Çalışma	Tasarım / Popülasyon	Ölçüm / Yaklaşım	Sonlanım	Temel Bulgular	Bizim Çalışmamız ile İlişkisi
Nam ve ark., 2025	Derleme / PCS yaklaşımı	PCS'nin etiyoloji–tanı–tedavi çerçevesi	Persistan/yeni semptomlar	PCS'nin **multifaktöriyel** olduğu; biliyer ve ekstra-biliyer nedenlerin birlikte değerlendirilmesi gerektiği vurgulanır.	"EF/volüm tek başına yeterli değil" sonucunu **patofizyolojik çerçeveyle** destekler.
Shrestha ve ark., 2024	Gözlemsel / LC sonrası semptomlar	Zaman içinde semptom seyri ve önzördürücüler	Persistan semptom/PCS	Postop erken dönemde semptomların görülebileceği ve zamanla değişebileceği raporlanır.	Bizde 1. ay semptom oranı (%13,5) **erken dönem** karşılaştırması için zemin sağlar.
Chang ve ark., 2023	Prospektif/izlem	Kolelitiazis + FGID örtüşmesi	FGID prevalansı	Kolesistektomi ile fonksiyonel Gİ bozuklukların ilişkisi tartışılır; semptom[redacted] biliyer mekanizmaya indirgenemeyebileceği vurgulanır.	Bizim sonuçların "FGID ekseni" ile **yorumlanmasını** destekler.
Mann ve ark., 2023	Retrospektif / biliyer diskinezi	HIDA ile GBEF ve cerrahi sonrası ağrı	Ağrı persistanlığı	GBEF'nin semptom öngörüsünde **heterojen** ve değişken performansı raporlanır.	"EF tek başına prediktör olmayabilir" argümanını **güçlendirir.**
DiBaise, 2003	Derleme	GBEF'nin sonuç öngörüsü	Semptom iyileşmesi	GBEF'nin öngörü gücü için kanıtların **heterojenliği** ve sınırlılıkları tartışılır.	Negatif bulgumuzu "literatürde değişken kanıt" çerçevesinde **savunur.**
Rome Foundation / Drossman ve ark., 2016	Konsensus	ROMA III kriter seti	Tanı çerçevesi	Fonksiyonel Gİ bozuklukların tanısal çerçevesi ve kriterleri tanımlanır.	Bizde ROMA-III "semptom çerçevesi" olarak kullanıldığını **doğru konumlandırır.**
Latenstein ve ark., 2021	Gözlemsel / safra taşı	Preop ROMA ile FGID	Preop FGID oranı	Safra taşı hastalarında ROMA kriterleriyle FGID'nin anlamlı prevalansta olabileceği gösterilir.	Post-op semptomların bir kısmının "preop fonksiyonel zemin" ile ilişkisini **tartışmaya açar.**
Mao ve ark., 2025	Kohort / postkolesistektomi diyare	Klinik faktörler	PCD insidansı	Postkolesistektomi diyarenin klinik belirleyicileri olabileceği raporlanır.	"Semptomlar multifaktöriyel" yaklaşımını Gİ semptom ekseninde **tamamlar.**
Bizim çalışmamız (Etlik Şehir Hastanesi, Türkiye)	**Prospektif, gözlemsel; elektif kolesistektomi. Başlangıçta n=60,** protokol gereği **DM hariç n=52**	**Preprandiyal ve postprandiyal SK volümü (USG), EF hesaplama**	**Postop 1. ay ROMA-III çerçevesinde semptom varlığı (ROMA III ±)**	ROMA 3 pozitifliği %13,5 (7/52). ROMA(+) ve ROMA(–) grupları arasında preprandiyal ve postprandiyal volümler ile EF açısından anlamlı fark saptanmadı. Bununla birlikte, preoperatif ve postoperatif semptom varlığına göre yapılan ikincil analizlerde EF ve yüzde EF değerlerinin bazı semptom paternleriyle ilişkili olduğu görüldü. Biyokimya anormalliğinde sınırda ilişki eğilimi izlendi (%71,4 vs %37,8; p=0,085).	Motilite/volüm temelli parametrelerin tek başına semptom öngörüsünde **sınırlı** olabileceğini gösterir; PCS'nin **multifaktöriyel** doğasına özgün prospektif katkı sağlar.

[S-197]

Comparison of outcomes of elective cholecystectomy following antibiotic therapy versus percutaneous cholecystostomy in patients aged 65 years and older with acute cholecystitis

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Objective: Early laparoscopic cholecystectomy is currently considered the gold standard treatment for acute cholecystitis in hemodynamically stable patients. However, alternative treatment modalities may be required in elderly patients with significant comorbidities due to the increased surgical risk. This study aimed to evaluate and compare the clinical and surgical outcomes of patients aged 65 years and older with acute cholecystitis who underwent elective cholecystectomy following antibiotic therapy alone and those who underwent percutaneous cholecystostomy during the acute phase followed by elective cholecystectomy.

Material and Methods: Patients aged 65 years and older who were hospitalized and treated for acute cholecystitis after admission to the emergency department were divided into two groups. The first group consisted of patients who received antibiotic therapy during their initial hospitalization and subsequently underwent elective cholecystectomy (AB group). The second group included patients who underwent percutaneous cholecystostomy during the initial hospitalization and later underwent elective cholecystectomy (PC group). Patients with a history of previous abdominal surgery were excluded from the study. Various parameters, including length of hospital stay, need for intensive care, and intraoperative and postoperative complications, were analyzed and compared between the groups.

Results: A total of 96 patients were included in the study (PC group, n=47; AB group, n=49). Age, charlson comorbidity index scores, and WBC and CRP levels were similar between the groups. Length of hospital stay, need for intensive care, and conversion rates from laparoscopic to open surgery were significantly higher in the PC group. Postoperative complication and mortality rates were comparable between the two groups.

Conclusion: In patients aged 65 years and older with acute cholecystitis, percutaneous cholecystostomy is associated with prolonged hospital stay and increased need for intensive care prior to elective surgery. Additionally, these patients have significantly higher rates of conversion from laparoscopic to open surgery and an increased risk of major intraoperative complications during elective cholecystectomy. However, postoperative complication and mortality rates were found to be similar to those observed after elective surgery following antibiotic therapy alone. Although percutaneous cholecystostomy is an effective bridging therapy in elderly patients with acute cholecystitis, careful patient selection is essential due to the increased surgical difficulty and higher risk of conversion to open surgery during elective cholecystectomy.

Keywords: Acute cholecystitis, percutaneous cholecystostomy

[S-198]

Comparison of total mesopancreatic excision and conventional pancreatoduodenectomy techniques in terms of early postoperative outcomes in the surgical treatment of pancreatic head adenocarcinoma

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Objective: Evaluation of early postoperative outcomes in patients undergoing total mesopancreatic excision (TME) versus conventional pancreatoduodenectomy (PD).

Material and Methods: The study included patients operated on for pancreatic head ductal adenocarcinoma between January 2021 and December 2025. Patients were divided into TME and conventional PD groups and compared regarding demographics and early clinicopathological outcomes.

Results: A total of 57 patients were included in the study. Of these, 28 (49.1%) underwent TME, while 29 (50.9%) underwent conventional PD. Demographic and clinicopathological parameters (lymph node yield, R0 resection rate, etc.) were similar between the two groups. Operation time was significantly longer in the TME group (485 min vs. 420 min, $p<0.001$). Postoperative complication rates and severity were similar between groups ($p=0.13$). Univariate analysis showed that a small pancreatic duct diameter increased complication rates (OR: 0.77, $p=0.05$). Multivariate analysis (including gender, biliary drainage, duct diameter, and tissue texture) showed that surgical technique had no significant impact on complication rates ($p=0.27$). No direct correlation was found between resection status (R0/R1) and complicatio.

Conclusion: In the surgical treatment of pancreatic head ductal adenocarcinoma, PD performed with the TME technique may provide more advantageous oncological outcomes compared to the conventional method. Postoperative surgical complications and clinicopathological features are similar in both methods. There is still a need for standardization in the TME technique and further objective studies on the subject.

Keywords: Artery first, pancreatic head adenocarcinoma, total mesopancreatic excision

[S-199]

Comparison of two anastomotic techniques after pancreaticoduodenectomy: Pancreaticogastrostomy vs. pancreaticojejunostomy

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Objective: Pancreaticoduodenectomy is widely performed for pancreatic cancer and periampullary diseases. Although procedure-related mortality is reported to be below 5%, postoperative morbidity exceeds 35%. Common complications include postoperative pancreatic fistula (POPF), delayed gastric emptying (DGE), and postoperative hemorrhage (POH). According to the updated definitions of the International Study Group for Pancreatic Surgery (ISGPS), POH and DGE are classified into three grades based on clinical presentation, timing and severity of bleeding, nasogastric tube management, and required therapeutic interventions. A drain amylase level more than three times the serum amylase level is defined as a biochemical leak. POPF is currently classified as Grade B or C depending on clinical severity and treatment requirements. Pancreaticojejunostomy (PJ) and pancreaticogastrostomy (PG) are the most commonly used reconstruction techniques. This study aimed to compare major postoperative complications according to anastomotic technique.

Material and Methods: Patients who underwent pancreaticoduodenectomy for pancreatic head adenocarcinoma between June 2021 and June 2025 at Bezmialem Vakıf University Faculty of Medicine, Department of General Surgery, were retrospectively reviewed. Thirty patients were included; PG was performed in 16 patients and PJ in 14 patients. The incidence of POPF, POH, and DGE was compared between groups according to ISGPS criteria.

Results: POH occurred in two patients in the PG group as Grade A hemorrhage (12.5%). In the PJ group, four patients (28.6%) developed Grade B hemorrhage. No Grade C hemorrhage was observed. Biliary leakage was detected in five patients (35.7%) in the PJ group and four patients (25%) in the PG group. Grade C pancreatic fistula was observed in one patient (6.2%) in the PG group, without statistical significance. DGE occurred in four patients in the PJ group (two Grade A, one Grade B, one Grade C) and in two patients in the PG group (one Grade A, one Grade B). A statistically significant difference was observed only for POH (p=0.032), with a higher rate of Grade B hemorrhage in the PJ group. Mortality occurred in one patient in the PG group, with no significant difference between groups.

Conclusion: In this study of 30 patients, a significant difference was observed only in postoperative hemorrhage, which was less frequent after pancreaticogastrostomy. No significant differences were found in terms of POPF, DGE, or mortality, suggesting that pancreaticogastrostomy is a safe reconstructive option following pancreaticoduodenectomy.

Keywords: Pancreatic adenocarcinoma, anastomosis, complication

[S-200]

External versus internal transanastomotic pancreatic duct stents after pancreaticoduodenectomy: A propensity-weighted single-center cohort study

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Objective: Postoperative pancreatic fistula (POPF) remains the most consequential complication after pancreaticoduodenectomy (PD), and the optimal transanastomotic pancreatic duct drainage strategy is still debated. We evaluated whether external versus internal transanastomotic pancreatic duct stenting is associated with clinically relevant POPF (CR-POPF) and early postoperative outcomes after PD.

Material and Methods: We retrospectively analyzed consecutive open pancreatic resections performed for non-traumatic indications between 2010 and 2020. To ensure technical homogeneity, we included only patients who underwent PD reconstructed with a standardized end-to-side duct-to-mucosa pancreaticojejunostomy and who received a transanastomotic pancreatic duct stent (external or internal), had at least one peripancreatic closed-suction drain, and had postoperative day 3 drain amylase available. The final cohort comprised 302 patients (external n=238; internal n=64). The primary outcome was CR-POPF (ISGPS grade B-C). To mitigate confounding, we applied stabilized inverse probability of treatment weighting (IPTW) based on a prespecified propensity score model, followed by IPTW-weighted logistic regression.

Results: Any-grade POPF occurred in 18.9% and CR-POPF in 9.9% of patients; 30-day mortality was 3.6%. CR-POPF was lower with external versus internal stenting (8.0% vs. 17.2%, p=0.029), as was POBL (4.6% vs. 14.1%, p=0.019). In the IPTW analysis, external stenting was associated with reduced odds of CR-POPF (OR: 0.31, 95% CI: 0.14-0.70) and larger pancreatic duct diameter (OR: 0.77, 95% CI: 0.62-0.94) independently reduced CR-POPF risk. Thirty-day mortality was numerically lower with external stenting (2.5% vs. 7.8%, p=0.059).

Conclusion: In a standardized duct-to-mucosa PD cohort, external transanastomotic pancreatic duct stenting was associated with lower CR-POPF and fewer biliary leaks compared with internal stenting, with a descriptive trend toward lower early mortality.

Keywords: Pancreaticoduodenectomy, postoperative pancreatic fistula, transanastomotic pancreatic stent

Table 1. IPTW-weighted multivariable logistic regression analysis for predictors of CR-POPF

Variable	Adjusted OR	95% CI	p-value
Transanastomotic pancreatic stent (external vs. internal)	0.310	0.137-0.702	0.005
Preoperative pancreatic duct diameter (mm)	0.765	0.621-0.942	0.012
Pancreatic texture (soft vs. firm)	1.764	0.810-3.839	0.153
Neoadjuvant therapy (yes vs. no)	1.913	0.876-4.180	0.104

CR-POPF: Clinically relevant postoperative pancreatic fistula (ISGPS grade B-C), OR: Odds ratio, CI: Confidence interval, IPTW: Inverse probability of treatment weighting.

[S-201]

Prognostic value of systemic inflammatory indexes in surgically treated gallbladder cancer patients

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Objective: Gallbladder cancer (GBC) is an aggressive malignancy frequently diagnosed incidentally after elective cholecystectomy. Practical preoperative biomarkers to predict tumor aggressiveness are limited. Systemic inflammatory indexes have been associated with prognosis in several solid tumors. This study aimed to evaluate the prognostic potential of neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR), systemic immune-inflammation index (SII), systemic inflammation response index (SIRI), and aggregate index of systemic inflammation (AISI) in surgically treated GBC patients.

Material and Methods: Patients diagnosed with GBC after elective cholecystectomy between 2015 and 2025 and subsequently treated with oncological surgery were retrospectively reviewed. NLR, PLR, SII, SIRI and AISI were calculated from preoperative complete blood count and C-reactive protein (CRP) levels. Associations between inflammatory indexes and histopathological subtypes were analyzed.

Results: Thirteen patients were included (mean age 64.1±7.2 years). Histopathology revealed adenocarcinoma in 76.9% of cases, while 23.1% had rare and biologically aggressive subtypes. Mean values were NLR 1.86±0.91, PLR 134.2±62.8, SII 412.6±284.3, SIRI 1.64±1.52, and AISI 456.2±497.1. Patients with aggressive histological subtypes demonstrated markedly higher SII, SIRI and AISI values. Elevated inflammatory indexes were accompanied by higher CRP levels. Distribution of clinicopathological features and systemic inflammatory indexes in patients diagnosed incidentally after elective cholecystectomy and treated surgically.

Conclusion: SII, SIRI and AISI may serve as accessible and cost-effective prognostic biomarkers reflecting tumor aggressiveness in GBC and may support preoperative risk stratification in clinical practice.

Keywords: Gallbladder cancer, inflammatory indexes, prognosis

Table 1. Clinicopathological characteristics and systemic inflammatory indexes in gallbladder cancer patients

Variable	Value
Number of patients (n)	13
Mean age (years)	64.1±7.2
Histopathology - adenocarcinoma	76.9% (10)
Histopathology - squamous cell carcinoma	7.7% (1)
Histopathology - adenosquamous carcinoma	7.7% (1)
Histopathology - carcinosarcoma	7.7% (1)
NLR (mean ± SD)	1.86±0.91
PLR (mean ± SD)	134.2±62.8
SII/SIRI/AISI (mean ± SD)	412.6±284.3/1.64±1.52/456.2±497.1

[S-202]

Evaluation of changes in serum albumin levels on the second day after laparoscopic cholecystectomy

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Objective: Albumin is the most abundant protein in plasma, constituting approximately 50-60% of total plasma proteins. Clinically, it is both a protein that maintains physiological balance and a prognostic marker. Metabolic and inflammatory responses following surgical procedures can lead to changes in serum albumin levels. This study aimed to statistically evaluate the difference between preoperative and second-day postoperative serum albumin levels in patients who underwent laparoscopic cholecystectomy at our center.

Material and Methods: A total of 51 cholelithiasis patients (36 women and 15 men) who underwent elective laparoscopic cholecystectomy at our center between February 2025 and 2026 were included in the study. These patients had no prior history of oral intake disorders, metabolic diseases, or medication use, and had not undergone previous surgery. Preoperative and second-day postoperative serum albumin levels (g/dL) were obtained from the hospital's medical records. Continuous variables were expressed as mean ± standard deviation. The difference between preoperative and postoperative measurements was analyzed using a paired-samples t-test. Statistical significance was set at $p<0.05$.

Results: The mean preoperative serum albumin level of the patients was 43.39±2.37 g/dL, and the serum albumin level on the second postoperative day was 36.24±2.57 g/dL. A statistically significant decrease in albumin levels on the second postoperative day was observed compared to preoperative values ($t=18.01$, $p<0.001$). The mean decrease was calculated to be approximately 7.15 g/dL.

Conclusion: A significant decrease in serum albumin levels occurs in the early postoperative period following laparoscopic cholecystectomy. This may be related to increased catabolism and capillary permeability, surgical stress response, acute phase reaction, and hemodilution due to perioperative fluid replacement. Our findings support the need for close monitoring of nutritional status and biochemical parameters in the postoperative period, initiation of enteral nutrition as soon as possible, provision of adequate protein support postoperatively, and the use of nutritional supplements when deemed necessary.

Keywords: Decrease in albumin levels, laparoscopic cholecystectomy

[S-203]

Usefulness of the CALLY index in predicting the development of complications in acute biliary pancreatitis: A single-center retrospective study

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Objective: Acute pancreatitis (AP) is an inflammatory disease ranging from mild edema to severe necrotizing pancreatitis, necessitating accurate early risk stratification. High mortality rates in severe cases increase the importance of early prognostic markers. While current scoring systems like Ranson, BISAP, and CT severity index are useful, they have disadvantages such as calculation complexity and limited early applicability. Consequently, interest has increased in simple biomarkers reflecting inflammation, nutritional status, and immune response. The CALLY index, combining albumin, CRP, and lymphocyte counts, has demonstrated prognostic value in various diseases. This study evaluates the CALLY index's performance in predicting a complicated course in acute biliary pancreatitis.

Material and Methods: This retrospective study included 233 consecutive patients diagnosed with acute biliary pancreatitis at Amasya University, Sabuncuoğlu Şerefeddin Training and Research Hospital between 2018 and 2025. Diagnosis was confirmed by characteristic clinical findings, serum amylase and/or lipase levels exceeding three times the upper limit of normal, and imaging. Patients without ultrasonographically proven biliary etiology were excluded. Patients were grouped into complicated (necrosis, organ failure, pseudocyst, infected necrosis, or vascular complications) and non-complicated pancreatitis. The CALLY index was calculated at admission using the formula: [(albumin\times lymphocyte)/CRP]. Mann-Whitney U and ROC analysis were used for statistical analyses, with significance at $p<0.05$.

Results: The mean age of the patients was 65.36±14.26 years, and 60.9% were female. The rate of complicated pancreatitis was found to be 6.9%. It was determined that the CALLY index did not show a normal distribution in either group ($p<0.001$). No statistically significant difference was found between the complicated and non-complicated pancreatitis groups in terms of the CALLY index ($p=0.069$). In the ROC analysis, the AUC value of the CALLY index for predicting complicated pancreatitis was calculated as 0.364 (95% CI: 0.204-0.524), and the discriminative power was not statistically significant. A clinically significant cut-off value could not be determined.

Conclusion: The CALLY index does not have sufficient discriminative power to predict the development of complications in acute biliary pancreatitis. Despite being an easily calculable parameter, our study indicates that the CALLY index is not suitable for clinical use as a reliable prognostic biomarker in this patient group. Further prospective, multicenter studies involving time-based measurements are needed to improve the accuracy of risk stratification in acute pancreatitis.

Keywords: Acute biliary pancreatitis, CALLY index, complicated pancreatitis

[S-204]

Comparison of postoperative complication rates in isolated liver and combined colon + liver resections with and without microwave ablation: A single-center retrospective analysis

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Objective: Parenchyma-sparing approaches in liver surgery have gained increasing importance, and microwave ablation (MWA) is widely used either in combination with surgical resection or as an adjunctive technique. However, the effect of MWA on postoperative complications in isolated liver and combined colon + liver resections remains unclear. The aim of this study was to compare postoperative complication rates between patients who underwent MWA and those who did not.

Material and Methods: This retrospective study included patients who underwent liver resection between March 2020 and December 2025. Patients aged ≥18 years who underwent isolated liver resection or combined colon + liver resection and whose data were accessible were included. Liver metastases originating from non-colonic primary tumors, patients who underwent ablation alone, and emergency surgeries were accepted as exclusion criteria.Patients were divided into two groups according to the use of intraoperative MWA: MWA (+) and MWA (−). Demographic characteristics and postoperative outcomes were evaluated. Complications were defined according to the Clavien-Dindo Classification (CDC). Subgroup analyses were performed based on the type of surgery.

Results: Of the total 215 liver resections, intraoperative MWA was performed in 36.7% (n=79). In this group, 57 patients underwent isolated liver resection and 22 underwent combined colon + liver resection. In the MWA (+) group, the median length of hospital stay was calculated as 10 days. The early postoperative complication rate was 26.5% (n=21); 9 cases were classified as CDC-I, 10 as CDC-IIIa, and 2 as CDC-V. In the MWA (−) group, 113 of 136 patients underwent isolated liver resection and 23 underwent combined colon + liver resection. The median length of hospital stay was 7 days. The early postoperative complication rate was 8% (n=11); 7 cases were classified as CDC-I, 3 as CDC-IIIa, and 1 as CDC-V.

Conclusion: Postoperative complication rates were higher in patients who underwent intraoperative MWA, particularly in combined colon + liver resections (40%). In isolated liver resections, the complication rate was 21.1% in the MWA (+) group and 5.3% in the MWA (−) group. Additionally, the length of hospital stay was significantly longer in the MWA (+) group compared to the MWA (−) group (Mann-Whitney U, $p<0.001$). These findings suggest that intraoperative MWA may be associated with increased morbidity and prolonged hospital stay, particularly in combined procedures. Multicenter studies with larger sample sizes are needed to further clarify this relationship.

Keywords: Microwave ablation, liver

Table 1.Postoperative complication rates in isolated liver and combined colon + liver resections with and without intraoperative MWA

Type of surgical procedure	Total patients (n)	Complications (n)	Complication (%)
Isolated liver resection	113	6	5,3
Colon + liver resection	23	5	21,7
Isolated liver + intraoperative MWA	57	12	21,1
Colon + liver + intraoperative MWA	22	9	40

[S-205]

Factors associated with the need for intensive care in gangrenous cholecystitis

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Objective: Gangrenous cholecystitis is the most severe form of acute cholecystitis, characterized by ischemia-related necrosis of the gallbladder wall and associated with serious, potentially life-threatening complications. The disease is frequently encountered in elderly patients and in those with multiple comorbidities. Its clinical course is variable, ranging from mild symptoms to rapid progression with sepsis and organ failure. Therefore, identifying easily accessible clinical and laboratory parameters that can predict the need for intensive care in gangrenous cholecystitis is of great importance.

Material and Methods: This retrospective study included 60 patients who underwent surgery with a prediagnosis of gangrenous cholecystitis between January 2019 and January 2024 and whose diagnosis was confirmed histopathologically. Patients were divided into two groups according to postoperative hospitalization status: those admitted to the intensive care unit (Group 1, n=30) and those followed in the surgical ward (Group 2, n=30). Demographic data, comorbidities, vital signs, laboratory parameters, and radiologic characteristics were recorded. Differences between the groups were analyzed using appropriate statistical methods.

Results: Patients requiring intensive care were significantly older than those followed in the ward (72.3±13.3 vs. 55.9±15.0 years, $p<0.05$), and diabetes mellitus was more frequent in this group (70% vs. 16.6%). Comparison of laboratory and clinical parameters demonstrated significantly higher C-reactive protein (CRP), alanine aminotransferase (ALT), lactate levels, neutrophil-to-lymphocyte ratio, and body temperature in Group 1 ($p<0.05$). Age and diastolic blood pressure values were also higher in this group. On preoperative radiologic evaluation, findings consistent with gangrenous cholecystitis, including gallbladder wall thickening and distension, were observed in both groups. However, no significant differences were found regarding gallbladder diameter, wall thickness, or stone characteristics ($p>0.05$). There was no significant difference between the groups in terms of surgical approach (laparoscopic versus open cholecystectomy). Postoperative complications were similar. Superficial surgical site infection and low-output bile leakage occurred in few patients in both groups and resolved with conservative management. No mortality was observed.

Conclusion: In histopathologically confirmed cases of gangrenous cholecystitis, postoperative intensive care unit (ICU) requirement is most strongly associated with advanced age and diabetes mellitus. In addition, elevated CRP, increased lactate levels, higher NLR, elevated body temperature, and increased ALT levels represent practical and readily available indicators that may predict a severe postoperative course. In contrast, radiologic measurements and surgical approach did not provide significant discriminatory value for ICU admission. These findings suggest that early systematic risk stratification in patients with gangrenous cholecystitis may play a critical role in guiding postoperative close monitoring and intensive care planning.

Keywords: Gangrenous cholecystitis, intensive care requirement, risk factors, postoperative outcome, inflammatory markers, neutrophil-to-lymphocyte ratio

Table 1. Comparison of specific variables of the cases according to the groups

	Group 1 (n)	Group 1 (%)	Group 2 (n)	Group 2 (%)	
Female	14	47	16	53	X^2=0.267 p>0.05
Male	16	53	14	47	X^2=0.267 p>0.05
Single stone	8	26.67			X^2=4.202 p>0.05
Millimetric stones	14	46.67			X^2=4.202 p>0.05
Multiple stone	5	16.67			X^2=4.202 p>0.05
Sludge	3	10.00			X^2=4.202 p>0.05
Open cholecystectomy	16	53			X^2=4.202 p>0.05
Laparascopic cholecystectomy	14	47			X^2=4.202 p>0.05

Table 2. Mann-Whitney U test results for the comparison of specific variables of the cases according to the groups

Variables	Groups	n	X ± SD	Mean rank	p
Gallbladder wall thickness (mm)	Group 1	30	6.08±5.74	31.83	0.552
Gallbladder wall thickness (mm)	Group 2	30	4.97±2.01	29.17	0.552
CRP	Group 1	30	153.02±105.53	35.80	0.019*
CRP	Group 2	30	153.22±386.88 25.20	25.20	0.019*
ALT	Group 1	30	59.5±39.73	35.87	0.017
ALT		30	51.77±58.55	25.13	0.017
AST	Group 1	30	48.27±26.6	34.78	0.057
AST	Group 2	30	49.5±67.63	26.22	0.057
GGT	Group 1	30	71.67±37.02	32.42	0.395
GGT	Group 2	30	68.1±46.01	28.58	0.395
Lactate	Group 1	30	7.66±11.59	38.35	0.001*
Lactate	Group 2	30	2.13±2.19	22.65	0.001*
LDH	Group 1	30	146.07±110.07	27.85	0.240
LDH	Group 2	30	153.81±50.7	33.15	0.240
NLR	Group 1	30	7±4.37	36.85	0.005*
NLR	Group 2	30	31.16±146.39	24.15	0.005*
Body temperature	Group 1	30	37.71±1.38	41.33	0.001*
Body temperature	Group 2	30	36.68±0.56	19.67	0.001*
Base excess	Group 1	30	-0.65±4.31	26.47	0.073
Base excess	Group 2	30	1.21±2.13	34.53	0.073

Table 3. T-test results for the comparison of specific variables of the cases according to the groups

Variables	Groups	n	X±SD	t	p
Age	Group 1	30	72.3±13.35	4.468	0.001*
Age		30	55.9±15.04	4.468	0.001*
Stone diameter (mm)	Group 1	30	7.17±9.55	-1.379	0.173
Stone diameter (mm)	Group 2	30	10.59±9.64	-1.379	0.173
Gallbladder diameter (mm)	Group 1	30	59.37±29.8	0.646	0.521
Gallbladder diameter (mm)	Group 2	30	54.24±31.74	0.646	0.521
WBC	Group 1	30	11482.67±4960	0.528	0.600
WBC	Group 2	30	10820±4763.47	0.528	0.600
Neutrophil percentage (%)	Group 1	30	9.07±4.31	0.604	0.548
Neutrophil percentage (%)	Group 2	30	8.38±4.58	0.604	0.548
Systolic BP	Group 1	30	110.34±15.03	-1.112	0.271
Systolic BP	Group 2	30	114±10.04	-1.112	0.271
Diastolic BP	Group 1	30	67.34±13.82	-2.241	0.029*
Diastolic BP	Group 2	30	73.84±7.85	-2.241	0.029*
Heart rate	Group 1	30	88.34±15.9	1.128	0.264
Heart rate	Group 2	30	83.67±16.15	1.128	0.264
BMI	Group 1	30	30±4.1	1.057	0.295
BMI	Group 2	30	28.77±4.92	1.057	0.295

[S-206]

Patients with non-normalizing CA 19-9 levels after pancreatoduodenectomy: A single-center retrospective study

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Objective: CA 19-9 is the gold standard biomarker for predicting survival after curative resection in pancreatic cancer. However, its levels after surgery can be affected by factors such as cholestasis, surgical margins, and the patient's ability to secrete CA 19-9. This study examines how well CA 19-9 change patterns predict recurrence and metastasis after pancreatoduodenectomy (PD).

Material and Methods: We reviewed 354 patients who underwent PD from 2015 to 2025. Of these, 183 were excluded for benign pathology (50), loss to follow-up (24), insufficient data (39), or early death (70). The final 171 patients (105 men, 66 women; mean age 66) were classified by preoperative CA 19-9 status. Data analysis used preoperative, early postoperative, and 6-month values.

Results: 1. Pre-op positive group (n=125):A complete biochemical response (persistent negativity) was observed in 62 patients (49.6%). In 24 patients (19.2%), values remained high, indicating a poor prognosis. In 33 patients, a re-elevation was detected at 6 months following postoperative normalization, with a recurrence/metastasis rate of 81% (n=27). Six patients showed a downward trend in initially high postoperative values, returning to normal by the 6-month mark. 2. Pre-op negative group (n=46): values remained persistently negative in 35 patients. Although recurrence was detected in 20% (n=7) of these patients at 6 months, the lack of CA 19-9 elevation supports a "non-secretor" (Lewis negative) status. False positivity due to cholestasis was observed in 2 patients. Of the remaining 9 patients, recurrence was found in 5, cholestasis in 2. 3. R1 resection and biochemical correlation: R1 resection was identified in 21 patients. While 5 patients maintained completely negative CA 19-9 levels postoperatively, 7 of the 16 patients with high early postoperative values achieved normalization by the 6-month control. Overall, 57% (12/21) of patients with R1 resections achieved CA 19-9 normalization.

Conclusion: Our study demonstrates that postoperative CA 19-9 elevation possesses high specificity for detecting recurrence. However, biomarker monitoring may be misleading in the 20% of the population who are "non-secretors" and do not produce CA 19-9. Cholestasis is a significant cause of false positivity in both preoperative positive and negative groups; therefore, biliary obstruction must be excluded first in patients with elevated levels. The fact that a biochemical response was achieved in more than half of the R1 resection patients suggests that CA 19-9 kinetics hold prognostic value independent of surgical margin status. In conclusion, CA 19-9 analysis should be personalized and integrated with the patient's secretory status and clinical presentation rather than relying solely on absolute values.

Keywords: Pankreatikoduedonektomi, CA 19-9, biomerker

Table 1. Results			
Patient groups	n (%)	6-month follow-up status	Clinical diagnosis and notes
Group 1: Pre-op CA 19-9 (+) (n=125)			
- Persistent negative	62 (49.6)	Recurrence in 11 patients	17.7% Recurrence rate
- Re-elevation	33 (26.4)	Recurrence in 27 patients	81% Recurrence specificity
- Persistent positive	24 (19.2)	Recurrence in 22 patients	91% Recurrence rate; poor prognosis
- Late normalization	6 (4.8)	No recurrence	Downward trend; favorable prognosis
Group 2: Pre-op CA 19-9 (-) (n=46)			
- Persistent negative	35 (76.1)	Recurrence in 7 patients	Non-secretor status (20% recurrence)
- Subsequent elevation	9 (19.5)	5 Recurrence/2 Cholestasis	Undetermined elevation in 2 patients
- False positive (transient)	2 (4.4)	No recurrence	Cholestasis-related normalization
Surgical margin (r1) analysis (n=21)			
- Biochemical response (+)	12 (57.1)	Normalization achieved	5 Persistent (-), 7 Late Normalization
- Biochemical response (-)	9 (42.9)	Persistent elevation	Associated with recurrence

[S-210]

Clinical experience and outcomes in retroperitoneal and renal masses associated with inferior vena cava thrombosis

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Objective: Inferior vena cava (IVC) tumor thrombosis associated with retroperitoneal and renal malignancies represents one of the most challenging conditions in surgical management. This study aimed to evaluate the clinical, surgical, and oncological outcomes of patients whounderwent IVC thrombectomy or caval resection-reconstruction.

Mayo Clinic Classification Level 0: The tumor thrombus is confined to the renal vein, with no extension into the inferior vena cava. Level I: The tumor thrombus extends into the inferior vena cava but is located ≤2 cm above the renal vein ostium. Level II: The tumor thrombus extends >2 cm above the renal vein ostium but remains below the hepatic veins (infrahepatic). Level III: The tumor thrombus reaches the level of the hepatic veins or extends above them but remains below the diaphragm (suprahepatic, infradiaphragmatic). Level IV: The tumor thrombus extends above the diaphragm into the right atrium. In selected cases, Level I tumor thrombi may be displaced back into the renal vein using the "milking" maneuver; however, caution is required in bulky or filamentous thrombi due to the risk of fragmentation and systemic embolization. In larger thrombi, vascular control should be achieved at the infrarenal and suprarenal inferior vena cava as well as the contralateral renal vein, followed by cavotomy and thrombectomy performed under direct visualization. For Level II tumor thrombi, a wider vascular dissection is required, including early ligation of the renal artery and control of the lumbar, adrenal, and gonadal veins. After cavotomy, preservation of at least 50% of the inferior vena cava lumen is recommended.

Material and Methods: This retrospective study included 16 patients who underwent surgery between 2017 and 2025 at the Department of General Surgery, Ege University Faculty of Medicine. Patients with retroperitoneal or renal malignancies accompanied by IVC tumor thrombus or wall invasion were included. Operative notes, pathology reports, imaging studies,and follow-up data were reviewed. Surgical approaches, repair techniques, thrombus level (Mayo classification), complications, rethrombosis, recurrence, and mortality rates were evaluated.

Results: The mean age of the patients was 55.9±9.2 years, and 56.2% were female. The most common tumor type was renal cell carcinoma (RCC; 62.5%). Other diagnoses included adrenocortical carcinoma, pheochromocytoma, paraganglioma, leiomyosarcoma, liposarcoma, and metastatic tumors. Most thrombi were Mayo Level II-III, while one case extended to theright atrium (Level IV). The most frequent repair technique was primary repair (62.5%), and graft reconstruction was performed in three patients (18.7%). The postoperative rethrombosis rate was 31.2%, mostly observed in patients with high-level thrombus or graft use. No early postoperative mortality was detected, while the overall mortality rate was 31.2%. Metastatic progression occurred in 40% of RCC cases, most commonly involving the liver, lungs, and vertebrae. In retroperitoneal sarcomas, the rates of local recurrence and late metastasis wereboth 50%. Complete resection was achieved in adrenal and neuroendocrine tumors, with long-term control after systemic therapy and no mortality.

Conclusion: In retroperitoneal and renal malignancies accompanied by IVC tumor thrombus, surgical treatment remains an effective and potentially curative option when performed by anexperienced multidisciplinary team with proper preoperative planning. Achieving negativesurgical margins (R0 resection) is the strongest determinant of long-term survival.

Keywords: Inferior vena cava, renal cell carcinoma, retroperitoneal neoplasms, surgical oncology, tumor thrombosis

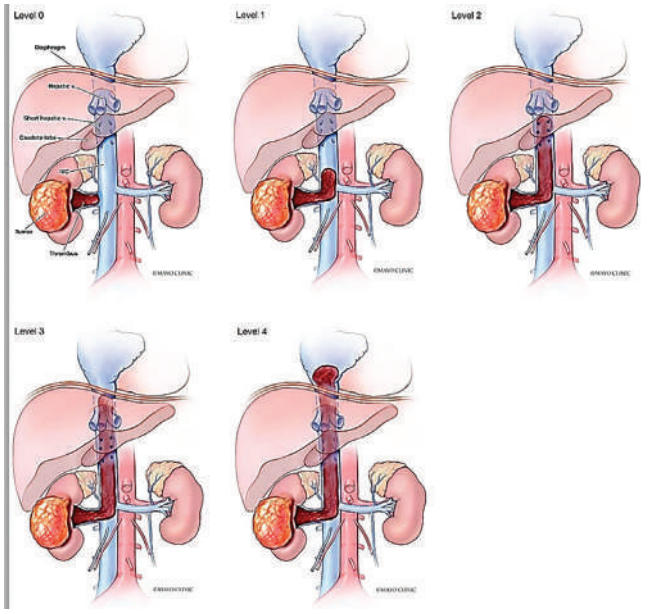


Figure 1. Mayo clinic classification of inferior vena cava tumor thrombus levels in renal cell carcinoma.

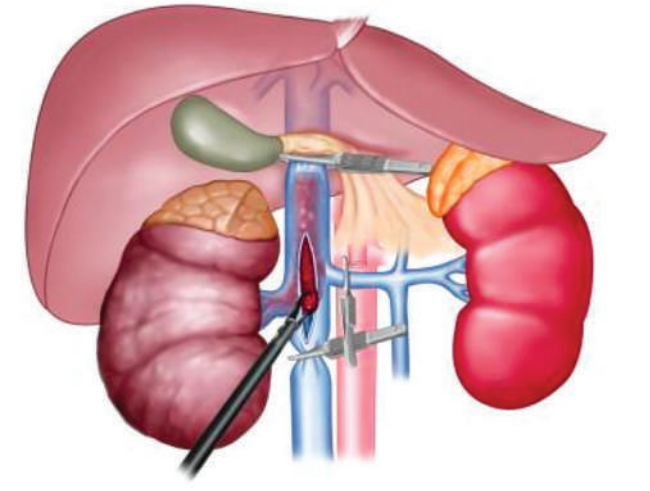


Figure 2. Laparoscopic thrombectomy for level II inferior vena cava tumor thrombus in renal cell carcinoma.

Table 1. Tumor characteristics

Variable	N (n=16)
Histopathological diagnosis	
Adenocarcinoma metastasis	1 (6.2%)
Adrenocortical carcinoma	1 (6.2%)
Clear cell RCC	6 (37.5%)
Pheochromocytoma	1 (6.2%)
Chromophobe RCC	1 (6.2%)
Leiomyosarcoma	1 (6.2%)
Liposarcoma	1 (6.2%)
Paraganglioma	1 (6.2%)
Unclassified RCC	3 (18.8%)

Table 2. Patient demographic and clinical characteristics

Variable	N (n=16)
Demographic characteristics	
Age (years)	55.9±9.2
Sex	
Male	7 (43.8)%
Female	7 (43.8%)
BMI (kg/m²)	26.2 (25.3-28.1)
Missing data	2
HT	5 (50%)
Other	5 (50%)
Missing data	6
Previous surgery	9 (60%)
Symptoms	
Pain	10 (62.5%)
Incidental	2 (12.5%)
Hematuria	6 (37.5%)
Leg swelling	1 (6.2%)
Side	
Right	14 (87.5%)
Left	2 (12.5%)
Follow-up duration (months)	26.3 (2.8-90.3)

Table 3. Surgical treatment approaches, clamping techniques, and retrombosis management

Patient no/ pathology	Side clamping	KRV-K	IR-IVC-K	IR-IVC-Ksh-IVC-K (pringle +)	ih-IVC-K	Repair	Collateral drainage*	Retrombosis	Time (days)	Treatment
1/RCC	Yes	Side	Side	Side	Side	Primary repair	Yes	Yes	7	Interventional surgery with inferior vena cava filter implantation and catheter-directed mechanical thromboaspiration
2/RCC	No	Yes	Yes	No	Yes	Primary repair	No	No		
3/RCC	Yes	Side	Side	Side	Side	Primary repair	No	No		
4/PHEO	No	Yes	Yes	No	Yes	Dacron graft + stump	Yes	Yes	6	Graft excision, stump
5/Liposarcoma	Yes	Side	Side	Side	Side	Primary repair	Yes	Yes		
6/RCC	No	TSA	TSA	TSA	TSA	Autologous graft (pericardial patch)	No	No		
7/RCC	Yes	Side	Side	Side	Side	Primary repair	Yes	No		
8/RCC	No	Yes	Yes	No	Yes	Primary repair	No	No		
9/RCC	Yes	Side	Side	Side	Side	Autologous graft (falciform ligament)	Yes	No	1551	Thrombectomy with interventional surgical support
10/Metastasis	No	Yes	No	Yes	No	Stump	No	Yes	84	Invasion
11/RCC	No	Yes	No	Yes	Yes	Primary Repair	Yes	Yes		
12/Paraganglioma	Yes	Side	Side	Side	Side	Primary Repair	Yes	No		
13/ACC	No	Yes	Yes	No	Yes	Primary Repair	No	No		
14/RCC	No	Yes	Yes	Yes	No	Primary Repair	No	No		
15/ Leiomyosarcoma	No	No	Yes	No	No	Stump	No	Yes	101	Re-operation: "Retroperitoneal recurrent mass + right common iliac artery excision + reconstruction with graft"
16/RCC	No	Yes	Yes	Yes	No	Stump	Yes	No		

KRVK: Contralateral renal vein clamping IR-VCI-K: Infra-renal inferior vena cava clamping SH-VCI-K: Supra-hepatic inferior vena cava clamping IH-VCI-K: Intra-hepatic inferior vena cava clamping * Collateral drainage: Collateral venous drainage via the azygos vein and vertebral venous system detected on CT proximal to the inferior vena cava thrombosis.

Table 4. Follow-up results

	Tumor type	Tumor type	Tumor type	Tumor type	Total (n=16)
Variable	RCC	ACC	Retroperitoneal sarcomas	Metastatic disease	
Residual disease	1	-	1	-	2
<12 month recurrence					
Locoregional	-	-	1	1	2
Metastasis	2	2	1	1	6
>12 month recurrence					
Locoregional	1	-	-	-	1
Metastasis	2	1	1	-	4

[S-211]

Can computed tomography-derived wall tension index predict early or delayed surgery in acute cholecystitis?

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Objective: Acute cholecystitis is characterized by acute inflammation of the gallbladder, and surgery remains the recommended treatment. Previous studies have reported longer operative times and postoperative hospital stays in these patients. According to current guidelines (Tokyo Guidelines 2018-2022), the timing of surgery is determined by symptom onset, severity of inflammation, surgical difficulty, hospital stay, and complication risk, with early surgery recommended within 7 days or delayed surgery after 4-8 weeks.In this study, we investigated the Wall Tension index (WTI), calculated from computed tomography (CT) images as the product of gallbladder wall thickness and transverse diameter, a parameter associated with Laplace's law and commonly used to estimate wall tension in fluid-filled hollow organs. We aimed to evaluate whether WTI could be used as an alternative parameter to symptom onset time in distinguishing early versus delayed surgical intervention in acute cholecystitis.

Material and Methods: A total of 119 patients who underwent surgery for acute cholecystitis between January 2024 and December 2025 were retrospectively analyzed. Demographic data (age, sex), operative time (minutes), length of hospital stay (days), perioperative Nassar scores (1-5), and CT-derived WTI values were recorded. Patients were grouped according to Nassar scores. Since only one patient was classified as Nassar grade 5, this group was excluded from statistical analysis. All remaining data were statistically compared.

Results: A total of 118 patients were included; 55.1% were female and 44.9% were male. Mean age was 46.0±12.5 years in males and 48.0±14.2 years in females. There were 36 patients (30.5%) in Nassar group 2, 32 (27.1%) in group 3, and 50 (42.4%) in group 4. Preoperative white blood cell count (p=0.0019) and C-reactive protein levels (p<0.001) differed significantly between Nassar groups (Table 1). As the Nassar score increased, WTI (p<0.001), operative time (p<0.001), and length of hospital stay (p=0.00025) increased significantly (Table 2). Receiver operating characteristic (ROC) analysis of WTI showed an area under the curve of approximately 0.88, with 84% sensitivity and 81% specificity. The optimal cut-off value determined by the Youden index was WTI ≈ 140.

Conclusion: WTI values increased significantly with higher Nassar scores and were associated with longer operative times and hospital stays. Preoperative WTI measurement, using a cut-off value of approximately 140, may help predict surgical difficulty and clinical outcomes in acute cholecystitis, independent of symptom onset time. Larger prospective studies are required to confirm these findings.

Keywords: Acute cholecystitis, nassar, Wall Tension index

Table 1. Infectious parameters of the groups

	Nassar 2	Nassar 3	Nassar 4	p-value
Preoperative WBC (median, IQR)	9.5 (7.9-13.0)	13.0 (9.0-15.5)	13.8 (11.5-16.0)	0.0019
Preoperative CRP (median, IQR)	15.5 (6.0-52.5)	85.5 (25.0-205.5)	190.5 (56.0-256.3)	<0.001

Kruskal-Wallis test was used for comparison between groups.

Table 2. Length of hospital stay, operative time, and WTI measurements of the groups

	Nassar 2	Nassar 3	Nassar 4	p value
WTI (median, IQR)	86.1 (64.5-116.1)	167.0 (142.9-205.0)	221.7 (160.2-312.4)	<0.001
Operative time (min)	50 (45-60)	67.5 (60-90)	90 (80-120)	<0.001
Length of hospital stay (days)	2 (2-3)	3 (2-4)	3 (3-4)	0.00025

Kruskal-Wallis test was used for comparison between groups.

[S-212]

Optimal timing of cholecystectomy after ERCP in patients with choledocholithiasis

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Objective: There is still no consensus in the literature regarding the optimal timing of cholecystectomy in patients with choledocholithiasis who undergo biliary drainage. In this study, we retrospectively analyzed patients who underwent cholecystectomy following endoscopic retrograde cholangiopancreatography (ERCP) in our clinic. This study aimed to evaluate the optimal timing of cholecystectomy after ERCP.

Material and Methods: A total of 264 patients who underwent ERCP for biliary drainage due to cholelithiasis and choledocholithiasis between 2020 and 2025, followed by cholecystectomy, were retrospectively reviewed. Patients were divided into two groups according to the timing of laparoscopic cholecystectomy (LC) after ERCP: early (1-30 days) and late (>30 days). Intraoperative and postoperative outcomes were analyzed between the two groups.

Results: Of the 264 patients included in the study, 53.1% (n=140) were female and 46.9% (n=124) were male, with a mean age of 55 years (range: 20-93). Comorbidities, ASA score, maximum gallstone size, common bile duct diameter, stent placement, preoperative laboratory values, presence of drainage, operative time, postoperative length of hospital stay, and postoperative complications were evaluated. Seventy-seven patients (29.1%) were in the early cholecystectomy group, while 187 patients (70.8%) were in the late group, with a mean interval of 63.5 days (range: 1-300).The conversion to open surgery rate was 16.8% (n=13) in the early group and 14.4% (n=27) in the late group. Perioperative complication rates were 6.4% (n=5) in the early group and 3.2% (n=6) in the late group. Postoperative complications occurred in 1.2% (n=1) of early patients and 2.6% (n=5) of late patients. No statistically significant difference was observed between the groups ($p>0.05$).

Conclusion: Although there is no consensus regarding the timing of cholecystectomy after ERCP, higher rates of conversion to open surgery, postoperative complications, and longer hospital stays were observed in the late cholecystectomy group in our clinic; however, these differences were not statistically significant. Nevertheless, since recurrent episodes of cholecystitis, cholangitis, and pancreatitis prior to surgery in patients undergoing late cholecystectomy resulted in prolonged hospitalizations, we recommend performing cholecystectomy in the early period.

Keywords: ERCP, choledocholithiasis, laparoscopic cholecystectomy

[S-213]

Comparison of early and late laparoscopic cholecystectomy after ERCP in patients undergoing ERCP for choledocholithiasis

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Objective: The optimal timing of laparoscopic cholecystectomy after endoscopic retrograde cholangiopancreatography (ERCP) in the treatment of choledocholithiasis remains controversial. While inflammation and fibrosis that develop during delayed surgery may make dissection more difficult, early surgery is also thought to carry potential risks. This study aimed to compare the perioperative and postoperative outcomes of laparoscopic cholecystectomy performed in the early versus late period following ERCP.

Material and Methods: A prospective study conducted at the General Surgery Department of Harran University Faculty of Medicine included 100 patients who underwent ERCP for choledocholithiasis with successful bile duct clearance. The patients were divided into two groups: an early surgery group (n=50) operated on within 48-72 hours after ERCP, and a late surgery group (n=50) operated on 8 weeks after ERCP. All patients underwent laparoscopic cholecystectomy using the standard four-port technique. Demographic data, laboratory parameters, operative time, pericholecystic adhesions, gallbladder perforation, drainage amount, conversion to laparotomy, postoperative complications, and length of hospital stay were compared. Statistical significance was accepted as $p<0.05$.

Results: No significant differences were found between the groups in terms of age, sex, or body mass index. Although preoperative AST, ALT, total bilirubin, GGT, and CRP levels were higher in the early surgery group, this did not negatively affect surgical outcomes. Operative time was significantly shorter in the early surgery group ($p<0.001$). The degree of pericholecystic adhesions was significantly higher in the late surgery group ($p<0.001$). Postoperative drainage volume was significantly lower in the early surgery group ($p=0.007$). Although gallbladder perforation, difficult dissection, and conversion to laparotomy were more frequent in the late surgery group, these differences were not statistically significant. Postoperative complication rates were similar between the two groups. Length of hospital stay was shorter in the early surgery group, but the difference was not statistically significant.

Conclusion: Our study suggests that laparoscopic cholecystectomy performed in the early period after ERCP may reduce the degree of surgical difficulty. Increased inflammation and pericholecystic adhesions in the late period may prolong operative time and make dissection more challenging. Consistent with studies in the literature reporting that cholecystectomy performed during the same hospitalization or in the early period after ERCP reduces recurrent biliary events, our findings support that an early surgical approach is safe and feasible. With appropriate patient selection, early laparoscopic cholecystectomy following ERCP may improve surgical efficiency and reduce healthcare utilization.

Keywords: Choledocholithiasis, ERCP, cholecystectomy

[S-214]

The relationship between signet ring cell histology and peritoneal spread in gastric cancer: A single-center experience

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Objective: Stone ring cell carcinoma (SRCC) is a histological subtype that draws attention with its aggressive biological behavior and tendency to peritoneal spread in stomach cancers.In this study, we aimed to investigate the relationship between stone ring cell histology and peritoneal metastasis in patients undergoing surgery due to local advanced stomach cancer.

Material and Methods: Patients with incomplete clinical or pathological data were excluded from the study. Patients were divided into two groups according to the histological type; SRCC group (SRCC with histological degree 4), non-SRCC group (adenocarcinomas with histological degree G1-G3). Demographic data (age, gender), preoperative clinical parameters (ASA score, albumin level), neoadjuvant treatment status and pathological staging (T,N,M stage) were recorded. Peritoneal metastasis was defined as the presence of peritoneal involvement detected and expressed as a percentage.

Results: A total of 379 patients were analyzed. Forty-eight (12.7%) of the patients were in the SRCC group and 331 (87.3%) were in the non-SRCC group. Demographic and clinical characteristics of the SRCC and non-SRCC groups were evaluated. There was no significant difference between the groups in terms of age, gender distribution, ASA score and preoperative albumin levels. The rate of neoadjuvant treatment was lower in the SRCC group. The rate of peritoneal metastasis was higher in the SRCC group compared to the non-SRCC group (16.7% vs. 6.6%). In addition, the M1 disease rate was higher in the SRCC group (20.8% vs. 8.8%). In this study, it was shown that stone ring cell histology is associated with peritoneal metastasis in patients who underwent surgery due to local advanced stomach cancer. The significantly higher rate of peritoneal metastasis in the SRCC group supports that this histological subtype exhibits a different biological behavior. The diffuse infiltrative growth pattern of SRCC and the decrease in cellular cohesivity are shown among the mechanisms that facilitate early spread to peritoneal surfaces. Although it has been reported in the literature that SRCC is associated with poor prognosis, its effect on peritoneal spread has been evaluated in a limited number of studies. Our findings reveal that this relationship may be clinically significant. These results suggest that preoperative and intraoperative peritoneal evaluation should be performed more carefully in patients diagnosed with SRCC. Although the retrospective design of the study and the relying on single center data are the main limitations, the homogeneous patient group and the data set of data spread over many years are among the strengths of the study.

Conclusion: SRCC appears to be associated with peritoneal metastasis in local advanced stomach cancer. This finding supports the need for more aggressive peritoneal evaluation and close clinical follow-up in SRCC cases.

Keywords: Gastric cancer, peritoneal spread, stone ring cell carcinoma

[S-215]

Clinical significance and biomarker potential evaluation of tumor-trained platelet (TEP)-derived PTPRG-AS1 expression in breast cancer patients

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Objective: Breast cancer is the most common malignancy and a major cause of cancer spread. High mortality is largely associated with metastasis and treatment resistance. The development of non-invasive, centrally located, and appropriate biomarkers capable of stage identification is clinically critical. Tumor-trained platelets (TEPs), whose RNA profiles are reprogrammed by tumor products, are promising structures in the field of liquid bacteria. This study focuses on obtaining TEP-derived PTPRG-AS1 expression in breast cancer patients and its clinical significance in both early-stage and advanced bone metastatic breast cancer.

Material and Methods: Platelets were isolated from peripheral blood samples taken from healthy individuals and patients with early-stage and advanced bone metastatic breast cancer. Total RNA extraction was performed from isolated platelets, and quality and distribution analyses were completed. TEP-induced lncRNA expression profiles were evaluated using microarray analysis; early-stage and bone metastatic groups were compared with a healthy control group. Daily lncRNAs showing differential expression in microarray analysis were confirmed using real-time polymerase chain processing (RT-PCR). PTPRG-AS1 expression levels were subjected to clinicopathological effect and expansion analysis.

Results: Microarray analysis showed significant expression changes in numerous TEP-produced lncRNAs in the early-stage and bone metastatic groups. Confirmation analysis revealed differences in PTPRG-AS1 expression in patient groups compared to the control group. In particular, increased expression in advanced/metastatic areas was associated with tumor progression, metastatic potential, and growth rates.

Conclusion: It is shown that TEP-induced changes in PTPRG-AS1 expression may influence disease staging and metastatic processes in breast cancer. The findings suggest that PTPRG-AS1 could be a potential biomarker for non-invasive liquid antibiotics. Functional and prospective studies in larger patient series will clarify its clinical applicability.

Keywords: Breast cancer, TEP, lncRNA

[S-216]

Familial history of cancer in breast cancer patients

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Objective: Breast cancer is the most common malignancy among women. It is the second most common cause of cancer-related mortality after lung cancer. In breast cancer, examining genetic predisposition and familial cancer distributions is also important for identifying high-risk individuals and ensuring that these patients receive early diagnosis through appropriate screening programs. This study aimed to investigate the types of cancers observed in the families of breast cancer cases and the degrees of kinship involved.

Material and Methods: Female patients who underwent surgical treatment for breast cancer in the General Surgery Clinic between 2015 and 2025 and who reported a family history were retrospectively reviewed. Cases where the degree of kinship or the location of cancer in relatives were unknown were excluded. The site of primary tumor in the families of the cases and the degree of closest kinship with the given diagnosis were documented.

Results: A total of 354 patients were evaluated in the study. Of these, 201 (56.8%) reported family history of cancer; however, two were excluded due to insufficient information regarding the malignancy present in their family member. In 199 patients, the distribution of cancers among first-degree relatives were as follows: 22.6% breast, 16.1% lung, 8.0% colon, 7.5% gastric, 6.0% hematological, 6.0% prostate, 5.0% endometrial, and 19.0% other cancers. Among relatives up to and including third-degree, the distribution of cancers were as follows: 50.7% breast, 25.6% lung, 12.5% colon, 10.1% gastric, 8.5% hematological, 8.5% endometrial, 7.0% prostate, and 36.7% other cancers.

Conclusion: A history of malignancy was observed in 56.7% of the families of patients with breast cancer. Breast cancer was the most frequently observed malignancy in the families, followed by lung cancer as the second most common.

Keyword: Breast cancer family

[S-217]

Identification of a novel molecular axis between serotonin receptor-7 and the pyroptosis pathway in colon cancer

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Objective: Colorectal cancer (CRC) is closely associated with chronic inflammation within the tumor microenvironment, and the role of inflammatory cell death mechanisms has gained increasing attention in recent years. Pyroptosis is an inflammatory form of programmed cell death characterized by activation of the NLRP3 inflammasome and subsequent release of proinflammatory cytokines. FOXM1 is an oncogenic transcription factor that plays a critical role in cell cycle regulation, and its overexpression in colon cancer has been associated with poor prognosis and reduced overall survival. Although serotonin and its receptors, particularly serotonin receptor-7 (HTR7), are highly expressed in the gastrointestinal tract and have been implicated in inflammation and tumor progression, their direct relationship with pyroptosis has not been clearly elucidated. This study aimed to investigate the association between HTR7 and the pyroptosis pathway in colon cancer and to identify a novel molecular signaling axis.

Material and Methods: Eighteen patients with histopathological colon adenocarcinoma and 24 age and sex matched healthy individuals were included in the study. Peripheral blood samples were collected preoperatively, and tumor tissue as well as non-cancerous normal tissue samples near the surgical margin were obtained from surgical specimens. Protein expression levels of HTR7, FOXM1, NLRP3, and IL-1β in tissue samples were analyzed by Western blotting, while serum IL-1β and IL-18 levels were measured using ELISA. In addition, the effects of siRNA-mediated HTR7 silencing on cell proliferation, clonogenic capacity, and inflammatory signaling pathways were evaluated *in vitro* using the HT-29 colon cancer cell line.

Results: Gene expression levels of HTR7, NLRP3, IL-1β, and FOXM1 were significantly higher in colon cancer tissues compared with normal tissues ($p<0.001$). At the protein level, HTR7, NLRP3, and FOXM1 expression showed an increasing trend in tumor tissues compared with normal colon tissues; however, these differences did not reach statistical significance. Serum levels of IL-1β and IL-18 were significantly elevated in patients with colon cancer compared with healthy controls ($p<0.05$). Silencing of HTR7 in HT-29 cells significantly suppressed cell proliferation and clonogenic capacity and resulted in a marked reduction in FOXM1, NLRP3, and IL-1β protein expression levels ($p<0.001$).

Conclusion: This study demonstrates that HTR7 occupies a central position in a novel molecular pyroptosis axis regulating inflammasome activation through both FOXM1 and NLRP3 in colon cancer. The identified HTR7/FOXM1/NLRP3 pathway contributes to a deeper understanding of inflammation-tumor interactions in colorectal cancer and represents a promising, targetable molecular axis with potential clinical relevance for future therapeutic strategies.

Keywords: Colon cancer, HTR7, NLRP3

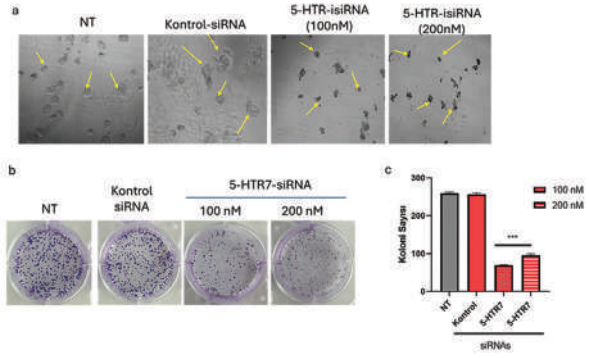


Figure 1. Effect of HTR7-siRNA mediated HTR7 silencing on cell morphology and clone formation.

(a) Microscopic images of morphological changes occurring in colon cancer cells following transfection with HTR7-siRNA. Arrows indicate morphologically altered cells. (b) Shows changes in colony formation of cells. (c) Shows changes in colony numbers ($p<0.0001$).

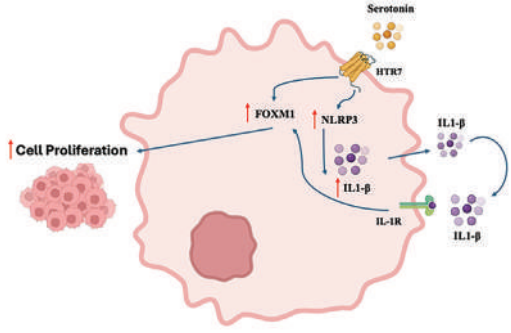


Figure 2. The HTR7-FOXM1-NLRP3 pathway identified in colon cancer.

[S-218]

Evaluation of the moleculer biomarker potential of miR-217 expression in breast, thyroid and colorectal cancers

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Objective: MicroRNAs (miRNAs) are endogenous non-coding RNA molecules that regulate gene expression at the post-transcriptional level and play essential roles in cancer development and progression. Dysregulated miRNA expression represents a key feature of tumor biology. Although miR-217 has been implicated in various malignancies, comparative expression patterns across different solid tumors using matched surgical tissue specimens remain incompletely characterized. This study aimed to evaluate and compare miR-217 expression levels in matched tumor and adjacent non-tumoral tissues from patients with breast, thyroid, and colorectal cancers.

Material and Methods: Matched tumor and adjacent non-tumoral tissue specimens were obtained from 60 patients undergoing curative surgical resection for breast (n=20), thyroid (n=20), and colorectal (n=20) cancers. Total RNA, including miRNAs, was isolated using the miRNeasy Mini Kit (Qiagen, Germany), followed by complementary DNA synthesis. miR-217 expression levels were quantified using quantitative real-time PCR (qRT-PCR) and normalized to U6 small nuclear RNA. Relative expression levels were calculated using the 2-ΔΔCt method. Paired comparisons between tumor and adjacent non-tumoral tissues were performed using the paired Student's t-test.

Results: miR-217 expression was significantly altered in breast and colorectal cancer tissues compared to matched adjacent non-tumoral tissues ($p<0.0001$ and $p=0.019$, respectively). In thyroid cancer, miR-217 expression showed a decreasing trend in tumor tissues; however, this difference did not reach statistical significance based on relative expression analysis. These findings demonstrate that miR-217 expression patterns vary across different solid tumors and may reflect tissue-specific molecular alterations associated with tumorigenesis.

Conclusion: miR-217 expression differs between tumor and adjacent non-tumoral surgical tissue specimens in breast, thyroid, and colorectal cancers. These results suggest that miR-217 may contribute to tumor-related molecular changes and could represent a potential biomarker candidate in solid tumors. Further studies integrating clinical and molecular data are needed to clarify its biological and clinical significance.

Keywords: miRNA, gene expression, cancer

[S-220]

Colorectal cancer and microbiota: A bibliometric analysis from mechanistic insights to clinical implications

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Objective: The relationship between colorectal cancer (CRC) and the gastrointestinal microbiota has rapidly evolved into a growing interdisciplinary research field. This study aims to comprehensively analyze the scientific production structure, thematic evolution, and global contribution patterns of the CRC-microbiota literature using bibliometric methods.

Material and Methods: Data obtained from internationally indexed publications were evaluated using bibliometric analysis software. Source distribution was examined according to Bradford's Law and author productivity according to Lotka's Law; author-, institution-, and country-level productivity, single- and multi-center collaborations, keyword frequencies, word clouds, and temporal thematic trends were analyzed.

Results: Bibliometric analysis revealed a marked increase in publications on colorectal cancer and the gastrointestinal microbiota since 2019, with a further acceleration observed after 2022. Publication output was concentrated in a limited number of core journals, predominantly within the fields of oncology, gastroenterology, and microbiology. Author productivity analysis showed that a large proportion of publications were produced by a small number of highly productive authors, while the majority of authors contributed to a limited number of studies. Institution- and country-level analyses indicated that scientific output was predominantly Asia-centered, with China emerging as the leading country by a substantial margin, followed by the United States and European countries. Keyword analyses highlighted the prominence of the terms "humans", "animals", "gastrointestinal microbiome", and "dysbiosis". Temporal evaluations demonstrated that early research primarily focused on experimental and animal models, whereas more recent years have seen a shift toward human-centered, clinical, and translational studies.

Conclusion: This bibliometric analysis demonstrates that the field of colorectal cancer and the gastrointestinal microbiota has expanded substantially in recent years, with a progressive shift in research focus from experimental foundations toward clinical and translational applications. The concentration of publications within a limited number of core journals and among highly productive authors suggests that the field is undergoing structural maturation. Consistent with previously reported bibliometric studies, scientific output was found to be predominantly Asia-centered, with China playing a decisive role in the development of the field. In contrast, the United States and European countries appear to contribute mainly through multicenter and collaboration-based research. Keyword and thematic trend analyses indicate that the literature initially emphasized mechanistic studies and animal models, whereas recent research has increasingly focused on human-centered investigations addressing diet, treatment response, and clinical outcomes. Collectively, these findings highlight the growing integration of microbiota-related research into clinical practice in colorectal cancer and the rising prominence of human-centered, functional approaches. Future research is expected to increasingly concentrate on microbiota-based biomarkers and personalized therapeutic strategies as central axes of the field.

Keywords: Bibliometric analysis, colorectal cancer, gastrointestinal microbiota, translational research

Table 1. Distribution of journals with the highest number of publications in the analyzed literature

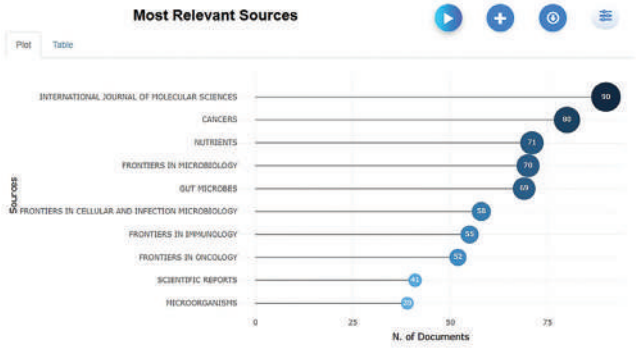


Table 2. Distribution of the most prolific authors in the analyzed literature

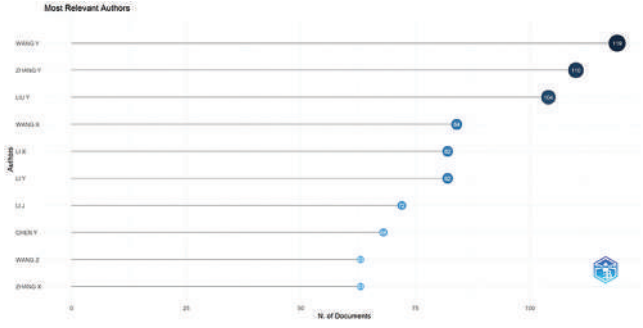


Table 3. Distribution of key concepts and thematic areas in the analyzed literature (treemap analysis)

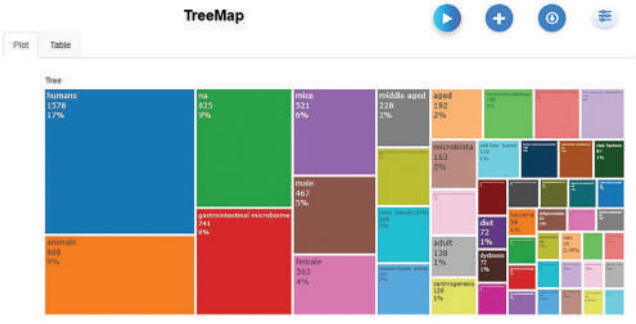


Table 4. Bibliometric studies in colorectal cancer-microbiota research: a comparison of the current literature

PARAMETRE	Bizim çalışma (Bibliometrix/Biblioshiny çıktıları; 2019–2026)	Chang ve ark., 2023 (Frontiers in Microbiology)	Zhen ve ark., 2023 (Frontiers in Oncology)	Wu ve ark., 2023 (PubMed kayıtlı çalışma; probiyotik/CRC bağlamı)
Çalışma	Bizim çalışma (Bibliometrix/Biblioshiny çıktıları; 2019–2026)	Chang ve ark., 2023 (Frontiers in Microbiology)	Zhen ve ark., 2023 (Frontiers in Oncology)	Wu ve ark., 2023 (PubMed kayıtlı çalışma; probiyotik/CRC bağlamı)
Odak / Kapsam	Kolon/kolorektal kanser–mikrobiyota literatürü (geniş alan taraması)	Kolorektal kanser ve mikrobiyota ilişkisi (genel alan)	Mikrobiyota ve kolorektal kanser taraması (CRC screening) odağı	Kolorektal kanserde probiyotik–mikrobiyota ekseni (daha klinik/uygulamalı alt tema)
Veri tabanı – dönem	2019–2026	Web of Science Core Collection; 2001–2021	Web of Science; 1992–2022	(Çalışmaya göre değişken)
Yayın sayısı	2707 doküman, 726 kaynak, 11.871 yazar	2707 yayın	700 yayın	863 yayın (raporlanan)
Ana yöntem/araç	Bibliometrix/Biblioshiny; kaynak-yazar-ülke-tema görselleştirmeleri	Bibliyometrik + görselleştirme (CiteSpace/VOSviewer temelli yaklaşım)	Bibliyometrik + görselleştirme	Bibliyometrik/ görselleştirme (çalışma içi)
Öne çıkan bibliyometrik bulgular	Yıllık büyüme %51,12; uluslararası ortak yazarlık %20,35; doküman başına ortak yazar 8,08. En üretken dergiler: Int. J. Mol. Sci. (90), Cancers (80), Nutrients (71), Frontiers in Microbiology (70), Gut Microbes (69). En üretken kurumlar Çin ağırlıklı: Chinese Univ. of Hong Kong (405), Sun Yat-sen Univ (342), Huazhong Univ S&T (249), Zhejiang Univ (247), Shanghai Univ TCM (241). Ülke üretiminde Çin açık ara lider, ardından ABD ve Avrupa ülkeleri. Ana terimler "gastrointestinal microbiome", "dysbiosis", "diet" gibi eksenlerde yoğunlaşıyor; insan/deney hayvanı temaları belirgin.	Alanın hızlanan büyümesi; ülke/kurum ağlarında Asya (özellikle Çin) ağırlığı; temalarda disbiyozis–inflamasyon–karsinogenez ekseni gibi kümeler raporlanıyor.	Screening odaklı alt literatürün yıllar içinde artışı; ülke/işbirliği ve anahtar kelime kümeleri ile "tarama–biyobelirteç–mikrobiyota" ekseninde odaklanma.	Probiyotik–CRC kesişiminde yayın dinamikleri; önde gelen ülke/kurum/tema kümeleri gibi çıktılar bildiriliyor.
Bizim çalışmamızla kıyas (katkı/fark)	Literatürdeki genel eğilimlerle uyumlu biçimde Çin-merkezli üretim ve çok hızlı büyüyen bir alan profili çiziyor. Ayrıca "screening" gibi alt odaklarla sınırlı kalmadan, kolorektal kanser–mikrobiyota hattını genel çerçevede yakalıyor.	Bizim analizimiz, benzer çekirdek temaları daha güncel bir zaman penceresine taşıyor (2019–2026) ve Biblioshiny panelleriyle dergi–kurum–yazar–trend eksenlerini aynı çatı altında özetliyor.	Bizim çalışma, screening alt alanına değil tüm CRC–mikrobiyota literatürüne baktığı için daha geniş; buna karşılık Zhen ve ark. alt alanın (tarama) dinamiklerini daha "niş" ve net gösteriyor.	Bizim çalışma, probiyotik gibi bir alt temaya "daralmadan" alanı genel harita şeklinde çıkarıyor; Wu ve ark. ise uygulamaya dönük alt temada derinleşiyor.

[S-221]

Alterations in PD-L1+ myeloid cells and immune infiltration are associated with atezolizumab and paclitaxel therapy success in a triple-negative breast cancer model

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Objective: Triple-negative breast cancer (TNBC) is an aggressive breast cancer subtype with limited targeted treatment options and suboptimal response to immune checkpoint inhibitors (ICIs). Although PD-L1 expression on tumor cells is widely used to guide immunotherapy, accumulating evidence suggests that PD-L1 expressed by immune cells within the tumor microenvironment may critically influence therapeutic outcomes. This study aimed to investigate the role of PD-L1-expressing myeloid cells and immune infiltration in determining the response to combined paclitaxel and anti-PD-L1 (atezolizumab) therapy in an experimental TNBC model.

Material and Methods: A murine TNBC model was established using 4T1 breast cancer cells inoculated into BALB/c mice. Animals were divided into four groups: sham, paclitaxel, anti-PD-L1, and combination therapy (paclitaxel + anti-PD-L1). Tumor growth and lung metastasis were assessed histopathologically. Immune cell populations from tumor, lung, liver, spleen, and lymph nodes were analyzed by flow cytometry. PD-L1 expression on granulocytes, monocytes, macrophages, and $CD206^+$ tumor-associated macrophages (TAMs) was quantified using percentage positivity and median fluorescence intensity (MFI). Statistical comparisons were performed using Student's t-test.

Results: PD-L1 expression was significantly higher on tumor-infiltrating myeloid cells than on tumor cells. $CD206^+$ TAMs exhibited the highest PD-L1 levels within the tumor microenvironment and in metastatic target organs including lung and liver, as well as in lymphoid tissues (Figure 1). Combination therapy significantly reduced primary tumor growth and lung metastasis burden compared with paclitaxel or anti-PD-L1 monotherapy (Figure 2). Immune profiling revealed marked remodeling of immune infiltration across tissues. Paclitaxel increased intratumoral $CD8^+$ T-cells while reducing granulocyte infiltration. Anti-PD-L1 monotherapy promoted immune cell accumulation without proportional therapeutic benefit. Importantly, combined treatment decreased PD-L1 expression on $CD206^+$ macrophages across multiple organs, indicating systemic modulation of immunosuppressive myeloid compartments. T-cell trafficking patterns demonstrated organ-specific redistribution, with enhanced cytotoxic T-cell presence in metastatic sites and lymph nodes.

Conclusion: Our findings demonstrate that PD-L1 expression on myeloid cells, particularly $CD206^+$ tumor-associated macrophages, plays a central role in regulating therapeutic response in TNBC. The combination of paclitaxel and atezolizumab not only suppresses tumor growth and metastasis but also remodels the immune microenvironment by reducing immunosuppressive myeloid populations and enhancing effective antitumor immunity. These results provide mechanistic insight into why PD-L1-negative tumors may still benefit from immune checkpoint inhibition and support targeting $PD\text{-}L1^+$ myeloid cells as a key strategy for improving combination chemo-immunotherapy in TNBC.

Keywords: Atezolizumab, metastasis, paclitaxel, triple-negative breast cancer, tumor immune microenvironment

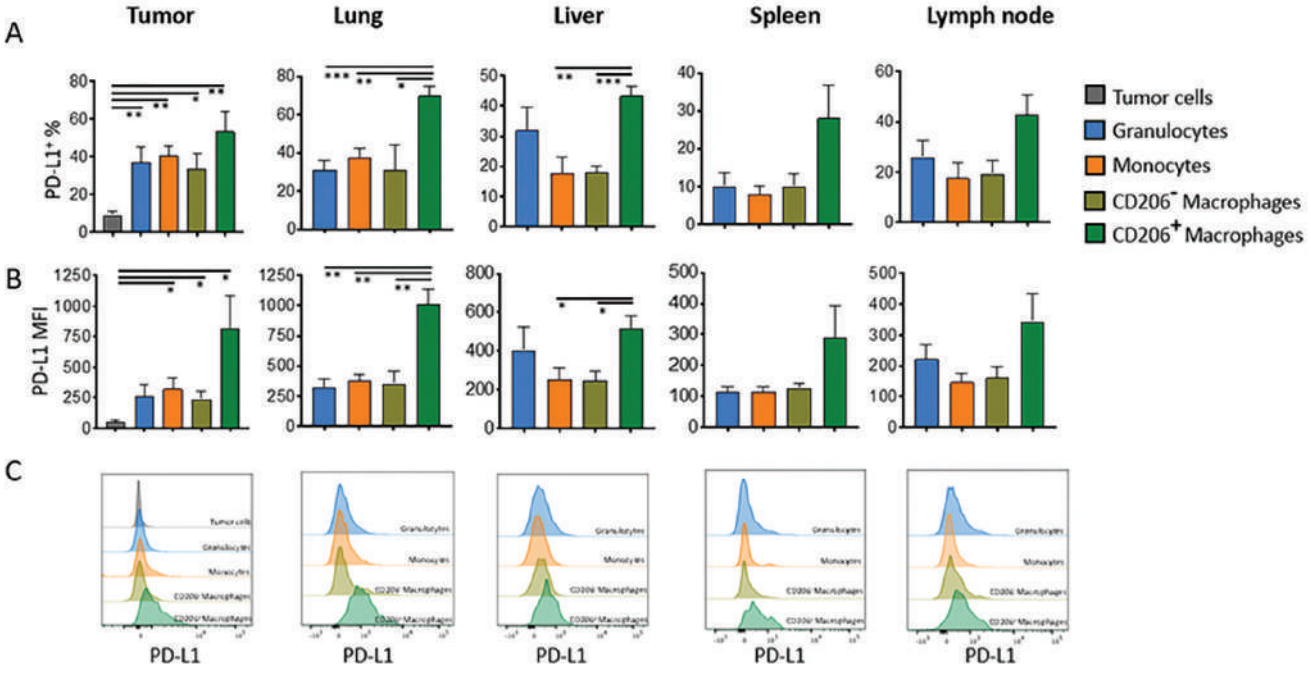


Figure 1. Analysis of PD-L1 expression on tumor cells and tumor-infiltrating immune cells. A) The percentages of PD-L1+ cells, B) PD-L1 MFI, and C) representative flow cytometry histograms of PD-L1 expressions were given. The data was presented as average ± SEM (*p<0.05, **p<0.01, ***p<0.001).

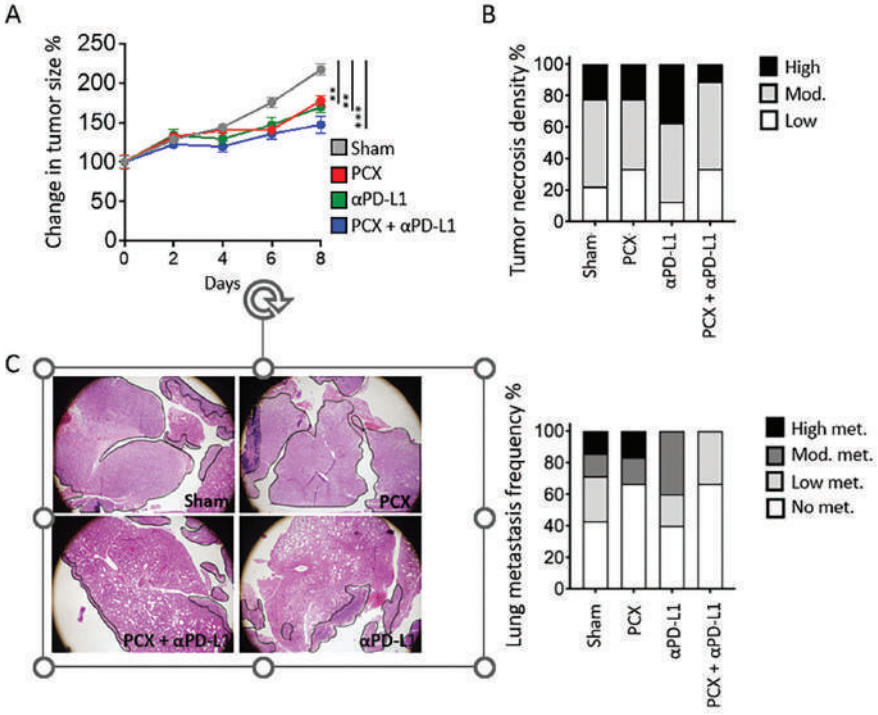


Figure 2. A) Change in tumor size under paclitaxel, anti-PD-L1, and combination treatments. B) Percentages of tumor necrosis and C) representative hematoxylin and eosin (H&E)-stained lung tissue section and lung metastasis frequency were given. The data was presented as average ± SEM (*p<0.05, **p<0.01, ***p<0.001). (Black outlines indicate metastatic tumor regions in lung parenchyma).

[S-222]

Investigation of the correlation between asprosin C-erbB-2 levels in gastric adenocarcinomas

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Objective: Gastric adenocarcinoma is one of the leading causes of cancer-related mortality worldwide, and there is a need for reliable biomarkers for early diagnosis. C-erbB-2 (HER2) positivity is associated with poor prognosis in gastric cancers and is of importance for targeted therapies. In recent years, the roles of metabolically regulatory adipokines in tumor biology have attracted increasing attention. Asprosin is a newly identified adipokine involved in energy homeostasis, and its association with cancer metabolism has not yet been clearly elucidated. The aim of this study was to investigate the relationship between Asprosin and C-erbB-2 expression in gastric adenocarcinomas.

Material and Methods: In this retrospective study, 60 gastric adenocarcinoma cases (20 Grade I, 20 Grade II, 20 Grade III) and 20 samples of normal gastric mucosa selected from the archives of the Department of Pathology, Fırat University Faculty of Medicine, were examined. Tissue sections were immunohistochemically stained with Asprosin and C-erbB-2 antibodies. H-scores were calculated based on staining intensity and the percentage of positive cells. Statistical analyses were performed using SPSS version 22.0. Groups were compared using the Kruskal-Wallis test, and the relationship between markers was evaluated using Spearman correlation analysis. Diagnostic performance was assessed by receiver operating characteristic (ROC) analysis.

Results: Asprosin expression was found to be high in normal gastric mucosa, whereas Asprosin levels decreased significantly with increasing tumor grade ($p=0.002$). In contrast, C-erbB-2 expression increased in parallel with tumor grade ($p=0.009$). A moderate, statistically significant negative correlation was observed between Asprosin and C-erbB-2 expression ($r=-0.54$, $p<0.01$). In ROC analysis, the area under the curve (AUC) was 0.81 for Asprosin and 0.84 for C-erbB-2. An Asprosin H-score below 102 was found to be discriminative in favor of malignancy. No significant associations were detected between marker levels and age, sex, or tumor localization.

Conclusion: The decrease in Asprosin expression and the concomitant increase in C-erbB-2 levels with advancing tumor grade in gastric adenocarcinomas suggest an inverse relationship between metabolic reprogramming and oncogenic activation. Asprosin represents a potential metabolic biomarker candidate for early diagnosis and tumor grading in gastric cancer. Its combined evaluation with C-erbB-2 may enhance diagnostic accuracy and support personalized therapeutic approaches.

Keywords: Asprosin, biomarker, C-erbB-2 (HER2), stomach cancer

[S-223]

Evaluation of the prognostic importance of aurora kinase B and its relationship with clinicopathological parameters in breast cancer patients

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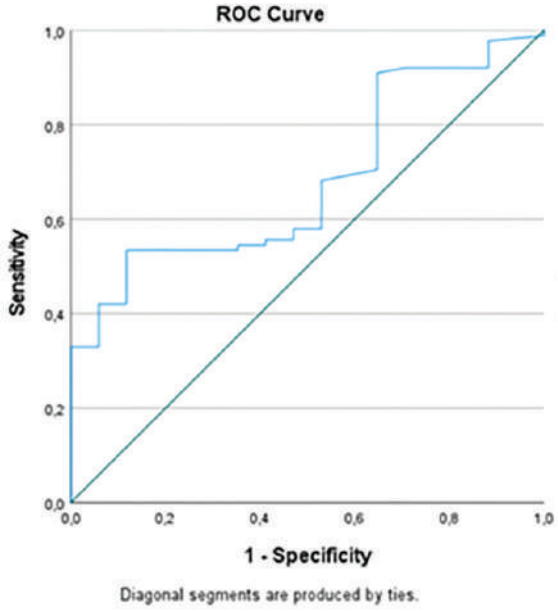
Objective: Aurora kinase B (AURKB) is a serine/threonine kinase that plays a critical role in mitotic regulation and genomic stability. Aberrant activation of AURKB has been implicated in tumorigenesis and cancer progression. This study aimed to evaluate the prognostic significance of serum AURKB levels in breast cancer patients and to investigate their relationship with molecular subtypes and clinicopathological parameters.

Material and Methods: Serum AURKB concentrations were determined by enzyme-linked immunosorbent assay (ELISA) in 88 breast cancer patients (22 Luminal A, 22 Luminal B, 22 HER2-positive and 22 triple-negative) and 17 healthy controls. Statistical analyses were performed using ANOVA, Kruskal-Wallis, and correlation test, and $p<0.05$ was considered statistically significant.

Results: Serum AURKB levels were significantly elevated in breast cancer patients compared to healthy controls (1.55 ± 0.11 vs. 0.90 ± 0.13 ng/mL; $p=0.018$). Among molecular subtypes, Luminal A and HER2-positive tumors exhibited significantly higher AURKB concentrations ($p=0.014$ and $p=0.034$, respectively). AURKB levels showed a strong positive correlation with hormone receptor positivity ($p=0.009$) and a negative correlation with tumor size and clinical stage. Receiver operating characteristic (ROC) analysis identified a diagnostic threshold of 1.32 ng/mL (AUC=0.68; sensitivity=53.4%; specificity=88.2%).

Conclusion: Elevated serum AURKB levels were found to be associated with hormone receptor positivity and early-stage breast cancer. The results obtained from the study suggest that increased serum AURKB levels may reflect the biology of better-differentiated and hormone receptor-positive tumors and may be closely related to tumor proliferative activity. Furthermore, the detection of higher AURKB levels in early stages suggests that this molecule may be an indicator of increased cellular division dynamics in the early stages of the disease and may be considered a supportive biomarker in predicting clinical prognosis. However, prospective, multicenter studies involving large patient cohorts are required to determine whether AURKB has independent prognostic value.

Keywords: Aurora kinase B, breast cancer, molecular subtypes



Area Under the Curve

Test Result Variable(s): ng/ml

Area	Std. Error[a]	Asymptotic Sig.[b]	Asymptotic 95% Confidence Interval	
			Lower Bound	Upper Bound
,682	,061	,018	,562	,802

The test result variable(s): ng/ml has at least one tie between the positive actual state group and the negative actual state group. Statistics may be biased.

a. Under the nonparametric assumption

b. Null hypothesis: true area = 0.5

Figure 1. ROC curve plotted for aurora kinase B.

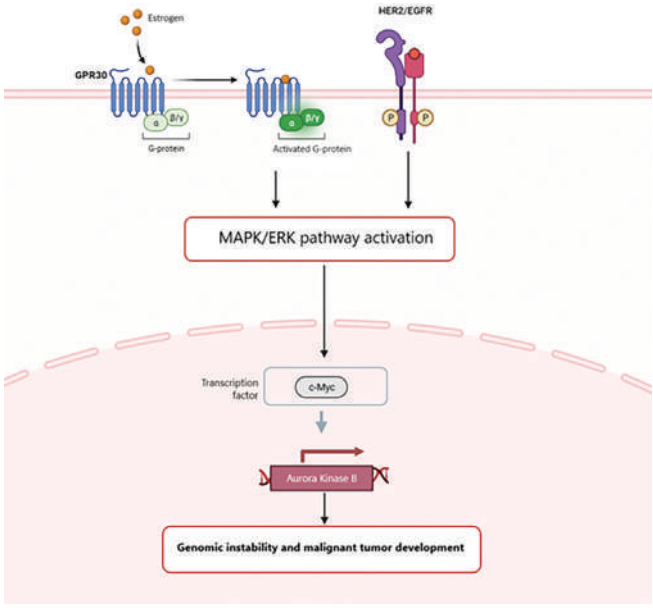


Figure 2. Proposed mechanism linking HER2 and estrogen receptor pathways activating aurora kinase B via MAPK/ERK and Myc signaling, adapted from references.

Table 1. Clinicopathologic and demographic characteristics of patients and AURKB serum levels

Clinicopathologic parameters	n (%)	AURKB (ng/mL)	p-value
Age			
<50	42 (48)	1.579	p=0.977
≥50	46 (52)	1.379	
Metastatic LN			
No	43 (49)	2.113	p=0.674
Yes	44 (51)	1.427	
Clinical stage			
I	17 (19)	2.7	p=0.022
II	48 (55)	1.25	
III	22 (25)	1.6706	
IV	1 (1)	0.55	
Tumor diameter			
<2 cm	26 (30)	2.2629	p=0.01
2-5 cm	50 (58)	1.1760	
>5 cm	11 (12)	1.8771	
Complete response			
No	32 (53)	1.059	p=0.05
Yes	29 (47)	1.9579	

AURKB: Aurora kinase B

Table 2. AURKB expression levels of patients according to molecular subtypes and compared to healthy women

Groups	n (%)	Aurora kinase B expression (mean ng/mL)	p-value
Luminal A	22 (20.95)	1.6623	0.014
Luminal B	22 (20.95)	1.4391	0.11
Triple negative	22 (20.95)	1.3409	0.124
HER2 positive	22 (20.95)	1.7509	0.034
Healthy women	17 (16.2)	0.8982	

AURKB: Aurora kinase B

Table 3. Comparison of AURKB threshold value with clinicopathologic data

Parameters		n	Total %	<1.32	>1.32	p
Clinical stage	1	17	19.30	3 (17.6)	14 (82.4)	0.034
	2	48	54.50	27 (56.3)	21 (43.8)	
	3	22	25.00	10 (45.5)	12 (55.5)	
	4	1	1.10	1 (100)	0 (0)	
Neural invasion	No	81	95.30	36 (44.4)	45 (55.6)	0.03
	Yes	4	4.70	4 (100)	0	

AURKB: Aurora kinase B

[S-224]

Clinical significance of CD27$^+$CD28$^+$ effector memory T-cells as potential prognostic biomarkers in ovarian cancer

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Objective: Ovarian cancer is the most lethal gynecological malignancy and is characterized by high recurrence rates and resistance to conventional therapies. Identification of reliable immune biomarkers for prognosis and treatment response remains a major clinical need. Effector memory T-cells (TEM) play a central role in antitumor immunity, and their functional heterogeneity can be defined by the expression of co-stimulatory molecules CD27 and CD28. This study aimed to investigate the clinical significance of CD27$^+$CD28$^+$ helper and cytotoxic TEM subsets in peripheral blood, ascites, and tumor tissue of patients with high-grade ovarian cancer.

Material and Methods: Peripheral blood, malignant ascites, and tumor tissue samples were obtained from patients with FIGO stage III-C ovarian cancer and age-matched healthy controls. Multi-parametric flow cytometry was used to analyze CD4$^+$ and CD8$^+$ T-cell subsets according to memory phenotypes and CD27/CD28 expression profiles. Patients were stratified based on histopathological diagnosis, neoadjuvant chemotherapy status, and clinical outcomes. Associations between immune subsets and progression-free survival (PFS), lymph node status, and CA125 kinetics were evaluated using appropriate statistical analyses.

Results: Effector memory T-cells constituted the predominant T-cell population across all compartments, with marked enrichment in the tumor microenvironment, exceeding 90% of infiltrating T-cells. Among TEM subsets, the CD27$^+$CD28$^+$ population emerged as the dominant fraction in both circulation and tumor tissue for CD4$^+$ and CD8$^+$ T-cells (Figure 1). High circulating frequencies (≥63%) of CD27$^+$CD28$^+$ helper or cytotoxic TEM cells were significantly associated with prolonged PFS (15-16 months versus 9-10.5 months), increased incidence of reactive lymph nodes, and favorable CA125 dynamics. In contrast, neoadjuvant chemotherapy was associated with a significant reduction of CD27$^+$CD28$^+$ TEM cells within tumor tissue (Figure 2). These findings indicate that preservation of CD27 and CD28 expression reflects active immunosurveillance, whereas loss of these markers corresponds to terminal differentiation and impaired antitumor immunity.

Conclusion: CD27$^+$CD28$^+$ effector memory T-cells represent a robust and minimally invasive prognostic biomarker in ovarian cancer. Their sustained presence in peripheral blood correlates with improved survival outcomes and favorable clinical parameters, while their depletion signals immune exhaustion and reduced antitumor capacity. Monitoring CD27/CD28 expression on circulating TEM cells may provide a practical tool for patient stratification and guide future immunotherapeutic strategies aimed at enhancing immune surveillance in ovarian cancer.

Keywords: CD27/CD28 expression, effector memory T-cells (TEM), ovarian cancer, prognostic biomarker, tumor immune microenvironment

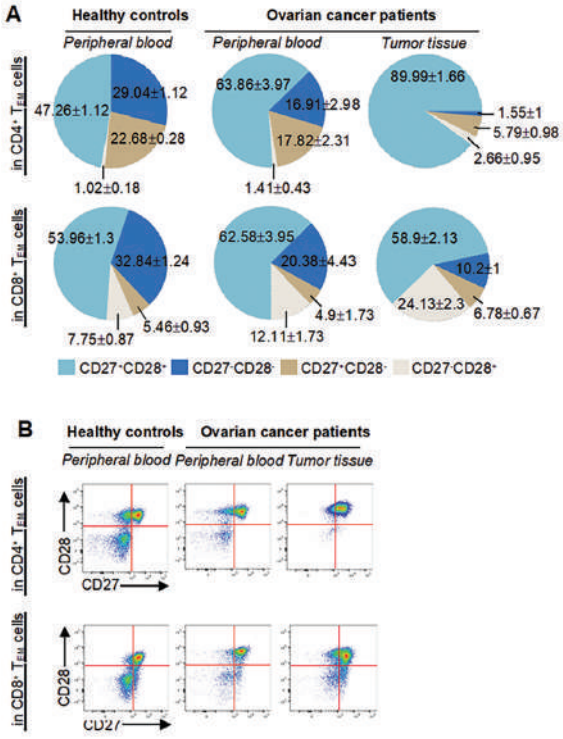


Figure 1. CD27+CD28+ TEM cells represent a predominant subset among CD4+ and CD8+ T-cells in ovarian cancer. Percentage distribution of CD4+ and CD8+ TEM cell subsets according to CD27 and CD28 expression was plotted in healthy control blood, patient blood, and tumor tissue (A). Representative flow cytometry dot plots illustrate CD27 and CD28 expression patterns on TEM cells determined in distinct samples (B).

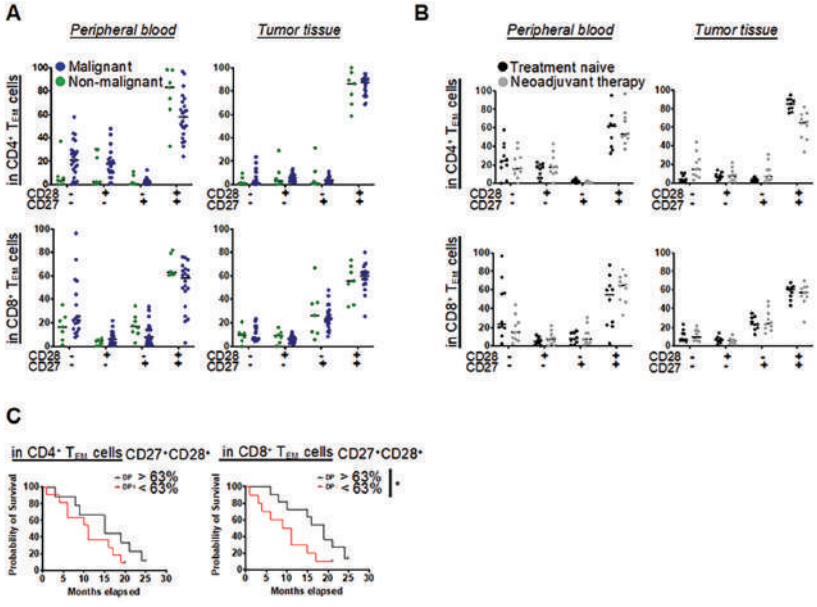


Figure 2. Tumor-infiltrating CD27+CD28+ TEM cells predict favorable prognosis in ovarian cancer. Percentage of circulating and tumor-infiltrating helper and cytotoxic TEM cells was distributed according to CD27 and CD28 expression (A) in malignant and non-malignant (benign and borderline) histopathology and (B) according to neoadjuvant therapy received. Kaplan-Meier curves for progression free survival of ovarian cancer patients categorized according to the percentage of CD27+CD28+ in CD4+ and CD8+ TEM cells. (C) The median percentage of CD27+CD28+ T-cells (63%) is taken as a cut-off value (n=18, *p<0.05, statistical Gehan-Breslow-Wilcoxon test applied).

[S-225]

Neoadjuvant chemotherapy resistance in Luminal B breast cancer: The role of T-Cell exhaustion and immune checkpoint expression in metastatic lymph nodes

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Objective: Tumor-infiltrating lymphocytes (TILs) and immune checkpoint molecules are well-established determinants of disease prognosis and therapeutic response in breast cancer. In the present study, we aimed to evaluate immune cell infiltration and immune checkpoint expression in metastatic axillary lymph nodes according to molecular subtypes, with a particular focus on elucidating the relationship between the immune microenvironment and the observed resistance to neoadjuvant chemotherapy in the Luminal B subtype.

Material and Methods: Metastatic axillary lymph node specimens obtained from 79 patients diagnosed with Luminal A, Luminal B, HER2-positive, and triple-negative breast cancer were analyzed. The proportions of $CD4^+$ and $CD8^+$ T-cells, as well as the expression of PD-1, CTLA-4, and LAG-3 on these subsets, were assessed by flow cytometry. Patients were stratified according to receipt of neoadjuvant chemotherapy and pathological response, and comparative analyses were performed accordingly.

Results: The rate of pathological complete response was significantly lower in patients with the Luminal B subtype compared to the other molecular subtypes. In this group, metastatic lymph nodes demonstrated significantly higher proportions of $CD4^+$ and $CD8^+$ T-cells expressing inhibitory receptors (PD-1, CTLA-4, and LAG-3) (Figure 1). Following neoadjuvant therapy, a marked increase in immune checkpoint molecule expression on $CD8^+$ T-cells was observed (Figure 2). These findings suggest that a T-cell exhaustion phenotype becomes more pronounced within the tumor microenvironment after chemotherapy.

Conclusion: Resistance to neoadjuvant chemotherapy in Luminal B breast cancer may be associated with an immunosuppressive microenvironment at the level of metastatic lymph nodes, characterized by features of T-cell exhaustion. The observed upregulation of immune checkpoint molecules underscores the potential rationale for exploring combined chemotherapy-immunotherapy strategies, particularly in the Luminal B subtype.

Keywords: Immune checkpoint inhibitors, metastatic breast cancer, neoadjuvant therapy

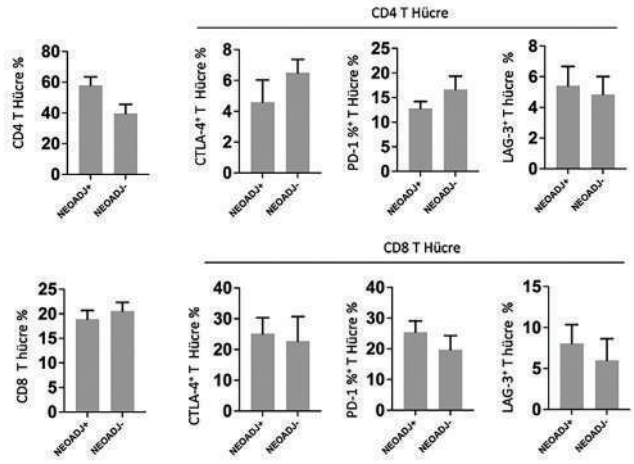


Figure 1. Flow cytometric analysis of metastatic lymph nodes from breast cancer patients who received and did not receive neoadjuvant therapy, demonstrating the percentages of inhibitory receptors (CTLA-4, PD-1, LAG-3) expressed on CD4 and CD8 T-cells.

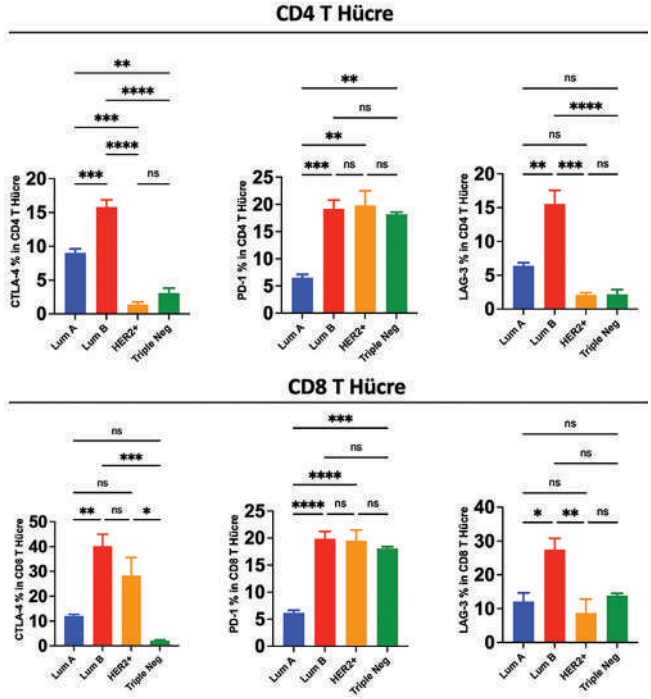


Figure 2. Determination of the percentages of inhibitory receptors (CTLA-4, PD-1, LAG-3) expressed on CD4 and CD8 T-cells in metastatic lymph nodes of breast cancer patients with different molecular subtypes (Luminal A, Luminal B, HER2-positive, and triple-negative) using multicolor flow cytometry.

[S-226]

Evaluation of specsin immunoreactivity in gastric adenocarcinomas and intestinal metaplasia cases

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Objective: Gastric cancer is one of the most common malignancies worldwide and remains a leading cause of cancer-related mortality. While five-year survival rates may reach up to 70% in patients diagnosed at an early stage, they decrease to approximately 10% in advanced-stage disease. Genetic predisposition, environmental factors, dietary habits, and particularly *Helicobacter pylori* infection play significant roles in gastric carcinogenesis. Because gastric cancer is frequently diagnosed at an advanced stage, there is a growing need for novel molecular biomarkers that may contribute to early diagnosis and prognostic assessment. Spexin (SPX) is a recently identified multifunctional peptide hormone involved in metabolic regulation, inflammation, and cell proliferation. However, its role in gastric cancer pathogenesis and tumor biology has not yet been fully elucidated. This study aimed to evaluate SPX expression in gastric adenocarcinoma and to investigate its association with tumor differentiation.

Material and Methods: This retrospective cross-sectional study included 100 individuals diagnosed and surgically treated between 2018 and 2023. The cases were divided into five equal groups: healthy controls, intestinal metaplasia, well-differentiated, moderately differentiated, and poorly differentiated gastric adenocarcinoma. Gastric cancer diagnoses were confirmed by endoscopic biopsy and histopathological examination. SPX immunoreactivity was assessed in formalin-fixed, paraffin-embedded tissue sections using immunohistochemical methods. A histoscore was calculated based on staining intensity and distribution. Statistical analysis was performed using one-way analysis of variance followed by Tukey post-hoc tests.

Results: No significant difference in spexin immunoreactivity was observed between the normal gastric mucosa and intestinal metaplasia groups. In well-differentiated gastric adenocarcinomas, SPX expression was largely preserved and comparable to that of the control group. In contrast, moderately and poorly differentiated gastric adenocarcinomas exhibited a marked reduction in spexin immunoreactivity, which was statistically significant. A progressive and significant decrease in SPX histoscores was observed as tumor differentiation decreased. Loss of cytoplasmic SPX staining in tumor cells appeared to parallel malignant progression and was associated with more aggressive tumor characteristics.

Conclusion: This study is the first to investigate SPX expression in gastric adenocarcinoma. SPX levels were found to be inversely correlated with tumor differentiation and were significantly reduced in poorly differentiated tumors. These findings suggest that loss of spexin expression may be associated with a more aggressive tumor phenotype. SPX may represent a potential biomarker reflecting tumor biology in gastric cancer, and its clinical utility should be further explored in larger, prospective studies.

Keywords: Intestinal metaplasia, spexin, stomach cancer

[S-227]

An experimental model to elucidate early liver metastasis in colorectal cancer and its impact on tumor aggressiveness

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Objective: Early liver metastasis or recurrence following curative resection remains a major clinical challenge in colorectal cancer. Even among patients with similar stage and pathological characteristics, heterogeneous clinical outcomes suggest that current staging systems may be insufficient to predict metastatic risk in certain cases. Patients who develop early recurrence are thought to harbor biologically more aggressive tumor features, and standard surgical and follow-up strategies may be inadequate for this subgroup. In this study, we aimed to establish an experimental model mimicking early metastatic behavior and to investigate its effects on tumor aggressiveness and treatment response.

Material and Methods: Human colorectal cancer cell line (HT-29) was cultured under standard conditions. To mimic metastatic behavior, a control group was formed by treating the cells with TGF-β, while untreated cells served as the control group. Tumor aggressiveness was assessed by proliferation, migration, invasion, and colony-forming capacity. Proliferation was examined using the MTT method, and migration and invasion were analyzed using Transwell assays. To evaluate treatment response, cell viability was compared at 72 hours after treatment with a combination representing the components of FOLFIRINOX and a combination of gemcitabine and cisplatin, both individually and in combination.

Results: In HT-29 cells treated with TGF-β, a significant increase in cellular proliferation was observed compared to the control group ($p<0.05$). Similarly, in migration and invasion analyses, the number of cells crossing the Transwell membrane was significantly increased in cells treated with TGF-β ($p<0.05$ for both analyses). In the colony formation test, the increased clonogenic capacity was confirmed by observing a greater number and larger colony formation in the experimental group ($p<0.05$). In the evaluation of chemotherapy response, a significant decrease in cell viability was observed with the application of the combination representing the FOLFIRINOX components ($p<0.05$). However, the gemcitabine-cisplatin combination produced a more pronounced cytotoxic effect ($p<0.01$). The lowest cell viability was obtained with the combined application of both regimens, and this combined approach was shown to be statistically more effective than the combination representing the FOLFIRINOX components ($p<0.01$).

Conclusion: This experimental model suggests that patients who develop early liver metastasis after curative resection may possess biologically distinct tumor characteristics. The findings indicate that follow-up and treatment strategies based solely on pathological staging may be insufficient in certain patients. Closer surveillance and alternative systemic treatment strategies may be warranted for high-risk individuals. This study provides a translational framework that may contribute to patient selection, surveillance frequency, and adjuvant treatment planning in colorectal cancer surgery.

Keywords: Early liver metastasis, early recurrence, tumor aggressiveness

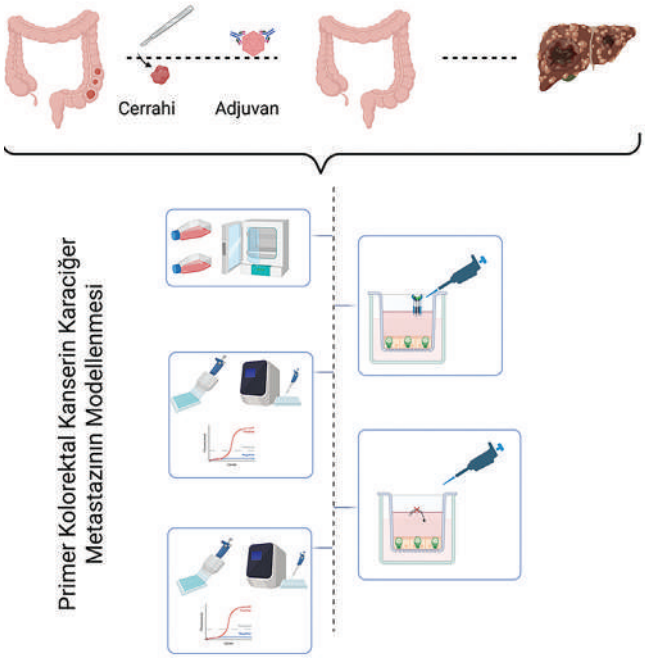


Figure 1. Modeling of liver metastasis in primary colorectal cancer.

[S-228]

A single-center retrospective analysis of early mortality rates following elective and emergency colorectal surgeries performed over the past five years

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Objective: Colorectal surgeries encompass procedures for a range of conditions, including colonic and diverticulitis perforations, bowel obstruction (ileus), mesenteric ischemia, volvulus, colorectal cancer, obstructive colorectal cancer, tumor perforation, and gastrointestinal bleeding requiring surgical intervention. This study aimed to identify factors associated with preoperative and postoperative mortality in colorectal surgeries performed under elective and emergency conditions and to compare outcomes between these groups.

Material and Methods: A total of 126 patients who developed mortality following colorectal surgery at our institution between November 15, 2020, and November 15, 2025, were reviewed. Patients whose postoperative mortality occurred more than one month after surgery (n=44) and those under 18 years of age (n=1) were excluded, leaving 81 patients (42 females, 39 males; mean age 65.5 years). Patients were classified as elective or emergency cases. Data analysis focused on preoperative and postoperative laboratory findings, as well as preoperative and intraoperative durations.

Results: No significant differences were observed between the elective and emergency groups regarding age or gender distribution ($p>0.05$). Preoperative and postoperative CRP values, and the changes between them, were not significantly different ($p>0.05$). Similarly, preoperative and postoperative WBC values showed no significant intergroup differences ($p>0.05$). However, in the elective group, postoperative WBC values increased significantly compared to preoperative levels ($p<0.05$), with the degree of change being greater than that in emergency cases ($p<0.05$). Preoperative and postoperative hemoglobin (HGB) levels did not differ significantly between groups ($p>0.05$). Postoperative HGB decreased significantly in the emergency group ($p<0.05$) but not in the elective group ($p>0.05$). Preoperative waiting time, time from admission to surgery, and total operative duration were all significantly shorter in the emergency group than in the elective group ($p<0.05$).

Conclusion: Mortality in emergency colorectal surgery was higher than in elective cases. Lower preoperative inflammatory markers (WBC, CRP) in elective surgeries likely reflect reduced systemic stress, whereas their elevation in emergency cases may relate to acute inflammatory responses triggered by the underlying pathology. The greater postoperative hemoglobin reduction in emergency surgeries is likely due to preoperative instability and increased intraoperative bleeding. Shorter preoperative and operative durations in emergency procedures are expected and appropriate findings given the urgent nature of these interventions.

Keywords: Colorectal surgery, elective surgery, emergency surgery

Table 1. Comparison between elective and emergency surgeries

Variable		Electif (n:12)				Emergency (n:69)				p	
	Mean±sd/n-%			Median	Mean±sd/n-%			Median			
Age		63.9	±	11.7	65.0	67.4	±	16.4	69.0	0.293	m
Gender	Male	7		58.3%		35		50.7%		0.626	X^2
	Female	5		41.7%		34		49.3%			
CRP											
Preop		75.0	±	94.8	40.0	159.4	±	151.2	94.5	0.139	m
Postop		109.3	±	88.2	83.0	165.0	±	135.1	128.0	0.277	m
Preop/postop change		17.3	±	53.6	-0.2	10.6	±	79.4	1.0	0.719	m
Within-group change (p)		0.594			w	0.794			w		
WBC											
Preop		7.2	±	3.3	6.5	12.1	±	9.9	8.0	0.101	m
Postop		12.8	±	6.9	10.0	12.7	±	14.0	10.0	0.322	m
Preop/postop change		5.61	±	6.57	5.00	0.36	±	9.23	-1.00	**0.011**	m
Within-group change (p)		**0.014**			w	0.532			w		
CBC											
Preop		9.8	±	1.3	9.8	10.8	±	2.7	11.0	0.237	t
Postop		10.3	±	1.4	10.3	10.4	±	2.6	10.1	0.836	t
Preop/postop change		0.47	±	1.74	0.05	-0.28	±	2.04	-0.45	0.240	t
Within-group change (p)		0.543			E	**0.000**			E		
Waiting time (days)		8.8	±	16.1	3.0	2.6	±	4.7	1.0	**0.004**	m
Hospitalization-to-surgery interval (hours)		137.3	±	217.1	72.0	18.3	±	38.3	3.0	**0.000**	m
Total operative time (hours)		3.25	±	1.60	2.50	2.30	±	0.71	2.25	**0.029**	m

tIndependent samples t-test, mMann-Whitney U test, X^2Chi-square test (Fisher's exact test), EPaired samples t-test, wWilcoxon test

[S-230]

Patient- and surgery-related factors associated with anastomotic leakage in colorectal cancer: An analysis of the Turkish Society of Colon and Rectal Surgery Colorectal Cancer Database

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Objective: Anastomotic leakage is one of the most serious postoperative complications following colorectal cancer surgery, with a reported incidence ranging from 2.8% to 30%. It is associated with increased morbidity, prolonged hospital stay, higher reoperation rates, and adverse short- and long-term oncological outcomes. Both patient-related factors (age, sex, obesity, comorbidities, neoadjuvant therapy) and surgery-related factors (surgical approach, anastomotic technique, intraoperative complications, surgeon experience) contribute to its development. Identifying risk factors is essential for defining high-risk patients and optimizing perioperative strategies. This study aimed to evaluate factors associated with anastomotic leakage using the Turkish Society of Colon and Rectal Surgery Colorectal Cancer Database.

Material and Methods: This retrospective study included patients who underwent surgery for colorectal cancer between July 2018 and January 2026, identified from the database. Patients were divided into two groups according to the presence of anastomotic leakage. Preoperative variables included age, sex, ASA score, body mass index, smoking status, history of abdominal surgery, and neoadjuvant therapy. Intraoperative variables comprised tumor localization, surgical approach, elective or emergency setting, type of resection, anastomotic technique and configuration, stoma formation, operative time, and intraoperative complications. Postoperative complications, length of hospital stay, 30-day reoperation, and mortality rates were compared. Multivariable logistic regression analysis was performed to identify independent risk factors. Results were reported as odds ratios (OR) with 95% confidence intervals (CI). A p-value <0.05 was considered statistically significant.

Results: A total of 1,967 patients were analyzed, and anastomotic leakage occurred in 4.9%. No significant differences were observed regarding age, ASA score, BMI, or smoking status. Leakage was more frequent in males than females (6.1% vs. 3.2%, p<0.05). Rectal tumors (6.8% vs. 4.2%, p=0.021) and emergency surgery (9.2% vs. 4.7%, p=0.035) were associated with higher leakage rates. Open surgery showed a higher rate compared to minimally invasive surgery (6.3% vs. 3.9%, p=0.017), while no difference was observed between laparoscopic and robotic techniques. Patients with leakage had longer hospital stays (10 vs. 8 days, p<0.001) and higher mortality (5.1% vs. 0.9%, p=0.0035). Multivariable analysis identified male sex (OR: 1.91, 95% CI: 1.18-3.04; p=0.006) and rectal tumor location (OR: 1.72, 95% CI: 1.11-2.63; p=0.014) as independent risk factors.

Conclusion: Anastomotic leakage remains a significant complication after colorectal cancer surgery. Male sex and rectal tumor location were identified as independent risk factors. These findings support careful preoperative risk assessment and suitable surgical planning in high-risk patients

Keywords: Colon cancer, rectum cancer, anastomotic leakage

Table 1. Demographic, clinical, and operative variables in patients with and without anastomotic leakage

	All patients (n=1967)	No leak (n=1870)	Leak (n=97)	p-value
Age, years, median (IQR)	65 (17)	65 (16)	67 (17)	0.133
Gender				0.004
Female, n (%)	783 (39.8)	758 (96.8)	25 (3.2)	
Male, n (%)	1184 (60.2)	1112 (93.9)	72 (6.1)	
ASA score, n (%)				0.287
I-II	1564 (79.5)	1491 (95.3)	73 (4.7)	
III-IV	403 (20.5)	379 (94)	24 (6)	
BMI, kg/m^2	25.8 (5.1)	25.8 (5)	25.3 (5.6)	0.387
Smoking, n (%)	262 (13.3)	246 (13.1)	16 (16.5)	0.429
Previous abdominal surgery, n (%)	488 (24.9)	471 (25.2)	17 (17.5)	0.113
Neoadjuvant treatment, n (%)	517 (26.3)	492 (26.3)	25 (25.8)	1.000
Tumor localization, n (%)				0.021
Colon	1418 (72.1)	1358 (95.8)	60 (4.2)	
Rectum	548 (27.9)	511 (93.2)	37 (6.8)	
Type of surgery, n (%)				0.035
Urgent	109 (5.5)	99 (90.8)	10 (9.2)	
Elective	1857 (94.5)	1770 (95.3)	87 (4.7)	
Surgical approach, n (%)				0.017
Open	864 (43.9)	810 (93.8)	54 (6.3)	
MIS	1103 (56.1)	1060 (96.1)	43 (3.9)	
MIS				0.243
Laparoscopic	896 (81.2)	864 (96.4)	32 (3.6)	
Robotic	207 (18.8)	196 (94.7)	11 (5.3)	
Conversion, n (%)	74 (6.7)	68 (4.8)	6 (8.1)	0.18
Anastomosis technique, n (%)				0.288
Hand-sewn	129 (6.6)	120 (93)	9 (7)	0.288
Stapler	1838 (93.4)	1750 (95.2)	88 (4.8)	
Anastomatic approach, n (%)				0.228
Intracorporeal	708 (67.9)	677 (95.6)	31 (4.4)	
Extracorporeal	334 (32.1)	325 (97.3)	9 (2.7)	
Anastomosis configuration, n (%)				0.317
End to end	1081 (55)	1027 (95)	54 (5)	
End to side	96 (4.9)	94 (97.9)	2 (2.1)	
Side to end	250 (12.7)	232 (92.8)	18 (7.2)	
Side to side	531 (27)	508 (95.7)	23 (4.3)	
Stoma, n (%)	523 (26.6)	494 (26.4)	29 (30.0)	0.523
Length of hospital stay, days, median (IQR)	7 (3)	8 (4)	14 (10)	<0.001
Mortality within postoperative 30 days, n (%)	22 (1.1)	17 (0.9)	5 (5.1)	0.0035

[S-231]

The impact of surgical approaches on functional outcomes in rectocele repair: A single-center retrospective cohort study

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Objective: Rectocele is one of the most common causes of obstructed defecation syndrome (ODS) and significantly impairs quality of life. Although various surgical repair techniques have been described in the literature, there is no consensus regarding their relative effectiveness on functional outcomes. This study aimed to compare the functional outcomes of transabdominal (laparoscopic ventral mesh rectopexy), transperineal, and transvaginal repair methods used in clinical practice at our center.

Material and Methods: This single-center retrospective cohort study included 52 patients who underwent surgery for rectocele between 2019 and 2025. Patients were grouped according to the surgical approach as transabdominal (n=12), transperineal (n=21), and transvaginal (n=19). Functional evaluation was performed using the Cleveland Clinic Florida Constipation Scoring System (Wexner) and Obstructed Defecation Syndrome (ODS) scores preoperatively and postoperatively. In accordance with commonly used thresholds in the literature, a reduction of ≥5 points in Wexner and ODS scores was accepted as clinically meaningful improvement (success), whereas a change of <5 points was considered persistent symptoms or insufficient clinical benefit. Continuous variables were presented as median (interquartile range, IQR). Preoperative and postoperative scores were analyzed using the Wilcoxon signed-rank test, and intergroup comparisons were performed using the Kruskal-Wallis test and appropriate categorical tests. Statistical significance was defined as $p<0.05$.

Results: The mean age of the patients was 52.17 years (36-77). In the overall analysis of 52 patients, postoperative Wexner and ODS scores showed a statistically significant decrease compared to preoperative values (Wilcoxon signed-rank test, $p<0.001$ for both scores). When evaluated separately, all three surgical approaches demonstrated significant postoperative reductions in Wexner and ODS scores ($p<0.01$ for all comparisons). Score reduction was more pronounced in the transabdominal and transvaginal groups, whereas functional improvement was more limited in the transperineal group. Analysis of clinical success rates based on Wexner, ODS, and combined evaluation revealed no statistically significant difference among surgical techniques (all comparisons $p>0.05$). However, clinical success rates were higher in the transabdominal and transvaginal repair groups compared with the transperineal group.

Conclusion: Transabdominal, transperineal, and transvaginal rectocele repairs generally provide functional improvement. Although no statistically significant difference was observed among surgical approaches in terms of clinical success rates, transabdominal and transvaginal approaches demonstrated higher success rates. Larger prospective studies are needed to provide clearer guidance for surgical approach selection.

Keywords: Obstructive defecation syndrome, rectocele

Table 1. Preoperative and postoperative functional scores according to repair type

Repair type	n	Wexner score (preoperative) median (IQR)	Wexner score (postoperative) median (IQR)	p	ODS score (preoperative) median (IQR)	ODS score (postoperative) median (IQR)	p
Transabdominal repair	12	16.50 (4.50)	6.5 (9.50)	<0.001	12.50 (4.75)	3.5 (7.5)	<0.001
Transperineal repair	21	18.0 (5.0)	10.0 (15.50)	<0.001	14.0 (4.0)	9.0 (13.0)	0.002
Transvaginal repair	19	18.0 (3.0)	7.0 (14.0)	<0.001	14.0 (3.0)	4.0 (11.0)	<0.001

IQR: Interquartile range Statistical test: Wilcoxon signed-rank test.

Table 2. Comparison of Wexner, ODS, and combined clinical benefit outcomes according to surgical repair type

Repair type	ΔWexner median (IQR)	Wexner success %	ΔODS median (IQR)	ODS success %	Combined success %
Transabdominal repair	11.5 (9.5)	75%	9.5 (8.25)	75.0%	75.0%
Transperineal repair	5.0 (15.0)	52.4%	5.0 (13.50)	52.4%	57.1%
Transvaginal repair	13.0 (14.0)	68.4%	10.0 (11.0)	68.4%	68.4%
P value (between-group comparison)	0.544*	0.367**	0.583*	0.367**	0.549**

ΔWexner and ΔODS represent the difference between preoperative and postoperative scores (preop-postop). *Kruskal-Wallis test **Pearson chi-square test.

[S-232]

Neoadjuvant treatment response beyond imaging: A combined dynamic CEA-mrTRG model to predict pathological complete response and guide organ preservation in rectal cancer

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Objective: Accurate prediction of pathological complete response (pCR) after neoadjuvant chemoradiotherapy (nCRT) remains critical in selecting candidates for organ-preserving strategies in rectal cancer. This study aimed to evaluate whether combining dynamic carcinoembryonic antigen change (ΔCEA%) with MRI-based tumor regression grade (mrTRG) improves pCR prediction compared with either modality alone.

Material and Methods: A total of 214 patients with locally advanced rectal cancer who received nCRT between 2014 and 2024 were retrospectively analyzed. Serum CEA levels were recorded at diagnosis and preoperatively, and ΔCEA% was calculated as $(CEA_1-CEA_3)/CEA_1$. Post-treatment MRI was evaluated using mrTRG. The primary endpoint was pathological complete response (TRG1). Logistic regression and ROC analyses were performed to assess predictive performance. A combined score integrating ΔCEA% ≥65% and mrTRG 1-2 was constructed.

Results: pCR was achieved in 46 patients (21.5%). ΔCEA% was significantly higher in the pCR group (median 72% vs. 41%, p<0.001). mrTRG 1-2 was strongly associated with pCR (OR=4.6, p<0.001). ROC analysis demonstrated an AUC of 0.74 for ΔCEA% alone and 0.79 for mrTRG alone. The combined ΔCEA%-mrTRG model significantly improved predictive accuracy with an AUC of 0.88 (p<0.001 vs. individual models). Patients meeting both criteria (ΔCEA% ≥65% + mrTRG 1-2) had a 58% probability of pCR compared with 9% in others (p<0.001). On multivariable analysis, the combined model remained an independent predictor (OR=6.2).

Conclusion: Dynamic CEA reduction combined with radiologic response substantially improves prediction of pathological complete response after neoadjuvant therapy. This integrated model may refine patient selection for watch-and-wait strategies and has the potential to influence surgical decision-making in locally advanced rectal cancer.

Keywords: Rectal cancer, neoadjuvant therapy, CEA dynamics

[S-233]

Comparison of clinicopathological profiles of right-sided and left-sided colon cancer: A single-center experience

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Objective: Right-sided colon cancer (RCC) and left-sided colon cancer (LCC) are increasingly recognized as distinct entities. This study aims to compare the clinicopathological characteristics of RCC and LCC in a Turkish patient cohort.

Material and Methods: We retrospectively analyzed 144 patients who underwent curative resection for non-metastatic colon adenocarcinoma between 2020-2025. Patients were classified into RCC (n=83) and LCC (n=61) groups based on anatomical location and surgical procedure. Demographic, clinical, surgical, and pathological data were compared using appropriate statistical tests.

Results: Patients with RCC were significantly older than those with LCC (mean age 66.2 vs. 61.1 years, p=0.018). The most striking difference was observed in the rate of emergency surgery, which was over three times higher in the LCC group (41.0% vs. 12.0%, p<0.001). Mucinous adenocarcinoma was significantly more common in RCC (18.1% vs. 6.6%, p=0.047). Lymph node positivity was more frequent in LCC (62.3% vs. 47.0%), although this trend did not reach statistical significance (p=0.081). No significant differences were found in gender distribution, metastatic disease at presentation, tumor grade, lymphovascular/perineural invasion rates, or receipt of adjuvant therapy.

Conclusion: Our real-world data confirm significant differences between RCC and LCC. RCC presents in older patients and is more frequently associated with mucinous histology. LCC occurs in relatively younger patients and presents dramatically more often with obstructive symptoms requiring emergency surgery, alongside a tendency for higher lymph node involvement. Tumor location should be considered in risk stratification, surgical planning, and patient counseling.

Keywords: Colon cancer, tumor laterality, emergency surgery

Table 1. Right and left colon comparison table

Parameter	Right colon (n=66)	Left colon (n=47)	p-value
Demographic characteristics			
Age (mean ± SD), years	66.1±12.7	60.8±13.1	0.035*
Female sex, n (%)	34 (51.5%)	20 (42.6%)	0.360
Comorbidity, n (%)	43 (65.2%)	31 (66.0%)	0.930
Family history of CRC, n (%)	4 (6.1%)	3 (6.4%)	1.000
Clinical characteristics			
Emergency surgery, n (%)	8 (12.1%)	17 (36.2%)	0.003*
Neoadjuvant therapy, n (%)	4 (6.1%)	3 (6.4%)	1.000
Pathological characteristics			
pT3-4 stage, n (%)	48 (72.7%)	38 (80.9%)	0.367
pN+ (lymph node positive), n (%)	31 (47.0%)	29 (61.7%)	0.146
pM1 (distant metastasis), n (%)	12 (18.2%)	10 (21.3%)	0.685
Mucinous histology, n (%)	12 (18.2%)	3 (6.4%)	0.084
Grade 3 (poor differentiation), n (%)	8 (12.1%)	7 (14.9%)	0.781
LVI positive, n (%)	50 (75.8%)	36 (76.6%)	0.920
PNI positive, n (%)	32 (48.5%)	25 (53.2%)	0.625
Adjuvant treatment and lymph node data			
Adjuvant therapy, n (%)	43 (65.2%)	33 (70.2%)	0.574
Total number of lymph nodes retrieved (mean ± SD)	32.1±19.3	30.5±21.1	0.679
Number of positive lymph nodes (mean ± SD)	2.9±6.4	3.5±6.5	0.636

[S-234]

Comparison of SiLaC and phenol treatment in primary pilonidal sinus disease: Planned interim analysis of an ongoing randomized controlled trial

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Objective: To present the planned interim analysis of our ongoing prospective randomized controlled trial comparing two minimally invasive approaches—laser ablation (SiLaC) and crystallized phenol—in primary pilonidal sinus disease. Primary endpoint: 12-month recurrence rate (the final analysis will be based on this endpoint). Secondary endpoints:Postoperative pain (VAS), healing/epithelialization time, return to work, complications, patient satisfaction, cost, and quality of life (PSD-QoL).

Material and Methods: This two-arm, parallel-group randomized controlled trial was conducted at our tertiary referral center, where eligible patients with primary pilonidal sinus disease were randomized to minimally invasive treatment. This presentation reports the interim analysis of the first randomized cases. Nineteen consecutive patients were assessed; one who underwent abscess drainage was excluded due to protocol deviation. The cohort included SiLaC (n=10) and Phenol (n=8). Pain (VAS) was evaluated at postoperative 1st, 6th, 12th, and 24th hours, and PSD-QoL preoperatively and on day 10. Continuous variables were analyzed using Shapiro-Wilk and Mann-Whitney U tests; categorical variables with Fisher's exact test. Results were expressed as median (IQR) or mean ± SD. The trial was prospectively registered at ClinicalTrials.gov (PNS-RCT-2026-SILPHEN). Recruitment and 12-month follow-up are ongoing.

Results: The groups were similar in age and BMI (p>0.4). Operative time was longer in the SiLaC group but not statistically significant (median 19 vs. 15 min; p=0.22). Pain during the first 24 hours was low in both groups, with no difference in 24-hour VAS scores (p=0.72). Median return-to-work time was 1 day, without significant difference (p=0.14). Early PSD-QoL scores were comparable. Patient satisfaction was higher in the Phenol group [9 (IQR 2) vs. 7.5 (IQR 1.75)], showing borderline significance (p=0.049). Complications occurred in 30% (3/10) of SiLaC patients and none in the Phenol group (p=0.22). Interim recurrence was 20% (2/10) in SiLaC and 0% in Phenol (p=0.48). As the primary endpoint is 12-month recurrence, this reflects only an early trend with limited interpretability due to small sample size. Costs were higher with SiLaC.

Conclusion: In the planned interim analysis of our ongoing RCT, both SiLaC and crystallized phenol demonstrated comparable early clinical performance, with low postoperative pain and rapid return to work. Patient satisfaction was higher in the Phenol group. Although complication and early recurrence rates were higher in the SiLaC group, these differences were not statistically significant, and sample size is limited. Upon completion of the study, the final comparison will be based on the primary endpoint of 12-month recurrence.

Keywords: Laser, phenol, pilonidal sinus

[S-235]

Association of extramural venous and lymphovascular invasion with nodal burden in colorectal cancer: Pathological predictors of aggressive disease

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Objective: Lymph node metastasis is one of the most important prognostic factors in colorectal cancer. However, pathological markers that can predict not only the presence of nodal metastasis but also the extent of metastatic nodal burden (N1-N2) remain insufficiently defined. This study aimed to evaluate the association of extramural venous invasion (EMVI) and lymphovascular invasion (LVI) with nodal metastasis and nodal stage in patients with colorectal cancer.

Material and Methods: Seventy-five patients who underwent curative surgical resection for colorectal cancer between 2020 and 2025 were retrospectively analyzed. Patients with rectal tumors or a history of neoadjuvant therapy were excluded. Demographic data, tumor localization, pT and pN stages, number of harvested and metastatic lymph nodes, and the presence of EMVI and LVI were recorded for all cases. Nodal burden was classified as pN0, pN1, and pN2. The associations of EMVI and LVI with nodal metastasis and nodal stage were analyzed using appropriate parametric and non-parametric statistical tests.

Results: EMVI positivity was strongly and significantly associated with the presence of nodal metastasis ($p<0.01$). A clear increase in EMVI positivity was observed with increasing nodal burden; the rate of EMVI was significantly higher in pN2 patients compared with pN1 patients ($p=0.02$). LVI positivity was also significantly correlated with nodal metastasis ($p=0.03$). However, the impact of LVI on nodal burden progression was more limited compared with EMVI, showing borderline statistical significance for progression from pN1 to pN2 ($p=0.06$). Patients with concomitant EMVI and LVI positivity demonstrated a markedly higher proportion of pN2 disease.

Conclusion: EMVI is a strong pathological predictor that is associated not only with the presence of nodal metastasis but also with increased nodal burden in colorectal cancer. LVI may serve as an additional supportive prognostic factor for nodal involvement. These findings suggest that EMVI positivity reflects more aggressive tumor biology and should be considered in postoperative risk stratification and adjuvant treatment decision-making.

Keywords: Colorectal cancer, extramural venous invasion, lymph node metastasis, lymphovascular invasion

[S-236]

Does protective loop ileostomy creation technique affect closure complications for rectal cancer

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Objective: Ileostomy closure is a minor surgical procedure performed through a peristomal incision. However, dense adhesions can complicate the closure technique. The peritoneal fascial suture (PFS) technique aims to reduce adhesions in the abdominal wall layers. This study was planned to evaluate whether the PFS technique reduces the adhesions between the intestine and abdominal wall during the mobilization of the ileostomy.

Material and Methods: This prospective randomized study was conducted between 2012 and 2022 at the Colorectal Surgery Department of Ankara University and Sivas Cumhuriyet University. A total of 90 patients with mid and low rectal cancer, consisting of 52 males and 38 females, were included in the study. All patients received neoadjuvant CRT. The average age of the patients was 64 (range: 42-80 years). Ileostomy was performed using the classical technique in 30 patients and the PFS technique in 60 patients. Due to less adhesion and shorter surgery times observed in the PFS group, the last 30 patients underwent the PFS technique instead of the classical method. The degree of adhesion during surgery, ileostomy mobilization time, total surgery time, intestinal injury, and pre- and post-operative parastomal hernia rates were analyzed.

Results: The total surgery time was found to be shorter in the PFS group compared to the classical method (42-71 minutes, $p=0.023$). The ileostomy mobilization time was also shorter in the PFS group (15-45 minutes, $p<0.001$). The rate of intestinal injury was lower in the PFS group (8.7% vs. 34.0%, $p<0.005$). The degree of adhesion was significantly less in the PFS group (7 vs. 4, $p=0.010$). There was no significant difference in the rates of preoperative parastomal hernias between the two groups. However, when evaluating the postoperative incisional hernia rates, it was observed that significantly more incisional hernias developed in the classical method compared to the PFS technique during the follow-up period of 3-10 years (2012-2022).

Conclusion: The PFS technique has less adhesion and fewer complications during the mobilization of ileostomy.

Keywords: Ileostomy, adhesion, rectal cancer



Figure 1. PFS 1



Figure 2. PFS 2

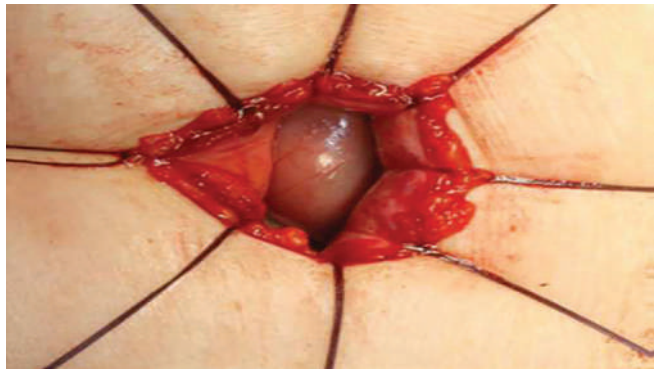


Figure 3. PFS 3

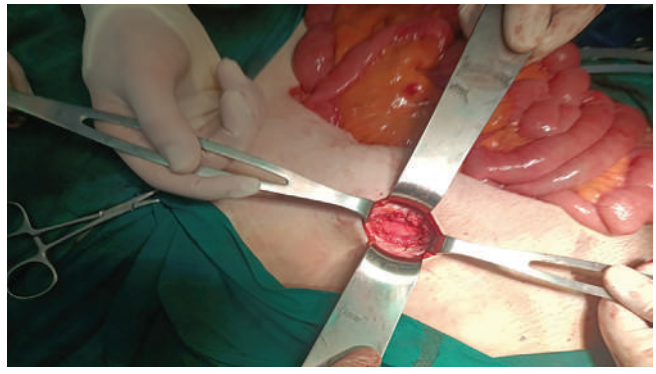


Figure 4. PFS 4

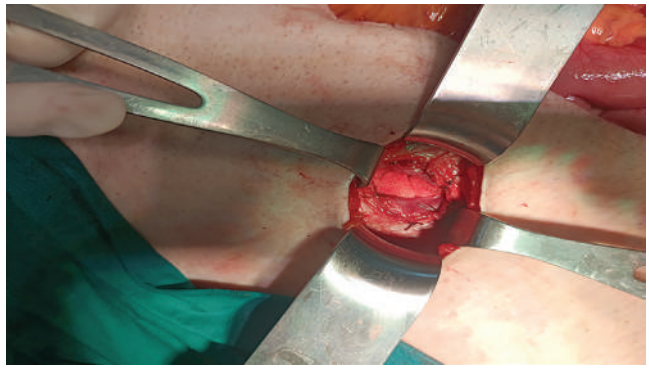


Figure 5. PFS 5

[S-237]

Comparison of diverting colostomy and fecal management catheter in fournier gangrene: A retrospective cohort study

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Objective: This study aimed to compare the effectiveness of colostomy and fecal management catheterization, two fecal diversion methods, in the treatment of Fournier gangrene (FG) and to determine which method offers greater advantages.

Material and Methods: A retrospective study was conducted on 54 patients who underwent surgical debridement and fecal diversion for FG at our hospital's General Surgery Clinic between January 2014 and October 2024. Patients were divided into colostomy (n=28) and fecal management catheter (Flexi-Seal) (n=26) groups for comparison. Age, gender, comorbidities, number of debridements, length of hospital stay, Fournier's gangrene severity index (FGSI), and Laboratory Risk Indicator for Necrotizing Fasciitis (LRINEC) scores were evaluated.

Results: The mean age was 65.07±13.45 years in the colostomy group and 57.92±14.41 years in the Flexi-Seal group (p=0.100). The mean number of debridements was 3.18±2.58 in the colostomy group and 2.54±1.56 in the Flexi-Seal group (p=0.539). The mean length of hospital stay was 25.96±16.02 days in the colostomy group and 20.50±11.15 days in the Flexi-Seal group (p=0.191). FGSI scores were 5.04±3.44 and 3.88±2.72 (p=0.216), while LRINEC scores were 7.46±2.24 and 7.00±1.65 (p=0.167) in the colostomy and Flexi-Seal groups, respectively. The mortality rate was 17.8% (5/28) in the colostomy group and 11.5% (3/26) in the Flexi-Seal group, with no statistically significant difference between the groups (p=0.51). The overall mortality rate was 14.8%. No statistically significant differences were observed between the groups regarding gender distribution and prevalence of comorbid diseases.

Conclusion: Both fecal diversion methods demonstrated effectiveness in FG treatment. Fecal management catheters may be considered in younger patients with shorter anticipated hospital stays and fewer debridement requirements. However, since the differences between the groups were not statistically significant, both methods can be safely employed. Patient-specific factors and clinical experience should guide method selection.

Keywords: Fournier gangrene, colostomy, fecal management catheter

Table 1. Demographic and clinical characteristics of all patients (n=54)

Parameter	Value
Age (years)	61.63±14.25
Number of debridements	2.87±2.15
Length of stay (days)	23.33±14.04
Mortality	8 (14.8%)
LRINEC score	7.24±1.97
FGSI score	4.48±3.14
Fecal diversion method	Colostomy: 28 (51.9%) Flexi-Seal: 26 (48.1%)
Gender	Male: 32 (59.3%) Female: 22 (40.7%)
Diabetes mellitus	26 (48.1%)
Hypertension	14 (25.9%)
COPD	3 (5.6%)
Coronary artery disease	10 (18.5%)
Chronic kidney disease	4 (7.4%)

Table 2. Comparison of colostomy and fecal management catheter groups

Parameter	Colostomy (n=28)	Flexi-Seal (n=26)	p-value
Age (years)	65.07±13.45	57.92±14.41	0.100
Number of debridements	3.18±2.58	2.54±1.56	0.539
Length of stay (days)	25.96±16.02	20.50±11.15	0.191
FGSI score	5.04±3.44	3.88±2.72	0.216
LRINEC score	7.46±2.24	7.00±1.65	0.167
Mortality	5 (17.8%)	3 (11.5%)	0.510
Gender (male/female)	14 (50%)/14 (50%)	18 (69.2%)/8 (30.8%)	0.151
Diabetes mellitus	13 (46.4%)	13 (50.0%)	0.793
Hypertension	9 (32.1%)	5 (19.2%)	0.279
COPD	1 (3.6%)	2 (7.7%)	0.604
Coronary artery disease	5 (17.9%)	5 (19.2%)	0.897
Chronic kidney disease	3 (10.7%)	1 (3.8%)	0.612[a]

[S-238]

The use of colonic stents prior to definitive surgery as a bridge to surgery in obstructive colon tumors: A five-year single-center experience

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Objective: Up to 30% of all colon cancers can present with colonic obstruction. Urgent colonic decompression is needed in these patients, as obstruction may result in electrolyte and fluid imbalance, ischemia and necrosis of the colon, bacterial translocation, perforation, sepsis and eventually, death. There is a need to convert emergency procedures to elective ones both to reduce morbidity and mortality. The use of self-expanding metallic stents (SEMS) appeared as a good solution in these patients. This study was prepared to share our five -year single-center experience with SEMS in patients who were admitted to the emergency department and were diagnosed with colonic obstruction due to a colonic tumor.

Material and Methods: Patients who were admitted to the emergency department with complaints of ileus and were diagnosed with colonic obstruction due to a colonic tumor and in whom a SEMS placement was performed between January 1, 2020 and June 30, 2025 at University of Health Sciences Türkiye, Gülhane Training and Research Hospital were included. Demographical and clinical data were retrieved retrospectively from hospital records.

Results: A total of 23 patients were determined. Fifteen patients with complete medical records were included. Median age (3 females and 12 males) was 63 (39-85) years. Median time to stenting from admission was 2.0 days (0.5-34.0), whereas median time to definitive surgery from admission was 18.0 (1.5-220.0) days. All tumors were tumors of the left colon and rectum. Three underwent definitive laparoscopic surgery and a diversion stoma was needed in 5 (33.3%). Median resected segment was 23.00 (10.0-88.0) cm, while median obstructive tumor diameter was 4.0 (2.0-8.0) cm. All tumors were T3 or T4 in adenocarcinoma pathology. Median retrieved lymph node number was 17 (6-43). Median ICU stay was 1.5 (0.0-15.0) and median hospitalization was 10.5 (5.0-26.0) days. One patient died during the postoperative first 30-days.

Conclusion: The use of SEMSs has superiorities such as providing lower rates of stomas, greater relief of obstruction, shorter duration of hospitalization better quality of life in addition to their benefits in palliation. With shorter hospitalization, postoperative complication, stoma and mortality rates, stenting can be recommended as a bridge to elective surgery. The routine use of SEMS is still controversial. A number of complications have already been reported for stenting. The influence of SEMS on tumor biology is yet ambiguous. Data from more prospective randomized clinical trials such as the OUTSTAND study are necessary to evaluate the impact of stent use as a bridge to surgery on patient prognosis.

Keywords: Self expanding metallic stents, obstructive left colon and rectum tumors, elective surgery

[S-240]

Association of the hemoglobin, albumin, lymphocyte, platelet (HALP) score with clinicopathological prognostic parameters in colon cancer patients

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Objective: Colorectal cancer ranks among the five most frequently diagnosed malignancies in our country, according to data from the Ministry of Health. In recent years, the hemoglobin, albumin, lymphocyte, and platelet (HALP) score has emerged as a promising biomarker for predicting clinical outcomes in patients with neoplastic diseases. As an index reflecting both immunological and nutritional status, the HALP score integrates routinely measured laboratory parameters, including hemoglobin and albumin levels, as well as lymphocyte and platelet counts. Previous research has demonstrated a significant association between the HALP score and overall survival in patients with gastric cancer. However, comprehensive investigations evaluating the prognostic significance of the HALP score in colorectal cancer remain limited. This study aimed to investigate the relationship between the preoperative HALP score and clinicopathological features such as TNM stage, lymph node metastasis, lymphovascular invasion, perineural invasion, tumor budding, differentiation, as well as survival, in patients with colon cancer.

Material and Methods: A retrospective analysis was performed on 222 patients who underwent surgery for non-metastatic colon cancer between February 2019 and April 2021. Demographic data, tumor localization, histopathological findings, laboratory results, and survival data were recorded. The HALP score was calculated using the formula: Hemoglobin (g/L) × Albumin (g/L) × Lymphocyte (/L) / Platelet (/L). Patients were classified according to their clinicopathological characteristics, the relationship between HALP score and these parameters was evaluated, and survival analyses were performed.

Results: The mean age was 60.73±12.04 years, and 39.6% of the patients were female. Most tumors were T3 (64.9%) and adenocarcinoma (88.7%). PNI and LVI were detected in 42.8% and 56.8% of cases, respectively. The mean HALP score was found to be 27.40±15.53, and the cut-off value for predicting survival was determined as 23.26. Overall survival was significantly shorter in patients with a low HALP score (log-rank $p=0.001$). In addition, the HALP score showed a significant correlation with the T stage ($p<0.05$).

Conclusion: In this study, statistically significant associations were observed between the HALP score, certain clinicopathological parameters, and survival data in patients with colon cancer. The findings suggest that the HALP score may be considered as a potential biomarker for prognostic evaluation in future research.

Keywords: Colon cancer, HALP, prognostic parameters

	AUC ± Standart Hata	%95 Güven Aralığı	Kesim Noktası	p
Halp Skoru	0,622±0,042	0,540-0,704	23,26	0,004

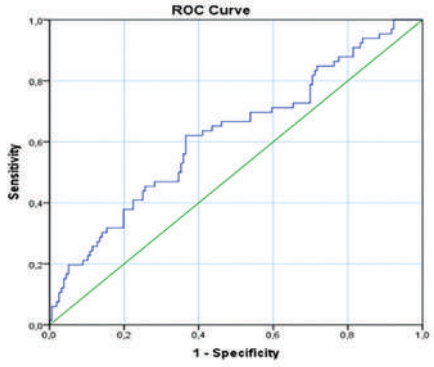


Figure 1. ROC analysis of the HALP score.

	Sağkalım Süresi (ay)		
Halp Skoru	Sağkalım(Ay)	Std Hata	%95 Güven Aralığı
>23,26	61,92	1,85	58,29-65,55
≤23,26	52,36	2,73	47,00-57,73

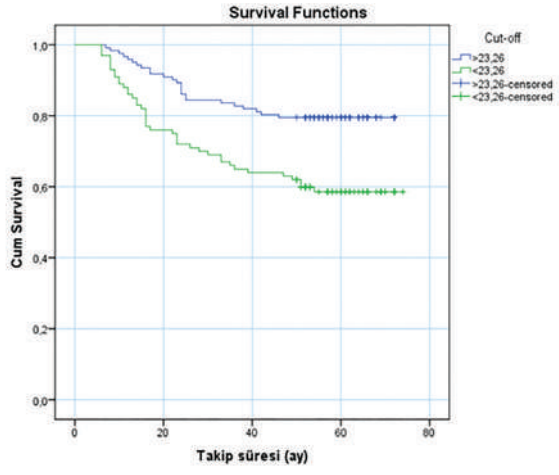


Figure 2. Survival analysis.

[S-241]

Early-stage detection of colorectal cancer with a dual-matrix DNA methylation qPCR panel: A clinical cohort

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Objective: Colorectal cancer (CRC) is the third most commonly diagnosed malignancy and ranks second in cancer-related death. CRC screening plays critical role in reducing disease-related mortality. High mortality rates observed in this cancer, directly linked to diagnosis of advanced stages. Colonoscopy, followed by pathological evaluation, considered most accurate diagnostic method. However, this method tends to reduce adherence among individuals in average risk group due to its invasive nature, the bowel preparation process. Fecal occult blood test and fecal immunochemical test are advantageous, non-invasive methods; however, they are insufficient in terms of sensitivity and specificity for the diagnosis. Epigenetic modifications serve as central regulatory layer in molecular pathogenesis and events such as abnormal hypermethylation in CpG islands of tumor suppressor genes, which suppress gene expression, form basis of cancer-specific epigenetic biomarkers with diagnostic and prognostic potential. DNA methylation markers are effective for early detection of cancer, emerge during initial stages of tumor development and exhibit cancer type-specific characteristics. These can be easily analyzed from blood or stool samples using non-invasive tests such as PCR, which more comfortable, patient-friendly compared to invasive methods. Additionally, DNA methylation markers can be used to monitor treatment responses and guide therapeutic follow-up.

Material and Methods: Stool and/or serum specimens were collected from 97 CRC patients, 122 controls, 43 patients with polyps or inflammatory disease. Methylation patterns of ten genes in stool and five genes in sera were examined using qPCR. Statistical evaluations were conducted on various parameters including Ct differences and clinical variables.

Results: Methylation of all genes was higher in CRC patients compared to control group in both stool and serum. SDC2 and SFRP2 methylation were different between cancer and polyp groups in both stool and serum. Only TFPI2 was different between polyp and control groups in both stool and serum. Three distinct gene panels for specimen types were generated to compare CRC and control groups. Sensitivity and specificity of stool panel (6 genes) were 86.3% and 94.7%, and that of serum panel (3 genes) were 77.4% and 94.4%. When stool and serum specimens were analyzed together with dual panel (stool: TFPI2, ITGA4, SEPTIN9, serum: TFPI2, SDC2), diagnostic performance was higher with sensitivity of 96.2% and specificity of 95.6%. Sensitivity and specificity of the dual panel was about 95% for Stage I-II tumors, confirming its strong potential for early-stage detection.

Conclusion: Our study investigated methylation of five genes in serum and stool simultaneously from same patients for a higher diagnostic performance.

Keywords: Colorectal carcinoma, dna methylation

[S-242]

The role of CEA dynamics after neoadjuvant treatment in predicting pathological response in rectal cancer: A cut-off-based novel model

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Objective: The aim of this study was to evaluate the predictive value of carcinoembryonic antigen (CEA) dynamics derived from serial CEA measurements in patients with rectal cancer following neoadjuvant chemoradiotherapy (nCRT), and to develop a clinically applicable cut-off-based predictive model using receiver operating characteristic (ROC) analysis for the prediction of pathological complete response (pCR).

Material and Methods: Patients with rectal cancer who received nCRT between 2014 and 2024 were retrospectively analyzed. Serum CEA levels were recorded at three time points: at diagnosis (CEA1), after completion of nCRT (CEA2), and immediately before surgery (CEA3). CEA dynamics were calculated as ΔCEA% = (CEA1-CEA3) / CEA1. Pathological response was assessed using the Mandard tumor regression grade (TRG) system, with TRG1 defined as pCR. The primary endpoint was the prediction of pCR, while secondary endpoints included disease-free survival (DFS) and overall survival (OS). ROC analysis was performed to determine the optimal ΔCEA% cut-off value, and multivariable logistic regression was used to identify independent predictors.

Results: Among 200 patients, pCR was observed in 20% (n=40). The ΔCEA% was significantly higher in the pCR group compared with the non-pCR group (p<0.001). ROC analysis demonstrated an area under the curve (AUC) of 0.81 for ΔCEA%, and a cut-off value of 68% provided the best sensitivity (78%) and specificity (72%) for predicting pCR. On multivariable analysis, ΔCEA% ≥ cut-off was identified as an independent predictor of pCR (OR=3.4). In addition, patients with a high ΔCEA% showed significantly longer DFS (p=0.01) and OS (p=0.04) compared with those with a low ΔCEA%.

Conclusion: CEA dynamics after neoadjuvant treatment represent a strong biomarker for predicting pathological complete response in rectal cancer, and the identified 68% cut-off value appears to be clinically applicable. This novel ΔCEA%-based model may assist in selecting appropriate candidates for organ-preserving strategies in locally advanced rectal cancer.

Keywords: CEA, pathological response, neoadjuvant therapy, predictive model

[S-243]

Investigation of clinicopathological features and early postoperative outcomes in patients who underwent robotic, laparoscopic and open surgery selectively for non-metastatic left colon cancer

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Objective: Colorectal cancer is one of the most common malignancies worldwide, and early diagnosis combined with appropriate surgical treatment plays a crucial role in determining prognosis. Various surgical techniques, including open, laparoscopic, and robotic approaches, are used in left colon cancer surgery. This study aims to compare robotic, laparoscopic, and open surgery in terms of clinicopathological characteristics and early postoperative outcomes in patients undergoing elective surgery for non-metastatic left colon cancer.

Material and Methods: This retrospective study included 129 patients who underwent elective surgery for left colon cancer at Ankara Bilkent City Hospital between 2019 and 2024. Patients were categorized into three groups based on the surgical technique used: open, laparoscopic, and robotic surgery. Variables such as operation time, postoperative hospital stay, intensive care unit (ICU) requirement, complication rates, time to adjuvant chemotherapy initiation, anastomosis, and ostomy necessity were compared. Data were obtained retrospectively from patient records and the hospital database. Statistical analyses were performed using IBM SPSS Statistics 21.0 and MS-Excel 2007, with a significance level of p<0.05.

Results: Robotic surgery was found to have a longer operative time compared to open and laparoscopic approaches. Minimally invasive surgical techniques (robotic and laparoscopic) were associated with shorter postoperative hospital stays, earlier mobilization, and earlier initiation of adjuvant chemotherapy. No significant differences were observed among the surgical methods regarding anastomosis, ostomy requirements, and postoperative complication rates. Oncological surgical principles were preserved in all approaches.

Conclusion: Minimally invasive surgery (laparoscopic and robotic) provides early postoperative advantages for patients. However, further prospective, large-scale randomized controlled studies are needed to assess long-term oncological outcomes and survival rates.

Keywords: Colorectal cancer, left colon cancer, robotic surgery

Table 1. Surgery time comparison

Bulgular

Tablo 7. Operasyon Türüne Göre Ameliyat Süresi Karşılaştırılması

	OPERASYON TÜRÜ				
	Açık (n=59)	Laparoskopik (n=36)	Robotik (n=34)	Test istatistiği F	p
Ameliyat Süresi					
Ort±SS	218.56±43.35	216.53±39.76	252.21±50.83	F=7.501	**0.001**
Medyan (Min-Max)	220.0 (120-310)	215.0 (100-300)	252.5 (155-390)		

F:One-Way ANOVA Testi

Table 2. Comparison of length of stay in hospital and ICU

Operasyon Türüne Göre Postop Yatış Süresi ve YBÜ Kalış Süresi Karşılaştırılması

	OPERASYON TÜRÜ				
	Açık (n=59)	Laparoskopik (n=36)	Robotik (n=34)	Test istatistiği	p
Postop Yatış Süresi					
Ort±SS	10.46±4.89	9.72±6.78	6.91±2.91	χ2=13.081	**0.001**
Medyan (Min-Max)	9.0 (4-25)	7.5 (3-41)	6.0 (0-16)		
YBÜ Kalış Süresi					
Ort±SS	2.15±0.99	2.50±1.03	1.50±0.79	χ2=17.699	**<0.001**
Medyan (Min-Max)	2.0 (0-5)	2.0 (1-5)	1.0 (0-3)		

2:Kruskal Wallis Testi

[S-244]

Management strategies and outcomes in acute diverticulitis: A 556-patient single-center cohort study

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Objective: Despite advances in medical and minimally invasive treatment, acute diverticulitis continues to cause significant morbidity in complicated cases. While most patients respond to conservative therapy, a subset requires interventional or surgical management. This study aimed to evaluate management strategies and short- and long-term outcomes in a large single-center cohort.

Material and Methods: This retrospective cohort study included 556 consecutive patients diagnosed with acute diverticulitis between 2010 and 2025. Demographic, clinical, and operative data were analyzed. Patients were categorized according to management strategy (conservative, percutaneous intervention, or surgery) and, for surgical cases, by timing (emergency vs. elective) and operative approach (open vs. laparoscopic). Disease severity was graded using the Hinchey classification. Postoperative complications were assessed according to the Clavien-Dindo classification. Mortality, stoma formation and reversal rates, incisional hernia, and incidental malignancy were evaluated.

Results: The mean age was 63.6±15.4 years, and 59.4% (n=330) were female. Conservative management was successful in 78.1% (n=434), while five patients underwent percutaneous abscess drainage without surgery. A total of 122 patients required surgical treatment: 54.9% (n=67) emergency and 45% (n=55) elective procedures. Open surgery was performed in 80.3% (n=98) and laparoscopy in 19.8% (n=24). Primary resection and anastomosis was performed in 34.7% (n=42), and Hartmann's procedure (HP) in 43.0% (n=52). HP was used in 71% (n=48) of emergency cases compared with 7.2% (n=4) of elective procedures. Stoma formation was strongly associated with Hinchey stage ($p<0.001$), increasing from 11.5% (n=3) in Hinchey 1A to 82.7% (n=43) in Hinchey 3. Among patients with a stoma, 44 underwent reversal and 35 did not; advanced age was the main determinant of non-reversal. Median stoma duration was 9 months (range 6-14). Incisional hernia developed in 38.5% (n=47) of operated patients and occurred exclusively after open surgery ($p<0.001$). Complication severity (Clavien-Dindo) was significantly associated with operative type ($p=0.005$). Six patients died postoperatively, four (66.7%) of whom had undergone HP. Incidental malignancy was detected in 7.4% (n=9) of surgical specimens.

Conclusion: Hartmann's procedure remains a life-saving option in advanced diverticulitis but is associated with high permanent stoma rates in elderly patients. Open surgery is strongly linked to incisional hernia development. Wider adoption of laparoscopic approaches may reduce long-term morbidity. The observed rate of incidental malignancy underscores the importance of routine colonoscopic evaluation after resolution of complicated diverticulitis.

Keywords: Diverticulitis, Hartmann's procedure, incisional hernia

[S-246]

Predictors of major postoperative morbidity in rectal cancer after neoadjuvant treatment

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Objective: Predicting major postoperative complications is important in patients with rectal cancer who undergo surgery after neoadjuvant therapy. It is unclear whether changes in albumin levels during the neoadjuvant process or absolute nutritional reserves prior to surgery are more closely related to postoperative morbidity. In this study, the relationship between albumin change (Δalb) and preoperative absolute nutritional parameters with major complications (Clavien-Dindo ≥3) was evaluated.

Material and Methods: A single-center retrospective analysis included 36 patients who underwent surgery within the last year after neoadjuvant therapy. Albumin change was defined as the difference between pre-RT and preoperative albumin levels (ΔAlb). Major complications were defined as Clavien-Dindo ≥3. The relationship between preoperative albumin, total protein, hemoglobin, RT-surgery interval, anastomosis level, total neoadjuvant therapy (TNT), and enteral nutrition support and major complications was evaluated using univariate logistic regression analysis.

Results: The major complication rate was determined to be 34%. ΔAlb was not associated with the development of major complications (OR 1.06, p=0.37). In contrast, preoperative total protein level showed a borderline significant association with major complications (OR 0.88, 95% CI 0.77-1.02; p=0.081). Similarly, preoperative albumin level showed a biologically consistent trend that did not reach statistical significance (OR 0.90, p=0.106). An increase in complication risk was observed with a more distal anastomosis level. TNT, enteral nutritional support, and the interval between RT and surgery were not associated with major complications.

Conclusion: Rather than changes in albumin during neoadjuvant therapy, absolute preoperative nutritional reserve appears to be more closely related to major postoperative morbidity. These findings highlight the potential importance of optimizing nutritional status prior to surgery in rectal cancer. Larger studies are needed.

Keywords: Rectal cancer, enteral nutrition, postoperative complications

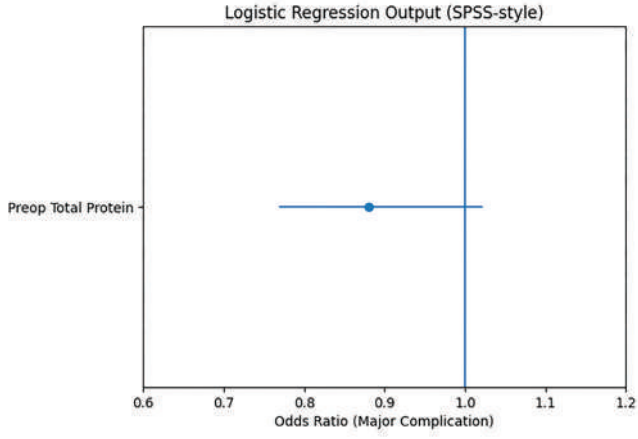


Figure 1. Odds ratio graph of the relationship between preoperative total protein value and major complications.

[S-248]

Clinical factors associated with mortality in Fourier's gangrene

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Objective: Fournier gangrene is a necrotizing soft tissue infection affecting the perianal and urogenital regions, exhibiting rapid progression and potentially life-threatening, often associated with comorbidities such as diabetes mellitus, immunosuppression, and advanced age. Despite early diagnosis and aggressive surgical debridement, mortality rates remain high. Therefore, evaluating clinical, laboratory, and scoring systems that can predict mortality is crucial for clinical management. This study aimed to analyze factors associated with mortality in patients operated on for Fournier gangrene.

Material and Methods: This retrospective observational study includes 58 patients who underwent surgery for Fournier gangrene at the General Surgery Clinic of Marmara University Pendik Training and Research Hospital between 2014 and 2025. Demographic characteristics, comorbidities, ASA scores, preoperative laboratory parameters, surgical treatment methods used, ostomy status, length of hospital stay, postoperative complications, intensive care unit (ICU) admission requirements, and mortality data were retrospectively analyzed. The primary outcome of the study was the evaluation of clinical, laboratory, and surgical factors associated with mortality.

Results: The mean age of the patients was 56.86±11.47 years, and 63.8% were male. 48.6% of the patients were in the ASA III or higher group. The median symptom duration was 7 days (IQR: 4-10), and the source of infection was mostly the perianal region (72.4%). Surgically, debridement and vacuum-assisted closure (VAC) were performed in 53.4% of the patients, and ostomy was performed in 17.2%. The postoperative complication rate was 51.7%, and the ICU admission rate was 41.4%. Mortality was observed in 9 out of 58 patients (15.5%). The mortality rate in patients who required ICU admission was 33.3%. The presence of immunosuppression as a predisposing factor was found to be significantly associated with mortality (p=0.01). When laboratory parameters were evaluated, high levels of procalcitonin (p=0.01), CRP (p=0.009), and creatinine (p=0.04) were found to be associated with increased mortality rates. Mortality rates were higher in patients who underwent ostomy (p=0.04). However, Fournier gangrene was found to be more severe in patients who underwent ostomy.

Conclusion: In Fournier's gangrene, mortality is closely associated with advanced age, high ASA score, immunosuppression, and significant systemic inflammation. The combined evaluation of clinical and laboratory parameters can contribute to the early identification of high-risk patients and the optimization of treatment strategies.

Keywords: Fournier's gangrene, necrotizing fasciitis, perineal sepsis

[S-249]

"Textbook outcome" in elective colon cancer surgery: Evaluation of surgical quality as a composite measure within an ERAS program

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Objective: The evaluation of surgical care quality has changed substantially in recent years. Measures based on single endpoints such as mortality and morbidity no longer adequately reflect the complexity of surgical process. Therefore, textbook outcome (TO) has emerged as a composite and holistic indicator assessing multiple dimensions of surgical success simultaneously. This study aimed to determine the rate of TO achievement in elective colon cancer surgery and to investigate factors associated with TO.

Material and Methods: Adult patients who underwent elective surgery for colon cancer at a single-center between January 2021 and December 2025 were included. Data prospectively recorded in the Ankara University Faculty of Medicine ERAS database were retrospectively analyzed. Emergency procedures, benign diseases, palliative interventions, rectal cancer cases, and patients with missing data were excluded. TO was defined as the absence of intraoperative major complications, 30-day postoperative major complications, 30-day readmission, 30-day mortality, prolonged hospital stay (≥14 days), together with achievement of R0 resection and retrieval of ≥12 lymph nodes. Patients with and without TO were compared in terms of demographic, clinical, and perioperative variables. Multivariable logistic regression analysis was performed to identify independent predictors.

Results: A total of 326 patients were included, and TO was achieved in 213 patients (65.3%). Figure 1 shows individual TO component achievement rates together with the cumulative TO rate. Patients without TO more frequently had CCI ≥4 (82.3% vs. 71.8%; p=0.037), longer operative duration (329±124 vs. 294±106 minutes; p=0.009), and higher rates of additional surgical procedures (17.0% vs. 9.0%; p=0.035). Minimally invasive surgery was significantly more common in TO group (85.4% vs. 70.8%; p=0.002). P-POSSUM physiological and operative severity scores were higher in patients without TO (p=0.007 and p<0.001, respectively). Overall ERAS compliance was significantly higher in patients achieving TO (76.1±6.4% vs. 71.9±7.1%; p<0.001) (Table 1). In multivariable analysis, increased ERAS compliance independently increased the likelihood of TO (OR 1.082; 95% CI 1.034-1.132; p=0.001), whereas longer operative time independently decreased TO probability (OR 0.998; 95% CI 0.995-1.000; p=0.041). Compared with right-sided tumors, left-sided colon cancers showed a higher likelihood of TO achievement (OR 0.549; 95% CI 0.320-0.941; p=0.029).

Conclusion: TO was achieved in approximately two-thirds of patients undergoing elective colon cancer surgery. ERAS compliance was the most important modifiable factor independently associated with optimal surgical outcomes. In contrast, prolonged surgery and left-sided tumors were associated with reduced likelihood of TO achievement. Composite outcome measures provide a strong approach for holistic assessment of care quality in colon cancer surgery.

Keywords: Colon neoplasms, enhanced recovery after surgery (ERAS), textbook outcome

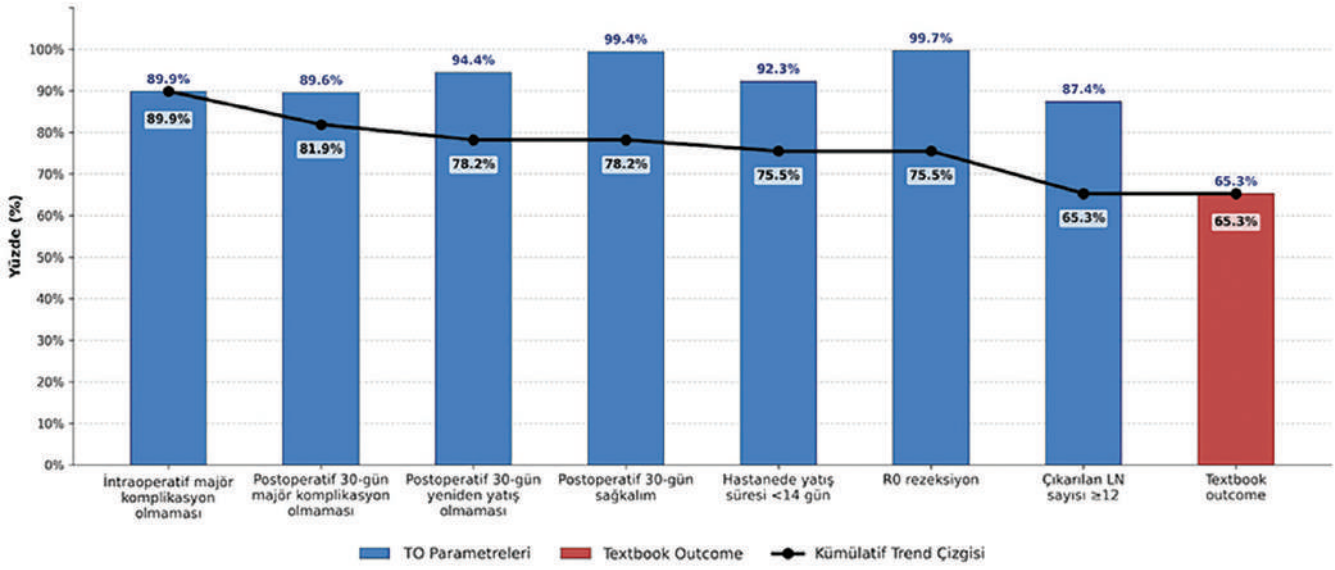


Figure 1. Individual component achievement rates and cumulative trend of textbook outcome in elective colon cancer surgery.

Table 1. Comparison of demographic, clinical, and perioperative characteristics according to textbook outcome achievement

	TO not achieved (n=113)	TO achieved (n=213)	p-value
Age, years	65.5±11.7	63.6±10.2	0.129
Male sex, n (%)	72 (63.7)	120 (56.3)	0.198
Body mass index, kg/m²	27.5±4.7	26.9±4.4	0.284
ASA score ≥III, n (%)	34 (30.1)	60 (28.2)	0.716
CCI score ≥4, n (%)	93 (82.3)	153 (71.8)	0.037
NRS-2002 ≥3, n (%)	57 (50.4)	86 (40.4)	0.081
Anemia, n (%)	58 (51.3)	106 (49.8)	0.788
Neoadjuvant chemotherapy, n (%)	8 (7.1)	0.482	0.482
Surgical technique, n (%)			0.002
Open	33 (29.2)	31 (14.6)	
Minimally invasive (L/R)	80 (70.8)	182 (85.4)	
Tumor location, n (%)			0.083
Right colon	42 (37.2)	106 (49.8)	
Transverse colon	6 (5.3)	7 (3.3)	
Left colon	65 (57.5)	100 (46.9)	
Operative time, minutes	329±124	294±106	0.009
Additional surgical procedure, n (%)	19 (17.0)	19 (9.0)	0.035
P-POSSUM score			
Physiological score	19.8±6.2	17.9±4.8	0.007
Operative severity score	17.8±6.7	14.2±3.1	<0.001
Overall ERAS compliance, %	71.9±7.1	76.1±6.4	<0.001

ASA: American Society of Anesthesiologists, CCI: Charlson comorbidity index, L/R: Laparoscopic/robotic, NRS-2002: Nutritional risk screening 2002, P-POSSUM: Portsmouth physiological and operative severity score for the study of mortality and morbidity, TO: Textbook outcome.

[S-250]

Association between ERAS protocol adherence and clinical outcomes in patients undergoing elective right hemicolectomy for colon cancer

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Objective: Enhanced recovery after surgery (ERAS) protocols are evidence-based, multimodal perioperative care pathways designed to attenuate the surgical stress response and promote early mobilization and feeding, thereby accelerating recovery and shortening hospital stay after colorectal surgery. Because right hemicolectomy may differ from other colorectal resections in terms of anastomotic configuration and postoperative recovery patterns, procedure-specific data on the relationship between ERAS adherence and outcomes remain limited. We aimed to evaluate the association between ERAS protocol adherence and clinical outcomes in patients undergoing elective right hemicolectomy for colon cancer.

Material and Methods: This single-center retrospective cohort included adult patients (≥18 years) who underwent elective standard or extended right hemicolectomy for malignancy between January 2021 and December 2025. Data were prospectively recorded in the Ankara University Faculty of Medicine ERAS database and retrospectively analyzed. Emergency surgeries, benign indications, palliative procedures without curative intent, and patients with insufficient data to assess ERAS adherence or grade postoperative complications were excluded. ERAS adherence was calculated for each patient using 24 components and summarized as overall adherence and phase-specific adherence (preadmission, preoperative, intraoperative, postoperative). Major complications were defined as Clavien-Dindo grade ≥IIIa. Non-normally distributed variables were compared using the Mann-Whitney U test; categorical variables using χ^2 or Fisher's exact tests; and correlations using Pearson or Spearman coefficients according to distribution. Multivariable logistic regression was used to identify predictors of major complications, and multivariable linear regression was performed for length of stay (LOS).

Results: A total of 151 patients were included (92 men, 60.9%), with a median age of 67 years (IQR 12). Median overall ERAS adherence was 75.0% (IQR 8.7). Median LOS was 7 days (IQR 4), and major complications occurred in 14/151 patients (9.3%). Overall ERAS adherence showed a significant inverse correlation with LOS (ρ=-0.329; p<0.001). Domain-level analyses demonstrated that higher postoperative and preoperative adherence were associated with shorter LOS (ρ=-0.301; p<0.001 and ρ=-0.248; p=0.002, respectively). Patients who developed major complications had lower preoperative adherence (p=0.014). In multivariable analyses, higher preoperative adherence independently predicted lower odds of major complications. For LOS, older age (B=0.183; p=0.022) and lower overall ERAS adherence (B=-0.265; p=0.006) were independent predictors of prolonged hospitalization.

Conclusion: In elective right hemicolectomy for colon cancer, higher ERAS adherence was associated with shorter LOS. Preoperative ERAS execution may be particularly important for reducing major morbidity, supporting targeted quality-improvement efforts and the need for larger multicenter prospective validation.

Keywords: Enhanced recovery after surgery (ERAS), right hemicolectomy, length of stay

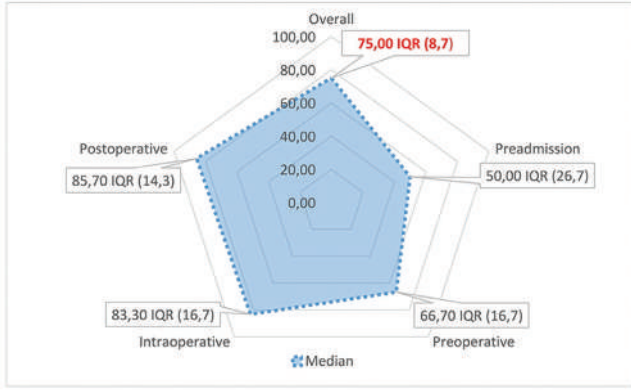


Figure 1. ERAS adherence rates by domain in the overall cohort.

Table 1. Multivariable logistic regression analysis for major postoperative complications (Clavien-Dindo ≥IIIa)

Variable	OR	95% CI	p-value
Preoperative ERAS adherence (%)	0.936	0.884-0.991	0.024
CCI	0.976	0.638-1.492	0.910
NRS-2002 ≥3; (yes vs. no)	2.322	0.596-9.052	0.225

CCI: Charlson comorbidity index; NRS: Nutritional risk screening 2002.

[S-251]

Colonic diverticular disease - A single-center experience

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Objective: This study aimed to present our single-center experience by evaluating the clinical characteristics, treatment strategies according to Hinchey stages, and outcomes of patients treated for colonic diverticular disease.

Material and Methods: We retrospectively reviewed the records of patients treated for colonic diverticular disease at Pamukkale University Faculty of Medicine Hospital over the past 10 years. Demographic characteristics, treatment modalities, length of hospital stay, recurrence rates, and treatment selection according to the Hinchey classification were analyzed.

Results: A total of 99 patients were included; 57.6% were male and 65.7% were admitted via the emergency department. Low Hinchey stage disease was present in 61.6% of patients, while 15.2% had stage ≥2 disease. Conservative management was performed in 49.5% of cases, 16.2% underwent emergency surgery, and 34.3% underwent elective surgery. The mean length of hospital stay was 8.5±3.4 days, and the recurrence rate was 15.2%. In multivariate analysis, surgical intervention prolonged hospitalization by 3.6 days ($p<0.001$), and Hinchey stage ≥2 increased length of stay by approximately 1.5 days ($p=0.026$). High Hinchey stage was the only independent risk factor for surgical requirement (OR 2.31; $p=0.049$). Recurrence was significantly more frequent in patients with a Charlson comorbidity index ≥2 (OR 9.33; $p=0.036$). Among hospitalized patients with colonic diverticular disease, disease severity and surgical requirement were the main determinants of length of stay. The higher probability of surgery and prolonged hospitalization in patients with advanced Hinchey stages emphasize the importance of radiological staging in clinical decision-making. The Charlson comorbidity index emerged as a strong predictor of recurrence, suggesting that systemic disease burden negatively influences the course of diverticulitis. The inverse association between age and recurrence may reflect more aggressive treatment strategies or closer follow-up in older patients. A recurrence rate of approximately 15% supports the acceptability of conservative management in selected patients. Nevertheless, complicated cases require close monitoring, and treatment should be individualized in patients with substantial comorbidity. The retrospective design, limited events in some subgroups, and heterogeneity in follow-up are the main limitations. Temporal changes in surgical techniques and indications may also have affected the results. Larger prospective studies are needed to clarify long-term surgical outcomes and the true impact of comorbidities on recurrence.

Conclusion: In this single-center series, high Hinchey stage and surgical requirement were the principal factors associated with prolonged hospitalization. Comorbidity burden was a significant predictor of recurrence, underscoring the need for individualized treatment strategies.

Keywords: Colonic diverticular disease, Hinchey classification, Charlson comorbidity index

Table 1. Patient characteristics and clinical distribution

Variable	n (%)
Female	42 (42.4)
Male	57 (57.6)
Emergency admission	65 (65.7)
Outpatient clinic	34 (34.3)
Hinchey 0-1	61 (61.6)
Hinchey 1b	23 (23.2)
Hinchey ≥2	15 (15.2)
Non-operative management	49 (49.5)
Emergency surgery	16 (16.2)
Elective surgery	34 (34.3)
Recurrence	15 (15.2)

Table 2. Clinical parameters and summary of multivariate analyses

Outcome	Independent variable	Effect (OR/B) - p
Surgical requirement	Hinchey ≥2	OR 2.31 - p=0.049
Recurrence	Charlson ≥2	OR 9.33 - p=0.036
Recurrence	Age	OR 0.92 - p=0.044
Length of hospital stay	Surgical intervention	+3.6 days - p<0.001
Length of hospital stay	Hinchey ≥2	+1.5 days - p=0.026

[S-252]

Conventional protective stoma should be replaced by tube ileostomy (Wafi procedure), phase II study

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Objective: Protective stoma is a common procedure for fecal diversion to prevent mortality and morbidity of colorectal anastomotic leakage. However, serious complications may occure due to protective stoma and its closure. Alternative prosedures should be considered. In this study, we aimed to present long term results of an innovative approach (Wafi procedure) in two centers.

Material and Methods: This prospective study was conducted in two centers in Türkiye. Patients who underwent colorectal resections with primary anastomosis and who were deemed as requiring a defunctioning stoma were included in the study. After completion of resection and anastomosis, Wafi procedure was performed to protect the anastomosis instead of coventional ileostomy. This technique was mainly consist of inserting a reinforced (spiral) endotracheal tube into the ileum and to provide complete faecal divertion, temporary occlusion of the distal ileum was performed using a flexible rubber strip (Figure 1). This procedure does not require closure surgery. The primary outcome of this study was to determine the saftey and efficacy of this procedure in large number of patients with long followup period. The secondary outcomes were to measure the spontaneous closure time of the wound after tube removal and to observe whether there were complications related to tube ileostomy.

Results: One hundred and sixty consecutive patients underwent the above described procedure. There was no mortality due to this technique. No major complication was observed in this large series. Defecation before removal of the tube did not occur in any of the patients inferring that complete diversion was observed in all patients (100%). Wound healing was observed within 4 (1-60) days after tube removal. During follow-up of 47(1-79) months.

Conclusion: Wafi procedure is a safe and effective to provide complete fecal diversion. Because it is minimally invasive, does not require ostomy closure and the lack of complications due to loop ileostomy, tube ileostomy (Wafi procedure) can be considered as a better alternative over loop ileostomy.

Keywords: Protective stoma, tube ileostomy



Figure 1. Tube ileostomy.

Intraoperative view of a patient who underwent tube ileostomy.

[S-253]

Evaluation of surgical timing following endoscopic detorsion in sigmoid volvulus: A comparative analysis of early and elective resection outcomes

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Objective: Sigmoid volvulus is a major surgical emergency in which decisions regarding surgical timing remain controversial due to the high risk of recurrence after endoscopic decompression. The objective of this study was to describe the short-term clinical course of patients undergoing endoscopic detorsion for sigmoid volvulus and to compare the short-term outcomes of early and elective surgical resection strategies within an exploratory framework.

Material and Methods: A retrospective analysis was conducted on 20 patients diagnosed with sigmoid volvulus who underwent endoscopic detorsion between January 2023 and December 2025. All patients had previously undergone one to three endoscopic detorsion procedures. Laparoscopic sigmoid resection with primary end-to-end anastomosis was performed in all cases. Surgical intervention was scheduled in the early period (≤7 days) for patients who developed recurrence within the first seven days following detorsion, whereas surgery was planned electively (≥30 days) for patients without early recurrence. Continuous variables were compared using the Mann-Whitney U test, and categorical variables were analysed using Fisher's exact test.

Results: The mean age of the patients was 49±11 years, and 65% were male. A history of chronic constipation was present in 85% of patients. Comorbid conditions included paraplegia (n=5), diabetes mellitus (n=6), and hypertension (n=4). Early recurrence within the first seven days after endoscopic detorsion was observed in 35% of patients. Length of hospital stay was longer in the early surgery group compared with the elective surgery group (p=0.02), whereas no statistically significant difference was observed between groups regarding time to oral intake (p=0.11). Postoperative complications were numerically more frequent in the early surgery group (p=0.04).

Conclusion: This study demonstrates that endoscopic detorsion constitutes an effective first-line treatment for sigmoid volvulus and that the occurrence of early recurrence represents a clinically relevant factor in decisions regarding surgical timing. The findings support a patient-based approach to surgical timing, which should be further evaluated in prospective and multicentre studies.

Keywords: Sigmoid volvulus, endoscopic detorsion, short-term clinical outcomes

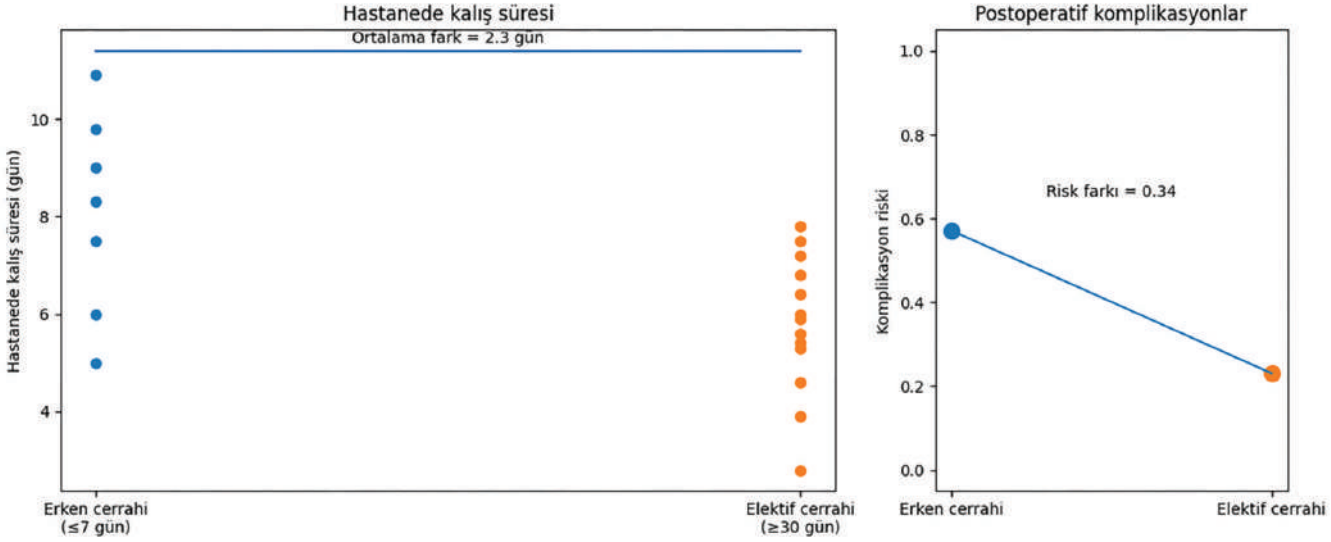


Figure 1. Clinical outcomes according to surgical timing.

[S-255]

83 is drainage necessary in laparoscopic colorectal surgery? A prospective randomized clinical trial

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Objective: The benefit of routine intraabdominal drain use after laparoscopic colorectal surgery (LKC) is controversial. This study aimed to evaluate the effect of drain use in LKC on postoperative early-stage clinical outcomes, complication rates, length of hospital stay, and patient comfort parameters through a prospective randomized study.

Material and Methods: The study was conducted between December 1, 2024, and December 1, 2025, on a total of 59 patients who underwent elective LKC. Patients were divided into two groups: Group 1 (n=27) without drains and Group 2 (n=32) with drains. All patients underwent standard laparoscopic techniques in accordance with the principles of total mesocolic excision or total mesorectal excision. Patients in the non-drain group underwent intra-abdominal collection screening with abdominal ultrasonography on postoperative days 1, 3, and 5, and percutaneous drainage was performed when necessary. Demographic data, comorbidities, surgical details, laboratory findings, pathological stages, and the postoperative course [first passage of gas/bowel movement, complications (according to the Clavien-Dindo classification), ward/intensive care and total hospital stay, reoperation, and need for percutaneous drainage] were recorded. Statistical analyses were performed using SPSS 24.0.

Results: There were no significant differences between groups in terms of age, gender, ASA score, comorbidity distribution, type of surgery, and preoperative laboratory values (hemoglobin, CEA, CA19-9, creatinine, albumin) (p>0.05). When postoperative clinical outcomes were compared, reoperation rates (Group 1: 100%, Group 2: 0%; p=0.458), postoperative ileus frequency (n=3

in both groups; p=1.000), hospital stay (4 days in both groups; p=0.452) and intensive care unit stay (1 day in both groups; p=0.470), total hospital stay (Group 1: 4 days, Group 2: 5 days; p=0.252), time to passage of gas (Group 1: 2.8±0.87 days, Group 2: 2.40±1.01 days; p=0.379) and stool passage time (Group 1: 3.55±1.25 days, Group 2: 3.37±1.43 days; p=0.611). Two patients in the non-drain group required percutaneous drainage, while no such need was observed in the drain group (p=0.205). The groups were similar in terms of major complications (Clavien-Dindo Grade ≥III) (Group 1: n=2, Group 2: n=0; p=0.205). Pathological diagnosis (malignant/benign) and T/N stage distributions also did not differ between groups (p>0.05).

Conclusion: This prospective randomized controlled trial demonstrated that routine prophylactic drain use in elective LKC does not provide a significant advantage in terms of early postoperative clinical outcomes, complication rates, length of hospital stay, and oncological pathological parameters. Our findings support that drain placement should be used as an individualized approach for selected cases, considering intraoperative risk factors

Keywords: Laparoscopic colorectal surgery, drain, postoperative complication, Clavien-Dindo classification, intraabdominal collection

Table 1. Analysis of postoperative clinical outcomes according to drain use in patients undergoing laparoscopic colorectal surgery

Variables	Group 1 (without drain) (n=27)	Group 2 (with drain) (n=32)	χ^2-t-Z value	p-value
Service length of stay median (IQR)	4 (2)	4 (2)	-0.753	0.452
Intensive care length of stay median (IQR)	1 (0)	1 (0)	-0.723	0.470
Total length of stay median (IQR)	4 (2)	5 (2)	-1.146	0.252
Gas passage time mean± SD	2.8±0.87	2.40±1.01	-0.887	0.379
Stool passage time mean± SD	3.55±1.25	3.37±1.43	0.511	0.611
Percutaneous drain requirement median (IQR)	2 (100)	0 (0)	0.117	0.205
Reoperation median (IQR)	1 (100)	0 (0)	0.272	0.458
Postoperative ileus	3 (50)	3 (50)	0.816	1.000
Postoperative day 1 creatinine median (IQR)	0.71 (0.28)	0.69 (0.25)	-0.023	0.982

Table 2. Demographic analysis of patients in groups

Variables		Group 1 (without drain) (n=27)	Group 2 (with Drain) (n=32)	t-X^2	p-value
Female		15 (45.5)	18 (54.5)	0.957	1.000
Male		12 (46.2)	14 (53.8)		
Age, years mean ± SD		56.37±12.86	53.84±12.60	0.760	0.450
ASA	1	2 (25)	6 (75)	3.206	0.201
	2	13 (41.9)	18 (58.1)		
	3	12 (60)	8 (40)		
Comorbidities Present	COPD	2 (50)	2 (50)	0.860	1.000
	CAD	2 (33.3)	4 (66.7)	0.519	0.678
	HF	0 (0)	1 (100)	0.354	1.000
	HT	10 (58.8)	7 (41.2)	0.200	0.254
	DM	3 (25)	9 (75)	0.106	0.193
Surgical Type	Lap. right hemicolectomy	7 (43.8)	9 (56.3)	1.030	0.905
	Lap. left hemicolectomy	1 (50)	1 (50)		
	Lap. anterior resection	7 (58.3)	5 (41.7)		
	Lap. low anterior resection	5 (41.7)	7 (58.3)		
	Lap. total colectomy	7 (41.2)	10 (58.8)		

[S-256]

Our clinical experience with Hartmann reversal performed via open surgical method at University of Health Sciences Türkiye, Ankara Bilkent City Hospital between 2022-2025

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Objective: The Hartmann procedure, described by Henri Albert Hartmann in 1921, includes rectosigmoid resection, rectal stump closure, and end colostomy formation. It is commonly used in acute left-sided colon obstruction, perforation, and diverticular disease because it lowers anastomotic leak risk compared to primary anastomosis. However, reversal to restore bowel continuity carries significant morbidity and mortality. Common complications are anastomotic leak, wound dehiscence, infection, ileus, abscess, and incisional hernia. The optimal timing of reversal remains controversial.

Material and Methods: In this retrospective observational study, data from 104 patients who underwent open surgical reversal after a Hartmann procedure performed under emergency or elective conditions at University of Health Sciences Türkiye, Ankara Bilkent City Hospital between 2022 and 2025 were analyzed. Demographic characteristics, indications, operative time, length of hospital stay, ASA grade, and postoperative complications were evaluated; statistical analysis was performed using SPSS.

Results: A total of 104 patients were included in the study. The mean age was 64.22±13.58 years, with a female-to-male ratio of 30.8% (n=32)/69.2% (n=72). Indications for the initial Hartmann procedure were malignancy (54.8%, n=57), diverticulitis (29.8%, n=31), volvulus (7.7%, n=8), and trauma (7.7%, n=8). Regarding the surgical setting, 53.8% (n=56) were emergency and 46.2% (n=48) were elective cases. The mean interval to Hartmann reversal was 10.89±8.86 months. Pre-reversal mean albumin and hemoglobin levels were 42.25±5.02 g/L and 13.54±7.62 g/dL, respectively. Comorbidity distribution showed no comorbidities in 31.7% (n=33), ≤2 in 51.9% (n=54), and >2 in 16.3% (n=17). ASA classifications were ASA II in 66.3%, ASA III in 31.7%, and ASA IV in 1.9%. The mean operative time was 136.82±31.05 minutes. Anastomoses were stapled in 88.5% (n=92) and hand-sewn in 11.5% (n=12). End-to-end and end-to-side techniques were used in 64.4% and 35.6% of patients, respectively. Protective ileostomy was performed in 17.3% (n=18). Postoperatively, 76.9% (n=80) were monitored in level II intensive care on day 1. The complication rate was 19.2%, including anastomotic leakage (6.7%), ileus (6.7%), and intra-abdominal abscess (5.8%). The mean hospital stay was 9.61±6.85 days. Reoperation was required in 6.7% (n=7) of patients, and the mortality rate was 3.8% (n=4).

Conclusion: In conclusion, the open surgical reversal of the Hartmann procedure can be performed with acceptable morbidity and mortality rates. However, anastomotic leakage and other complications pose a clinically significant risk. Proper patient selection, comprehensive evaluation of comorbidities, and optimal timing are decisive factors in improving surgical success

Keywords: Hartmann reversal, colorectal surgery, anastomosis

Table 1. Patient demographics and preoperative characteristics (n=104)

Variable	Findings
Age (years), mean ± SD	64.22±13.58
Gender, n (%)	
- Female	32 (30.8%)
- Male	72 (69.2%)
Initial Hartmann indications, n (%)	
- Malignancy	57 (54.8%)
- Diverticulitis	31 (29.8%)
- Volvulus	8 (7.7%)
- Trauma	8 (7.7%)
Surgical setting, n (%)	
- Emergency	56 (53.8%)
- Elective	48 (46.2%)
Comorbidities, n (%)	
- None	33 (31.7%)
-≤ 2	54 (51.9%)
- >2	17 (16.3%)
ASA classification, n (%)	
- ASA II	69 (66.3%)
- ASA III	33 (31.7%)
- ASA IV	2 (1.9%)
Preoperative lab values (mean ± SD)	
- Albumin (g/L)	42.25±5.02
- Hemoglobin (g/dL)	13.54±7.62

Table 2. Operative details and postoperative outcomes

Variable	Findings
Time to Reversal (months), mean ± SD	10.89±8.86
Operative time (min), mean ± SD	136.82±31.05
Anastomosis technique, n (%)	
- Stapler	92 (88.5%)
- Hand-sewn	12 (11.5%)
Anastomosis type, n (%)	
- End-to-end	67 (64.4%)
- End-to-side	37 (35.6%)
Protective ileostomy, n (%)	18 (17.3%)
Postoperative ICU day 1, n (%)	80 (76.9%)
Overall complications, n (%)	20 (19.2%)
- Anastomotic leak	7 (6.7%)
- Ileus	7 (6.7%)
- Intra-abdominal abscess	6 (5.8%)
Length of hospital stay (days), mean ± SD	9.61±6.85
Reoperation, n (%)	7 (6.7%)
Mortality, n (%)	4 (3.8%)

[S-257]

Comparison of the effectiveness of crystallized phenol after pit excision and debridement versus normal saline irrigation in the treatment of pilonidal sinus disease

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Objective: Minimally invasive techniques incorporating pit excision and sinus debridement have been successfully applied in the treatment of pilonidal sinus disease (PSD). The aim of this study was to critically evaluate the effectiveness of crystallized phenol, which is widely used following pit excision and sinus debridement, by comparing its therapeutic efficacy with that of normal saline (NS) irrigation used as a placebo. Treatment outcomes, complication rates, healing process, and recurrence rates were compared between the two approaches.

Material and Methods: This cohort study included 130 patients diagnosed with PSD who had no prior history of sinus surgery and presented without pilonidal abscess or active infection. The pit excision and debridement (PED) technique was applied as the standard procedure in all patients. In Group 1 (n=60), crystallized phenol was placed into the sinus cavity following debridement, whereas in Group 2 (n=70), the cavity was irrigated with NS. The treatment protocol was standardized and consisted of four sessions performed at one-week intervals. Anthropometric measurements of the patients, healing rates at the 3rd and 6th month follow-ups, postoperative complications, and recurrence rates were comparatively analyzed.

Results: Patients in the phenol group demonstrated significantly higher body mass index, greater intergluteal cleft depth, and increased subcutaneous adipose tissue thickness, whereas a history of pilonidal abscess was significantly more frequent in the NS irrigation group ($p<0.05$). Topical skin irritation was observed in 33.3% of patients treated with phenol. At the 6-month follow-up, healing rates were 85.0% in Group 1 and 91.4% in Group 2, with no statistically significant difference between the groups ($p=0.253$). Logistic regression analysis evaluating factors associated with recurrence at 6 months revealed that a history of pilonidal abscess increased the risk of recurrence by approximately 3.8-fold (OR: 3.82; 95% CI: 1.13-12.90; $p=0.031$). Furthermore, the use of phenol, compared to NS irrigation, was associated with a 3.55-fold increased risk of recurrence (OR: 3.55; 95% CI: 1.04-12.13; $p=0.043$).

Conclusion: In this cohort study, the groups were largely comparable, differing mainly in anatomical measurements and prior abscess history. As an adjunct to the PED technique, topical phenol showed no superiority over NS irrigation. Given its caustic nature, potential periwound irritation and possible toxic exposure should be considered. Overall, PED without phenol appears to be a safe and effective minimally invasive initial treatment for PSD.

Keywords: Phenol, pilonidal disease, punch excision

Table 1. Demographic characteristics, anatomical measurements, and treatment-related variables by group

Variable	Group 1 debridement + crystallized phenol (n=60)		Group 2 debridement + normal saline (n=70)		p-value
	n / mean ± SD	%	n / mean ± SD	%	
Age (years), mean ± SD	25.1±5.9		26.5±1.9		0.137
Sex					0.367
Male	47	78.3	50	71.4	
Female	13	21.7	20	28.6	
Body mass index (BMI), kg/m², mean ± SD	27.61±2.28		26.51±1.94		0.004
BMI categories					
Normal weight	9	15.0	13	18.6	0.664
Overweight	42	70.0	54	77.1	0.008
Obese	9	15.0	3	4.3	0.664
Intergluteal cleft depth (cm), mean ± SD	3.61±0.38		3.43±0.32		0.002
Subcutaneous adipose tissue thickness (cm), mean ± SD	2.71±0.38		2.49±0.25		<0.001
Number of pits, mean ± SD	2.3±0.7		2.1±0.7		0.128
Number of sessions, mean ± SD	4.1±0.3		4.0±0.1		0.239
Disease duration (months), mean ± SD	5.7±4.8		5.8±5.1		0.614

Table 2. Treatment outcomes at 3 months and 6 months by group

Treatment groups	3-month outcomes		6-month outcomes	
	Recurrence, n (%)	Healing, n (%)	Recurrence, n (%)	Healing, n (%)
Group 1 (debridement + crystallized phenol, n=60)	2 (3.3)	58 (96.7)	9 (15.0)	51 (85.0)
Group 2 (debridement + normal saline, n=70)	3 (4.3)	67 (95.7)	6 (8.6)	64 (91.4)
P-value	1.000		0.253	

[S-258]

Predictive value of the hematocrit-albumin difference in acute diverticulitis

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Objective: Early identification of complicated acute diverticulitis is crucial for timely assessment of the need for invasive interventions and has a major impact on prognosis. Recent studies have suggested that the hematocrit-albumin difference (HCT-ALB) is a predictive marker of mortality in patients with sepsis. The aim of this study was to investigate the predictive value of HCT-ALB in estimating complications and length of hospital stay in patients with acute diverticulitis.

Material and Methods: Adult patients (≥18 years) hospitalized for acute left-sided colonic diverticulitis between 2020 and 2025 were retrospectively analyzed. Demographic characteristics, biochemical parameters at emergency department admission, cross-sectional imaging findings, and diverticulitis-related complications were recorded. Patients with right-sided diverticulitis and those with uncertain diagnoses were excluded. Receiver operating characteristic analysis identified an HCT-ALB cut-off value of 5.5, and patients were divided into two groups: HCT-ALB <5.5 and HCT-ALB ≥5.5.

Results: A total of 93 patients were included in the study. Forty-four patients had an HCT-ALB value <5.5 (Group 1), and 49 patients had an HCT-ALB value ≥5.5 (Group 2). The median (IQR) age was 53.0 (21.0) years in Group 1 and 50.0 (14.0) years in Group 2. The median (IQR) time from symptom onset to hospital admission was 24 (36) hours in Group 1 and 18 (15) hours in Group 2. The median (IQR) HCT-ALB value was 1 (8) in Group 1 and 10 (11) in Group 2. Modified Hinchey stage 3-4 disease was observed in 8 patients (18.2%) in Group 1 and 16 patients (32.7%) in Group 2 (p=0.111). According to the Clavien-Dindo classification, grade ≥3 complications occurred in 8 patients (18.2%) in Group 1 and 10 patients (20.4%) in Group 2 (p<0.001). Length of hospital stay was significantly longer in Group 2 (p=0.040).

Conclusion: The HCT-ALB appears to be a practical and valuable biomarker for predicting prognosis and length of hospital stay in patients with acute diverticulitis. Patients with an HCT-ALB value ≥5.5 may require closer monitoring for complications that could necessitate early invasive intervention.

Keywords: Acute diverticulitis, hematocrit-albumin difference

[S-259]

Global immune-nutrition-inflammation index (GINI) in acute colonic diverticulitis: A novel biomarker for differentiating complicated and uncomplicated cases

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Objective: In the management of acute colonic diverticulitis, a common reason for emergency department visits, this study evaluates the effectiveness of the global immune-nutrition-inflammation index (GINI) in differentiating between complicated and uncomplicated diverticulitis.

Material and Methods: Between 2019 and 2024, 194 patients over 18 years of age, of both sexes, who presented to Ankara Bilkent City Hospital with a diagnosis of acute colonic diverticulitis via computed tomography were included in the study. Exclusion criteria: patients who had received active cancer treatment in the last year, patients with advanced renal, hepatic, or heart failure, pregnant patients, and patients receiving immunosuppressive therapy. Patients were divided into two groups according to the World Society for Emergency Surgery classification: complicated and uncomplicated diverticulitis. The GINI value was calculated using the following formula based on laboratory parameters at the time of admission: GINI=(CRP×monocyte×platelet×neutrophil) ÷ (albumin×lymphocyte). ROC analysis was performed for GINI to determine the optimal threshold value, and patients were divided into low and high GINI groups.

Results: The mean age of the patients was 54.90±15.45 years, and the proportion of female patients was 46.9% (n=91). There were 111 patients (57.2%) diagnosed with complicated diverticulitis. GINI value was found to be significant in differentiating between complicated and uncomplicated diverticulitis (p<0.05). ROC analysis results for GINI showed AUC: 0.708, 95% CI: (0.625-0.782), p<0.001, cut-off: 1259.28.

Conclusion: In the management of acute colonic diverticulitis, determining inflammation, immune response, and nutritional status is crucial for guiding the clinical course. GINI, a multifaceted index encompassing immunological, inflammatory, and nutritional parameters, can be an effective predictor of the development of complicated diverticulitis. While parameters such as pan-immune inflammation value, CRP-albumin ratio, and systemic inflammatory response index were previously evaluated separately in clinical practice, GINI is formulated as a combination of these indices. Our study demonstrates a strong association between GINI and the development of complicated diverticulitis. This suggests that GINI, by identifying inflammatory processes at an early stage, can better predict the need for hospitalization, further investigations, and surgical intervention in patients. As a novel biomarker evaluating inflammatory and immunological processes, GINI may be clinically useful in the early diagnosis of complicated diverticulitis. Early patient classification can contribute to shorter hospital stays, prevent unnecessary invasive procedures, and improve patient management. Therefore, the integration of GINI into clinical practice can play a significant role in predicting complicated diverticulitis.

Keywords: Acute colonic diverticulitis, GINI, inflammation

[S-260]

Thirty-day readmission after rectal cancer surgery: Analysis of causes and independent risk factors

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Objective: Thirty-day postoperative readmission is an important quality indicator used to evaluate quality of care and patient outcomes in colorectal surgery. Reported readmission rates in the literature range between 6% and 25%. The aim of this study was to assess the early readmission rate following rectal cancer surgery, to identify the causes of readmission, and to determine the associated clinical risk factors.

Material and Methods: This retrospective study included adult patients who underwent rectal cancer surgery under the enhanced recovery after surgery protocol at the Department of General Surgery, Ankara University Faculty of Medicine, between 2021 and 2025. Patients were divided into two groups according to the occurrence of readmission within 30 days. Demographic, clinical, operative, and pathological variables were compared between groups. Multivariable logistic regression analysis was performed to identify independent predictors of readmission.

Results: A total of 229 patients were analyzed, of whom 38 (16.6%) were readmitted within 30 days postoperatively. The most common cause of readmission was acute kidney injury, followed by nausea-vomiting and surgical site infections. Other causes included anastomotic complications, ileus/subileus, pain, low oral intake, anemia, and urinary complications (Figure 1). Comparative analysis between groups revealed no significant differences in age, sex, body mass index, surgical approach, administration of neoadjuvant therapy, or pathological tumor stage. However, a significant difference was observed in tumor location (p=0.043). In addition, the development of major in-hospital complications was significantly higher in the readmission group (21.1% vs. 6.8%; p=0.005). Although the length of hospital stay was longer in the readmission group. In multivariable logistic regression analysis, the presence of a lower rectal tumor (OR: 2.58; 95% CI: 1.19-5.61; p=0.017) and the occurrence of major in-hospital complications (OR: 3.31; 95% CI: 1.20-9.14; p=0.021) were identified as independent risk factors for 30-day readmission. In contrast, the presence of a postoperative stoma was associated with a decreased risk of readmission (OR: 0.21; 95% CI: 0.05-0.87; p=0.031). Nutritional risk and the presence of metastatic disease were not found to be independent predictors in the multivariable analysis (Figure 2).

Conclusion: The 30-day readmission rate after rectal cancer surgery was 16.6%, with acute kidney injury being the most common cause. Readmission was particularly associated with major complications during the index hospitalization and tumors located in the lower rectum. Postoperative stoma formation appeared to be a protective factor. These findings suggest that early management of complications, optimal perioperative fluid balance, and targeted follow-up of high-risk patients may play a critical role in reducing readmission rates.

Keywords: Rectal cancer, readmission, ERAS protocol

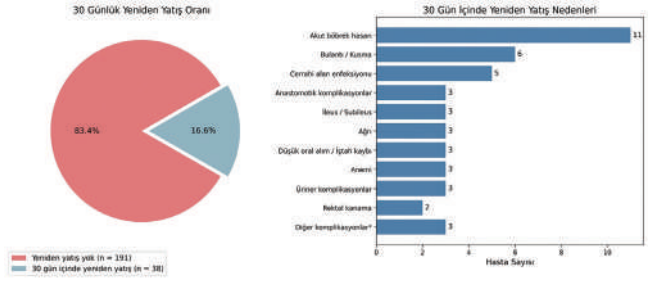


Figure 1.

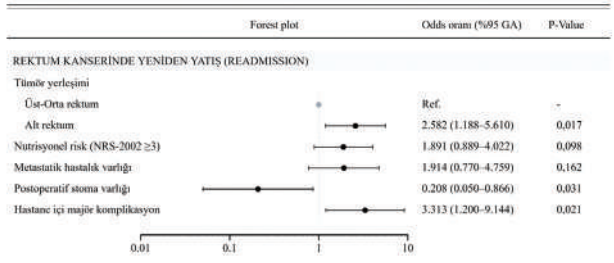


Figure 2.

Table 1. Comparison of demographic, operative, pathological characteristics, and follow-up outcomes in patients who were and were not readmitted within 30 days after rectal cancer surgery

Variables	No readmission (n=191)	Re-admission within 30 days (n=38)	p-value
Age, years	65 (37-85)	64 (25-86)	0.958
Male gender, n (%)	120 (62.8%)	24 (63.2%)	0.969
Body mass index (BMI), kg/m²	26.1 (17.9-39.6)	26.2 (19.4-42.7)	0.944
Surgical procedure, n (%)			0.497
LAR	164 (85.9%)	31 (81.6%)	
APR	27 (14.1%)	7 (18.4%)	
Stoma type, n (%)			0.155
No stoma	7 (3.7%)	4 (10.5%)	
Ileostomy	155 (81.2%)	27 (71.1%)	
Colostomy	29 (15.2%)	7 (18.4%)	
Surgical technique, n (%)			0.618
Open	10 (5.2%)	1 (2.6%)	
Laparoscopic	109 (57.1%)	20 (52.6%)	
Robotic	42 (29.6%)	17 (44.7%)	
Charlson comorbidity index	4 (2-11)	4 (2-9)	0.883
NRS-2002 ≥3, n (%)	68 (35.6%)	18 (47.4%)	0.171
Diabetes mellitus, n (%)	42 (22.0%)	10 (26.3%)	0.561
Hypertension, n (%)	79 (41.4%)	14 (36.8%)	0.604
Neoadjuvant chemotherapy, n (%)	140 (73.3%)	28 (73.7%)	0.961
Neoadjuvant radiotherapy, n (%)	133 (69.6%)	27 (71.1%)	0.962
P-POSSUM			
Physiological score	16 (12-44)	15 (12-32)	0.186
Operative severity score	17 (8-37)	19 (10-30)	0.299
Distance of tumor from anal verge, cm	7.0 (1-15)	6.5 (2-15)	0.385
Tumor location, n (%)			0.043
Upper rectum	46 (24.1%)	10 (26.3%)	
Middle rectum	89 (46.6%)	10 (26.3%)	
Lower rectum	56 (29.3%)	18 (47.4%)	
Operation time, minutes	430 (227-777)	485 (251-710)	0.105
T stage			0.693
ypT0	46 (24.1%)	7 (18.4%)	
T1	9 (4.7%)	2 (5.3%)	
T2	48 (25.1%)	9 (23.7%)	
T3	87 (45.5%)	19 (50.0%)	
N stage			0.225
N0	145 (75.9%)	26 (68.4%)	
N1	34 (17.8%)	11 (28.9%)	
N2	12 (6.3%)	1 (2.6%)	
M stage			0.115
M1	165 (86.4%)	29 (76.3%)	
M2	26 (13.6%)	9 (23.7%)	
Hospital stay, days	7 (4-50)	8 (4-25)	0.142
Major in-hospital complications, n (%)	13 (6.8%)	8 (21.1%)	0.005
30-day postoperative mortality, n (%)	0 (5.3%)	2 (5.3%)	0.027

[S-261]

Diagnostic significance of RDWLR, PDWLR, and immature granulocytes in colorectal cancer

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Objective: This study aimed to investigate the diagnostic value of hematological markers reflecting inflammatory response in differentiating colorectal cancer from benign colorectal polypoid lesions. In this context, the diagnostic performance of immature granulocytes (IG), nucleated red blood cells (NRBC), platelet distribution width (PDW), and mean platelet volume (MPV), as well as novel inflammatory indices including red cell distribution width–to–lymphocyte ratio (RDWLR) and PDW–to–lymphocyte ratio (PDWLR), which have limited data in the literature, was evaluated.

Material and Methods: In this retrospective study, a total of 326 patients who underwent colonoscopy and histopathological examination after detection of polyps at a tertiary care center between January 1, 2023, and December 31, 2023, were analyzed. Patients were divided into two groups: benign colorectal polyps (n=269) and colorectal adenocarcinoma (n=57). NLR, PLR, RDWLR, and PDWLR were calculated from routine pre-colonoscopy complete blood count parameters. Intergroup comparisons were performed, and receiver operating characteristic (ROC) analysis was conducted to evaluate diagnostic performance.

Results: Lymphocyte counts were significantly lower and RDW values were significantly higher in the colorectal cancer group. NLR, PLR, RDWLR, and PDWLR values were statistically significantly higher in the malignant group compared with benign polyps. ROC analysis demonstrated that NLR, PLR, and particularly RDWLR showed moderate-to-good diagnostic performance in differential diagnosis. The area under the curve, sensitivity, and specificity values obtained for RDWLR were notable. In contrast, IG and NRBC parameters did not show significant differences between groups and did not provide diagnostic contribution.

Conclusion: This study supports the usability of inflammatory indices calculated from complete blood count parameters in the differential diagnosis of colorectal cancer and benign colorectal polyps. NLR and PLR were significantly higher in the malignant group, confirming their diagnostic value. Moreover, RDWLR demonstrated superior discriminatory performance compared with RDW alone and emerged as a promising novel parameter that may be considered in clinical practice. However, IG and NRBC values did not differ between groups and did not provide significant diagnostic contribution. Further studies with larger cohorts are required to clarify the clinical utility of RDWLR.

Keywords: Colorectal cancer, complete blood count, differential diagnosis, inflammatory indices, RDWLR

[S-262]

Gallstone ileus: Diagnosis, surgical approach, and clinical outcomes - A single-center experience

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Objective: Gallstone ileus is a rare cause of mechanical bowel obstruction associated with advanced age and a high comorbidity burden, resulting in increased diagnostic difficulty and significant morbidity. Delayed diagnosis is common due to non-specific clinical presentation, while surgical management remains controversial because of the high perioperative risk in this patient population. This study aimed to evaluate the clinical presentation, imaging findings, surgical management strategies, and short-term outcomes of patients treated for gallstone ileus in a tertiary referral center and to provide practical insights for early diagnosis and optimal surgical decision-making.

Material and Methods: This retrospective observational study included five patients who were admitted through the emergency department and treated with a diagnosis of gallstone ileus between January 2023 and November 2025. Demographic characteristics, comorbidity profiles, presenting symptoms, laboratory findings, imaging results, surgical procedures, and postoperative outcomes were recorded. Continuous variables were expressed as median and interquartile range, while categorical variables were presented as numbers and percentages.

Results: The median age was 69 years (46-76), and 80% of patients were male. The median ASA score was 3 (2-4), and the Charlson comorbidity index was 4 (1-6). All patients presented as emergency admissions, with nausea and vomiting (100%) and abdominal distension (80%) being the most common symptoms. Median white blood cell count was 11.3×10^3/μL (8.7-11.8), and median CRP level was 155 mg/L (72-197). Imaging revealed pneumobilia and ectopic gallstones in all patients, while Rigler's triad was present in 80% of cases. Stones were located in the ileum in 80% and in the duodenum in 20%, with a median diameter of 45 mm (30-50). Bouveret syndrome was identified in 60% of patients. All patients underwent open enterolithotomy alone without bowel resection or simultaneous cholecystectomy. Postoperative complications occurred in 40% of cases, most commonly surgical site infection. Median hospital stay was 14 days (8-14). No 30-day mortality was observed.

Conclusion: Gallstone ileus remains a challenging surgical emergency due to advanced patient age and high comorbidity burden. Our findings demonstrate that effective use of imaging modalities enables early diagnosis and facilitates timely surgical intervention. Enterolithotomy alone provided acceptable morbidity rates and favorable short-term outcomes in selected patients. Individualized surgical strategies based on patient risk profiles rather than standardized approaches may improve clinical outcomes. Early diagnosis combined with a limited surgical approach appears to be a safe and effective management strategy in gallstone ileus.

Keywords: Bouveret syndrome, emergency surgery, enterolithotomy, Gallstone ileus, mechanical ileus

Figure 1. Demographic characteristics, risk profile, and laboratory findings.

Parameter	Value
Age, years	69.0 (46.0–76.0)
Female sex, n (%)	1 (20%)
ASA score	3.0 (2.0–4.0)
Charlson comorbidity index	4.0 (1.0–6.0)
Presence of comorbidity, n (%)	3 (60%)

Parameter	Value
Symptom duration, days	4.0 (4.0–5.0)
Nausea/vomiting, n (%)	5 (100%)
Abdominal distension, n (%)	4 (80%)
Obstipation, n (%)	1 (20%)
Fever (>38°C), n (%)	2 (40%)
Hypotension, n (%)	1 (20%)

Parameter	Value
WBC ($10^3/\mu L$)	11.3 (8.7–11.8)
CRP (mg/L)	155.0 (72.0–197.0)
Lactate (mmol/L)	1.2 (1.1–1.7)

Figure 2. Treatment characteristics and comparison of our series with the current literature on Gallstone ileus.

Parameter	Value
Postoperative complications, n (%)	2 (40%)
Anastomotic leakage, n (%)	0 (0%)
Postoperative ileus, n (%)	1 (20%)
Surgical site infection, n (%)	2 (40%)
Sepsis, n (%)	1 (20%)
Clavien–Dindo score	2.0 (1.0–3.0)
ICU admission, n (%)	3 (60%)
ICU stay, days	2.0 (0.0–2.0)
Hospital stay, days	14.0 (8.0–14.0)
30-day mortality, n (%)	0 (0%)
Overall mortality, n (%)	1 (20%)
Recurrence, n (%)	0 (0%)
Follow-up duration, months	5.0 (3.0–12.0)

	Our Study (n=5)	Ayantunde et al. (2007)	Halabi et al. (2014)	Costi et al. (2017)
Study type	Retrospective, single center	Review	National database analysis	Review
Median age (years)	69	65–75	67	70
Female ratio (%)	20	~70	72	68
Preoperative diagnosis rate (%)	80	50–60	67	55–70
Pneumobilia on imaging (%)	100	60–80	Not reported	70–80
Rigler's triad (%)	80	40–50	Not reported	40–60
Stone location (ileum) (%)	80	60–70	63	65
Median stone diameter (mm)	45	30–40	Not reported	35–45
Enterolithotomy alone (%)	100	70–80	78	75–85
One-stage surgery (%)	0	15–20	18	15–25
Postoperative complication rate (%)	40	30–50	32	35–45
30-day mortality (%)	0	7–15	8.2	10–12

[S-263]

The impact of routine splenic flexure mobilization in low anterior resection on clinical and oncological outcomes: A single-center experience

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Objective: Introduction splenic flexuremobilization (SFM) is performed duringlow anterior resection to achieve a tension-free colorectal anastomosis withadequate perfusion. However, whether this mobilization should be performed routinely or selectively remains controversial in the literature Rondelli et al. reported that routine SFM did not reduce the rate of anastomotic leakage but prolonged operative time. Emile et al. demonstrated an increase in operative time without providing a significant oncological advantage. Brennan et al. stated that a selective mobilization approach is safe. Elmeligi et al., on the other hand, suggested that complete mobilization may enhance anastomotic safety.

Material and Methods: A total of 89 consecutive patients who underwent LAR were retrospectively analyzed. Complete SFM was defined as full mobilization of the splenic flexure including division of the splenocolic, splenorenal, and phrenic attachments with medialization of the transverse colon. Partial SFM was defined as limited division of the splenocolic ligament only. The following parameters were evaluated: Tumor level (cm from anal verge), anastomotic level (1=low, 2=middle, 3=high), operative time. ICU stay, length of hospital stay, anastomotic leak, Clavien-Dindo ≥3 major complications, total lymph node yield, circumferential resection margin (CRM) status, and protective stoma formation. Continuous variables were expressed as medians. The Kruskal-Wallis test was used for comparisons between groups. Categorical variables wereanalyzed using Fisher's exact test. A p-value <0.05 was considered statistically significant.

Results: Thetumor level wasfound to be significantly moredistal in the complete SFM group (median 13 cm; p=0.014). In terms of anastomotic level distribution, low andmid-level anastomoses were morefrequent in the complete SFM group (p=0.014). Operativetime was significantly longer in the complete SFM group (median 5 hours vs. 3.25 hours; p=0.0009). No significant difference was observed between the groups regarding intensive car unit stay orlength of hospital stay.The overall anastomotic leakage rate was 3.4%. Leakage was observed in 3.9% of patients in the complete SFM group, while no leakage was detected in the other groups. No significant difference was observed interms of major complication rates. The number of harvested lymphnodes was similar between the groups (p=0.85). The rate of positive CRM wa 1.3%. No significant association was found between the creation of a diverting stoma and anastomotic leakage (p=1.0) or major complication rate (p=1.0). In our study, complete SFM was applied significantly more frequently inpatients with more distaltumors and loweranastomotic levels. Despite this, no increase was observed interms of leakage, major morbidity intensivecare requirement, or length of hospital stay. Although operative time was prolonged, this increase did not translate into worse clinical out comes. These findings are consistent with those reported in the literature. No significant effect of diverting stoma on leakage or major complication rates was detected in our analysis.

Conclusion: Complete splenic flexue mobilization was preferentially performed in more distaltumors and lower anastomoses without increasing anastomotic leak, major morbidity, ICU requirement, or length of hospital stay. Although operative time was prolonged, this did not adversely affect clinical outcomes. These findings suggest that, in experienced centers, splenic flexure mobilization can be safely performedas a routine component of lowanterior resection.

Keyword: Splenic flexure anastomosis leak

[S-264]

The role of the RDW/albumin ratio in predicting major postoperative complications after right hemicolectomy

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Objective: Major complications following right hemicolectomy significantly affect patient prognosis. Systemic inflammation and nutritional status are key determinants of surgical recovery. Red cell distribution width (RDW) reflects the inflammatory state, whereas albumin (Alb) indicates nutritional status and the acute phase response. The RDW/Alb ratio represents a potential prognostic marker that integrates these two physiological axes. This study aimed to evaluate the value of the preoperative RDW/Alb ratio in predicting early major postoperative complications in patients undergoing right hemicolectomy for cancer.

Material and Methods: In this single-center retrospective study, 117 patients who underwent right hemicolectomy between January 2020 and December 2025 were included. Patients with benign pathology, non-adenocarcinoma malignancies, immunodeficiency, a history of other malignancies, those who underwent an additional major procedure during the same session, patients without blood tests within one week before surgery, and cases with incomplete records were excluded. Postoperative complications within the first 30 days were graded according to the Clavien-Dindo classification; grade <3 was defined as Group 1 and grade ≥3 as Group 2. The RDW/Alb ratio was calculated using preoperative RDW and Alb values. The optimal cut-off value was determined by receiver operating characteristic (ROC) analysis. Comparisons were performed using appropriate statistical tests, and p<0.05 was considered statistically significant. Variables with p<0.1 in univariate analysis were included in the multivariate logistic regression model.

Results: Of the patients, 107(91.5%) were in Group 1 and 10 (8.5%) in Group 2. The mean age was 59.37±12.62 years. The length of hospital stay was significantly longer in Group 2 (15.8±10.8 days vs. 7.5±3.2 days). Preoperative hemoglobin levels were lower in Group 2 (9.51±2.20 vs. 11.44±2.36 g/dL), as were Alb levels (35.7±5.2 vs. 39.9±5.1 g/L), while CRP levels were higher (67.0±85.9 vs. 22.4±53.4). RDW-CV values were higher in the major complication group (16.48±1.97 vs. 14.96±4.80). The RDW/Alb ratio was significantly higher in Group 2 (0.028±0.003 vs. 0.025±0.004). ROC analysis showed an AUC of 0.746 (p=0.010) for RDW/Alb. The optimal cut-off value was 0.026 (sensitivity 80%, specificity 70%). Patients with RDW/Alb ≥0.026 had a significantly higher rate of major complications (20% vs. 2.6%; p=0.001). Anastomotic leakage occurred in 5 patients (4.3%). In multivariate logistic regression analysis, RDW/Alb ≥0.026 was an independent risk factor for major complications (OR=9.081; 95% CI: 1.172-70.355; p=0.035). Smoking was also independently associated (OR=6.272; p=0.035).

Conclusion: The RDW/Alb ratio is an independent and clinically applicable biomarker for predicting early major postoperative complications after right hemicolectomy. Its ability to simultaneously reflect inflammation and nutritional reserve may provide additional value in risk stratification.

Keywords: Right hemicolectomy, postoperative complications, RDW/albumin ratio, systemic inflammation, colorectal surgery

Table 1. Multivariate logistic regression analysis for major postoperative complications

Variable	OR (ExpB)	95% CI	p-value
Potassium (K)	10.89	0.86-138.25	0.066
Preoperative hemoglobin	0.93	0.60-1.43	0.728
Metastatic lymph node count	0.64	0.36-1.13	0.123
C-reactive protein (CRP)	1.01	0.997-1.021	0.132
Smoking (yes)	6.27	1.14-34.63	0.035
RDW/albumin ratio above cut-off	9.08	1.17-70.36	0.035

[S-265]

Does pathologic complete response reflect clinical reality? A comparison of total neoadjuvant therapy and chemoradiotherapy in locally advanced rectal cancer

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Objective: Total neoadjuvant therapy (TNT) aims to enhance tumor response by delivering all systemic chemotherapy before surgery and may allow non-operative management in selected patients. This study compared TNT and standard chemoradiotherapy (CRT) in patients with locally advanced rectal cancer regarding pathologic complete response (pCR) and non-operative management outcomes.

Material and Methods: Patients with locally advanced (stage ≥II) rectal cancer who received neoadjuvant treatment between January 2023 and December 2025 were retrospectively evaluated. Patients were divided into TNT and CRT groups according to treatment modality. In the TNT group, concurrent capecitabine-based radiotherapy was followed by consolidation chemotherapy with FOLFOX or CAPOX. In the CRT group, only concurrent capecitabine-based radiotherapy was administered. All patients underwent response evaluation before and after treatment with pelvic MRI, colonoscopy, and digital rectal examination (DRE). Clinical complete response (cCR) was defined as absence of residual tumor on MRI, no visible tumor or only scar tissue on colonoscopy, and no palpable lesion on DRE. Patients with cCR were managed with a watch-and-wait strategy following multidisciplinary board decision. In operated patients, pCR was defined as ypT0N0 on histopathologic examination. pCR rates and non-operative outcomes were analyzed retrospectively.

Results: A total of 103 patients with locally advanced rectal cancer who received neoadjuvant treatment were included in the study. Sixty-five patients received TNT and 38 patients received CRT. Among operated patients, pCR was achieved in 14 patients in the TNT group and in 4 patients in the CRT group. Accordingly, the pCR rate was 22.6% in the TNT group and 10.5% in the CRT group. Three patients with cCR after TNT were managed without surgery and were followed for 13, 10, and 6 months, respectively, without recurrence. The cCR rate after TNT was calculated as 4.4%. No cCR was observed in the CRT group.

Conclusion: This single-center retrospective study demonstrates that TNT is associated with higher pCR rates compared to standard CRT and may allow non-operative management in selected patients. However, pCR can only be definitively confirmed after surgery. In cases where post-treatment MRI, colonoscopy, and DRE do not fully meet cCR criteria or residual disease is suspected, surgery may still be performed even if final pathology reveals pCR. Discordance between clinical-imaging findings and final pathology underscores the importance of careful multimodal response assessment when determining organ-preserving strategies.

Keywords: Non-operative management, pathologic complete response, total neoadjuvant therapy

Table 1. Clinical, endoscopic and MRI findings in patients with pathologic complete response (ypT0N0) after neoadjuvant treatment

No	Name	Age	Sex	Treatment	Digital rectal exam	Colonoscopy	MRI finding
1	HM	55	F	TNT	No palpable lesion	No visible tumor	Partial regression
2	AG	64	F	TNT	Normal	Mass at 10 cm (marker placed)	Complete response
3	AK	60	M	TNT	Normal	Luminal narrowing at 10 cm	Partial regression
4	HŞM	53	M	TNT	No palpable lesion	No visible tumor	Regression
5	AT	62	M	TNT	Normal	Mass at 10 cm	Regression
6	ST	61	F	TNT	Tumor palpable 2 cm from anal verge	Residual area at 2 cm	Regression
7	NA	68	F	CRT	No palpable lesion	No visible tumor	Regression
8	HK	66	F	TNT	Normal	Circumferential mucosal irregularity at 13 cm	Regression
9	SK	68	M	CRT	No palpable lesion	No visible tumor	Regression
10	KY	70	F	TNT	Palpable mass on left side	No visible tumor	Regression
11	SS	77	F	CRT	No palpable lesion	No visible tumor	Regression
12	RA	74	M	TNT	Normal	No visible tumor	Complete regression
13	YE	71	M	TNT	No palpable lesion	No visible tumor	Preoperative MRI unavailable
14	HE	53	M	TNT	No palpable lesion	1-1.5 cm fibrotic area	Regression
15	FT	39	F	TNT	No palpable lesion	Nodular residual-appearing area at 10-12 cm	Preoperative MRI unavailable
16	MD	69	F	TNT	No palpable lesion	No visible tumor	Regression
17	OÖ	84	M	CRT	Normal	No visible tumor	Partial regression
18	HD	59	M	TNT	No palpable lesion	No visible tumor	Partial regression

Table 2. Clinical, endoscopic and MRI findings in patients with clinical complete response managed non-operatively							
No	**Name**	**Age**	**Sex**	**Treatment (last CT date)**	**Digital rectal exam**	**Colonoscopy**	**MRI finding**
1	MS	55	M	TNT-09/25	Normal	Fibrotic wall thickening in lower rectum	Complete regression
2	NA	40	F	TNT-04/25	Posterolateral scar, no mass	Scarred distal rectal area, no recurrence	Suspicious residual
3	EA	70	M	TNT-01/25	Normal	Scar in mid-rectum, no recurrence	Complete response

[S-266]

Clinical and prognostic significance of tumor budding and tumor deposits in patients with colorectal cancer

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Objective: Colorectal cancer (CRC) remains one of the leading causes of cancer-related morbidity and mortality worldwide. In recent years, histopathological parameters reflecting tumor biology have gained increasing importance in prognostic assessment. Tumor budding (TB) and tumor deposits (TD) are recognized as markers of invasive and aggressive tumor behavior. This study aimed to evaluate the clinical and prognostic significance of TB grade and TD presence in patients with CRC.

Material and Methods: A total of 1140 patients who underwent surgery for CRC between 2012 and 2025 were assessed. Patients with non-adenocarcinoma histology, carcinoma *in situ*, those who underwent transanal local excision, and patients with incomplete data were excluded. After exclusion of 112 patients, 1028 patients were retrospectively analyzed. TB was categorized into four groups: TB-0 (no budding), TB-1 (1-4 buds), TB-2 (5-9 buds), and TB-3 (≥10 buds). Patients were also classified according to the presence or absence of TD based on pathology reports. Associations between TB grade and TD presence with tumor diameter, lymph node metastasis, lymphovascular invasion (LVI), perineural invasion (PNI), locoregional and distant organ recurrence, presence of disease progression, and 2-year disease-free survival (DFS) were evaluated.

Results: A total of 1028 patients (mean age 65.4±12.6 years; 56.3% male) were included. TD were present in 179 patients (20.4%) and absent in 697 patients (79.6%). According to TB grading, 441 patients (42.9%) were classified as TB-0, 412 (40.1%) as TB-1, 112 (10.9%) as TB-2, and 63 (6.1%) as TB-3. Increasing TB grade was significantly associated with larger tumor diameter, higher rates of lymph node metastasis, LVI and PNI ($p<0.001$). TD presence was significantly associated with larger tumor size (5.50±2.39 cm vs. 5.00±2.26 cm), higher distant organ recurrence rates (26.3% vs. 10.6%), increased disease progression (33.9% vs. 17.2%), and higher rates of LVI and PNI ($p<0.001$). The 2-year DFS rate was significantly lower in patients with TD compared to those without TD (52.2% vs. 86.8%, $p<0.001$).

Conclusion: TB and TD are associated with adverse pathological features in CRC. The presence of TD is particularly associated with increased recurrence and reduced disease-free survival. Incorporating TB and TD into routine pathological evaluation may improve prognostic stratification.

Keywords: Colorectal cancer, tumor budding, tumor deposite, prognosis

[S-267]

Analysis of factors affecting early mortality in colorectal cancer patients aged over 65 across three different geriatric decades

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Objective: Colorectal cancer is a common health problem in the elderly population and is associated with high morbidity and mortality risks following surgical treatment. The aim of this study was to evaluate the clinicopathological factors affecting early mortality in colorectal cancer patients aged 65 years and older who underwent surgical treatment, and to assess the impact of different age decades (65-74, 75-84, and >85 years) on mortality.

Material and Methods: The data of a total of 167 patients aged 65 years and older who underwent surgery for colorectal cancer at our center between January 1, 2014 and December 31, 2023 were retrospectively analyzed. Patients were stratified into three age decades: 65-74 years (n=107), 75-84 years (n=43), and >85 years (n=17). Demographic characteristics, comorbidities, preoperative laboratory parameters, type of surgical approach (open/laparoscopic), and postoperative complications were analyzed for their association with early mortality using the chi-square test and Fisher's exact test. A p-value <0.05 was considered statistically significant in all analyses

Results: The overall early mortality rate among the 167 patients included in the study was 7.1% (n=12). When analyzed according to age decades, early mortality was 2.8% in the 65-74 age group, whereas it increased to 29.4% in patients aged >85 years, constituting the strongest statistically significant risk factor (p=0.003). With regard to sex, early mortality was significantly higher in female patients (12.3%) compared with male patients (3.2%) (p=0.034). Patients who required reoperation in the postoperative period had a markedly higher early mortality rate (22.2%) than those who did not require reoperation (5.4%) (p=0.028). Interestingly, a lower rate of early mortality was observed in patients with cardiovascular comorbidities (p=0.029), which was attributed to meticulous preoperative optimization and stricter anesthetic selection in this patient group. No statistically significant association was found between early mortality and surgical approach (open vs. laparoscopic), tumor localization, or preoperative laboratory parameters (WBC, hemoglobin, and albumin) (p>0.05).

Conclusion: In geriatric colorectal cancer surgery, age over 85 years, female sex, and the need for postoperative reoperation are the main risk factors predicting early mortality. In surgical strategies for the very elderly population, careful consideration of patients' physiological reserves and meticulous management of postoperative complications are of paramount importance.

Keywords: Colorectal cancer, elderly patients, early postoperative mortality

[S-269]

Evaluation of the effect of exercise on accelerating wound healing and possible weakening, and determination of the role of endogenous iris in this effect

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Objective: Wound healing is a complex biological process coordinated through a balance of inflammatory and regenerative responses. Although exercise promotes wound healing, the exact biological mechanisms and mediators involved remain unclear. Irisin, a myokine secreted from skeletal muscle in response to exercise, has been proposed as a potential regulator of tissue repair, but its role in wound healing remains uncertain. This study aimed to investigate the effects of exercise and irisin on wound healing and evaluate irisin's possible mediating role.

Material and Methods: Forty male Sprague-Dawley rats were divided into five groups to examine the effects of acute and chronic exercise and recombinant irisin on skin and colon wound healing compared to control and sedentary groups. Before surgery, acute-exercise rats swam for 30 minutes with tail weights (~8% of body weight). Chronic exercise animals performed unloaded swimming for 30 minutes/day, 5 days/week for 6 weeks. Full-thickness skin and colon wounds were created in all animals, and they were sacrificed on postoperative day 4. Microscopic wound scores and colon adhesion scores were recorded. Serum and tissue samples (skin, colon, muscle) were analyzed for inflammatory cytokines (TNF-α, IL-6, IL-10), irisin levels, reactive oxygen species markers (luminol-lucigenin), hydroxyproline content, and colon microbiota composition.

Results: Histological damage scores in skin tissue were reduced in the irisin-treated group compared to the sedentary-group. In colon tissue, both chronic-exercise and irisin groups showed significantly lower microscopic damage scores. While hydroxyproline levels decreased in the skin of the chronic-exercise group, levels were significantly elevated in the colon of all exercise groups. Adhesion scores were lower in both the exercise and irisin groups. No significant differences in cytokine levels were observed. Luminol-lucigenin levels decreased in skin and muscle tissues in both treatment groups, whereas in the colon, luminol decreased with exercise, and lucigenin increased only with irisin. Tissue irisin levels rose in all treatment groups, but serum levels increased only after irisin administration. No significant changes in microbiota were detected.

Conclusion: In our study, exercise and irisin administration elevated tissue irisin levels in skin, colon, and skeletal muscle. This increase was accompanied by significant reductions in luminol-lucigenin, particularly in skin and muscle. Decreased microscopic damage scores in skin and colon suggest that irisin may enhance antioxidant defense and limit tissue injury. Additionally, elevated hydroxyproline levels in the colon of exercise groups indicate active collagen synthesis and biochemical support of healing. Overall, both endogenous and exogenous irisin appear to promote regeneration by reducing oxidative stress.

Keywords: Exercise, wound healing, colon anastomosis, irisin

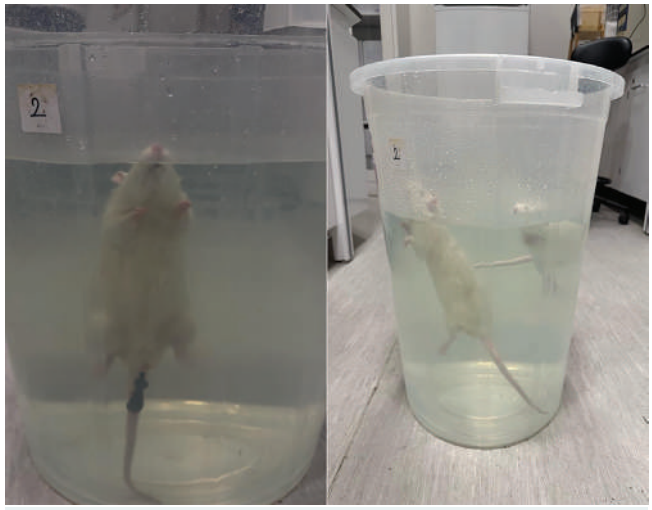


Figure 1. Acute-chronic swimming exercise.

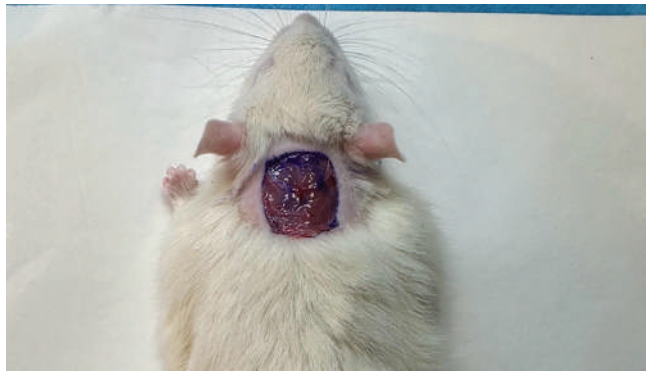


Figure 2. Skin excision wound model.

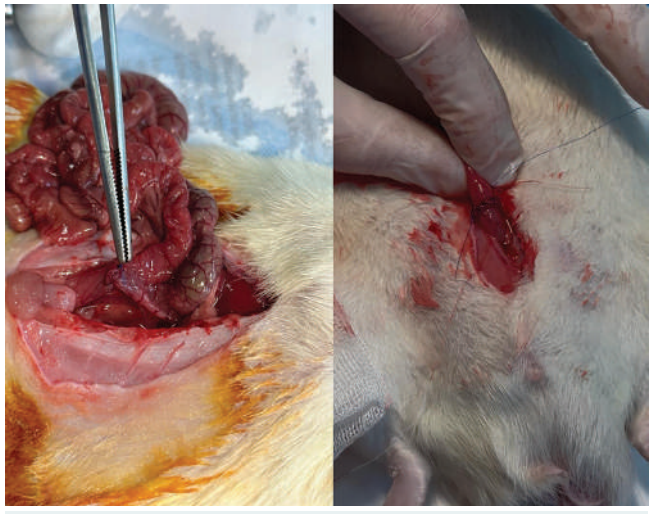


Figure 3. Colon anastomosis.



Figure 4. Inferior vena cava-iris injection.

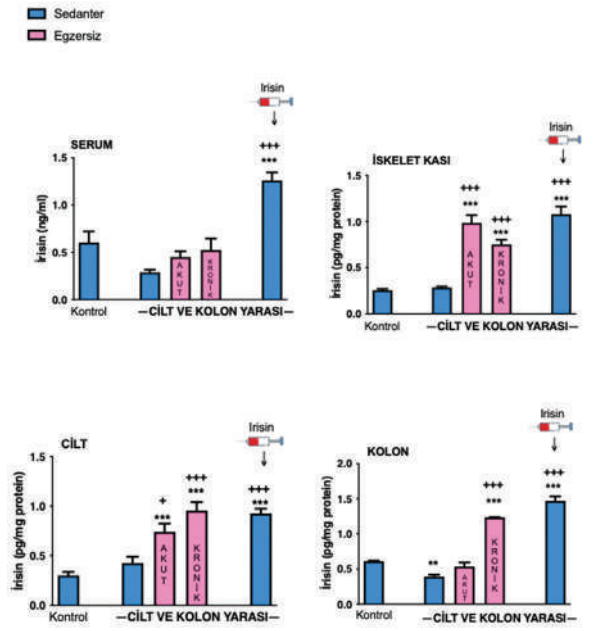


Figure 5. Serum, skeletal muscle, skin and colon - irisin level.

Table 1. Experimental groups

Experimental groups	Male rats (n=40)
1. Control group that remained sedentary and underwent sham surgery.	8
2. The group that remained sedentary and underwent excisional wound modeling + colon anastomosis.	8
3. The group that remained sedentary, received peroperative irisin into the vena cava (40 µg/kg), and underwent excisional wound model + colon anastomosis.	8
4. Group undergoing acute-compulsory intense swimming exercise and excisional wound model + colon anastomosis	8
5. Group that performed long-term to moderate-level swimming exercises and underwent excisional wound model + colon anastomosis.	8
Total:	40

[S-270]

Comparison of treatment strategies in sigmoid volvulus: A retrospective analysis of emergency surgery, surgery during the same hospitalization after detorsion, and detorsion with conservative follow-up

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Objective: Sigmoid volvulus is an important and potentially life-threatening cause of colonic obstruction. Although endoscopic detorsion is recommended as the first-line treatment, the optimal timing of elective surgery after successful detorsion remains controversial due to high recurrence rates. Emergency surgery is generally performed in cases of peritonitis, ischemia, or failed detorsion. This study aimed to compare the clinical outcomes of different treatment strategies.

Material and Methods: In this single-center retrospective cohort study, 54 patients were initially evaluated. Seven patients with radiological findings suggestive of sigmoid volvulus on computed tomography but not confirmed clinically and/or intraoperatively were excluded from the analysis. A total of 47 patients diagnosed with sigmoid volvulus were divided into three groups: (i) emergency surgery (n=7), (ii) surgery during the same hospitalization after successful detorsion (n=11), and (iii) detorsion alone (n=29). The groups were compared in terms of age, laboratory parameters, length of hospital stay (LOS), recurrence, complications, and mortality. The Kruskal-Wallis test was used for continuous variables, and the chi-square or Fisher's exact test was used for categorical variables.

Results: No significant differences were observed among the groups regarding age or laboratory parameters ($p>0.05$). A significant difference was found in LOS ($p=0.029$); the median LOS was 7 days in the emergency surgery group, 11 days in the elective surgery group, and 3 days in the detorsion-only group. Post-discharge recurrence rates were 13.8% in the conservative group and 9.1% in the elective surgery group. Although complication and mortality rates tended to be higher in the emergency surgery group, the sample size was limited.

Conclusion: In sigmoid volvulus, performing surgery during the same hospitalization after successful endoscopic detorsion may be a strategy with the potential to reduce recurrence. Emergency surgery, however, may be associated with a higher morbidity trend. The importance of clinical and radiological correlation in diagnosis should be emphasized. Larger prospective studies are needed.

Keywords: Emergency surgery, volvulus, colonoscopy

[S-271]

Factors affecting the development of low anterior resection syndrome after sphincter preserving surgery for rectal cancer

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Objective: Low anterior resection syndrome (LARS) is characterized by altered bowel function following low anterior resection (LAR), including increased stool frequency, changes in stool consistency, urgency (tenesmus), and fecal incontinence. This study aimed to determine the incidence of LARS in patients undergoing sphincter-preserving surgery for rectal malignancy and to identify factors associated with its development.

Material and Methods: Patients who underwent sphincter-preserving surgery for rectal cancer at NEÜ Medical Faculty, Department of General Surgery, between January 2014 and January 2020 were retrospectively evaluated. Inclusion criteria were: at least 12 months postoperatively; completion of ileostomy closure, if performed; absence of recurrence or metastatic disease; completion of chemotherapy and radiotherapy; and no history of proctologic disease. A total of 103 patients met the study criteria. Variables potentially influencing LARS development were identified, and a structured questionnaire was administered. LARS was assessed using the LARS score described by Emmertsen and Laurberg (2013), supported by anal manometry findings. Patients were classified according to LARS severity, and associated risk factors were analyzed.

Results: LARS symptoms were observed in 51.5% of patients. Major LARS was present in 35%, and minor LARS in 16.5%. The mean LARS score was 21.5. Neoadjuvant chemoradiotherapy, shorter tumor distance to the anal verge, total mesorectal excision, creation of ileostomy, shorter postoperative interval, smaller tumor size, fewer lymph nodes harvested, prolonged ileostomy duration, and shorter anastomotic distance to the anal verge were significantly associated with the development of LARS. The findings are presented in Supplementary Table 1.

Conclusion: LARS remains a common complication following sphincter-preserving rectal cancer surgery. Several clinical and surgical factors were found to increase its incidence. Given the lack of clear consensus in the literature, further large-scale, multicenter, prospective studies are needed. Improved understanding of LARS, which significantly affects patients' social functioning and quality of life, may contribute to better prevention strategies and optimized postoperative management.

Keywords: Rectum, low anterior resection (LAR), low anterior resection syndrome (LARS)

Supplementary Table 1. Factors affecting the development of low anterior resection syndrome							
		LARS					
		LARS no	LARS yes			Mean LARS score ± SD	
	Total n (%)	n (%)	Minor n (%)	Major n (%)	p	Mean ± S.S.	p
Neoadjuvant CRT							
No	51 (49.5%)	34 (66.6%)	6 (11.8%)	11 (21.6%)	<0.001	16.1±13.81	<0.001
Yes	52 (50.5%)	16 (30.8%)	11 (21.2%)	25 (48.1%)		26.71±11.52	
Tumor distance (cm)							
<5 cm	10 (9.8%)	0 (0%)	2 (20%)	8 (80%)	0.003	35.40±6.55	0.001
≥5, <9	29 (28.2%)	13 (44.8%)	6 (20.7%)	10 (34.5%)		22.31±11.62	
>10 (upper rectum)	64 (62%)	37 (57.8%)	9 (14.1%)	18 (28.1%)		18.89±14.17	
Mesorectal excision							
TME	80 (7.7%)	34 (42.5%)	15 (18.8%)	31 (38.8%)	0.022	23.84±12.75	0.001
PME	23 (22.3%)	16 (69.5%)	2 (8.7%)	5 (21.8%)		13.17±14.01	
Ileostomy							
No	42 (40.8%)	26 (61.9%)	5 (11.9%)	11 (26.2%)	0.024	16.88±14.07	0.004
Yes	61 (59.2%)	24 (39.3%)	12 (19.7%)	25 (41%)		24.61±12.65	
Tumor size (mm)							
≤30	40 (38.9%)	14 (35%)	7 (17.5%)	19 (47.5%)	0.028	25.05±13.61	0.033
>30	63 (61.1%)	36 (57.1%)	10 (15.9%)	17 (27%)		19.17±13.4	
Anastomotic distance							
≤4 cm	21 (20.4%)	5 (23.9%)	4 (19.1%)	12 (57.1%)		29.29±11.18	<0.001
>4, ≤9	54 (52.4%)	23 (42.6%)	9 (16.7%)	22 (40.8%)	<0.001	24.2±12.6	
>9	28 (27.2%)	22 (78.5%)	4 (14.3%)	2 (7.1%)		10.29±10.71	

[S-272]

How predictable is the clinical course of cecal diverticulitis? Ten years of single-center experience

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Objective: Cecal diverticulitis is a rare clinical entity that is frequently misdiagnosed as acute appendicitis or right-sided colonic malignancy. This study aimed to present the clinical course and treatment outcomes of patients hospitalized with cecal diverticulitis at a tertiary care center.

Material and Methods: This retrospective, single-center study included 24 patients who were hospitalized with a diagnosis of cecal diverticulitis between 2015 and 2025. Diagnosis was established based on clinical findings, computed tomography, intraoperative assessment, or pathological examination. Demographic characteristics, laboratory parameters [white blood cell count, C-reactive protein (CRP), neutrophil-to-lymphocyte ratio (NLR)], treatment modalities, length of hospital stay, and clinical outcomes were evaluated. Severe clinical course was defined as the presence of at least one of the following: prolonged hospitalization (≥7 days), escalation of antibiotic therapy, or requirement for surgical intervention. Due to the limited sample size, no advanced statistical modeling was performed. Inflammatory markers were compared between patients with and without a severe clinical course in an exploratory manner.

Results: The median age of the 24 patients was 45.5 years (IQR: 37.8-55), and half of the cohort was female. The median length of hospital stay was 5 days (IQR: 5-7). A severe clinical course was observed in 9 patients (37.5%). Patients with a severe clinical course had higher admission CRP, 24-hour CRP, and NLR values compared to those without severe disease. Nineteen patients (79.2%) were successfully managed with conservative treatment, while 5 patients (20.8%) required surgical intervention. Surgical indications included perforation, volvulus, stricture, and suspicion of malignancy.

Conclusion: Most patients with cecal diverticulitis can be successfully managed with conservative treatment. However, a substantial subset develops a severe clinical course requiring prolonged hospitalization, treatment escalation, or surgery. Elevated inflammatory markers such as CRP and NLR may be associated with a severe clinical course. This single-center case series provides descriptive clinical outcomes and generates hypotheses for future prospective studies on cecal diverticulitis.

Keywords: Cecal diverticulitis, classification, diverticulotis coli

Figure 1. Summary of surgical cases.

Hasta	Cerrahi Endikasyon	Uygulanan Cerrahi	Kısa Klinik Özet
1	Striktür + volvulus	Subtotal kolektomi	Geçirilmiş divertikülit atağı sonrası striktür; eksplorasyonda çekal ve sigmoid divertiküle bağlı volvulus
2	Malignite/perforasyon şüphesi	Sağ hemikolektomi	Sepsis ve KC lezyonları nedeniyle malignite şüphesi; kolonoskopi sonrası perforasyon; intraoperatif çekal divertikülit perforasyonu
3	Akut batın	Sağ hemikolektomi	Komplike çekal divertikülit
4	Akut batın	Sağ hemikolektomi	İleri inflamasyon ile uyumlu bulgular
5	Komplike seyir	Subtotal kolektomi	Yaygın inflamasyon ve komplikasyon bulguları

[S-273]

Diagnosis of intestinal endometriosis: A multicenter retrospective study

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Objective: Intestinal endometriosis is a rare but diagnostically challenging clinical condition characterized by infiltration of endometrial-like tissue into the intestinal wall. The rectosigmoid colon is most commonly affected, and the disease may clinically mimic conditions such as colorectal malignancy, diverticulitis, or acute appendicitis. Diagnosis is particularly difficult in postmenopausal patients. In this study, we analyzed the clinical characteristics, surgical approaches, and complication profiles of patients who underwent surgical treatment for intestinal endometriosis.

Material and Methods: Patients who underwent surgery for intestinal endometriosis at five tertiary referral centers between January 2012 and February 2025 were retrospectively evaluated. Cases with pathological confirmation of endometrial glands and stroma within the intestinal wall were included in the study. Demographic characteristics, menopausal status, emergency versus elective surgery, type of operation, postoperative complications (classified according to the Clavien-Dindo system), length of hospital stay, and readmissions were recorded. Complication rates and severity were compared according to surgical localization. Statistical analyses were performed using the chi-square test, Kruskal-Wallis test, and Mann-Whitney U test, with a p-value <0.05 considered statistically significant.

Results: A total of 49 patients were evaluated; 83.7% were premenopausal and 16.3% were postmenopausal. Of the surgeries, 71.4% were performed under emergency conditions and 28.6% electively. The most common preoperative diagnoses were acute appendicitis (59.2%) and rectosigmoid cancer (20.4%). The procedures performed included appendectomy (53.1%), colon/rectal resection (42.9%), and small bowel resection (4.1%). The overall postoperative complication rate was 16.3%, with no cases of anastomotic leakage observed. Complication rates differed significantly according to surgical localization (p=0.033). Patients undergoing rectal surgery had a complication rate of 80%, compared with 19% in those undergoing appendiceal surgery. A significant difference in Clavien-Dindo scores was also observed among the groups (p=0.020). No significant difference in complication severity was found between emergency and elective surgeries (p>0.05).

Conclusion: Intestinal endometriosis is frequently operated on under incorrect preoperative diagnoses, particularly in emergency surgical settings, and a definitive diagnosis is most often established through postoperative histopathological examination. The risk of complications is significantly higher in cases with rectal involvement. Increasing clinical awareness and considering intestinal endometriosis in the differential diagnosis are crucial to prevent unnecessary extensive surgical procedures.

Keywords: Emergency surgery, intestinal endometriosis, colorectal involvement, retrospective study, diagnostic challenges

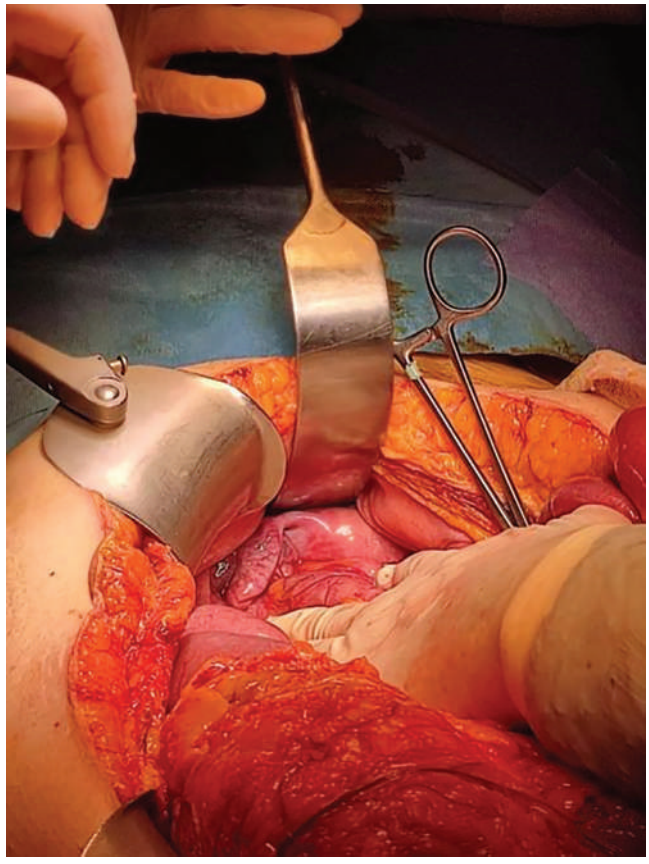


Figure 1. Intraoperative view of a strictured rectosigmoid colon segment in a patient with postmenopausal intramural endometriosis.

Figure 2. Comparison of postoperative complication rates and Clavien-Dindo scores across different surgical sites.

Group (surgical site)	Complication rate	Median Clavien-Dindo score	Notes
Appendix (Group 1)	19%	0.0	Lowest risk; many emergency appendectomies
Small Intestine (Group 2)	Intermediate	Intermediate	—
Colon (Group 3)	Intermediate	Intermediate	—
Rectum (Group 4)	80%	2.0	Highest complication rate
p-value	0.033 (Chi-square)	0.020 (Kruskal-Wallis)	Statistically significant difference

[S-274]

Beyond BMI: The impact of CT-based sarcopenic obesity on postoperative outcomes after right hemicolectomy

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Objective: Sarcopenic obesity, characterized by the coexistence of reduced skeletal muscle mass and increased visceral adiposity, represents a metabolically high-risk phenotype that cannot be adequately identified using body mass index (BMI) alone. In colorectal surgery, computed tomography (CT)-based body composition analysis has emerged as a promising tool for improving preoperative risk stratification. However, the independent and combined effects of sarcopenia and visceral obesity on postoperative outcomes remain incompletely defined.This study aimed to investigate the relationship between CT-defined sarcopenic obesity and postoperative complication severity in patients undergoing elective right hemicolectomy with ileotransversostomy.

Material and Methods: This retrospective cross-sectional study included patients who underwent elective right hemicolectomy between January and December 2024. Preoperative abdominal CT scans were analyzed at the third lumbar vertebra (L3) level. The Psoas Muscle Index (PMI, cm^2/m^2) was calculated by normalizing total psoas muscle area to height squared. Visceral fat area (VFA) was quantified using validated Hounsfield unit thresholds. Sarcopenia was defined using sex-specific PMI cut-off values validated for the Turkish population (≤5.40 cm^2/m^2 for men and ≤3.56 cm^2/m^2 for women). Visceral obesity was defined as VFA ≥100 cm^2. Patients fulfilling both criteria were classified as having sarcopenic obesity. Postoperative complications within 30 days were graded according to the Clavien-Dindo classification, and severe morbidity was defined as grade ≥III. Statistical analyses included non-parametric tests, chi-square or Fisher's exact tests, multivariable logistic regression, and receiver operating characteristic (ROC) curve analysis.

Results: Fifty-one patients were included in the final analysis. Sarcopenia and sarcopenic obesity were both significantly associated with severe postoperative complications. In contrast, visceral obesity alone was not independently associated with complication severity, likely due to its high baseline prevalence in the cohort. BMI demonstrated an inverse association with major complications, with lower BMI values observed in patients who developed severe morbidity, consistent with the obesity paradox. Multivariable logistic regression confirmed sarcopenic obesity as an independent predictor of severe postoperative complications after adjustment for age, sex, and BMI. ROC analysis showed superior discriminatory performance of CT-derived muscle indices compared with BMI. None of the evaluated body composition parameters were significantly associated with length of hospital stay.

Conclusion: CT-defined sarcopenic obesity is a strong independent predictor of major postoperative complications in elective right hemicolectomy. These findings highlight the limitations of BMI-based assessment and support the integration of CT-based skeletal muscle evaluation into preoperative risk stratification to improve identification of high-risk patients in colorectal surgery.

Keywords: Postoperative complications, right hemicolectomy, sarcopenic obesity

Table 1. Comprehensive comparison of phenotypes on surgical morbidity

Phenotype	Status	n (%)	Minor comp. (CD 1-2)	Major comp. (CD 3-5)	Mean LOS (days)
Sarcopenia	Absent	35 (68.6%)	31 (88.6%)	4 (11.4%)	8.11±3.07
	Present	16 (31.4%)	8 (50.0%)	8 (50.0%)	8.50±2.92
Visceral obesity	Absent	4 (7.8%)	2 (50.0%)	2 (50.0%)	8.25±5.62
	Present	47 (92.2%)	37 (78.7%)	10 (21.3%)	8.23±2.78
Sarcopenic obesity	Absent	37 (72.5%)	32 (86.5%)	5 (13.5%)	8.35±3.16
	Present (SO)	14 (27.5%)	7 (50.0%)	7 (50.0%)	7.93±2.59

Table 2. ROC curve analysis of body composition parameters for predicting severe postoperative complications (Clavien-Dindo ≥III)

Parameter	AUC	95% Confidence interval	p-value	Direction of effect	Interpretation
BMI	0.110	~0.01-0.28	<0.01	Inverse	Strong inverse association (obesity paradox)
PMI	0.771	~0.63-0.91	<0.001	Direct	Good discrimination
Visceral fat area	0.370	~0.19-0.55	0.21	None	Poor/not discriminatory
Sarcopenic obesity	0.702	~0.56-0.84	<0.01	Direct	Fair-good discrimination

[S-276]

Early postoperative outcomes and factors associated with major complications following ileostomy closure: A three-year single-center experience

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Objective: Diverting ileostomy is widely performed after colorectal surgery to protect the anastomosis and reduce septic complications. Although ileostomy closure is often considered a minor procedure, it is associated with considerable morbidity and occasional mortality. This study aimed to evaluate early postoperative outcomes after.

Material and Methods: In this retrospective study, 60 consecutive patients who underwent ileostomy closure at a tertiary referral city hospital between 2023 and 2025 were included. Demographic characteristics, comorbidities, indications for stoma formation, technical details of the primary surgery and closure procedure, and postoperative outcomes were recorded. The primary endpoint was the development of major complications, defined as Clavien-Dindo grade ≥3. Secondary endpoints included postoperative ileus within 30 days, length of hospital stay after closure, time to initiation of oral intake, and other early postoperative complications. Continuous variables were presented as median (interquartile range) and compared using the Mann-Whitney U test. Categorical variables were analyzed using the chi-square or Fisher's exact test, as appropriate. A p-value <0.05 was considered statistically significant.

Results: The median age was 61 years, and 68.3% of patients were male. An American Society of Anesthesiologists (ASA) score ≥3 was present in 31.7% of patients. The most common indication for ileostomy formation was colorectal malignancy (68.3%). Low anterior resection/total mesorectal excision constituted 55% of primary procedures. Most closures were performed via an open approach, and 86.7% of anastomoses were constructed using staplers. The overall major complication rate was 8.3%. Within 30 days, postoperative ileus occurred in 5%, anastomotic leakage in 3.3%, and readmission in 13.3% of patients. Surgical site infection was observed in 28.3%, predominantly superficial.Patients who developed major complications had a significantly longer postoperative hospital stay (13.5 vs. 6 days, p=0.009) and delayed initiation of oral intake (p=0.007). No significant associations were identified between major complications and age, body mass index, ASA score, comorbidities, stoma duration, primary surgical approach, or anastomotic technique.

Conclusion: Although the rate of major complications following ileostomy closure is relatively low, affected patients experience significantly prolonged postoperative recovery. Length of hospital stay and delayed oral intake appear to be key clinical indicators associated with major complications. Careful patient selection and close perioperative monitoring may help reduce early postoperative morbidity.

Keywords: Ileostomy, ileostomy closure, postoperative complications

Table 1.

Postoperative outcome	n (%)
Major complications	5 (8.3%)
30-day mortality	3 (5.0%)
Postoperative ileus (within 30 days)	3 (5.0%)
Surgical site infection (overall)	17 (28.3%)
Superficial	13 (21.7%)
Deep	2 (3.3%)
Organ/space	2 (3.3%)
Anastomotic leakage (within 30 days)	2 (3.3%)
Reoperation	4 (6.6%)
Readmission (within 30 days)	8 (13.3%)
Stoma-site hernia (within 6 months)	2 (3.3%)

Table 2. Comparison of patients with and without major postoperative complications

Variable	No major complication (n=55)	Major complication (n=5)	p-value
Age (years)	61.0 (49.0-68.0)	70.0 (58.0-76.2)	0.358
BMI (kg/m^2)	25.7 (22.2-29.3)	25.9 (24.4-26.9)	0.988
Stoma duration (days)	227.0 (158.8-356.0)	250.0 (146.5-405.5)	0.957
Length of stay after closure (days)	6.0 (5.0-7.0)	13.5 (10.8-71.2)	**0.009**
Time to first flatus (post-op day)	3.0 (2.0-3.0)	3.0 (2.8-3.2)	0.482
Time to oral intake (days)	3.0 (2.0-3.0)	5.0 (4.0-8.2)	**0.007**

[S-278]

Anti-adhesive, anti-inflammatory, antioxidant and histopathological effects of ficus carica extract on postoperative intra-abdominal adhesions in an experimental rat model

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Objective: Peritoneal adhesions are fibrous structures that develop as a result of abnormal peritoneal wound healing following surgical trauma, inflammation, or mesothelial injury. They occur in more than half of abdominal surgeries and represent a major cause of postoperative morbidity, leading to complications such as chronic abdominal pain, infertility, and intestinal obstruction. Oxidative stress, inflammation, and impaired fibrinolysis play key roles in the pathogenesis of adhesion formation. Ficus carica has been traditionally used for medicinal purposes and has demonstrated antioxidant and anti-inflammatory properties; however, its effects on intra-abdominal adhesions have not been previously investigated.

Material and Methods: This experimental study was conducted at the Experimental Animal Laboratory of Kütahya Health Sciences University following approval from the Local Ethics Committee for Animal Experiments (approval no: 2024.11.01, date: 27.11.2024). Twenty-four male Sprague-Dawley rats (250-300 g) were randomly divided into three groups: control (n=8), intra-abdominal adhesion (sham) (n=8), and FCE treatment (n=8). In adhesion-induced groups, the FCE group received oral Ficus carica extract at a dose of 500 mg/kg/day, while the sham group received an equivalent volume of saline. At the end of the experiment, all animals were sacrificed under ketamine-xylazine anesthesia. Tissue samples were analyzed for total oxidant status (TOS), total antioxidant status (TAS), oxidative stress index (OSI), inflammatory cytokines (IL-1β, TNF-α), and apoptosis markers (cytochrome c, caspase-3). Macroscopic and histopathological evaluations were also performed.

Results: Compared with the control group, the intra-abdominal adhesion group demonstrated significantly increased TOS, OSI, IL-1β, TNF-α, cytochrome c, and caspase-3 levels, along with decreased TAS levels ($p<0.001$). In the FCE-treated group, TAS levels were significantly increased, whereas TOS and OSI levels were markedly reduced ($p<0.001$). In addition, FCE treatment resulted in significant reductions in inflammatory cytokines and apoptosis markers. Macroscopic and histopathological assessments revealed significantly lower fibrosis, inflammation, and adhesion scores in the FCE group compared with the adhesion group ($p<0.001$).

Conclusion: Ficus carica extract significantly reduced oxidative stress, inflammation, apoptosis, and adhesion formation in an experimental intra-abdominal adhesion model. These findings suggest that Ficus carica extract may be a promising agent for the prevention of postoperative intra-abdominal adhesions.

Keywords: Ficus carica, intra-abdominal adhesion, oxidative stress, inflammation, apoptosis



Figure 4. Exposure of the lateral abdominal wall and the ileocecal junction following laparotomy.



Figure 5. Creation of a sharp and blunt adhesion model on the lateral abdominal wall and the ileocecal junction.



Figure 7. Evaluation of intra-abdominal adhesions during relaparotomy.

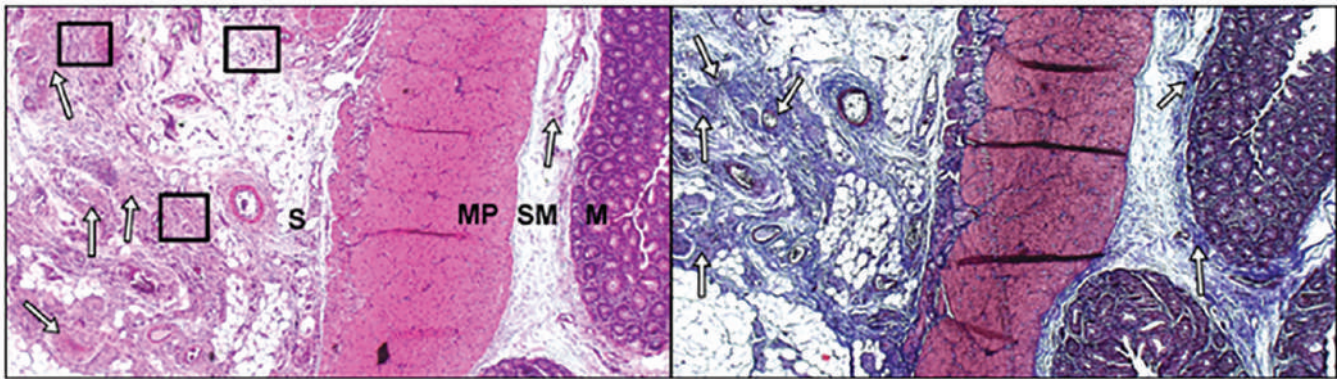


Figure 8. Tissue samples from the IAA group, score 3 (H&E ×5, Masson's trichrome ×5).

S: Serosa, MP: Muscularis propria, SM: Submucosa, M: Mucosa, White arrow: Moderate fibrosis, Square: Moderate inflammatory cell infiltration.

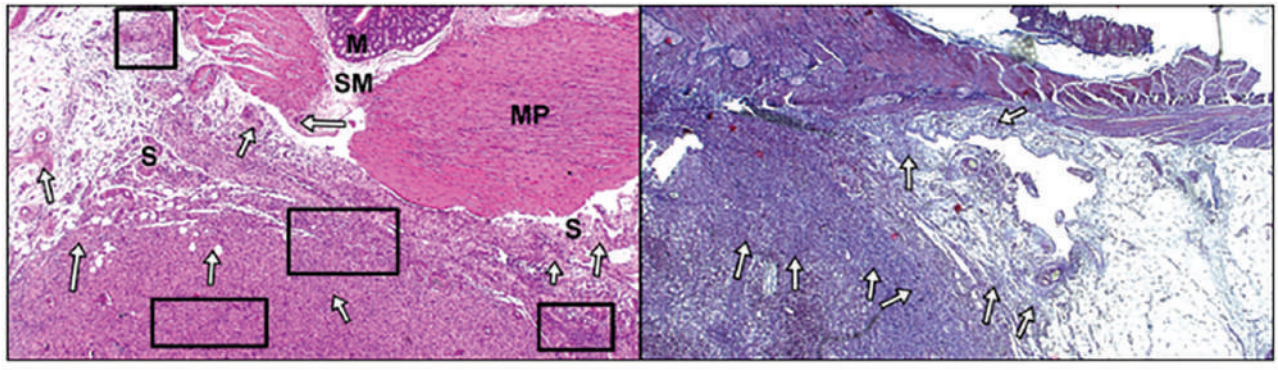


Figure 9. Tissue samples from the treatment group, score 1 (H&E ×5, Masson's trichrome ×5).

S: Serosa, MP: Muscularis propria, SM: Submucosa, M: Mucosa, White arrow: Dense fibrosis, Square: Diffuse inflammatory cell infiltration.

[S-280]

Textbook outcome after colon cancer surgery: A nationwide multicenter analysis from the TSCRS registry

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Objective: Textbook outcome (TO) has emerged as a composite quality indicator reflecting the ideal perioperative course following colon cancer surgery. This study aimed to evaluate nationwide TO rates and to identify clinical and surgical factors associated with TO achievement using a national colorectal cancer registry.

Material and Methods: This retrospective multicenter study was conducted using the Turkish Society of Colon and Rectal Surgery Colorectal Cancer Registry. Patients who underwent curative-intent surgery for colon cancer between July 2018 and December 2024 were included. TO was defined as the simultaneous achievement of the following criteria: R0 resection, retrieval of ≥12 lymph nodes, absence of major postoperative complications (Clavien-Dindo grade ≥III), no 30-day mortality, no 30-day readmission, no reoperation, and no unplanned stoma formation. Factors associated with TO achievement were evaluated using univariate analyses and multivariate binomial logistic regression modeling.

Results: A total of 1.453 patients were analyzed. Among TO components, retrieval of ≥12 lymph nodes was achieved in 92.8% of patients, absence of major complications in 90.0%, and absence of 30-day mortality in 98.1%. Rates of no 30-day readmission and no reoperation were 92.6% and 93.7%, respectively, while absence of unplanned stoma formation was observed in 85.4% of patients. In univariate analyses, TO achievement was significantly associated with younger age, female sex, lower ASA score, elective surgery, minimally invasive surgical approach, and avoidance of extended resection (all $p<0.05$). Multivariate analysis demonstrated that ASA class III-V [odds ratio (OR)=1.55, p=0.005], receipt of neoadjuvant therapy (OR=2.13, $p<0.001$), emergency surgery (OR=4.65, $p<0.001$), and left-sided tumor location (OR=1.95, $p<0.001$) were independently associated with an increased risk of TO failure. In contrast, a minimally invasive surgical approach (OR=0.39, $p<0.001$) and avoidance of extended resection (OR=0.62, p=0.021) were identified as independent protective factors against TO failure.

Conclusion: In this nationwide multicenter analysis, TO achievement following colon cancer surgery was strongly influenced by patient physiological status, surgical timing, and operative strategy rather than surgical technique alone. These findings support the role of TO as a comprehensive, reliable, and comparable quality metric for evaluating surgical performance in colon cancer care at the national level.

Keywords: Colon cancer, multicenter study, surgical quality, textbook outcome

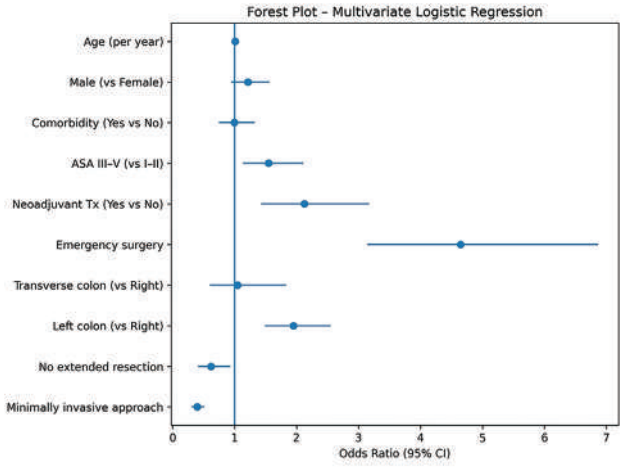


Figure 1. Forest plot of multivariate logistic regression analysis. Dots represent adjusted ORs and horizontal lines indicate 95% confidence intervals. The vertical dashed line represents the reference value (OR=1).

[S-281]

Timing of protective loop ileostomy closure and independent predictors of major complications: A single-center retrospective analysis

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Objective: Protective loop ileostomy is commonly performed in colorectal cancer surgery to mitigate the clinical consequences of anastomotic leakage. However, ileostomy itself may cause dehydration, electrolyte imbalance, renal dysfunction, weight loss, and impaired quality of life. The optimal timing of closure remains controversial. Early closure may reduce stoma-related metabolic complications but could increase postoperative morbidity due to repeated surgical stress. Delayed closure allows systemic recovery but prolongs stoma-related risks. This study aimed to compare early and late ileostomy closure outcomes and identify predictors of major postoperative complications.

Material and Methods: A retrospective review was conducted of 158 adult patients who underwent elective closure of protective loop ileostomy following colon cancer resection between January 2023 and December 2025. Closure performed <12 weeks after primary surgery was defined as early, and ≥12 weeks as late. Demographics, ASA scores, ileostomy duration, preoperative weight loss, dehydration, electrolyte and renal dysfunction, and laboratory parameters (creatinine, sodium, hemoglobin, albumin) were recorded. Postoperative complications were graded according to the Clavien-Dindo classification; grade ≥3 was defined as major complications.

Results: The median age was 62.5 years (26-94), and 55.1% were male. Median ileostomy duration was 180 days. Early closure was performed in 23.4% of patients and late closure in 76.6%. The overall complication rate was 57.6%, with a major complication rate of 18.3%. Anastomotic leakage occurred in 3.8%, postoperative ileus in 47.5%, and surgical site infection in 23.4%. Reoperation was required in 13.3% of patients; no in-hospital mortality occurred. Median hospital stay was 7 days. Major complications (p=0.011) and surgical site infections (p=0.018) were significantly more frequent in the early closure group, which also had a longer hospital stay (10 vs. 7 days, p=0.009). No differences were observed in anastomotic leakage or ileus rates. Patients with major complications had significantly lower preoperative hemoglobin (p=0.016) and albumin (p=0.038) levels.

Conclusion: Loop ileostomy closure is safe regarding mortality but associated with considerable morbidity. Early closure may not be suitable for all patients. Preoperative anemia and hypoalbuminemia appear to be significant risk factors for major complications. Closure timing should be individualized based on clinical and biochemical status rather than time interval alone.

Keywords: Loop ileostomy, colon cancer, postoperative morbidity

Table 1. Analysis of factors predicting major postoperative complications (Clavien-Dindo ≥3)

Parameters		No complications and Clavien-Dindo minor complication	Clavien-Dindo major complication	p-value
Age (years)		62 (26-94)	64 (38-82)	*0.235
BMI		25 (17-37.5)	24.2 (20-31.8)	*0.485
Stay duration (days)		7 (4-15)	10 (4-32)	***0.027**
Preoperative weight loss percentage (%)		5 (0-26.4)	5 (0-20)	*0.743
Preoperative creatinine		0.88 (0.29-2.58)	0.89 (0.37-6.03)	*0.817
Preoperative sodium		140 (119-159)	140 (130-154)	*0.816
Preoperative hemoglobin		12.3 (7.4-17.7)	10.8 (8.7-15.1)	***0.016**
Preoperative albumin		42 (19-54)	37 (19-51)	***0.038**
Gender	Woman	56 (78.9%)	15 (21.1%)	**0.416
	Male	73 (83.9%)	14 (16.1%)	
Ostomy closure method	Manually	20 (83.3%)	4 (16.7%)	**0.817
	Stapler with	109 (81.3%)	25 (18.7%)	
Ostomy closure technique	End to end	19 (79.2%)	5 (20.8%)	**0.776
	Side by side	110 (82.1%)	24 (17.9%)	
ASA score	2 and below	77 (86.5%)	12 (13.5%)	**0.072
	3 and above	52 (75.4%)	17 (24.6%)	

Table 2. Comparison of clinical outcomes between early (<12 weeks) and late (>12 weeks) ileostomy closure				
Parameters		**Early closure**	**Late closing**	**p-value**
Gender	Woman	23 (32.4%)	48 (67.6%)	***0.016**
	Male	14 (16.1%)	73 (83.9%)	
Postoperative anastomotic leakage	None	36 (23.7%)	116 (76.3%)	*0.980
	There is	1 (16.7%)	5 (83.3%)	
Postoperative ileus condition	None	18 (21.7%)	65 (78.3%)	*0.589
	There is	19 (25.3%)	56 (74.7%)	
Postoperative wound infection	None	23 (19%)	98 (81%)	***0.018**
	There is	14 (37.8%)	23 (62.2%)	
Second operation during hospitalization	None	32 (23.4%)	105 (76.6%)	*0.964
	There is	5 (23.8%)	16 (76.2%)	
Postoperative complications	No complications and Clevien-Dindo minor complication (<2)	25 (19.4%)	104 (80.6%)	***0.011**
	Clavien-Dindo major complications (>3)	12 (41.4%	17 (58.6%)	
Age (years)		63 (27-83)	62 (26-94)	**0.805
BMI		26 (19-31.8)	25 (17-37.5)	**0.921
Stay duration (days)		10 (4-32)	7 (4-26)	****0.009**

[S-282]

Anastomosis or stoma in obstructed colorectal cancer undergoing emergency resection? A single-center experience

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Objective: Obstructed colorectal cancer is a clinical condition observed in approximately 10-18% of patients with colorectal cancer and requires emergency surgery. Compared to elective surgery, resections performed under emergency conditions are associated with higher postoperative morbidity and mortality rates. In patients operated on due to obstruction, the choice between primary anastomosis and stoma formation after resection varies depending on patient characteristics, tumor factors, and intraoperative findings, and there is no clear consensus on this issue. This study aimed to evaluate the preferred surgical approaches and the factors influencing this preference in patients who underwent emergency resection for obstructed colorectal cancer.

Material and Methods: Patients who underwent emergency right hemicolectomy, left hemicolectomy, segmental colon resection, anterior resection, or low anterior resection at our center between January 2021 and December 2022 were retrospectively evaluated. Patients diagnosed with obstructed colorectal adenocarcinoma who underwent resection were included in the study. Obstructions due to benign causes (diverticulitis, volvulus, etc.), patients who underwent stoma formation alone, and obstructions secondary to non-colorectal malignancies were excluded. Surgical procedures were classified as resection/primary anastomosis, resection/end stoma, and resection/primary anastomosis with diverting loop stoma. Patients were analyzed in two main groups: primary anastomosis and stoma formation. Demographic characteristics, comorbidities, pathological data, and survival outcomes were compared between the groups.

Results: A total of 84 patients were included in the study. The mean age was 63.4±14.7 years, and 64.3% were male. Tumors were located in the left colon in 66.7% of patients and in the right colon in 27.4%. Pathological examination revealed that 52.4% of cases were T4 stage and 55.4% were node-positive. The rate of positive surgical margins was 20.2%. The median follow-up period was 39 months (IQR: 35.2). Regarding surgical method, 40.5% of patients underwent primary anastomosis, 52.4% underwent resection with end stoma, and 7.1% underwent primary anastomosis with diverting stoma. The overall mortality rate was 51.2%. Mortality was 38.2% (13/34) in patients who underwent primary anastomosis and 60.0% (30/50) in those who had stoma formation. A borderline statistically significant difference in mortality was observed between the two groups (p=0.05).

Conclusion: In patients undergoing emergency resection for obstructed colorectal cancer, the choice of surgical approach shows a heterogeneous distribution. In our study, mortality was higher in patients who underwent stoma formation, and this difference was at the threshold of statistical significance. These findings suggest that patient and tumor characteristics are determinants in surgical strategy selection; however, multivariate analyses are needed to demonstrate the effect on mortality.

Keywords: Emergency surgery, obstructed colorectal cancer, primary anastomosis and stoma

Table 1. Tumor characteristics, surgical procedures, and oncological outcomes (n=84)

Tumor location, n (%)	
Right colon	23 (27.4%)
Left colon	56 (66.7%)
Transvers colon	3 (3.6%)
Synchronous tumor	2 (2.4%)
Surgical procedure, n (%)	
Primary anastomosis	34 (40.5%)
Primary anastomosis + end stoma	44 (52.4%)
Primary anastomosis + protective stoma	6 (7.1%)
Closed obstruction, n (%)	
Yes	48 (57.1%)
No	36 (42.9%)
Presence of perioperative distant metastasis, n (%)	
Yes	20 (23.8%)
No	64 (76.2%)
T stage, n (%)	
T2	2 (2.4%)
T3	38 (45.2%)
T4	44 (52.4 %)
N stage, n (%)	
N0	37 (44.6%)
N1	28 (33.7%)
N2	18 (21.7%)
Number of lymph nodes, median (IQR)	18 (13)
Surgical margin positivity, n (%)	
Negative	67 (79.8%)
Positive	17 (20.2%)
Mortality, n (%)	
Yes	43 (51.2%)
No	41 (48.8%)
Follow-up duration, median (IQR)	39 (35.2)

Table 2. Demographic and clinical characteristics of the patients (n=84)

Variable	Value
Age (years), mean ± SD	63.4±14.7
Body mass index (kg/m^2), mean ± SD	26.3±4.5
Gender, n (%)	
Female	30 (35.7%)
Male	54 (64.3%)
Smoking status, n (%)	
Yes	33 (39.3%)
No	51 (60.7%)
COPD, n (%)	
Yes	4 (4.8%)
No	80 (95.2%)
Diabetes mellitus, n (%)	
Yes	22 (26.2%)
No	61 (73.8%)
Cardiac disease, n (%)	
Yes	12 (14.3%)
No	72 (85.7%)
Hypertension, n (%)	
Yes	31 (36.9%)
No	53 (63.1%)

[S-283]

Prognostic impact of the number of lymph nodes on disease-free survival in node-negative colorectal cancer

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Objective: Adequate lymph node evaluation in colorectal cancer is a key quality indicator for accurate staging and treatment planning. Guidelines recommend examination of at least 12 lymph nodes. However, studies investigating the association between number of harvested lymph nodes and prognosis continue published. This study aimed to evaluate additional prognostic value of higher lymph node dissection on survival outcomes in node-negative colorectal cancer patients.

Material and Methods: Patients who underwent curative surgery between 2016 and 2023 at Marmara University Pendik Training and Research Hospital and were pathologically node-negative were retrospectively analyzed. Demographic characteristics, comorbidities, laboratory parameters, operative features, and pathological findings were compared. ROC curve and Youden index analyses were performed to determine the lymph node cut-off value for disease-free survival. Patients were divided into two groups according to lymph node count: <16.5 (n=125) and >16.5 (n=117). Overall survival and disease-free survival were evaluated using the Kaplan-Meier method, and prognostic factors were analyzed with Cox regression.

Results: A total of 242 node-negative colorectal cancer patients were included. No significant differences were observed between groups regarding age, sex, comorbidities, body mass index, ASA score, hemoglobin, albumin, CEA, and CA 19-9 levels (p>0.05). Right-sided colon tumors were more frequent in the >16.5 group (43% vs. 18%), whereas left-sided tumors were more common in the <16.5 group (47% vs. 29%) (p<0.001). Median tumor diameter was larger in the high lymph node group (50 mm vs. 35 mm, p<0.001). Postoperative complication rate, hospital stay, and mortality did not differ (p>0.05). Operation time was shorter in the >16.5 group (p=0.013). Pathological stage II disease was more frequent in the >16.5 group (p=0.007). Kaplan-Meier analysis showed significantly longer overall survival and disease-free survival in the >16.5 lymph node group (p=0.039 and p=0.031, respectively). In multivariate Cox regression for overall survival, tumor stage and preoperative hemoglobin level were independent prognostic factors (p<0.001 and p=0.015). Although lymph node count <16.5 was significant in univariate analysis, it lost significance in multivariate analysis. For disease-free survival, stage and <16.5 lymph nodes were identified as independent adverse prognostic factors.

Conclusion: Although the minimum lymph node number recommended in guidelines is necessary for adequate staging in node-negative colorectal cancer, a higher lymph node count may provide additional prognostic information, particularly for disease-free survival. This finding suggests that a high lymph node yield may reflect tumor biology rather than surgical quality alone. Therefore, lymph node count may be considered a parameter for risk stratification beyond standard staging.

Keywords: Node-negative colorectal cancer, lymph node yield, disease-free survival

[S-284]

Is the risk of liver metastasis in patients with colorectal cancer predictable?

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Objective: Colorectal cancers are the second leading cause of cancer-related mortality worldwide. Disease stage at diagnosis is the most important prognostic factor. The most significant cause of mortality is distant organ metastasis, with the liver being the most common site of distant metastasis. Liver metastases not detected at diagnosis may appear months or years after resection of the primary tumor. Therefore, it is important to assess the risk factors for liver metastasis beforehand. Our study aimed to investigate the clinical, pathological, and laboratory parameters indicating the risk of liver metastasis after resection of the primary tumor in patients who did not have liver metastasis at the time of diagnosis.

Material and Methods: Our study included 349 patients over 18 years of age who underwent surgery for colorectal cancer between January 2018 and April 2023 and did not have hepatic or extrahepatic metastases. In 22 of these patients, liver metastases were observed within 2 years after surgery, as revealed by radiological imaging and histopathological examinations. Demographic characteristics, tumor localization, tumor markers (CEA, CA 19-9), pathological features, and inflammatory markers (neutrophil-to-lymphocyte ratio, platelet-to-lymphocyte ratio, and C-reactive protein-to-albumin ratio) were analyzed. Data from the 22 patients with liver metastases were compared with data from the 327 patients without liver metastases.

Results: Our study showed that tumors located on the left side had approximately 5.5 times higher risk of developing liver metastasis compared to those located on the right side. While CEA levels, platelet/lymphocyte ratio, T-stage, and lymph node positivity were found to be significantly associated with the risk of liver metastasis, no significant association was found between gender, neoadjuvant treatment, neutrophil/lymphocyte ratio, and CRP/albumin ratio and the development of liver metastasis.

Conclusion: In patients with colorectal cancer, the risk of liver metastasis can be predicted preoperatively based on blood CEA levels, platelet/lymphocyte ratio, tumor localization, T-stage, and lymph node positivity. These markers can be used to determine the follow-up and treatment plan for high-risk patients.

Keywords: Colorectal cancer, liver metastasis, inflammatory markers

[S-286]

The role of machine learning models in predicting long-term disease progression in right-sided colon cancer

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Objective: Accurate prediction of long-term disease progression in patients with right-sided colon cancer (RCC) is essential for individualized surveillance and optimization of adjuvant therapy. Conventional statistical methods have limitations in analyzing complex, multidimensional clinical data. Machine learning (ML) approaches offer promising alternatives for outcome prediction. This study aimed to identify factors associated with long-term progression after curative surgery for RCC and to compare the predictive performance of different ML models.

Material and Methods: This retrospective study included patients who underwent curative surgery for RCC between 2016 and 2023. Patients were categorized according to long-term postoperative progression status. Demographic data, preoperative laboratory parameters, operative variables, and pathological findings were collected from institutional records. Continuous variables were analyzed using the Student's t-test or Mann-Whitney U test, and categorical variables using the chi-square or Fisher's exact test. For predictive modeling, all variables were integrated into a unified dataset. Logistic regression, k-nearest neighbors, support vector machines, decision tree, random forest, extra trees, XGBoost, LightGBM, and multilayer perceptron (MLP) models were applied. Model generalizability was enhanced using 10-fold stratified cross-validation and GridSearch-based hyperparameter optimization. Performance was evaluated using ROC-AUC, sensitivity, specificity, and Cohen's kappa.

Results: A total of 385 patients were analyzed; 30 (7.8%) developed long-term progression. No significant differences were observed between groups in demographic characteristics or laboratory parameters. However, perineural invasion (57% vs. 32%, p=0.007) and positive surgical margins (10% vs. 1.1%, p<0.001) were significantly more frequent in patients with progression. Multivariable Cox regression identified perineural invasion (HR=2.41, p=0.027) and positive surgical margins (HR=5.80, p=0.004) as independent risk factors. Among ML models, random forest achieved the highest overall performance (AUC=0.77). XGBoost demonstrated strong specificity (0.91) with an AUC of 0.75. Logistic regression (AUC=0.56) and MLP (AUC=0.52) showed limited predictive ability. Feature importance analysis highlighted CA19-9, body mass index, CEA, age, and lymphocyte count as key predictors.

Conclusion: Ensemble-based ML models outperform conventional statistical approaches in predicting long-term progression in RCC. Integrating tumor markers, inflammatory and nutritional parameters, and pathological features may improve risk stratification and support personalized follow-up strategies.

Keywords: Long-term progression, machine learning, right colon cancer

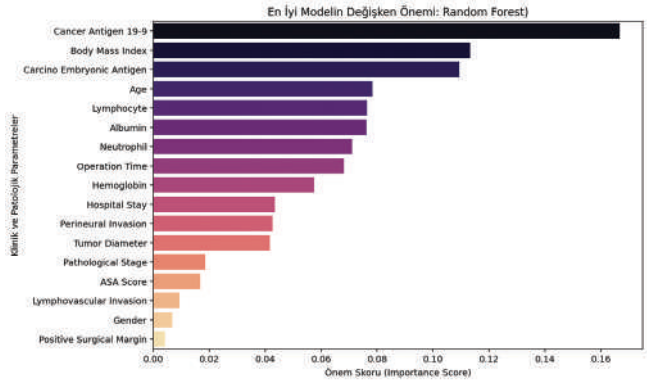


Figure 1. Feature importance plot of the best model (random forest).

[S-287]

Long-term recurrence and quality of life after open wells rectopexy: A single-center experience

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Objective: Rectal prolapse is a debilitating condition that significantly impairs quality of life, and surgery remains the mainstay of treatment in adults. Despite numerous described techniques, no universally accepted gold standard exists, and long-term data on open posterior rectopexy are limited. This study evaluates long-term recurrence and quality of life outcomes following open Wells (posterior mesh) rectopexy.

Material and Methods: This single-center retrospective cohort study included adult patients who underwent elective open Wells rectopexy for internal or external rectal prolapse between January 2015 and August 2025. Demographic, clinical, and operative data were collected retrospectively from hospital records. Postoperative recurrence, fecal continence status, and quality of life were assessed through structured telephone interviews. Disease-specific quality of life was evaluated using the validated Turkish version of the PAC-QOL questionnaire.

Results: Twenty-one patients were included, with a mean age of 46.8±16.5 years, and 61.9% were female (Table 1). Rectal prolapse recurrence occurred in 14.3% of patients, and incisional hernia was observed in 23.8% (Table 2). The median PAC-QOL score was 0.6 (1.7), and higher PAC-QOL scores were significantly associated with longer postoperative hospital stay (p=0.02).

Conclusion: Open Wells rectopexy is associated with low recurrence rates in rectal prolapse. However, incisional hernia remains an important limitation of the open approach, and quality of life outcomes assessed by PAC-QOL indicate that functional results may not be optimal in all patients.

Keywords: Rectal prolapse, Wells rectopexy, quality of life

Table 1. Preoperative demographic and clinical characteristics (n=21)

Variable	Value
Age (years), mean ± SD	46.8±16.5
Body mass index (kg/m²), mean ± SD	25.8±3.7
Sex, n (%)	
Female	13 (61.9%)
Male	8 (38.1%)
Rectal prolapse type, n (%)	
Internal	8 (38.1%)
External	13 (61.9%)
Preoperative MR defecography, n (%)	
Performed	14 (66.7%)
Not performed	7 (33.3%)
Preoperative colonoscopy, n (%)	
Normal	9 (42.9%)
Rectal ulcer	8 (38.1%)
Not performed	4 (19.0%)
Previous abdominal surgery, n (%)	
Yes	8 (38.1%)
No	13 (61.9%)
Previous perineal surgery, n (%)	
Yes	3 (14.3%)
No	18 (85.7%)
ASA physical status, n (%)	
ASA I	6 (30.0%)
ASA II	12 (60.0%)
ASA III	2 (10.0%)
Preoperative fecal incontinence, n (%)	
Yes	3 (14.3%)
No	18 (85.7%)

Table 2. Postoperative outcomes and follow-up results (n=21)

Outcome	Value
Length of hospital stay (days), mean ± SD	3.8±1.6
Incisional hernia, n (%)	
Yes	5 (23.8%)
No	16 (76.2%)
Recurrence of rectal prolapse, n (%)	
Yes	3 (14.3%)
No	18 (85.7%)
Postoperative fecal incontinence, n (%)	
Absent	16 (76.2%)
Improved	2 (9.5%)
Worsened	3 (14.3%)
PAC-QOL score, median (IQR)	0.6 (1.7)

[S-289]

Investigation of peritoneal metastasis patterns in metastatic colon cancer: Clinical and pathological factors associated with peritoneal spread

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Objective: Peritoneal metastasis is associated with poor prognosis in metastatic colon cancer and represents a critical pattern of spread guiding treatment strategies. This study aimed to identify clinical and pathological factors associated with the presence of peritoneal metastasis in patients with metastatic colon cancer.

Material and Methods: Patients who underwent surgery for colon cancer between May 2019 and August 2025 were retrospectively reviewed, and 120 patients with metastatic disease at the time of surgery were identified. After excluding those who received neoadjuvant therapy and those with missing data, 104 metastatic patients aged over 18 years were included in the analysis. Peritoneal metastasis was diagnosed based on radiological, surgical, and/or pathological findings. Evaluated variables included age, sex, primary tumor location (right vs. left colon), histopathological subtype, pT and pN stage, tumor differentiation, lymphovascular invasion, perineural invasion, tumor budding, and MMR/MSI status. Factors associated with peritoneal metastasis were first analyzed using univariate methods, followed by multivariate logistic regression including clinically relevant variables. A p-value <0.05 was considered statistically significant.

Results: Peritoneal metastasis was present in 25 of 104 metastatic patients (24%). In univariate analysis, female sex, right-sided colon location, mucinous histology, and T4 tumors were significantly associated with peritoneal metastasis. In multivariate analysis, right-sided colon location and mucinous adenocarcinoma histology emerged as independent risk factors, while pT stage, pN stage, differentiation, lymphovascular and perineural invasion, tumor budding, and MMR/MSI status were not independently associated.

Conclusion: This study demonstrates that in stage IV colon cancer, right-sided tumor location and mucinous adenocarcinoma histology are independent risk factors for peritoneal metastasis. These findings suggest that even in the metastatic setting, the biological characteristics of the primary tumor continue to shape the pattern of metastatic spread. Peritoneal dissemination appears not to be random but influenced by tumor location and histology, and these features may help identify patients at higher risk for peritoneal involvement.

Keywords: Peritoneal metastasis, colon cancer

[S-290]

Predictive value of the modified frailty index (mFI-5) score for postoperative morbidity and mortality in geriatric patients undergoing emergency colorectal surgery

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Objective: Emergency colorectal surgery in geriatric patients is associated with a high risk of morbidity and mortality due to reduced physiological reserve, comorbidities, and frailty. In this population, traditional indicators such as chronological age and the ASA score may not always be sufficient to predict postoperative outcomes. The modified frailty index-5 (mFI-5) is a frailty assessment tool that incorporates comorbid conditions and functional dependence. The aim of this study was to evaluate the predictive value of the mFI-5 score for postoperative morbidity and mortality in patients aged 65 years and older undergoing emergency colorectal surgery.

Material and Methods: A total of 44 patients aged ≥65 years who underwent emergency colorectal surgery for malignant or benign indications in the general surgery department of a tertiary referral training and research hospital between January 2020 and January 2025 were included. Clinical and medical record data were retrospectively reviewed and statistically analyzed.

Results: The mFI-5 score distribution of the 44 patients was categorized into two groups: low frailty (mFI-5 0-1; n=29) and high frailty (mFI-5 ≥2; n=15). The overall postoperative morbidity rate was 27.3% (12/44), the rate of severe morbidity (Clavien-Dindo ≥3) was 13.6% (6/44), and the 30-day mortality rate was 9.1% (4/44). The rate of overall postoperative morbidity was significantly higher in the high frailty group compared to the low frailty group (66.7% vs. 6.9%; p<0.001). Similarly, severe morbidity was more frequent in the high frailty group (33.3% vs. 3.4%; p=0.013). In multivariate regression analysis, frailty remained an independent predictor of overall postoperative morbidity after adjustment for clinical and laboratory variables (OR=137.52; p=0.028).

Conclusion: This study demonstrates that the mFI-5 score is a clinically meaningful predictor of postoperative morbidity and severe morbidity in geriatric patients undergoing emergency colorectal surgery. Owing to its simplicity and rapid applicability, mFI-5 may contribute to risk stratification in emergency surgical settings and serve as a useful tool in perioperative management.

Keywords: Emergency colorectal surgery, geriatric patient, frailty (mFI-5)

[S-292]

The effect of topical oxygen therapy on the immune microenvironment, hypoxia, and oxidative stress in diabetic foot ulcers: Clinical and tissue analysis

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Objective: Hypoxia, inflammation, and immune dysfunction are major pathophysiological mechanisms that impair wound healing in diabetic foot ulcers. Although hyperbaric oxygen therapy improves tissue oxygenation, its use may be limited in patients with significant comorbidities or restricted access to treatment. Topical oxygen therapy (TOT) enhances local oxygen delivery without systemic effects and may represent a practical alternative. This study aimed to evaluate the effects of TOT (Granulox®) on immune cell profile, hypoxia response, and oxidative stress markers at the tissue level and to explore their relationship with clinical healing.

Material and Methods: Clinical follow-up demonstrated a significant reduction in wound size, with a mean decrease exceeding 40%. Complete epithelialization occurred in 2 patients (4.5%), while the remaining patients showed progressive wound contraction. Flow cytometry revealed immune modulation with increases in both M1 and M2 macrophage populations. Biochemical analysis showed decreased HIF-1α levels, increased VEGF levels, a downward trend in IL-6, reduced TOS and OSI, and increased TAS. Changes in adiponectin and kisspeptin levels were consistent with improved wound healing. These findings indicate that TOT reduces hypoxia and modulates inflammatory and oxidative pathways in the wound microenvironment.

Results: In clinical follow-up after TOT, a marked reduction in wound size was observed, with a mean wound area reduction exceeding approximately 40%. During the follow-up period, complete epithelialization was achieved in 2 patients (4.5%), while progressive reduction in wound area was observed in the remaining cases. Flow cytometry analysis demonstrated changes in the wound microenvironment consistent with an immune response, with increases observed in both M1 (CD38) and M2 (CD209) macrophage populations (Figure 1). Biochemical analyses revealed: a decrease in HIF-1α levels,an increase in VEGF levels, a trend toward decreased IL-6 levels,reductions in TOS and OSI, and an increase in TAS levels. Changes in adiponectin and kisspeptin levels were observed in a direction consistent with wound healing (Figure 2). When clinical and molecular findings were evaluated together, TOT was found to reduce hypoxia in the wound microenvironment while promoting immunomodulation and regulation of oxidative stress. Flow cytometry analysis demonstrates the proportions of $CD38^+$ (M1) and $CD209^+$ (M2) macrophages before and after treatment. A statistically significant increase in both $CD38^+$ and $CD209^+$ cell percentages was observed following TOT ($^*p<0.05$). Paired analyses demonstrate that TOT decreased HIF-1α, IL-6, TOS, Kisspeptin, and OSI levels, while increasing VEGF165, adiponectin, and TAS levels compared with pre-treatment values. These findings indicate modulation of hypoxia signaling, inflammation, angiogenesis, and oxidative balance following treatment.

Conclusion: TOT accelerates clinical healing in diabetic foot ulcers while exerting regulatory effects on immune response, hypoxia, and oxidative stress. The combined clinical and molecular evidence supports TOT as a treatment modality with a strong pathophysiological basis and potential role as an alternative option in diabetic foot management.

Keywords: Hypoxia response, immunomodulation, topical oxygen therapy

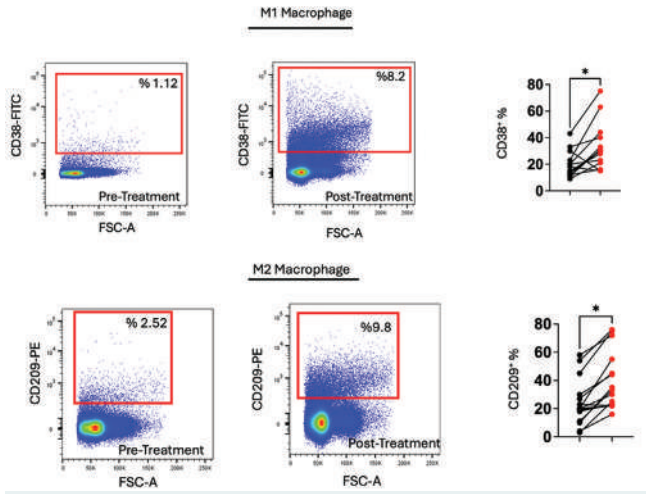


Figure 1. Effect of topical oxygen therapy on macrophage polarization.

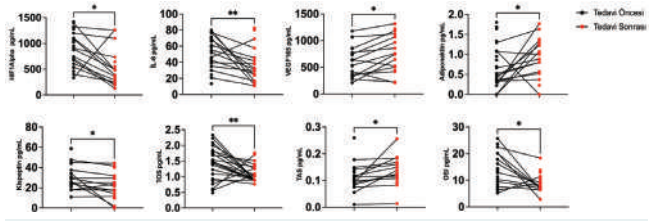


Figure 2. Effect of topical oxygen therapy on inflammatory, angiogenic, and oxidative stress markers.

[S-293]

Evaluation of the child burn cases at the burn center over the last 30 months

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Objective: Treatment and outcomes for childhood burns differ from those for adults. Our burn center has a history of over 10 years, and we wanted to share the results of pediatric burns treated in our new hospital with our new infrastructure.

Material and Methods: In a retrospective study of 138 cases whose treatment was completed between May 1, 2023, and January 1, 2026, demographic data, burn percentages and locations, abbreviated burn injury scale (ABSI) scores, etiology, compartment syndrome, inhalation burns; escharectomy percentage, use of assistive devices, number and percentage of grafts were evaluated. Burn infections and sepsis; need for intensive care, intubation rates and duration, mortality rate; and complications that developed in the cases were also assessed.

Results: Olguların 58'i (%42,0) kadın, 80'i (%58,0) erkekti. Ortalama yaş 5,41 (0-17) olup, 14'ü (%10,1) göçmendi. Yanık yüzde alanı ortalaması %14,76 (2-89) olup, yüz-baş-boyun yanıkları 49 (%35,5), gövde yanıkları 70 (%50,7), ekstremite yanıkları 121 (%87,6) olguda mevcuttu. Haşlanma yanıkları 106 (%76,8) olguda, alev-temas yanıkları 28 (%20,2) olguda, elektrik yanıkları 4 (%2,8) olguda görüldü. ABSI skorlarına göre düşük riskli yanıklar 98 (%71,0) olguda, orta şiddette yanıklar 32 (%23,1) olguda ve ağır yanıklar 8 (%5,7) olguda görülmüş olup, ortalama ABSI değeri 3,38 (2-12) olarak bulunmuştur. On bir (%7,9) olguda kompartman sendromu tespit edildi. Dört (%2,8) olguda vasküler patolojiler, 4 (%2,8) olguda inhalasyon yanığı görüldü. Olgulardan 27'sinde (%19,5) eskarektomi gerekmedi. Yüz on bir (%80,4) olguya ortalama 1,9 (1-9) kez eskarektomi tüm vücut yüzeyinin ortalama %11,7'sine (%2-60) uygulandı. On yedi (%12,3) olguda yardımcı tedavi ekipmanları biodegradable temporary matriks kullanıldı. Altmış (%43,4) olguya greft gerekmemiştir, bunlardan 27 (%19,5)'si sadece pansumanlar ve kimyasal debridman ile, 33 (%23,9)'ü sadece eskarektomi ile düzelmiştir. Yetmiş sekiz (%56,6) olguda, ortalama 1,57 (1-9) kez greftleme uygulanmış olup, %11,6'lık (%2-%35) vücut yüzeyi greftlenmiştir. Yoğun bakım ihtiyacı 18 (%13,0) olguda görülmüş olup, yoğun bakımda kalış süreleri 7,1 (1-24) gün olarak hesaplanmıştır. Dokuz (%6,5) olgu entübe edilmiş olup, ortalama entübasyon süresi 12,4 (2-34) gün olarak saptanmıştır. Mortalite 2 (%1,5) olguda gelişmiş olup, ilk olgu vücut yüzeyinin %89'u alev yanığı ve inhalasyon yanığı olan ABSI skoru 12 olan olgu idi, ikinci olgu ise vücut yüzeyinin %52'si elektrik ark yanığı ve inhalasyon yaralanması olan ABSI skoru 8 olan olgu idi.

Conclusion: Yanık merkezlerinde çocuk yaştaki olguların tedavisi yanık cerrahisi ile ilgilenen uzmanlar, çok sayıda konsültan hekim, ekipman, özelleşmiş sağlık personeli ve yoğun bakım altyapısı gerektirmektedir. Kendine has özellikleri ve yaklaşımı nedeniyle daha fazla çocuk yanık merkezleri ve çocuk yanık yoğun bakım ünitelerine ihtiyaç vardır. Yanık cerrahisinin yan dal uzmanlığı olarak kabulü ve deneyimli çocuk cerrahlarının yetiştirilmesi gerekmektedir.

Keywords: Burn, burn center, childhood burns

Table 1. Findings in most cases

Finding	Case number, n	Ratio, %
Mean burn area ratio	138	14.76
Head, face and neck burns	49	35.5
Trunk burns	70	50.7
Extremity burns	121	87.6
Compartment syndrome	11	7.9
İnhalation burns	4	2.8
Vasculary complications	4	2.8
Infections, wound	16	11.2
Sepsis	6	4.2
Need of intensive care unit	18	13.0
Intubation	9	6.5
ABSI, mean	138	3.3
Mortality	2	1.5

Table 2. Treatment methods in all cases

Treatment method	Case number	Ratio, %
Dressing and chemical debridement	27	19.5
Escarectomy	33	23.9
Escarectomy and grafting	78	56.6

[S-294]

The association between antidiabetic treatment and glycemic control and the risk of lower extremity amputation in patients with diabetic foot ulcers: A retrospective cohort study

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Objective: The aim of this study was to evaluate the association between glycemic control, types of antidiabetic treatment, and the clinical characteristics of ulcers (ulcer depth, stage, and accompanying vascular pathologies) with the risk of lower extremity amputation in patients followed with a diagnosis of diabetic foot ulcer (DFU). It was also aimed to determine the role of glycemic control and antidiabetic treatment, together with ulcer severity, in identifying patient groups at high risk for major and minor amputations.

Material and Methods: In this single-center, retrospective, and observational cohort study, a total of 48 patients aged 18 years and older who were followed with a diagnosis of DFU at the Wound Care Unit of University of Health Sciences Türkiye, İzmir City Hospital between 01 January 2025, and 31 December 2025, were evaluated. The patients were divided into two groups as those who did not develop lower extremity amputation (n=34) and those who developed amputation (n=14). Demographic characteristics and clinical features (Table 1), clinical characteristics of DFU (Table 2), glycemic control parameters (Table 3), treatment approaches and clinical outcomes (Table 4), and radiological findings (Table 5) were retrospectively and comparatively analyzed. A p-value <0.05 was considered statistically significant in all analyses.

Results: Lower extremity amputation developed in 14 (29.2%) of the 48 patients with DFU. No significant differences were observed between patients with and without amputation in terms of age (67.43±11.16 vs. 60.32±12.55 years; p=0.156), body mass index (26.25±2.85 vs. 26.39±5.12 kg/m^2; p=0.594), duration of diabetes (9.57±2.14 vs. 9.65±2.58 years; p=0.906), or accompanying comorbidities (all p>0.05). In contrast, the presence of deep ulcers was significantly higher in the amputation group (92.9% vs. 23.5%; p<0.001). Advanced Wagner stage (stages 4-5) was more frequently observed in patients who developed amputation (64.2% vs. 11.8%; p<0.001). The presence of gangrene (85.7% vs. 8.8%; p<0.001) and an ischemic component (85.7% vs. 14.7%; p<0.001) showed a strong association with amputation. On radiological evaluation, pathological findings on Doppler ultrasonography were more common in the amputation group (p=0.043). Mean HbA1c levels were lower in patients who developed amputation (6.76±1.14 vs. 8.23±2.04; p=0.01); however, no significant differences were found between the groups regarding HbA1c categories, fasting and random blood glucose levels, or types of antidiabetic treatment. Total length of hospital stay was significantly longer in patients who developed amputation (63.07 vs. 31.79 days; p<0.001).

Conclusion: In our study, the risk of amputation in patients with DFU was found to be more closely associated with ulcer depth, stage, and accompanying vascular pathologies, independent of glycemic control levels and types of antidiabetic treatment. In particular, the presence of deep ulcers, advanced Wagner stage, ischemic components, and gangrene showed a strong association with the development of amputation. Glycemic control parameters and the classes of antidiabetic treatments used were observed to have limited value in predicting amputation risk when considered alone. These findings indicate that local ulcer characteristics and vascular status should be prioritized in the assessment of amputation risk in patients with DFU.

Keywords: Diabetic foot ulcer, lower extremity amputation, glycemic control, antidiabetic therapy, peripheral arterial disease

Table 1. Demographic and clinical characteristics of the patients

Değişken	Değer	Değişken	Değer	p
Hasta sayısı (n)	48	Amputasyon yok (n=34)	Amputasyon var (n=14)	
Yaş (yıl), ortalama ± SD	62,40 ± 12,48	60,32 ± 12,55	67,43 ± 11,16	0,156
Vücut kitle indeksi (kg/m²), ortalama ± SD	26,35 ± 4,54	26,39 ± 5,12	26,25 ± 2,85	0,594
Diyabet süresi (yıl), ortalama ± SD	9,62 ± 2,44	9,65 ± 2,58	9,57 ± 2,14	0,906
eGFR (ml/dk/1.73 m²), ortalama ± SD	68,96 ± 30,17	73,62 ± 29,68	57,64 ± 29,32	0,156
Cinsiyet, n (%)				0,416
↳ Erkek	39 (81,3)	29 (85,3)	10 (71,4)	
↳ Kadın	9 (18,8)	5 (14,7)	4 (28,6)	
Diyabet tipi, n (%)				—
↳ Tip 2	48 (100)	34 (100)	14 (100)	
Sigara kullanımı, n (%)				0,613
↳ Hayır	13 (27,1)	8 (23,5)	5 (35,7)	
↳ Evet	35 (72,9)	26 (76,5)	9 (64,3)	
Hipertansiyon, n (%)				0,108
↳ Yok	20 (41,7)	17 (50,0)	3 (21,4)	
↳ Var	28 (58,3)	17 (50,0)	11 (78,6)	
Koroner arter hastalığı, n (%)				0,184
↳ Yok	29 (60,4)	22 (64,7)	7 (50,0)	
↳ Var	19 (39,6)	12 (35,3)	7 (50,0)	
Serebrovasküler hastalık, n (%)				0,2
↳ Yok	45 (93,8)	33 (97,1)	12 (85,7)	
↳ Var	3 (6,3)	1 (2,9)	2 (14,3)	
Diyabetik nefropati, n (%)				0,448
↳ Yok	38 (79,2)	27 (79,4)	11 (78,6)	
↳ Var	10 (20,8)	7 (20,6)	3 (21,4)	
Diyabetik retinopati, n (%)				0,322
↳ Yok	34 (70,8)	25 (73,5)	9 (64,3)	
↳ Var	14 (29,2)	9 (26,5)	5 (35,7)	
Diyabetik nöropati, n (%)				1
↳ Yok	5 (10,4)	4 (11,8)	1 (7,1)	
↳ Var	43 (89,6)	30 (88,2)	13 (92,9)	
Periferik arter hastalığı, n (%)				0,108
↳ Yok	20 (41,7)	17 (50,0)	3 (21,4)	
↳ Var	28 (58,3)	17 (50,0)	11 (78,6)	

Table 2. Clinical characteristics of diabetic foot ulcers in the patients

Değişken	Toplam (n=48)	Amputasyon yok (n=34)	Amputasyon var(n=14)	p
Ülser süresi (hafta), ortalama ± SD	10,46 ± 11,46	9,50 ± 10,76	12,79 ± 13,12	0,422
Ülser tarafı, n (%)				0,515
↳ Sağ	23 (47,9)	16 (47,1)	7 (50,0)	
↳ Sol	22 (45,8)	15 (44,1)	7 (50,0)	
↳ Bilateral	3 (6,3)	3 (8,8)	0 (0)	
Ülser lokalizasyonu, n (%)				0,248
↳ Parmak	9 (18,8)	6 (17,6)	3 (21,4)	
↳ Taban	17 (35,4)	15 (44,1)	2 (14,3)	
↳ Topuk	3 (6,3)	2 (5,9)	1 (7,1)	
↳ Diğer	19 (39,6)	11 (32,4)	8 (57,1)	
Ülser derinliği, n (%)				<0,001
↳ Yüzeyel	27 (56,3)	26 (76,5)	1 (7,1)	
↳ Derin	21 (43,8)	8 (23,5)	13 (92,9)	
Wagner evresi, n (%)				<0,001
↳ Evre 1	25 (52,1)	24 (70,6)	1 (7,1)	
↳ Evre 2	5 (10,4)	3 (8,8)	2 (14,3)	
↳ Evre 3	5 (10,4)	3 (8,8)	2 (14,3)	
↳ Evre 4	12 (25,0)	4 (11,8)	8 (57,1)	
↳ Evre 5	1 (2,1)	0 (0)	1 (7,1)	
Enfeksiyon varlığı, n (%)				0,085
↳ Yok	8 (16,7)	8 (23,5)	0 (0)	
↳ Var	40 (83,3)	26 (76,5)	14 (100)	
Osteomiyelit, n (%)				0,083
↳ Yok	37 (77,1)	29 (85,3)	8 (57,1)	
↳ Var	11 (22,9)	5 (14,7)	6 (42,9)	
Gangren tipi, n (%)				<0,001
↳ Yok	33 (68,8)	31 (91,2)	2 (14,3)	
↳ Kuru	7 (14,6)	1 (2,9)	6 (42,9)	
↳ Islak	8 (16,7)	2 (5,9)	6 (42,9)	
İskemik komponent, n (%)				<0,001
↳ Yok	31 (64,6)	29 (85,3)	2 (14,3)	
↳ Var	17 (35,4)	5 (14,7)	12 (85,7)	
Revaskülarizasyon, n (%)				0,265
↳ Yok	38 (79,2)	28 (82,4)	10 (71,4)	
↳ Endovasküler	9 (18,8)	6 (17,6)	3 (21,4)	
↳ Cerrahi	1 (2,1)	0 (0)	1 (7,1)	

Table 3. Glycemic control and antidiabetic treatment

Değişken	Toplam (n=48)	Amputasyon yok (n=34)	Amputasyon var(n=14)	p
HbA1c (%), ortalama ± SD	7,80 ± 1,93	8,23 ± 2,04	6,76 ± 1,14	0,01
Açlık plazma glukozu (mg/dL), ortalama ± SD	138,92 ± 53,63	141,88 ± 57,03	131,71 ± 45,43	0,759
Rastgele kan glukozu (mg/dL), ortalama ± SD	156,21 ± 81,80	158,06 ± 90,59	151,71 ± 57,73	0,642
HbA1c kategorisi, n (%)				0,106
└ HbA1c < 7	23 (47,9)	13 (38,2)	10 (71,4)	
└ HbA1c 7–7,9	5 (10,4)	3 (8,8)	2 (14,3)	
└ HbA1c 8–8,9	10 (20,8)	9 (26,5)	1 (7,1)	
└ HbA1c ≥ 9	10 (20,8)	9 (26,5)	1 (7,1)	
İnsülin kullanımı, n (%)				0,469
└ Hayır	11 (22,9)	9 (26,5)	2 (14,3)	
└ Evet	37 (77,1)	25 (73,5)	12 (85,7)	
İnsülin tipi, n (%)				0,428
└ Yok	11 (22,9)	9 (26,5)	2 (14,3)	
└ Bazal	6 (12,5)	5 (14,7)	1 (7,1)	
└ Bazal–bolus	31 (64,6)	20 (58,8)	11 (78,6)	
Oral antidiyabetik kullanımı, n (%)				0,091
└ Hayır	29 (60,4)	18 (52,9)	11 (78,6)	
└ Evet	18 (37,5)	16 (47,1)	2 (14,3)	
GLP-1 RA kullanımı, n (%)				—
└ Hayır	48 (100)	34 (100)	14 (100)	
DPP-4 inhibitörü kullanımı, n (%)				0,726
└ Hayır	36 (75,0)	26 (76,5)	10 (71,4)	
└ Evet	12 (25,0)	8 (23,5)	4 (28,6)	
SGLT-2 inhibitörü kullanımı, n (%)				0,303
└ Hayır	43 (89,6)	29 (85,3)	14 (100)	
└ Evet	5 (10,4)	5 (14,7)	0 (0)	
Kombine tedavi, n (%)				1
└ Hayır	39 (81,3)	27 (79,4)	12 (85,7)	
└ Evet	9 (18,8)	7 (20,6)	2 (14,3)	

Table 4. Treatment approaches and clinical outcomes of the patients

Değişken	Toplam (n=48)	Amputasyon yok (n=34)	Amputasyon var(n=14)	p
Diyabetik Tedavi değişikliği, n (%)				1
└ Hayır	39 (81,3)	28 (82,4)	11 (78,6)	
└ Evet	9 (18,8)	6 (17,6)	3 (21,4)	
Antibiyotik kullanımı, n (%)				0,063
└ Yok	7 (14,6)	7 (20,6)	0 (0)	
└ Oral	1 (2,1)	0 (0)	1 (7,1)	
└ İntravenöz	40 (83,3)	27 (79,4)	13 (92,9)	
Amputasyon tipi, seviyesi(n = 11), n (%)				—
└ Minör (Parmak)	9 (64,3)	—	9 (64,3)	
└ Majör (Transmetatarsal; Ayak bileği altı; Diz altı; Diz üstü)	5 (35,7)	—	5 (35,7)	
Amputasyona kadar süre (gün), ortalama	27,38	—	27,38	—
Toplam yatış süresi (gün), ortalama	40,92	31,79	63,07	<0,001

Table 5. Radiological findings

Değişken	Toplam (n=48)	Amputasyon yok (n=34)	Amputasyon var(n=14)	p
Radyolojik görüntüleme	45 (93,8)	32 (94,1)	13 (92,9)	1
RDUS'da Patolojik bulgu, n (%)				0,043
└ Hayır	16 (33,3)	15 (44,1)	1 (7,1)	
└ Evet	28 (58,3)	17 (50,0)	11 (78,6)	
└ Değerlendirmeyen	4 (8,3)	2 (5,9)	2 (14,3)	
BTA'da Patolojik bulgu, n (%)				0,75
└ Hayır	5 (10,4)	4 (11,8)	1 (7,1)	
└ Evet	17 (35,4)	11 (32,4)	6 (42,9)	
└ Değerlendirmeyen	26 (54,2)	19 (55,9)	7 (50,0)	
MRG'de Patolojik bulgu, n (%)				0,264
└ Hayır	5 (10,4)	3 (8,8)	2 (14,3)	
└ Evet	3 (6,3)	1 (2,9)	2 (14,3)	
└ Değerlendirmeyen	40 (83,3)	30 (88,2)	10 (71,4)	
Hiperbarik oksijen tedavisi, n (%)	2 (4,2)	2 (5,9)	0 (0)	1
PAH nedenli medikal tedavi, n (%)	31 (64,6)	19 (55,9)	12 (85,7)	0,095

[S-295]

Predictors of reamputation after minor amputation: Analysis of 30-day, 90-day, and 1-year outcomes

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Objective: The aim of this study was to determine the incidence of early and late reamputation in patients who underwent minor amputation due to diabetic foot disease and to evaluate the clinical, laboratory, and vascular predictors associated with reamputation at 30 days, 90 days, and 1 year.

Material and Methods: In this retrospective cohort study, patients who underwent minor amputation (toe, ray, or transmetatarsal amputation) due to diabetic foot ulcers were analyzed. Patients were followed for reamputation outcomes at 30 days, 90 days, and 1 year postoperatively. Demographic characteristics, comorbidities, laboratory parameters, inflammatory and nutritional indices, and vascular assessments were recorded. Factors associated with reamputation were evaluated using univariate analyses, and independent predictors were identified using multivariate logistic regression analysis. Time to reamputation was analyzed using the Kaplan-Meier method.

Results: A total of 306 patients were included in the study. Reamputation occurred in 112 patients (36.6%) during the follow-up period. The presence of peripheral arterial disease, higher inflammatory indices, lower serum albumin levels, and more advanced amputation levels were significantly more frequent in patients who developed reamputation ($p<0.05$). In multivariate analysis, WIfI score, need for revascularization, and hypoalbuminemia were identified as independent predictors of 1-year reamputation. Kaplan-Meier analysis demonstrated a significantly shorter time to reamputation in high-risk patients (log-rank $p<0.05$).

Conclusion: Reamputation after minor amputation is common, particularly in patients with concomitant vascular insufficiency and systemic inflammation. Early identification of high-risk patients may contribute to reducing major amputation rates through individualized follow-up and treatment strategies.

Keywords: Diabetic foot, minor amputation, reamputation, peripheral arterial disease, WIfI score

[S-296]

Diagnostic accuracy of blind surgeon photographic assessment in the early diagnosis of necrotizing fasciitis: A multi-observer diagnostic accuracy study demonstrating the impact of clinical experience

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Objective: Necrotizing fasciitis (NF) is a life-threatening soft tissue infection that progresses rapidly and has a significantly increased mortality rate when diagnosis is delayed. The accuracy of the surgical suspicion formed during the initial clinical evaluation is of vital importance. In daily practice, this initial suspicion is mostly based on a rapid visual assessment of the wound appearance. This study investigated the accuracy of blinded surgeon assessment based on preoperative wound images in the diagnosis of NF and the effect of clinical experience on diagnostic performance. The aim was to independently measure the diagnostic contribution of the visual assessment that led to early surgical suspicion.

Material and Methods: Diagnostic performance was evaluated using sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), and receiver operating characteristic (ROC) curve analysis; the area under the curve (AUC) was calculated. Inter-observer agreement was analyzed using Cohen's kappa coefficient.

Results: Sixty-seven patients (53.2%) had a diagnosis of NF confirmed by surgical findings, while 59 (46.8%) were classified as having serious soft tissue infections requiring hospitalization but without necrosis. The blinded assessment revealed that visual assessment had a high level of discriminatory power in the diagnosis of NF. Sensitivity for expert surgeons was calculated as 88.1% and 85.1%, respectively, and specificity as 83.0% and 79.6%. Sensitivity for senior residents was 80.6% and 77.6%, respectively, and specificity was 74.5% and 71.1%. In the ROC analysis, the AUC values for expert surgeons were determined to be 0.92 (95% CI: 0.86-0.96) and 0.89 (95% CI: 0.82-0.94), while in assistants, these values were 0.84 (95% CI: 0.76-0.90) and 0.81 (95% CI: 0.73-0.88). In the specialist group, the mean PPV was 86% and NPV was 85%, while in the assistant group, PPV was 78% and NPV was 75%. In the multi-observer analysis, the overall Cohen's kappa coefficient was 0.56, indicating moderate-to-good agreement; kappa was calculated as 0.64 among specialists and 0.48 among assistants. The moderate level of agreement observed among observers in this study indicates that the nature of NF diagnosis is open to differences in interpretation.

Conclusion: Blind surgeon assessment based on preoperative wound images demonstrates high clinical accuracy in the early diagnosis of NF. The higher agreement and diagnostic performance of expert surgeons supports the decisive role of clinical experience in diagnostic decision-making processes.

Keywords: Multiple observers, blinded assessment, necrotizing fasciitis



Figure 1. Necrotizing fasciitis of the abdominal wall.

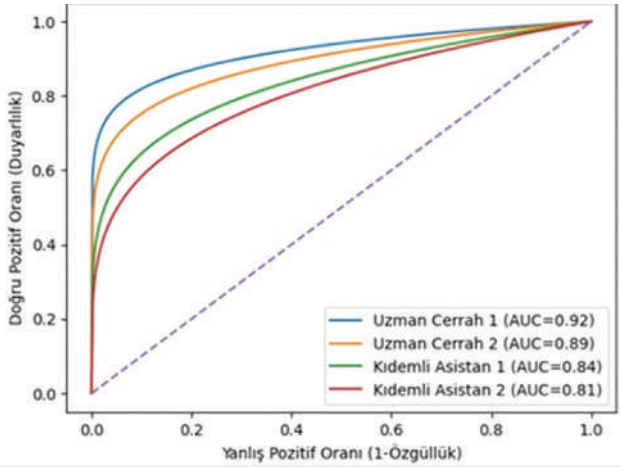


Figure 2. ROC curve-blind surgeon photo evaluation.

[S-297]

Zero mortality in Fournier's gangrene: Association of clinical severity with LRINEC score and microbiological findings

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Objective: Fournier's gangrene (FG) is a rapidly progressive necrotizing soft tissue infection associated with high morbidity and mortality. Early diagnosis and aggressive surgical management are critical for survival. Although the LRINEC score is widely used in necrotizing infections, its role in reflecting disease severity in FG remains unclear. In this study, we aimed to evaluate the relationship between determinants of clinical severity and both the LRINEC score and microbiological findings in our FG series with no observed mortality.

Material and Methods: Thirty-seven consecutive patients treated for FG between 2022 and 2025 were retrospectively analyzed. Demographic characteristics, presence of diabetes mellitus, infection source, anatomical extent of disease, LRINEC score, number of debridements, need for colostomy, intensive care unit (ICU) requirement, and culture results were recorded. Clinical severity was defined as the presence of ≥2 debridements, ICU requirement, colostomy, or extensive disease spread. Associations between the LRINEC score, microbiological findings, and clinical severity indicators were analyzed.

Results: The mean age of the patients was 54.7±11.7 years; 86.5% were male and 59.5% had diabetes mellitus. The source of infection was perianal in 54%, scrotal/perineal in 32%, and urogenital in 14%. Extensive disease spread was observed in 62%. The mean LRINEC score was 8.95±1.06. Patients underwent a mean of 5.03±1.79 debridements, and the mean length of hospital stay was 18.6±7.3 days. The colostomy rate was 27%, and ICU requirement was 43%. No mortality occurred. Culture positivity was 78%, with polymicrobial infection in 17%. The most common pathogens were *Staphylococcus* spp., *Klebsiella pneumoniae*, *Escherichia coli*, and *Pseudomonas aeruginosa*. Patients with LRINEC ≥9 had a higher ICU requirement (73% vs. 25%, p=0.074). No significant association was found between polymicrobial infection and disease extent (75% vs. 80%, p=1.00).

Conclusion: In FG, mortality may be prevented through early surgical intervention and multidisciplinary management. The observed trend toward increased intensive care requirement in patients with LRINEC ≥9 suggests that the LRINEC score may reflect clinical severity independent of mortality. This homogeneous Fournier gangrene series with zero mortality demonstrates that early aggressive surgery and multidisciplinary care can prevent mortality and indicates that the LRINEC score may serve as a mortality-independent marker of clinical severity in FG.

Keywords: Fournier's gangrene, polymicrobial infection, LRINEC score

Table 1. Numerical clinical and laboratory characteristics of patients with Fournier's gangrene (n=37)

Variable	Mean ± SD
Age (years)	54.7±11.7
LRINEC score	8.95±1.06
Number of debridements	5.03±1.79
Length of hospital stay (days)	18.6±7.3
CRP (mg/L)	238.3±78.2
WBC ($\times 10^3/mm^3$)	18.48±4.00
Hemoglobin (g/dL)	10.53±1.83
Sodium (mmol/L)	132.6±5.03
Creatinine (mg/dL)	1.20±0.88
Glucose (mg/dL)	193.4±91.1

Table 2. Demographic and clinical distribution of patients (n=37)

Variable	n (%)
Male sex	32 (86.5)
Diabetes mellitus	22 (59.5)
Perianal source	20 (54)
Scrotal/perineal source	12 (32)
Urogenital source	5 (14)
Extensive spread	23 (62)
Colostomy	10 (27)
ICU requirement	16 (43)
Culture positivity	29 (78)
Polymicrobial infection	6 (17)
Mortality	0 (0)

[S-298]

Evaluating the impact of umbilical cord-derived mesenchymal stem cell exosome therapy on the wound microenvironment in diabetic foot ulcers

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Objective: Mesenchymal stem cell–derived exosomes support cellular proliferation through the cytokines and growth factors they contain, while limiting oxidative stress–induced apoptosis. They reduce inflammation, promote angiogenesis and cell migration, enhance collagen deposition, and modulate chronic wound healing by regulating macrophage polarization. This study aimed to evaluate the effects of exosome therapy on the chronic wound microenvironment and clinical healing parameters in patients with diabetic foot ulcers.

Material and Methods: Fourteen patients with diabetic foot ulcers who developed postoperative tissue defects and received exosome therapy were included in the study. Tissue samples obtained from the wound bed before and after treatment were analyzed by flow cytometry. During follow-up, wound sizes were measured and healing times were recorded.

Results: The clinically observed reduction in wound size was consistent with cellular changes in the wound bed. Flow cytometric analyses revealed an increase in both M1 (CD38) and M2 (CD209) macrophage populations in the wound tissue after treatment. Examination of myeloid subgroups demonstrated increases in monocytes, neutrophils, and $CD4^+$ T lymphocytes, while no significant change was observed in B lymphocytes. These findings indicate that exosome application modulates immune cell distribution and macrophage phenotype within the chronic wound microenvironment.

Conclusion: Mesenchymal stem cell–derived exosome therapy supports granulation and epithelialization in chronic diabetic wounds and is associated with changes in immune cell profile and macrophage polarization. Exosome application may represent a promising therapeutic approach that promotes tissue remodeling by shifting the chronic wound microenvironment from the inflammatory phase toward the reparative phase.

Keywords: Diabetic foot ulcers, exosome, flow cytometry

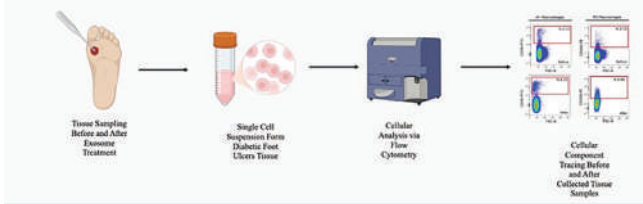


Figure 1. Diabetic foot ulcers tissue cellular analysis.

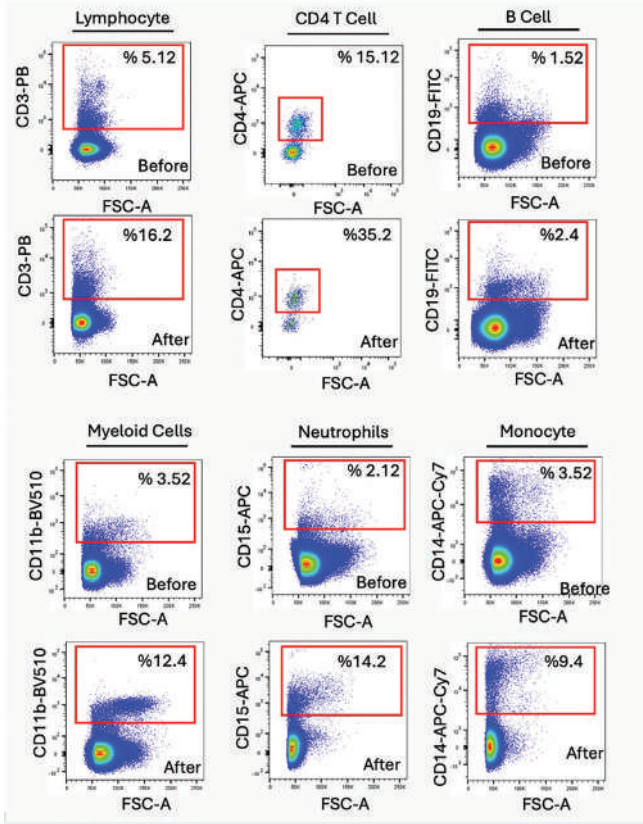


Figure 2. Immune cell profile changes observed by flow cytometry following exosome therapy.

[S-300]

The co-existence of diabetic foot ulcers and peripheral arterial disease: Is endovascular revascularization essential?

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Objective: Diabetic foot ulcers and critical limb ischemia are challenging conditions associated with high morbidity affecting the lower extremities, often necessitating major amputation in surgical practice. The aim of this study is to evaluate the efficacy of endovascular revascularization (ER) regarding wound healing and treatment outcomes in patients presenting to our chronic wound unit with diabetic foot ulcers co-existing with arterial pathology.

Material and Methods: A retrospective screening was performed on 380 chronic wound patients treated at our hospital's chronic wound unit between May 2024 and December 2025. Following the exclusion of venous and traumatic etiologies (44 pressure ulcers, 22 venous ulcers, 10 trauma/burns, and 19 others), 285 patients diagnosed with peripheral arterial disease (PAD) were identified. Patients with suspected arterial occlusion based on Doppler ultrasound underwent computed tomography angiography (CTA). The study group consisted of 69 patients with confirmed pathology and no contraindications who subsequently underwent ER. The primary endpoint was defined as major amputation-free survival (limb salvage). Minor amputations were considered an integral part of limb-sparing surgery.

Results: From the initial cohort of 380 patients, 285 were evaluated for PAD and diabetic ulcers, and a study group was established comprising 69 patients who underwent ER. The study group (n=69) consisted predominantly of high-risk patients, with 56 (81.1%) classified as rutherford stage 5-6 and 35 (50.7%) as wagner grade 4-5. Complete healing was achieved in 33 patients (47.8%) without any amputation. While 23 patients (33.3%) achieved healing following minor amputation/debridement post-revascularization, major amputation (below-knee or above-knee) was required in only 13 patients (18.8%). Consequently, limb salvage success was achieved in 56 patients (81.1%), avoiding major amputation. Statistical analysis revealed that while the presence of Rutherford Stage 6 significantly increased the risk of major amputation (p=0.038), a limb preservation rate exceeding 70% was achieved even within the wagner grade 4-5 group.

Conclusion: Our study demonstrates that advanced ischemic tissue loss in patients with diabetic foot co-existing with peripheral arterial disease is not a standalone indication for major amputation. Endovascular revascularization enhances surgical success and wound healing rates, facilitating limb preservation even in high-risk patient groups. In a multidisciplinary approach, it is recommended that the decision for amputation should only be made after angiographic patency is established and tissue perfusion has been evaluated.

Keywords: Limb-sparing surgery, endovascular revascularization, diabetic foot

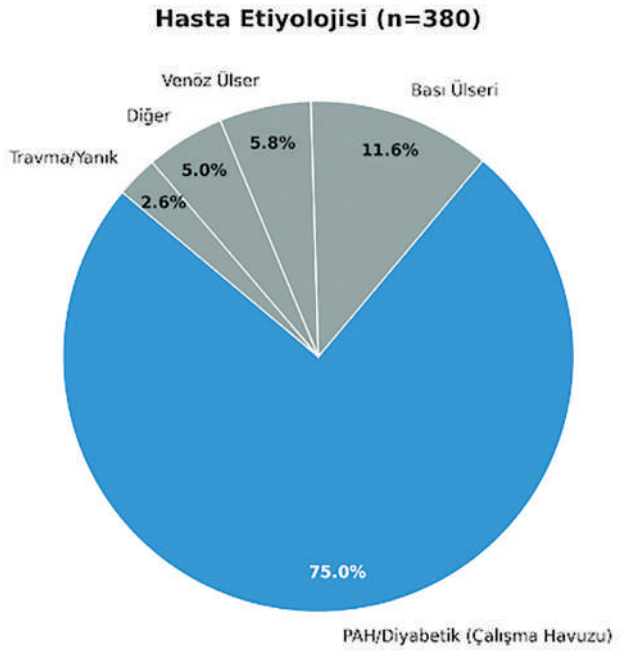


Figure 1. Patient etiology.

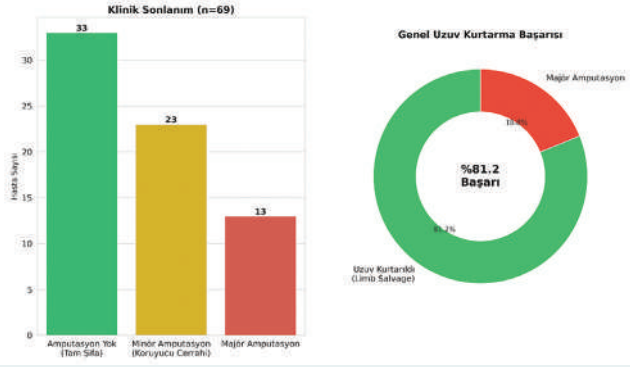


Figure 2. Our patient follow-up results.

[S-301]

Antiseptic pooling-induced perioperative skin injury: A non-thermal burn etiology

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Objective: Preoperative skin antisepsis is fundamental in preventing surgical site infections; however, antiseptic solutions may themselves cause tissue injury when prolonged contact occurs. These lesions are frequently mistaken for thermal burns related to electrocautery or pressure-related injuries, leading to delayed recognition and inappropriate preventive strategies. The aim of this study was to identify the clinical characteristics, mechanisms, and preventability of antiseptic-related chemical burns observed in routine operating room practice.

Material and Methods: All surgical procedures performed in our operating theatre complex between November 2023 and May 2024 were retrospectively reviewed. Skin lesions were included if they developed within the first 24 postoperative hours, were located outside the surgical field, and demonstrated clinical morphology compatible with chemical burn injury. Lesions corresponding to dispersive electrode placement, contact pressure areas, or direct instrument injury were excluded after cross-checking operative positioning records, electrocautery pad locations, anaesthesia documentation, and postoperative examination findings. Operative duration, patient characteristics, warming device usage, and antiseptic preparation technique were analysed.

Results: Eleven patients aged 1-65 years were identified, including four pediatric cases. All had undergone skin preparation using 10% povidone-iodine solution. Lesions consistently appeared in gravity-dependent areas such as the sacral region, gluteal folds, back, and lateral thighs. The distribution pattern did not correspond to electrode placement, surgical instrumentation, or pressure points, but rather to areas where antiseptic runoff could accumulate. Operative duration ranged from 16 to 190 minutes, and the most extensive bullous lesion occurred following the longest procedure. Active warming systems were present in most cases; however, similar injury occurred without warming in one patient, excluding temperature exposure as the primary mechanism. The uniform localisation and morphology strongly supported prolonged chemical exposure due to solution pooling as the underlying cause. After recognition of the pattern, a protocol modification was implemented including prevention of fluid accumulation, controlled application volume, mandatory drying time before draping, and staff education. No additional cases were observed thereafter.

Conclusion: Antiseptic-related chemical burns represent a distinct and preventable perioperative complication caused by pooling and prolonged contact rather than thermal injury. Pediatric patients and prolonged procedures appear particularly susceptible. Simple technical precautions during antiseptic application effectively eliminated recurrence. Awareness of this mechanism allows differentiation from electrocautery burns and enables targeted prevention strategies.

Keywords: Chemical burn, antisepsis, povidone-iodine



Figure 1. Cases.

[S-302]

Clinical course and surgical outcomes of frostbite injuries: A single-center experience

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Objective: Frostbite injuries are cold-induced tissue damages frequently observed in harsh climate conditions and socioeconomically disadvantaged populations, potentially leading to significant morbidity and limb loss. Early diagnosis, appropriate medical management, and timely surgical intervention are critical determinants of clinical outcomes. This study aimed to evaluate the clinical characteristics, treatment approaches, and surgical outcomes of patients treated for frostbite injuries at our center.

Material and Methods: In this retrospective study, 27 patients admitted to our burn center between October 1, 2024, and April 30, 2025, with a diagnosis of frostbite were analyzed. Demographic characteristics, degree of frostbite, affected extremities, medical and surgical treatments, length of hospital stay, and complications were recorded. All patients received initial wound care and were hospitalized, except those with isolated acral involvement (ear or nose), who were followed on an outpatient basis. Medical management included anticoagulant, antiplatelet, vasodilator, and analgesic therapies. In eligible patients, a controlled rewarming protocol was implemented within the first 72 hours. Patients were closely monitored clinically and radiologically for ischemia and necrosis, and surgical decisions were made in collaboration with the orthopedic surgery team.

Results: Of the 27 patients, 26 (96.3%) were male, with a mean age of 23.7±7.9 years. Twenty-four patients (88.9%) were foreign refugees. Frostbite was classified as second degree in 10 patients (37.0%) and as second to third degree in 17 patients (63.0%). All patients had extremity involvement; lower extremities were affected in 88.9% and upper extremities in 51.9%. Overall, 19 patients (70.4%) underwent disarticulation or amputation. Surgical intervention was not required in 6 patients with isolated second-degree frostbite. No cases of secondary infection or mortality were observed. The median length of hospital stay was 25 days (IQR: 18.5-32).

Conclusion: Although frostbite injuries are associated with low mortality, they result in substantial morbidity, limb loss, and prolonged hospitalization, particularly among young and socioeconomically vulnerable populations. Early standardized medical management, close monitoring, and a multidisciplinary approach play a crucial role in optimizing limb preservation and improving clinical outcomes.

Keywords: Burn, frostbite, amputation

[S-303]

Burn injuries associated with epileptic seizures: A single-center case series

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Objective: Burn injuries are among the most severe forms of trauma due to their potential to cause permanent physical and psychological consequences. In patients with epilepsy, the sudden and unpredictable nature of seizures significantly increases the risk of secondary traumatic injuries, as individuals are unable to protect themselves during an ictal event. Prolonged contact with the causative agent during a seizure frequently results in deep and full-thickness burns. The aim of this study was to evaluate the clinical characteristics, burn etiology, treatment modalities, and outcomes of burn injuries occurring during epileptic seizures in patients treated at our burn center.

Material and Methods: In this retrospective study, digital medical records of patients hospitalized and treated at our burn center between January 2019 and January 2026 were reviewed. Adult patients (≥18 years) who sustained burn injuries during epileptic seizures were included. Demographic data, burn etiology, total body surface area (TBSA), burn depth, surgical interventions, and length of hospital stay were analyzed.

Results: A total of 15 patients were included in the study. Of these, 8 (53.3%) were male and 7 (46.7%) were female. The mean age was 43.5 years (range: 19-72 years). The most common burn etiology was hot liquid contact, followed by contact with hot surfaces and flame burns. The mean TBSA was 8.4% (range: 2-20%). Regarding burn depth, 5 patients had deep second-degree burns, while 10 patients presented with mixed second- and third-degree burns; one patient had a fourth-degree burn. Upper extremity involvement was the most frequently affected anatomical region. In terms of surgical management, skin grafting was performed in 66.7% of patients, surgical debridement in 80%, and vacuum-assisted closure (VAC) therapy was required in 20%. The mean length of hospital stay was 22.9 days (range: 6-46 days). One patient died during follow-up. Two patients treated in the intensive care unit required blood transfusions, and intraoperative epileptic seizure was observed in one of these patients.

Conclusion: Burn injuries associated with epilepsy require a high rate of surgical intervention and prolonged hospitalization despite relatively low average TBSA values. These injuries are largely preventable, and targeted patient education, effective seizure control, and a multidisciplinary approach are essential to reduce morbidity in this high-risk population.

Keywords: Epileptic seizure, burn injuries, deep burns, surgery



Figure 1. Burn injury following an epilepsy seizure.



Figure 2. Burn injury following an epilepsy seizure-2.



Figure 3. Burn injury following an epilepsy seizure-3.

Table 1. Demographic data

Demographic data	Number of patients
Gender	
Male	8
Female	7
Mean Age	43.6
Mean body surface area	8.4
Burn severity	
Mix type burns	8
Burn factor	
Hot liquid	9
Hot object contact	2
Fire	4
Body surface area	
Upper limb	10
Lower limb	6
Face, Head, Neck	4
Chest	6
Mean length of hospital stay	22.86
Surgical procedures	
Escarectomy	12
Greft	10
Vac	3
Complications	
Blood transfusion	2
ICU stay	2
Mortality	1

[S-304]

The role of diverting ostomy in perineal necrotizing fasciitis: A retrospective analysis of wound healing and clinical outcomes

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Objective: Necrotizing fasciitis is a rare but life-threatening soft tissue infection that progresses rapidly and causes inflammation and necrosis of the skin, subcutaneous tissue, and fascia. The management of necrotizing fasciitis is multidisciplinary and multimodal. Treatment includes patient stabilization through initiation of broad-spectrum antibiotic therapy, fluid resuscitation, and management of comorbidities, as well as control of infection through surgical debridement. Depending on the extent of disease spread, a diverting ostomy may be required due to anal sphincter damage or to prevent fecal contamination. This study aims to evaluate the effect of diverting ostomy creation on wound healing, the need for repeated debridement, and the development of complications in patients who underwent surgical debridement for necrotizing fasciitis.

Material and Methods: A total of 54 patients who underwent surgical debridement for necrotizing fasciitis between April 15, 2023, and January 15, 2026, were included in the study. The patients were divided into two groups according to whether a diverting ostomy was performed. The groups were compared in terms of wound healing time, length of hospital stay, need for repeated debridement, development of complications, and mortality.

Results: A total of 54 patients were included in the study. The mean wound healing time was 51.4±22.6 days in patients who underwent diverting ostomy and 40.6±25.6 days in those who did not. There was no statistically significant difference between the groups in terms of wound healing time ($p=0.078$). The mean length of hospital stay was 34.1±32.3 days in the ostomy group and 10.8±7.8 days in the non-ostomy group. A statistically significant difference was observed between the groups regarding length of hospital stay ($p<0.001$). Higher rates of complications and mortality were observed in patients who underwent diverting ostomy; however, this group was older and had a higher burden of comorbidities.

Conclusion: In patients who underwent debridement for necrotizing fasciitis, diverting ostomy is generally preferred in more severe, extensive, and complicated cases when appropriately indicated. Therefore, longer wound healing time and length of hospital stay were observed in patients who underwent diverting ostomy.

Keywords: Necrotizing fasciitis, debridement, diverting ostomy

[S-307]

What do the numbers say, what do surgeons choose? A national analysis of general surgery subspecialty placements

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Objective: General surgery subspecialty training reflects not only individual career choices but also broader structural changes in the healthcare system, including surgeons' work-related expectations, regional disparities, and institutional capacity. The recent resurgence of YDUS has made the determinants of subspecialty preferences more apparent. Accordingly, changes in occupancy rates despite increasing quotas should be interpreted within a comprehensive sociological framework encompassing professional satisfaction, working conditions, training quality, and long-term career expectations, rather than as a simple supply–demand issue. This study aims to examine temporal trends in subspecialty quota distribution, occupancy rates, and regional and institutional concentration in Türkiye using descriptive statistics, thereby highlighting the evolving structure of subspecialty training and its implications for surgeon preferences.

Material and Methods: Data from general surgery subspecialty placements conducted between 2015 and 2025 were retrospectively analyzed. The YDUS year, exam period, additional placement status, subspecialty type, hospital characteristics, geographic region, province-based distribution, number of vacancies and unfilled positions, and occupancy rates were evaluated using descriptive statistics.

Results: In total, 503 placement records were analyzed. Of 757 quotas, 68.4% were filled, leaving 239 vacant. The occupancy rate declined from 82.8% in 2015–2019 to 58.0% in 2020–2024, indicating that quota expansion was not matched by sustained enrollment. Occupancy was highest in surgical oncology (80.6%) and gastroenterological surgery (75.5%), and lowest in intensive care (45.8%) and hand surgery (34.8%), reflecting marked heterogeneity among subspecialties. Quotas were largely concentrated in university hospitals (58.1%) and metropolitan cities (94.6%), indicating institutional and geographic clustering. Additional placement positions exhibited particularly low occupancy (34.9%) and accounted for a disproportionate share of vacancies. Despite high quota density in Ankara and İstanbul, vacancy rates remained relatively high with limited regional expansion.

Conclusion: This study shows that although subspecialty training in general surgery has expanded quantitatively, this growth has not been matched by enrollment rates. The sharp decline in occupancy after 2020, despite increased quotas, indicates that subspecialty preferences are shaped not only by individual motivation but also by working conditions, training environment, professional satisfaction, and quality of life. In line with the literature, workload, burnout, and long-term career expectations play a key role in subspecialty choice. The marked heterogeneity in occupancy rates across subspecialties and the high vacancy rates in additional placements further suggest a supply-driven expansion not met by comparable demand. These findings highlight the need to reassess subspecialty planning within a comprehensive human resources framework that incorporates surgeons' professional and social expectations rather than focusing solely on quota increases.

Keywords: General surgery subspecialty training, health workforce, quota occupancy rates, sociological analysis, surgical preferences

Table 1. (A) Quota distribution by YDUS year (B). Quota and enrollment by exam period (C) Quota distribution by placement status

TABLO 1A. YDUS Yıllarına Göre Kontenjan Dağılımı

YDUS Yılı	Merkez Sayısı (n)	Açılan Kontenjan (n)	Boş Kontenjan (n)	Doluluk Oranı (%)
2015	33	72	3	95,8
2016	32	44	6	86,4
2017	35	52	10	80,8
2018	43	60	3	95,0
2019	50	91	33	63,7
2020	92	187	98	47,6
2021	37	45	9	80,0
2022	82	93	53	43,0
2023	30	39	0	100,0
2024	25	27	11	59,3
2025	44	47	13	72,3

TABLO 1B. Sınav Dönemine Göre Kontenjan ve Doluluk

Sınav Dönemi	Merkez Sayısı (n)	Açılan Kontenjan (n)	Boş Kontenjan (n)	Doluluk Oranı (%)
İlkbahar	478	730	228	68,8
Sonbahar	25	27	11	59,3

TABLO 1C. Yerleştirme Durumuna Göre Kontenjanların Dağılımı

Yerleştirme	Merkez Sayısı (n)	Açılan Kontenjan (n)	Boş Kontenjan (n)	Doluluk Oranı (%)
Normal	339	545	101	81,5
Ek	164	212	138	34,9

Table 2. (A) Quota distribution by general surgery subspecialties (B) Quota distribution by hospital type (C) Quota distribution by geographic region

TABLO 2A. Genel Cerrahi Yan Dallara Göre Kontenjan Dağılımı

Yan Dal	Merkez Sayısı (n)	Açılan Kontenjan (n)	Boş Kontenjan (n)	Doluluk Oranı (%)
Cerrahi Onkoloji	208	294	57	80,6
Gastroenteroloji Cerrahisi	117	261	64	75,5
Yoğun Bakım	122	144	78	45,8
El Cerrahisi	46	46	30	34,8
Diğer	10	12	10	16,7

TABLO 2B. Hastane Türüne Göre Kontenjanların Dağılımı

Hastane Türü	Merkez Sayısı (n)	Açılan Kontenjan (n)	Boş Kontenjan (n)	Doluluk Oranı (%)
Üniversite	355	440	130	70,5
Eğitim ve Araştırma Hastanesi	79	152	38	75,0
Şehir Hastanesi	69	165	71	57,0

TABLO 2C. Coğrafi Bölgelere Göre Kontenjan Dağılımı

Bölge	Merkez Sayısı (n)	Açılan Kontenjan (n)	Boş Kontenjan (n)	Doluluk Oranı (%)
İç Anadolu	184	332	117	64,8
Marmara	99	132	32	75,8
Akdeniz	76	106	27	74,5
Doğu Anadolu	58	88	26	70,5
Ege	65	69	26	62,3
Güneydoğu Anadolu	10	18	6	66,7
Karadeniz	11	12	5	58,3

Table 3. (A) Quotas based on metropolitan status (B) Quota distribution based on 5-year periods

TABLO 3A. Büyükşehir Durumuna Göre Kontenjanlar

Büyükşehir	Merkez Sayısı (n)	Açılan Kontenjan (n)	Boş Kontenjan (n)	Doluluk Oranı (%)
Büyükşehir	468	713	221	69,0
Büyükşehir değil	35	44	18	59,1

TABLO 3B. 5 yıllık periyotlara Göre Kontenjan Dağılımı

Zaman Dönemi	Merkez Sayısı (n)	Açılan Kontenjan (n)	Boş Kontenjan (n)	Doluluk Oranı (%)
2015–2019	193	319	55	82,8
2020–2024	310	438	184	58,0

Table 4. Comparative literature table

ÇALIŞMA / KAYNAK	KAPSAM – TASARIM	ANA BULGU (KONU İLE İLGİLİ)	BİZİM VERİMİZLE İLİŞKİ / YORUM
Bizin çalışmamız (2015–2025 YDUS yerleştirme kayıtları)	Ulusal, tanımlayıcı; 503 kayıt; 757 kontenjan	Genel doluluk **%68,4. 2015–2019: %82,8 → 2020–2024: %58,0** düşüş. Yan dallar arasında belirgin heterojenlik (Cerrahi Onkoloji/Gastroenteroloji yüksek; Yoğun Bakım/El Cerrahisi düşük). Büyükşehir ve üniversite ağırlığı; ek yerleştirmede doluluk düşük.	**Doğrudan arz–talep "davranışımı" ölçen** nadir ulusal veri. Literatürde sık konuşulan "çalışma koşulları / eğitim ortamı / tükenmişlik" gibi etkenlere **sayısal zeminde** işaret ediyor.
Kıvratma ve ark., 2025 (Turkish Journal of Surgery)	Türkiye'de genel cerrahi asistanlarının eğitim koşullarına ilişkin anket (perspektif çalışması)	Eğitim koşulları, yöntemler ve zorluklara odaklanarak **asistan deneyimini** ortaya koyuyor.	Sizin bulgunuzdaki **2020 sonrası doluluk düşüşü** ve yan dallar arası farklar için "mekanizma" tartışmasına güçlü arka plan sağlar: eğitim/iş yükü algısı ↔ yan dala yönelim.
Celik ve ark., 2021 (PubMed: ulusal survey) – Türkiye'de genel cerrahlarda tükenmişlik	Türkiye genelinde katılımcılarla ulusal kesitsel çalışma	Genel cerrahlarda tükenmişlik ve ilişkili faktörleri inceler; cerrahide tükenmişliğin yaygın ve sistemik bir sorun olduğunu vurgular.	Doluluğun zamanla azalmasını "sosyolojik" okumada destekler: **yüksek stres/tükenmişlik iklimi**, yan dal motivasyonlarını ve tercih davranışını etkileyebilir.
Burnout among surgeons and surgical trainees – sistematik derleme, 2022	Cerrah ve cerrahi asistanlarda tükenmişlik çalışmalarının derlemesi	Tükenmişliğin yaygınlığı, iş–yaşam dengesi, iş yükü ve kurumsal faktörlerle ilişkisi vurgulanır.	Sizin çalışmanızdaki **doluluk düşüşünü** sadece "kontenjan arttı" ile değil, "mesleki sürdürülebilirlik / yaşam kalitesi" ekseninde tartışmayı bilimsel zemine oturtur.
Burnout in Surgical Trainees – Narrative review, 2022	Cerrahi asistanlarda eğilimler ve riskler (derleme)	Eğitim ortamı, mentorluk, iş yükü ve tükenmişlik ilişkisi; müdahale alanları vurgulanır.	Yan dallar arası heterojenlik (bazı yan dalların daha az tercih edilmesi) için "eğitim ve çalışma koşulları farklılığı" argümanını destekleyen çerçeve sağlar.
Türkiye'de YDUS kontenjanlarına ilişkin kurumsal duyurular (YÖK kontenjan talep toplama)	Kurumsal/idarî süreç duyurusu	Kontenjanların belirlenmesinde ihtiyaç ve talep toplama süreçlerine işaret eder.	Sizin bulgunuz (doluluk düşüşü + bölgesel yoğunlaşma) **kontenjan planlaması** tartışması için politika bağlamı sağlar (arz planlanıyor ama talep aynı değil).
Basın/ajans haberleri (AA, 2024)	Haber metni	YDUS yerleşme oranlarına dair açıklamalar (branş bazlı örnek oranlar).	Bilimsel kanıt yerine "kamu söylemi"ni gösterir. Sizin çalışma, bu söylemin **uzun dönem ve yapısal** karşılığını test etmeye daha uygundur.

[S-308]

Survival of the patients with breast cancer who underwent Oncotype DX Recurrence score® testing: Long-term survival update of a prospective multicenter study in Türkiye according to different cut-offs

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Objective: 70% of early-stage breast cancers are hormone receptor positive. In this prospectively designed study, we aim to update the long-term survival outcomes of chemotherapy decision-making according to Oncotype DX Recurrence Score (ODX RS®) and its relation with different cut-offs.

Material and Methods: Ten academic centers in Türkiye that routinely discuss all new cases at multidisciplinary tumor board participated. Consecutive patients who are pT1-3, pN0-N1mic, M0 were identified. Adjuvant treatment decisions were discussed at tumor board before and after ODX-RS® results.

Results: Of the 165 patients (26-76, median 48 years) with a median follow-up of 108 months, ODX-RS® ≤25 had significantly better overall survival (OS) than those with ODX-RS® ≥26 (p=0.022). When evaluated by age, OS and disease-free survival (DFS) was significantly better with ODX-RS® ≤15 in patients aged ≤50 years and with ODX-RS® ≤25 in patients aged >50 years (p=0.034 and p=0.024). ODX-RS® ≤20 in patients aged ≤50 years and ODX-RS® ≤25 in patients aged >50 years had significantly better OS (p=0.002). There was no difference in OS between those who received chemotherapy before ODX-RS® and those who did not (p=0.119). Conversely in the post-ODX-RS®, ODX-RS® predicted survival better and OS was lower in patients who received chemotherapy compared to those who did not (p=0.020) meaning that ODX-RS® can predict OS.

Conclusion: The ODX-RS® significantly influences treatment decisions resulting comparable survivals for patients who received chemotherapy and who did not. Different cut-offs have variable significant prognostic effect on survival prediction models.

Keywords: Chemotherapy decision-making, genomic testing, survival outcomes

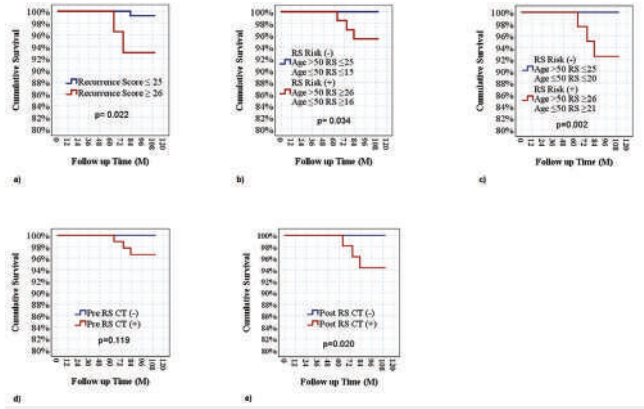


Figure 1. Kaplan-Meier survival analysis-1.

a) Overall survival of patients with ODX-RS® ≤ compared with ODX-RS® ≥26. b) Overall survival for ages ≤50 years and >50 years with ODX-RS® ≥16 and ODX-RS® ≥26 cut-offs respectively. c) Overall survival for ages ≤50 years and >50 years with ODX-RS® ≥21 and ODX-RS® ≥26 cut-offs respectively. d) Overall survival of patients who received chemotherapy before ODX-RS® and those who did not. e) Overall survival of patients who received chemotherapy after ODX-RS® and those who did not.

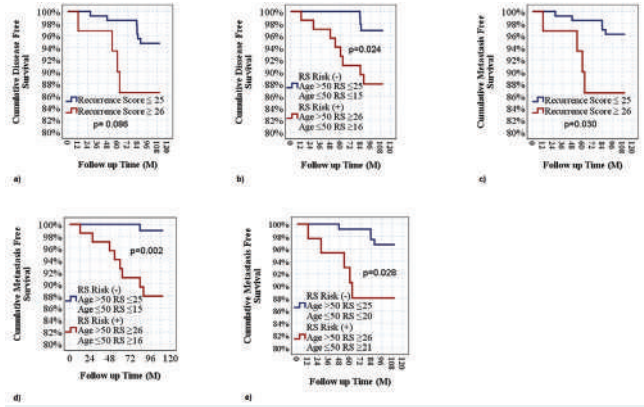


Figure 2. Kaplan-Meier survival analysis-2.

a) Disease-free survival of patients with ODX-RS® ≤ compared with ODX-RS® ≥26. b) Disease-free survival for ages ≤50 years and >50 years with ODX-RS® ≥16 and ODX-RS® ≥26 cut-offs respectively. c) Metastasis-free survival of patients with ODX-RS® ≤ compared with ODX-RS® ≥26. d) Metastasis-free for ages ≤50 years and >50 years with ODX-RS® ≥16 and ODX-RS® ≥26 cut-offs respectively. e) Metastasis-free for ages ≤50 years and >50 years with ODX-RS® ≥21 and ODX-RS® ≥26 cut-offs respectively.

[S-309]

Does oncoplastic breast-conserving surgery provide superior esthetic and functional outcomes compared with conventional breast-conserving surgery? A retrospective matched-pair study from a high-volume tertiary center in Türkiye

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Objective: Oncoplastic breast-conserving surgery (OPC) aims to maintain oncologic safety while improving esthetic and functional outcomes. However, comparative evidence incorporating patient-reported outcome measures (PROMs), particularly sexual function, remains limited. We compared patient-reported satisfaction/quality of life and sexual function after OPC versus conventional breast-conserving surgery (BCS) in a contemporary Turkish cohort.

Material and Methods: This single-center retrospective matched-pair cohort study included women with early-stage (T1-T2, N0-N1, M0) invasive breast cancer or ductal carcinoma *in situ* who underwent segmental mastectomy between January 2019 and April 2025. From approximately 1,000 screened cases, 132 OPC patients were identified and 1:1 matched to 132 BCS patients by age, tumor size, T stage, nodal status, histology, laterality, and year of diagnosis. Primary outcomes were patient satisfaction and quality of life assessed using the BREAST-Q (reduction/mastopexy module; 0-100) and sexual function assessed with the arizona sexual experiences scale (ASEX; 5-30, higher scores worse). Secondary outcomes included operative time, margin status, perioperative variables, and 90-day complications.

Results: The final cohort comprised 264 women with good balance on matching variables. OPC was associated with longer operative time (median 150 min vs. 80 min for BCS, p<0.001) but showed similarly excellent oncologic and perioperative safety. Margin positivity was very low and comparable (one case in BCS; none in OPC; p=0.317), and 90-day complication rates did not differ (p=0.916). PROMs favored OPC: median BREAST-Q scores were significantly higher after OPC [80 (IQR 75-87 vs. 71 IQR 66-74, p<0.001)]. Median ASEX scores were lower in the OPC group (14 IQR 12-17 vs. 17 QR 15-19, p<0.001), indicating better sexual function. Sexual dysfunction defined as ASEX ≥11 was highly prevalent overall but less frequent after OPC (92.4% vs. 100%, p=0.004).

Conclusion: In this matched-pair analysis from a high-volume tertiary center, OPC was associated with significantly improved patient-reported satisfaction/quality of life and modestly better sexual function without compromising margin status or short-term morbidity. These findings support OPC as a patient-centered evolution of breast-conserving surgery and highlight the value of routine PROM integration in breast cancer care.

Keywords: Oncoplastic breast surgery, breast-conserving surgery, BREAST-Q, ASEX, quality of life

Table 1. Baseline clinicopathologic characteristics of patients undergoing conventional breast-conserving surgery (BCS) versus oncoplastic breast-conserving surgery (OPC)

Variable	Total (n=264)	BCS (n=132)	OPC (n=132)	p-value
Age, mean ± SD	51.4±12.7	50.8±12.7	51.9±12.8	0.507[a]
Preoperative histopathology, n (%)				0.972[c]
– IDC	199 (75.4)	99 (75.0)	100 (75.8)	
– ILC	12 (4.5)	5 (3.8)	7 (5.3)	
– DCIS	29 (11.0)	16 (12.1)	13 (9.8)	
– Papillary neoplasm/carcinoma	9 (3.4)	5 (3.8)	4 (3.0)	
– Mucinous adenocarcinoma	10 (3.8)	5 (3.8)	5 (3.8)	
– Neuroendocrine tumor	5 (1.9)	2 (1.5)	3 (2.3)	
Side, n (%)				1.000[c]
– Right	143 (54.2)	72 (54.5)	71 (53.8)	
– Left	121 (45.8)	60 (45.5)	61 (46.2)	
Preoperative axillary status, n (%)				0.686[c]
– Negative	186 (70.5)	95 (72.0)	91 (68.9)	
– Positive	78 (29.5)	37 (28.0)	41 (31.1)	
Neoadjuvant therapy, n (%)				0.775[c]
– No	199 (75.4)	98 (74.2)	101 (76.5)	
– Yes	65 (24.6)	34 (25.8)	31 (23.5)	

Table 2. Operative variables and axillary surgery details

Variable	Total (n=264)	BCS (n=132)	OPC (n=132)	p
Operative time, median (IQR), min	110 (80-150)	80 (70-108.8)	150 (120-180)	<0.001[b]
SLNB performed, n (%)				<0.001[c]
– Yes	236 (89.4)	105 (79.5)	131 (99.2)	
– No	28 (10.6)	27 (20.5)	1 (0.8)	
Axillary dissection, n (%)				<0.001[c]
– Yes	67 (25.4)	15 (11.4)	52 (39.4)	
– No	197 (74.6)	117 (88.6)	80 (60.6)	
Oncoplastic technique used (OPC group only)	–	–	132	–
– Racquet	–	–	50 (37.9)	
– J-plasty	–	–	21 (15.9)	
– Batwing	–	–	20 (15.2)	
– Donut (benelli)	–	–	16 (12.1)	
– Grisotti	–	–	12 (9.1)	
– V-plasty	–	–	8 (6.1)	
– Superior pedicle	–	–	3 (2.3)	
– Inverted-T	–	–	2 (1.5)	

Table 3. Tumor characteristics, axillary involvement, margin status, and pathology

Variable	Total (n=264)	BCS (n=132)	OPC (n=132)	p
Gross pathology, n (%)				0.996[c]
– IDC	202 (76.5)	102 (77.3)	100 (75.8)	
– ILC	13 (4.9)	6 (4.5)	7 (5.3)	
– DCIS	27 (10.2)	14 (10.6)	13 (9.8)	
– Papillary	7 (2.7)	3 (2.3)	4 (3.0)	
– Mucinous	10 (3.8)	5 (3.8)	5 (3.8)	
– NET	5 (1.9)	2 (1.5)	3 (2.3)	
Tumor size, n (%)				<0.001[c]
– ≤1 cm	63 (23.9)	37 (28.0)	26 (19.7)	
– 1.01-2 cm	116 (43.9)	70 (53.0)	46 (34.8)	
– 2.01-4.99 cm	80 (30.3)	25 (18.9)	55 (41.7)	
– ≥5 cm	5 (1.9)	0 (0)	5 (3.8)	
Axillary involvement, n (%)				<0.001[c]
– Negative	198 (75.0)	124 (93.9)	74 (56.1)	
– Positive	66 (25.0)	8 (6.1)	58 (43.9)	
Surgical margins, n (%)				NA
– Negative	263 (99.6)	131 (99.2)	132 (100)	
– Positive	1 (0.4)	1 (0.8)	0	

Table 4. Postoperative complications and patient-reported outcome scores (BREAST-Q and ASEX)				
Variable	**Total (n=264)**	**BCS (n=132)**	**OPC (n=132)**	**p**
BREAST-Q score, median (IQR)	74 (71-81)	71 (66-74)	80 (75-87)	<0.001[b]
ASEX score, median (IQR)	16 (14-18)	17 (15-19)	14 (12-17)	<0.001[b]
ASEX category, n (%)				0.004[c]
– <11 (no dysfunction)	10 (3.8)	0 (0)	10 (7.6)	
– ≥11 (sexual dysfunction)	254 (96.2)	132 (100)	122 (92.4)	
Complications, n (%)				0.916[c]
– None	240 (90.9)	121 (91.7)	119 (90.2)	
– Minor	22 (8.3)	10 (7.6)	12 (9.1)	
– Major	2 (0.8)	1 (0.8)	1 (0.8)	

[S-310]

Comparison of long-term results of local steroid therapy versus oral steroid therapy in idiopathic granulomatous mastitis

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Objective: Idiopathic granulomatous mastitis (IGM) is a chronic inflammatory condition that mimics breast carcinoma and is associated with autoimmune processes and Corynebacterium infections. While systemic steroids are commonly used, they are linked to high recurrence rates (up to 50%) and systemic side effects. This study compares the efficacy, duration, side effect profile, and recurrence rates of combined local steroid therapy (intralesional + topical) versus classic oral steroid therapy.

Material and Methods: A retrospective cohort study evaluated 105 patients (LST: 69, OST: 36) diagnosed with IGM between 2019 and 2024. Pregnant/lactating patients and those with malignancy suspicion were excluded. The LST group received intralesional triamcinolone and topical steroids, while the OST group received systemic prednol. Statistical analyses included Mann-Whitney U, chi-square, and Kaplan-Meier tests for recurrence-free survival.

Results: Demographic characteristics were similar between groups. Although complete response rates were comparable (LST 95.7% vs. OST 86.1%, p=0.119), the median treatment duration was significantly shorter in the LST group (3 months) compared to the OST group (5 months) (p=0.005). Factors prolonging LST duration included lesion size, fistulas, and abscesses. While overall side effect rates were similar, the OST group experienced systemic effects like weight gain and hirsutism, whereas the LST group showed only local skin changes. Kaplan-Meier analysis revealed significantly superior recurrence-free survival in the LST group (p=0.034), with lower recurrence rates (7.2% vs. 19.4%).

Conclusion: Local steroid therapy offers significant advantages, including high patient compliance and no need for dose tapering. Providing significantly shorter treatment durations and superior recurrence-free survival, it is a reliable and effective first-line treatment option for both uncomplicated and complicated IGM cases.

Keywords: Granulomatous mastitis, local steroid therapy, oral steroid therapy

[S-311]

Hilar loss and cortical thickness as clinical decision tools for axillary surgery after neoadjuvant chemotherapy

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Objective: Axillary surgery after neoadjuvant chemotherapy (NAC) is increasingly moving toward de-escalation. However, reliable preoperative indicators to safely avoid ALND remain limited. We evaluated whether baseline ultrasonographic findings—hilar loss and cortical thickness—can serve as clinical decision tools for predicting the need for ALND after NAC.

Material and Methods: A total of 108 patients with biopsy-proven metastatic axillary lymph nodes who underwent targeted axillary dissection were retrospectively analyzed. Hilar loss and cortical thickness were assessed. ROC analysis identified the optimal cortical thickness threshold. Independent predictors were evaluated using multivariable logistic regression. A three-component clinical risk score incorporating hilar loss, cortical thickness ≥6 mm, and ycT≥2 was constructed.

Results: ALND was performed in 49 of 108 patients (45.4%). Cortical thickness alone demonstrated limited discriminatory ability for predicting ALND (AUC=0.55). ROC analysis identified 6.0 mm as the optimal cut-off, yielding a sensitivity of 16.7% and a specificity of 94.8%. Patients with hilar loss had higher ALND rates. Although hilar loss and cortical thickness were associated with ALND in univariate analyses, they did not retain independent significance in the multivariable model. The multivariable logistic regression model demonstrated excellent discrimination (AUC=0.91) and adequate calibration (Hosmer-Lemeshow p=0.68). Radiologic complete response suspicion independently reduced the likelihood of ALND (OR=0.16; p=0.011). In the three-component risk model incorporating hilar loss, cortical thickness ≥6 mm, and ycT≥2, ALND rates increased stepwise from 23.1% (score 0) to 43.9% (score 1), 73.3% (score 2), and 85.7% (score 3). Each 1-point increase in the risk score nearly tripled the odds of ALND (OR=2.89; p=0.0005). The risk score demonstrated moderate discrimination (AUC=0.69).

Conclusion: While hilar loss and cortical thickness are not strong standalone predictors, when integrated with tumor response parameters, they form a practical and clinically meaningful risk model. This approach may help optimize patient selection and reduce unnecessary ALND after NAC.

Keywords: Neoadjuvant chemotherapy, risk score, targeted axillary disection

Table 1. ALND rates according to the three-component risk score

Risk score	Number of patients (n)	ALND (n)	ALND rate (%)
0	26	6	23,1
1	57	25	43,9
2	15	11	73,3
3	7	6	85,7

Risk score = Hilar loss (1 point) + Cortical thickness ≥6 mm (1 point) + ycT ≥2 (1 point).

[S-312]

Ultrasound guided skin projection marking to reduce surgical margin positivity in breast conserving surgery: A prospective comparative study

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Objective: In breast-conserving surgery (BCS) cases, the technique we routinely use, which reduces surgical positivity, is compared with other techniques.

Material and Methods: This prospective comparative study included 195 breast cancer patients who underwent BCS between January and July 2025. The patients in our study were divided into three groups: the first group consisted of patients who were only marked with a wire; the second group consisted of patients who underwent shaving surgery on the excision cavity after wire marking; and the third group consisted of patients who underwent skin marking with ultrasound (USG) after wire marking to identify areas of tumor and structural damage in the breast.

Results: The rates of tumor positivity at the surgical margins were 23.1%, 0%, and 3.3%, respectively ($p<0.001$).

Conclusion: In the preoperative period, marking the mass in the breast with a wire under ultrasound guidance, followed by marking the skin projection of the tissue identified as pathological by the radiologist using ultrasound, is a valuable method to reduce positive surgical margins.

Keywords: Breast conserving surgery, skin projection marking, breast, re-excision rates, reoperation

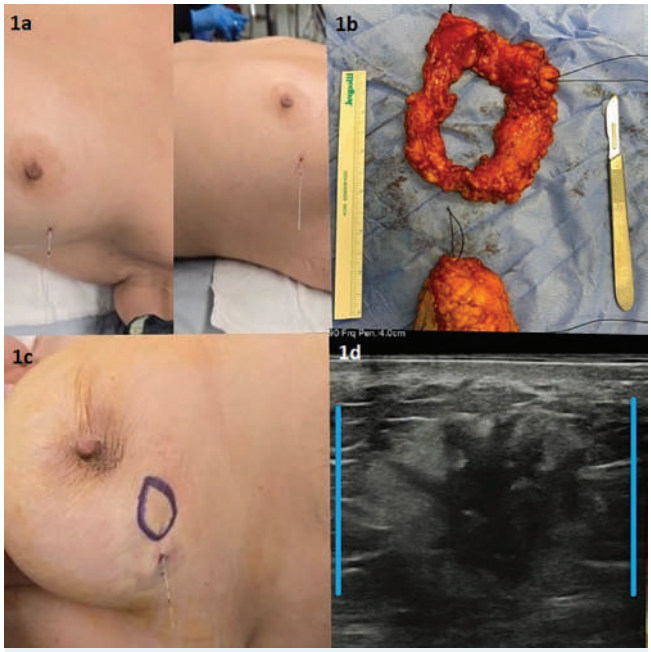


Figure 1. (a) Marking of breast malignancies that cannot be felt during examination with a wire, (b) Shaving material removed from the cavity left behind after the specimen was removed, (c) The marked projection of the pathological tissue observed internally onto the skin during the placement of a wire marker for a non-palpable breast malignancy detected during examination, (d) The radiologist will mark the skin to guide the surgeon in locating the mass within the breast and the surrounding pathologically affected tissues.

Table 1. Comparison of metric parameters by group

	Groups	N	Middle	Minimum	IQR	Maximum	Mean rank	p-value
Distance of the tumor from the areola (mm)	I	65	25	5	30	80	78.26	0.687
	II	31	25	5	20	70	85.13	
	III	61	22.5	5	20	85	76.67	
Resection size (cc)	I	65	82	9	115	560	75.15	0.533
	II	31	78	26	112	380	77.18	
	III	61	94	27	106	420	84.02	
Longest tumor length (mm)	I	65	18	1	16	75	86.08	0.116
	II	31	15	1	10	47	65.58	
	III	61	18	1	15	40	78.28	
The tumor's closest distance to the surgical margin (mm)*	I	65	2	0	6	20	69.27	0.058
	II	31	5	0	9	10	90.68	
	III	61	3.5	0	6	30	83.43	
Number of lymph nodes removed	I	65	5	0	6	26	69.48	0.113
	II	31	7	2	7	20	88.10	
	III	61	6	1	6	19	81.88	
Number of malignant lymph nodes	I	65	0	0	0	5	75.12	0.572
	II	31	0	0	0	7	78.18	
	III	61	0	0	0	4	80.98	

IQR: Interquantile range.

Table 2. Comparison of groups based on certain parameters

			Groups			p-value
			BCS with wire marking under USG guidance	Cavity shaving	Projection marking with USG	
The quadrant where the tumor is located in the breast	Upper outer quadrant	N	33	17	40	0.265
		%	36.7	18.9	44.4	
	Upper inner quadrant	N	16	6	7	
		%	55.2	20.7	24.1	
	Lower inner quadrant	N	3	2	6	
		%	27.3	18.2	54.5	
	Lower outer quadrant	N	8	6	5	
		%	42.1	31.6	26.3	
	Retro areolar	N	5	0	3	
		%	62.5	0	37.5	
Neoadjuvant chemotherapy	Not taken	N	41	10	25	0.006
		%	53.9	13.2	32.9	
	Taken	N	24	21	36	
		%	29.6	25.9	44.4	
Estrogen receptor	Negative	N	9	2	5	0.430
		%	56.3	12.5	31.3	
	Positive	N	56	29	56	
		%	39.7	20.6	39.7	
Progesterone receptor	Negative	N	18	8	19	0.845
		%	40	17.8	42.2	
	Positive	N	47	23	42	
		%	42	20.5	37.5	
HER2	Negative	N	50	21	51	0.220
		%	41	17.2	41.8	
	Positive	N	15	10	10	
		%	42.9	28.6	28.6	
Total		N	65	31	61	
		%	41.4	19.7	38.9	

BCS: Breast conserving surgery, USG: Ultrasonography, HER2: Human epidermal growth factor receptor 2.

Table 3. Comparison of groups based on certain parameters

Surgical margin positivity			Groups			p-value
			Wire marking under USG guidance	Cavity shaving	Projection marking with USG	
Positive surgical margin after surgery (according to Spesimen)						
Surgical margin positivity	Negative	N	46	25	54	0.049
		%	36.8	20	43.2	
	Positive	N	19	6	7	
		%	59.4	18.8	21.9	
Positive surgical margin after surgery (after the procedure is completed)						
Surgical margin positivity	Negative	N	46	31	54	0.001
		%	35.1	23.7	41.2	
	Positive	N	19	0	7	
		%	73.1	0	26.9	
After completion of BCS techniques, surgical margin positivity according to the NCCN guidelines						
Surgical margin positivity	Negative	N	50	31	59	<0.001
		%	35.7	22.1	42.1	
	Positive	N	15	0	2	
		%	88.2	0	11.8	
Total		N	65	31	61	
		%	41.4	19.7	38.9	
Tumor presence in re-excision material						
Becoming negative		N	13	0	2	0.052
		%	68.4	0	28.6	
There is a tumor at the surgical margin		N	2	0	0	
		%	10.5	0	0	
No tumor in the re-excision material		N	4	0	5	
		%	21.1	0	71.4	
Total		N	19	0	7	
		%	73.1	0	26.9	

BCS: Breast conserving surgery, USG: Ultrasonography.

[S-313]

Sarcopenia and body composition changes in breast cancer patients receiving neoadjuvant therapy

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Objective: Sarcopenia is an important factor affecting treatment tolerance and clinical outcomes in patients with breast cancer. Body composition changes during neoadjuvant therapy may not be adequately reflected by conventional anthropometric measures such as body mass index (BMI). This study aimed to evaluate changes in sarcopenia prevalence defined by the psoas muscle index (PMI), as well as changes in HAUS score and BMI, before and after neoadjuvant therapy.

Material and Methods: A total of 96 breast cancer patients who received neoadjuvant therapy and had available pre- and post-treatment computed tomography scans were retrospectively analyzed. PMI was calculated at the L3 vertebral level by normalizing bilateral psoas muscle area to height. Sarcopenia was defined as PMI <36. Paired comparisons were performed between pre- and post-treatment values. Changes in sarcopenia prevalence were assessed using the McNemar test, and continuous variables were analyzed using the Wilcoxon signed-rank test. Associations between variables were evaluated using Spearman correlation analysis.

Results: Sarcopenia was present in 16 patients (16.7%) before neoadjuvant therapy and increased to 25 patients (26.0%) after treatment. Nine patients without pre-treatment sarcopenia developed sarcopenia following therapy, while no patient demonstrated reversal. This increase was statistically significant (McNemar test, p=0.004). Mean PMI significantly decreased after neoadjuvant therapy (45.84 vs. 43.85; mean change -1.99; p<0.001). HAUS scores also showed a significant decline (mean change -2.89; p<0.001). In contrast, BMI demonstrated a minimal but statistically significant increase (+0.12; p=0.026). No significant correlations were observed between changes in PMI and changes in BMI or HAUS (all p>0.05).

Conclusion: Neoadjuvant therapy is associated with significant muscle loss and increased sarcopenia prevalence despite preserved BMI in patients with breast cancer. Conventional anthropometric measures may fail to capture treatment-related muscle depletion. Imaging-based muscle assessment may provide a more sensitive evaluation of body composition changes during neoadjuvant therapy.

Keyword: Body composition body mass index breast cancer neoadjuvant therapy sarcopenia

[S-314]

Permanent section-based axillary management in early-stage breast cancer: Is frozen section obsolete?

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Objective: Axillary management in early-stage breast cancer has progressively shifted toward de-escalation. Although sentinel lymph node biopsy remains the standard staging procedure in clinically node-negative disease, the routine use of intraoperative frozen section analysis is increasingly questioned in the era of ACOSOG Z0011 and modern adjuvant therapies. This study aimed to evaluate axillary outcomes in early-stage, clinically node-negative breast cancer patients undergoing sentinel lymph node biopsy without intraoperative frozen section analysis, with particular focus on the rate of secondary axillary lymph node dissection and factors associated with high nodal burden.

Material and Methods: This retrospective cohort study included 398 patients with early-stage invasive breast cancer treated with upfront surgery between January 2019 and January 2025 at a tertiary referral center. All patients underwent sentinel lymph node biopsy without frozen section analysis. Axillary management decisions were based on permanent section pathology, with completion axillary lymph node dissection performed only in patients with three or more metastatic sentinel lymph nodes. Clinicopathological variables were analyzed to identify factors associated with increased nodal burden.

Results: Sentinel lymph node metastasis was detected in 21.6% of patients. Among node-positive cases, 90.6% had one or two metastatic sentinel lymph nodes. Only 8 patients (2.0% of the entire cohort) were found to have three or more metastatic nodes and subsequently underwent secondary axillary lymph node dissection. Luminal B molecular subtype, higher Ki-67 proliferation index, and the presence of lymphovascular invasion were significantly associated with a higher sentinel lymph node burden (p<0.05). During a median follow-up of 40 months, locoregional recurrence was observed in 1.0% of patients managed without axillary dissection.

Conclusion: Omission of intraoperative frozen section during sentinel lymph node biopsy in early-stage, clinically node-negative breast cancer results in a very low rate of secondary axillary surgery and does not compromise locoregional control. Permanent section-based axillary decision-making appears safe and aligns with contemporary de-escalation strategies, supporting the selective rather than routine use of frozen section analysis.

Keywords: Breast cancer, sentinel lymph node biopsy, frozen section; axillary management, axillary lymph node dissection, de-escalation surgery, permanent section

[S-316]

Predictive factors for pathological complete response after neoadjuvant therapy in patients with HER2-positive breast cancer

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Objective: The aim of this study was to retrospectively evaluate pathological complete response (pCR) rates after neoadjuvant therapy (NACT) and to identify clinicopathological factors associated with treatment response in patients diagnosed with HER2-positive (+) breast cancer (BC).

Material and Methods: This retrospective study included 184 patients diagnosed with HER2-positive breast cancer who received neoadjuvant therapy. All patients received standard neoadjuvant chemotherapy combined with anti-HER2 targeted therapy. Factors associated with pCR were analyzed using univariate and multivariate logistic regression analyses.

Results: A total of 184 patients, among them, 53.8% were hormone receptor positive and 46.2% were hormone receptor negative. HER2 positivity was identified by IHC 3+ in 29.9% of patients and by IHC 2+/FISH positivity in 70.1%. Clinical T stage (cT) was T1-T2 in 51.6% and T3-T4 in 48.4% of patients. Clinically node (cN)-negative disease was observed in 38.6% of patients, while 61.4% had cN-positive disease. A Ki-67 proliferation index ≥20% was observed in 59.8% of patients. Univariate analysis demonstrated significant associations between pCR rates and several clinicopathological parameters. The pCR rate was significantly higher in HR-negative patients compared with HR-positive patients (58.8% vs. 34.3%, p<0.001). Patients with IHC 3+ HER2 positivity achieved higher pCR rates than those with IHC 2+/FISH+ status (56.4% vs. 41.1%, p=0.048). Patients with cT stage ≤T2 had significantly higher pCR rates compared with those with T3-T4 tumors (52.6% vs. 33.8%, p=0.012). Similarly, patients with cN-negative disease had higher pCR rates than those with cN-positive disease (54.9% vs. 38.2%, p=0.031). Higher pCR rates were also observed in grade 3 tumors compared with grade 1-2 tumors (57.1% vs. 35.4%, p=0.009), and in patients with Ki-67 ≥20% compared with those with Ki-67 <20% (53.6% vs. 29.7%, p=0.015).In multivariate logistic regression analysis including variables significant in univariate analysis, HR negativity (OR: 2.41; 95% CI: 1.32-4.38; p=0.004), IHC 3+ HER2 positivity (OR: 1.89; 95% CI: 1.01-3.54; p=0.046), cT stage ≤T2 (OR: 1.97; 95% CI: 1.08-3.61; p=0.026), and Ki-67 ≥20% (OR: 2.12; 95% CI: 1.14-3.95; p=0.018) were identified as independent predictors of pathological complete response. cN positivity and grade 3 were not independently associated with pCR in the multivariate analysis.

Conclusion: In patients with HER2-positive breast cancer, pCR rates following NACT are closely associated with HR status. Higher pCR rates were observed in HR-negative and IHC 3+ HER2-positive patients. These findings are consistent with the existing literature and may contribute to the development of individualized treatment strategies.

Keywords: Breast cancer, HER2-positive, pathological complete response

Table 1. Association between pathological complete response and clinicopathological parameters (univariate analysis)

Parameter	pCR (%)	p-value
Hormone receptor status		
Positive	34.3	
Negative	58.8	<0.001
Method of HER2 positivity		
IHC 3+	56.4	
IHC 2+/FISH+	41.1	0.048
Clinical T stage		
T1-T2	52.6	
T3-T4	33.8	0.012
Clinical N status		
N0	54.9	
N+	38.2	0.031
Histological grade		
Grade 1-2	35.4	
Grade 3	57.1	0.009
Ki-67 index		
<20%	29.7	
≥20%	53.6	0.015

Table 2. Multivariate logistic regression analysis for pathological complete response

Parameter	OR	95% confidence interval	p-value
Hormone receptor negativity	2.41	1.32-4.38	**0.004**
IHC 3+ HER2 positivity	1.89	1.01-3.54	**0.046**
Clinical T stage ≤T2	1.97	1.08-3.61	**0.026**
Ki-67 ≥20%	2.12	1.14-3.95	**0.018**
Clinical N positivity	0.78	0.41-1.49	0.45
Histological grade 3	1.43	0.78-2.63	0.24

[S-317]

Is radiological complete response sufficient to omit surgery reliability of core biopsy after neoadjuvant chemotherapy

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Objective: Neoadjuvant chemotherapy (NACT) is administered in breast cancer to reduce tumor size and achieve pathological complete response (pCR). The necessity of surgery in patients who achieve radiological complete response (rCR) has recently become a subject of debate. This study aimed to evaluate the reliability of preoperative core biopsy in detecting residual disease by comparing biopsy findings with final postoperative pathology results in patients with rCR.

Material and Methods: Patients who underwent surgery after NACT between May 11, 2023 and June 1, 2024 at Haseki Training and Research Hospital, Department of General Surgery were retrospectively analyzed. Patients with rCR confirmed by physical examination and imaging were included, while those without rCR were excluded. Core biopsy from the tumor bed was performed preoperatively in patients with rCR, followed by surgical resection. Preoperative biopsy findings were compared with final pathological results.

Results: Among 71 patients operated after NACT, 36 met the inclusion criteria. Core biopsy revealed no tumor in 35 patients (97.2%) and residual tumor in 1 patient (2.8%). Final pathology demonstrated pCR in 22 patients (61.1%) and residual tumor in 14 patients (38.9%). The sensitivity, specificity, and overall accuracy of core biopsy were 100%, 62.9%, and 63.9%, respectively. The false negative rate was 37.1%.

Conclusion: Due to a false negative rate of 37.1%, omitting surgery based solely on core biopsy findings in patients with radiological complete response does not appear to be safe. These findings support that surgery remains the standard treatment following NACT.

Keywords: Breast cancer, core biopsy, neoadjuvant chemotherapy

Table 1. Concordance between core biopsy and final pathology

	Final pathology pCR	Residual tumor	Total
Core biopsy negative	22	13	35
Core biopsy positive	0	1	1
Total	22	14	36

[S-318]

Comparison of clinical, radiological, and pathological characteristics between multicentric and unifocal breast cancer

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Objective: The presence of multicentric tumors in breast cancer represents an important clinical entity affecting surgical planning, axillary management, and prognostic evaluation. However, the relationship between multicentric disease and tumor biology remains incompletely understood. This study aimed to compare the clinical, radiological, and pathological characteristics of multicentric breast cancers with those of unifocal tumors.

Material and Methods: A total of 321 patients who underwent surgery for breast cancer between 2020 and 2025 were retrospectively analyzed. Patients were divided into two groups according to tumor focality: multicentric (n=63) and unifocal (n=258). Demographic characteristics, axillary lymph node status, immunohistochemical features, proliferation indices, pathological findings, and the diagnostic performance of imaging modalities were evaluated.

Results: The mean age of patients with multicentric tumors was significantly lower compared with the unifocal group (56.9±16.5 vs. 63.4±14.5 years; p=0.016). Axillary lymph node metastasis was significantly more frequent in multicentric tumors (60.3% vs. 44.2%; p=0.022). Evaluation of HER-2 status demonstrated a markedly higher rate of HER-2 positivity in the multicentric group compared with unifocal tumors (25.4% vs. 10.1%; p=0.0012). Lymphovascular invasion was also significantly more common in multicentric tumors (44.4% vs. 27.5%; p=0.0091). No statistically significant differences were observed between the groups regarding estrogen receptor (ER) and progesterone receptor (PR) positivity or Ki-67 proliferation index. Similarly, the presence of a concomitant ductal carcinoma *in situ* (DCIS) component and perineural invasion did not differ significantly between groups.The diagnostic accuracy for detecting multicentricity was 78.3% for ultrasonography, 78% for magnetic resonance imaging (MRI), and 81% for PET/CT. In axillary evaluation, PET/CT demonstrated higher positive predictive value (74.8%) and negative predictive value (76.6%) compared with other imaging modalities, although these differences were not statistically significant. Among patients evaluated as axilla-negative by ultrasonography, additional imaging resulted in nodal upstaging in 12.9% of cases with MRI and 25.3% with PET/CT.

Conclusion: Multicentric breast cancers tend to occur at a younger age and are associated with higher rates of HER-2 positivity, lymphovascular invasion, and axillary lymph node metastasis compared with unifocal tumors. These findings suggest a more aggressive biological behavior in multicentric disease. Although imaging modalities demonstrate comparable diagnostic accuracy, additional imaging studies may provide clinically meaningful contributions to axillary evaluation and staging.

Keywords: Multicentric breast cancer, axillary lymph node metastasis, tumor biology

[S-319]

Comparative the effects of aloe vera and tetracycline on seroma formation after mastectomy and axillary dissection: An experimental rat model

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Objective: Seroma after mastectomy and axillary dissection is a common and clinically important complication that increases postoperative morbidity. Although various agents have been investigated to reduce seroma formation, the ideal method remains controversial. This study aimed to compare the effects of Aloe vera and tetracycline on seroma formation and wound healing.

Material and Methods: This experimental study included twenty-four female Wistar albino rats (200-250 g). The animals were randomly assigned to three groups (n=8). All rats underwent unilateral mastectomy and axillary dissection under general anesthesia. Group 1 (Control): No agent was applied. Group 2 (Aloe vera): Thirty milligrams of lyophilized aloe vera was applied into the dead space. Group 3 (Tetracycline): Tetracycline (15 mg/kg) was applied into the dead space. On postoperative day 10, seroma volume was measured by ultrasonography. Tissue samples from the surgical area were evaluated histopathologically. Hemorrhage, edema, congestion, necrosis, fibrin, polymorphonuclear leukocytes (PNL), fibroblasts, lymphocytes, macrophages, vascular proliferation, and fibrosis were scored semi-quantitatively.

Results: A significant difference in seroma volume was observed among the groups ($p<0.001$). Seroma volume in the control group was significantly higher than in the Aloe vera and tetracycline groups ($p<0.05$), while no difference was found between the aloe vera and tetracycline groups ($p>0.05$). Fibrin and PNL scores were significantly higher in the aloe vera group ($p=0.02$ and $p=0.01$). Necrosis scores and lymphocyte density were significantly lower in the tetracycline group compared with the control group ($p<0.05$). No significant differences were observed for the remaining parameters (Table 1). Histopathological evaluation showed prominent seroma cavities and diffuse inflammatory infiltration in the control group (Figure 1). In the aloe vera group, seroma areas were more limited, with increased inflammatory cell density and fibroblast activity (Figure 2). In the tetracycline group, seroma cavities were minimal, and inflammation and congestion were milder (Figure 3). These findings support a stronger effect of tetracycline on seroma formation and inflammatory response.

Conclusion: Both aloe vera and tetracycline significantly reduce seroma formation after mastectomy and axillary dissection. However, due to its more effective suppression of the inflammatory response, lower necrosis rates, and more balanced tissue healing profile, tetracycline appears to be a more reliable agent for seroma control. These findings suggest that tetracycline may be considered a preferable option in the clinical management of postoperative seroma. Aloe vera may serve as a supportive agent; however, further large-scale and long-term studies are required before it can be recommended as a standard treatment alternative.

Keywords: Seroma, mastectomy, axillary dissection, aloe vera, tetracycline

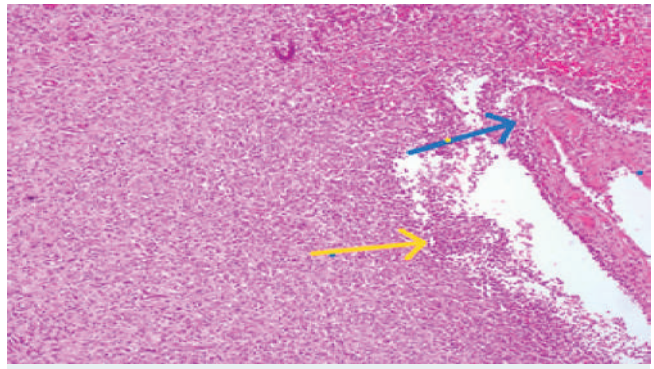


Figure 1. Control group, H&E ×4. Blue arrow: seroma; yellow arrow: general inflammation.

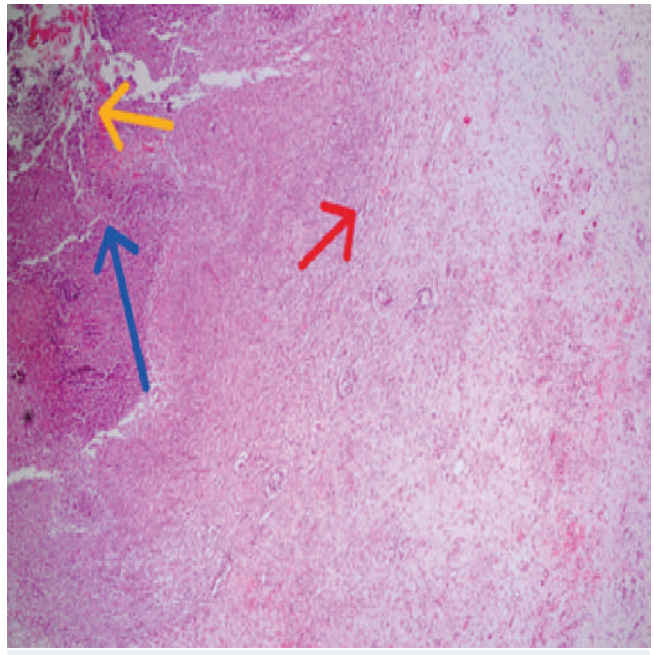


Figure 2. Aloe vera group, H&E ×4. Yellow arrow: seroma; blue arrow: general inflammation; red arrow: fibroblasts.

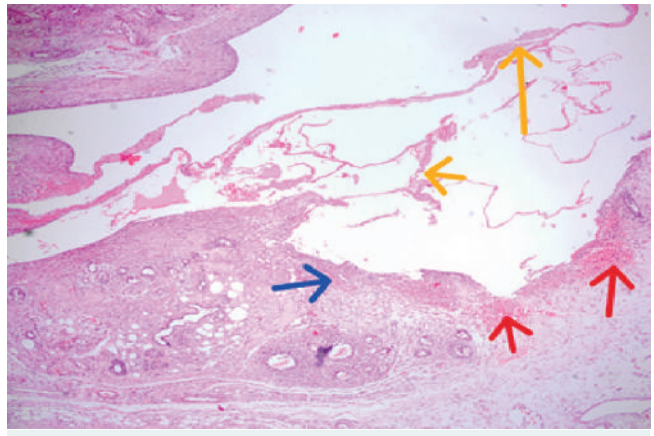


Figure 3. Tetracycline group, H&E ×4. Yellow arrow: seroma; blue arrow: general inflammation; red arrow: congestion.

Table 1. Comparison of seroma volume and histopathological parameters among Group 1, Group 2, and Group 3

Paramater	Group 1 (n=8)	Group 2 (n=8)	Group 3 (n=8)	Kruskal-Wallis p	Group 1 vs. Group 2	Group 2 vs. Group 3	Group 2 vs. Group 3
Seroma volume (mL, mean ± SD)	2.14±3.07	0.28±0.30	0.19±0.32	<0.001	<0.05	<0.05	>0.05
Vacsular proliferatin (0-3, median) [min-max]	2 [1-2]	2 [1-3]	2 (2-2)	0.40	NS	NS	NS
Fibrin	2 (0-3)	3(1-3)	1 (0-1)	0.02	NS	<0.05	NS
Hemorragi	1 (0-2)	1 (0-2)	0 (0-3)	0.21	NS	NS	NS
Edema	1 (0-1)	1 (1-1)	1 (1-2)	0.31	NS	NS	NS
Necrosis	1 (1-2)	1 (0-3)	1 (0-1)	0.04	NS	<0.05	NS
Kongesion	1 (1-2)	1 (1-2)	1 (1-2)	0.76	NS	NS	NS
PNL	2 (1-3)	3 (1-4)	0 (0-1)	0.01	<0.05	<0.05	<0.05
Fibroblast	2 (1-2)	1 (1-1)	2 (1-2)	0.12	NS	NS	NS
Lymphocyte	1 (0-2)	1 (0-1)	2 (2-3)	0.03	NS	<0.05	<0.05
Macrophage	1 (0-3)	1 (0-3)	2 (0-3)	0.28	NS	NS	NS
Collagen	1 (0-2)	1 (0-2)	1 (0-2)	0.67	NS	NS	NS

[S-320]

Two-year outcomes and factors affecting recovery in 84 breast cancer patients undergoing immediate breast reconstruction with simultaneous latissimus dorsi flap

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Objective: The aim of this study was to evaluate the two-year long-term surgical, functional, and aesthetic outcomes in breast cancer patients who underwent immediate breast reconstruction with a latissimus dorsi myocutaneous flap (LDF) following mastectomy, and to analyze factors influencing postoperative recovery.

Material and Methods: This retrospective study included 84 patients who underwent mastectomy for breast cancer and immediate breast reconstruction with LDF between January 2018 and December 2021. Demographic characteristics, tumor stage, adjuvant therapies, surgical techniques, and early and late complications were recorded. All patients were followed for at least 24 months. Functional outcomes were assessed based on shoulder range of motion and patient-reported evaluations, while aesthetic outcomes and overall satisfaction were analyzed using a Likert scale.

Results: The mean age of the patients was 49.6±8.3 years. The median follow-up duration was 28 months (range: 2442 months). Reconstruction was performed with implant-assisted LDF in 52 patients (61.9%), while 32 patients (38.1%) underwent reconstruction using autologous LDF alone. In the early postoperative period, the most common complication was a donor-site seroma, observed in 21 patients (25%). Partial flap necrosis occurred in 3 patients (3.6%), and no cases of major flap loss were reported. Implant loss was identified in 5 patients (6%) (Table 1). Late complications included chronic donor-site pain in 10 patients (11.9%) and capsular contracture in 7 implant-based cases (13.5%). Revision surgery was required in 9 patients (10.7%). Functional assessment showed that shoulder range of motion fully returned to normal in 78% of patients. Mild strength loss was reported by 17%, whereas 5% experienced significant functional limitation affecting daily activities (Table 2). Regarding patient satisfaction, aesthetic satisfaction was 74% and overall satisfaction was 81%. A history of radiotherapy, high body mass index (BMI) >30, and smoking were significantly associated with increased complication rates ($p<0.05$).

Conclusion: Immediate breast reconstruction with a latissimus dorsi flap is a safe and effective surgical option with high patient satisfaction in breast cancer patients over the long term. Careful patient selection and thorough evaluation of adjuvant therapies are essential to reduce complication rates.

Keywords: Breast cancer, latissimus dorsi flap, immediate breast reconstruction, mastectomy, long term outcomes

Table 1. Early postoperative surgical complications

Complications	Number of patients	Rate (%)
Donor site seroma	21	25
Hematoma	6	7.1
Surgical site infections	5	6
Partial flep necrosis	3	3.6
Major flep loss	0	0

Table 2. Functional outcomes (shoulder function)

Functional status	Number of patients	Rate (%)
Full normal range of motion	66	78.6
Mild strength loss	14	16.7

[S-321]

Evaluation of malignancy risk in BI-RADS 4 subtypes using pathological and imaging findings

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Objective: The breast imaging reporting and data system (BI-RADS), developed by the American College of Radiology, is a standardized system for classifying breast imaging findings according to malignancy risk. BI-RADS 4 lesions account for approximately 2-6% of breast imaging findings, with reported malignancy rates ranging widely from 2% to 95%. This heterogeneity has led to the subdivision of BI-RADS 4 into low (4A), intermediate (4B), and high suspicion (4C) categories. Although current guidelines recommend biopsy for all BI-RADS 4 lesions, the necessity of biopsy in BI-RADS 4A lesions remains controversial.This study aimed to evaluate the relationship between BI-RADS 4 subtypes and malignancy by incorporating patient age, lesion size, number of imaging modalities, and multimodal BI-RADS 4 concordance, and to reassess the necessity of biopsy in all BI-RADS 4 lesions.

Material and Methods: Breast lesions reported as BI-RADS 4 between 2021 and 2025 at University of Health Sciences Türkiye, Kanuni Sultan Süleyman Training and Research Hospital were retrospectively analyzed. Patient age, lesion size (mm), BI-RADS 4 subtype, imaging modalities in which BI-RADS 4 was detected, and histopathological outcomes were recorded. Lesions were categorized by age (<50 vs. ≥50 years), size (<10 mm vs. ≥10 mm), and number of imaging modalities. Histopathological results were classified as benign, malignant, or high-risk; malignant and high-risk lesions were grouped as non-benign.

Results: A total of 110 patients were included. BI-RADS 4 lesions were most frequently detected by ultrasonography. A significant association was observed between BI-RADS 4 subtypes and histopathological outcomes, with malignancy rates increasing significantly from BI-RADS 4A to 4C ($p<0.001$). On mammography, malignancy rates increased from 11.3% in BI-RADS 4A lesions to 80% in BI-RADS 4C lesions. No statistically significant difference was found in non-benign lesion rates between lesions <10 mm and ≥10 mm ($p=0.53$). Although non-benign rates were higher in lesions detected as BI-RADS 4 by more than one imaging modality, this difference did not reach statistical significance ($p\approx0.12$).

Conclusion: BI-RADS 4 subtypes are not homogeneous in terms of malignancy risk, which increases progressively from 4A to 4C. Although BI-RADS 4A lesions are considered low suspicion, their malignancy risk is not negligible. Our findings suggest that biopsy decisions should be based on a comprehensive risk assessment incorporating both patient- and lesion-related factors, rather than subtype alone. Based on this approach, biopsy remains an appropriate strategy for all BI-RADS 4 subgroups.

Keywords: BI-RADS, biopsy

[S-322]

Sentinel and non-sentinel lymph node involvement in clinically N0 breast cancer after neoadjuvant therapy: An analysis of initially node-positive cases

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Objective: Axillary involvement in breast cancer plays a critical role in both prognosis and treatment planning. Neoadjuvant chemotherapy (NACT) not only reduces tumor size but can also achieve axillary sterilization, potentially altering the surgical approach. However, in patients who are initially node-positive (N+) and become clinically node-negative (cN0) after NACT, the adequacy of sentinel lymph node biopsy (SLNB), the rate of SLN positivity, and the likelihood of non-sentinel lymph node (non-SLN) involvement remain important clinical questions. This study aimed to identify clinical and biological factors associated with SLN positivity and non-SLN involvement in breast cancer patients who were initially clinically node-positive (N+) and became cN0 following NACT.

Material and Methods: A total of 157 female patients were retrospectively evaluated. All patients were clinically node-positive at diagnosis and underwent SLNB after being assessed as clinically node-negative following NACT. Among them, 46 patients with positive SLN results underwent completion axillary lymph node dissection, and non-SLN involvement was assessed. The associations of SLN and non-SLN status with clinical T and N stage, focality, histological grade, ER, PR, HER2, Ki-67 index, and molecular subtype were analyzed.

Results: The mean age of the patients was 52.9±11 years. SLN positivity was identified in 29.3% of patients. Mastectomy was performed in 63.1% of the patients, while 36.9% underwent breast-conserving surgery (BCS). Among SLN-positive patients, 60.9% had non-SLN involvement. SLN positivity was significantly lower in patients who achieved a pathological complete response (pCR) in the breast (5.5%) compared to those who did not (42.2%) ($p<0.001$). However, among SLN-positive patients, breast pCR was not significantly associated with non-SLN involvement ($p=0.689$). The false-negative rate (FNR) of sentinel lymph node biopsy was found to be 8.3%. SLN positivity was significantly associated with ER positivity ($p=0.013$), PR positivity ($p=0.043$), and low Ki-67 index ($p=0.0094$). Additionally, a statistically significant difference was observed among molecular subtypes ($p=0.044$). No clinical or biological factor was significantly associated with non-SLN involvement (all $p>0.05$).

Conclusion: SLN positivity persists at a significant rate in patients who are clinically node-negative after NACT. Breast pCR is strongly associated with SLN negativity and may serve as a predictor of axillary sterilization. However, no reliable clinical or biological predictor of non-SLN involvement was identified among SLN-positive patients.

Keywords: Breast cancer, neoadjuvant chemotherapy, sentinel lymph node, non-sentinel lymph node

[S-323]

Residual disease patterns and molecular characteristics in fibrous scar-dominant response breast cancers after neoadjuvant chemotherapy

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Objective: Neoadjuvant chemotherapy (NACT) in breast cancer is not merely a strategy to reduce tumor size; it is a dynamic process that reveals biological response patterns directly influencing surgical planning,axillary management and margin assessment. While pathological complete response (pCR) serves as a strong prognostic marker in certain molecular subtypes, residual disease after NACT often exhibits heterogeneous morphological features. In clinical practice, a fragmented regression pattern, characterized by residual invasive tumor foci within a fibrotic scar, is particularly relevant for assessing surgical margins and detecting true tumor spread. This study aimed to evaluate the immunohistochemical and molecular characteristics of breast cancers exhibiting residual invasive disease in a fibrotic scar following NACT, in relation to residual tumor distribution patterns.

Material and Methods: Between January 2019 and December 2025, breast cancer patients undergoing surgery after NACT at University of Health Sciences Türkiye, Gülhane Training and Research Hospital were retrospectively reviewed. A total of 113 patients with residual invasive tumor within fibrotic scar tissue were included. Residual disease morphology was classified into two groups: Limited residual pattern (Group 1) and scattered residual pattern (Group 2). Demographic and clinicopathological data, residual tumor size, axillary management, fibrotic scar area, and ER, PR, HER2, and Ki-67 expression were analyzed. Statistical analyses were performed using SPSS v26.0. Continuous variables were assessed with the Kolmogorov-Smirnov test; non-parametric distributions led to between-group comparisons using the Mann-Whitney U test, while categorical variables were analyzed with chi-square or Fisher's exact tests. The diagnostic performance of ER and PR expression for differentiating residual patterns was evaluated by receiver operating characteristic (ROC) curve analysis.

Results: Following NACT, 87.6% of patients displayed a limited residual pattern (Group 1) and 12.4% a scattered pattern (Group 2). No significant differences were observed between groups regarding age, histologic subtype, surgical approach, or axillary management. Immunohistochemically, median ER and PR expressions were significantly higher in the scattered residual pattern (p=0.008 and p=0.004, respectively). Although axillary response did not differ significantly, patients with scattered residuals showed relatively higher partial and complete response rates. ROC analysis demonstrated moderate discriminatory ability for ER (AUC=0.718) and PR (AUC=0.736) in distinguishing residual patterns.

Conclusion: Residual disease on a fibrotic scar background after NACT does not represent a surgically homogeneous partial response. The scattered residual pattern, characterized by small and irregular tumor foci dispersed within extensive fibrotic areas, poses greater challenges for margin safety and pathological sampling. The association of this pattern with hormone receptor positivity suggests that not only the amount but also the distribution morphology of residual disease should be considered during surgical planning. These findings highlight the importance of integrating pathological response patterns with biological markers when determining post-NACT surgical strategies.

Keywords: Fibrotic scar, neoadjuvant chemotherapy, residual tumor pattern

[S-324]

Factors affecting healing time in idiopathic granulomatous mastitis: A retrospective cohort analysis

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Objective: Idiopathic granulomatous mastitis (IGM) is a rare, chronic inflammatory breast disease with an unpredictable clinical course and no standardized treatment algorithm. Identifying factors that influence healing time may help optimize treatment selection and patient counseling.

Material and Methods: We retrospectively analyzed patients diagnosed with IGM between 2020 and 2025. Demographic characteristics, clinical features (number of foci, presence of fistula, abscess size), and treatment modalities were recorded. Healing time was compared according to disease characteristics and treatment type. Correlation and linear regression analyses were performed to evaluate the relationship between abscess size and healing duration. A p-value <0.05 was considered statistically significant.

Results: The mean age of the entire cohort was 37.37±7.24 years, while the mean age at diagnosis was 32.56±7.49 years. Healing was observed in 83.5% of patients with single-focus disease compared to 62.9% in multifocal disease (p=0.071). Patients with fistula had a longer mean healing time than those without fistula (7.86±5.9 vs. 4.87±6.67 months, p=0.264). Abscess size showed a moderate positive correlation with healing time (r=0.31, p=0.017). Linear regression analysis demonstrated that healing time (months) could be predicted by the formula: healing time =2.59+(0.1 × abscess size in mm), indicating that each 10 mm increase in abscess size prolongs treatment duration by approximately one month.Mean healing times differed significantly according to treatment modality (p<0.01): observation (1.2±0.9 months), steroid injection (3.3±1.7 months), and oral steroid therapy (8.7±7.9 months). Healing duration in the oral steroid group was highly heterogeneous. Although longer healing times were observed in patients receiving steroids, these patients had larger initial abscess sizes, suggesting a selection bias.

Conclusion: Abscess size is a significant predictor of prolonged healing time in idiopathic granulomatous mastitis. While oral steroid therapy is often reserved for more severe disease, steroid injection in selected patients appears to shorten healing duration. Individualized treatment strategies based on disease burden may improve outcomes and reduce treatment duration.

Keywords: Idiopathic granulomatous mastitis, healing time, abscess size, treatment outcomes

[S-325]

Steroid-free approach in the management of idiopathic granulomatous mastitis: Comparison of surgical drainage with conservative treatment with aspiration alone

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Objective: Idiopathic granulomatous mastitis (IGM) is a chronic benign inflammatory breast disease that can clinically and radiologically mimic breast cancer and tends to recur. In practice, lesion size, multifocality, clinical severity, and imaging findings shape management, yet there is no universally accepted standard between surgical and non-surgical strategies; centers differ in response times, recurrence rates, and complication profiles.

Material and Methods: We prospectively evaluated 53 patients (mean age 37 years; range 20-78) diagnosed with IGM between January 2024 and January 2026. Patients were managed with one of two protocols. The surgical group underwent operative drainage of abscesses with debridement when needed. The non-surgical group received ultrasound-guided core needle abscess aspiration, repeated saline irrigation, and culture-directed antibiotics, followed by close clinical and ultrasonographic follow-up. No patient received oral or intralesional steroids at any point (pre- or post-procedure); our approach relied on mechanical evacuation/cleaning and, when indicated, surgical drainage and debridement.

Results: Lesions were predominantly unilateral and most commonly presented as painful masses or abscess/fistula formations. Healing was significantly faster after surgery: 90% achieved wound healing within a median of 13 days, and no patient required secondary surgery. In contrast, the aspiration group showed a longer overall "radiological" course despite early symptom control. Pain, erythema, and discharge typically subsided soon after aspiration, but complete symptom regression and ultrasound normalization generally required 2-3 months, and residual radiological sequelae could persist for up to 4 months. These longer intervals should not be labeled treatment failure; they mainly reflect the time required for granulomatous tissue and edema to resolve on ultrasound after the purulent component has been mechanically removed. Only two patients with clinically recurrent abscesses required re-aspiration or conversion to surgery; most others were safely observed.

Conclusion: During steroid-free follow-up, recurrences were less frequent in the surgical group, although minor complications such as seroma and wound dehiscence were observed. In the aspiration group, radiological persistence was common, but surgery was considered unnecessary unless a clear clinical flare-up occurred, emphasizing the primacy of symptoms over imaging alone. Overall, IGM can be successfully managed without steroid therapy, provided expectations are aligned with the chosen pathway. For patients treated with aspiration, persistent ultrasound findings should be anticipated and contextualized: radiological improvement is typically slower because resolution depends on gradual resorption after evacuation of purulent collections. Discussing alternatives, expected duration, and risks with the patient—and making a shared, preference-sensitive decision—are key to effective IGM management.

Keywords: Granulomatous mastitis, abscess drainage, conservative treatment



Figure 1. Skin fistulizing mastitis image. A patient presented to the clinic with complaints of breast pain and discharge, showing a fistula-like appearance of mastitis on the skin.

Table 1. Summary table

Parameter	Group 1 (surgical group)	Group 2 (aspiration and conservative treatment group)
Age, median (IQR)	36 (33-44)	35 (31-42)
Initial focus maximum diameter (mm), median (IQR)	26 (16-31)	30 (24-46)
Single focus	22 (84.6%)	18 (69.2%)
Multifocal (≥2 foci)	4 (15.4%)	8 (30.8%)
USG type 3	15 (57.7%)	6 (23.1%)
Clinical complete response (days), median (IQR)	12 (7-18)	-
USG complete response (days), median (IQR)	52 (32-85)	-
Wound healing time (days), median (IQR)	-	16 (11-28)
Recurrence, n/N (%)	2/24 (8.3%)	5/26 (19.2%)
Surgical complications (yes), n/N (%)	-	9/25 (36.0%)

[S-327]

Indications for surgical excision in intraductal papillomas and factors determining upgrade risk

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Objective: In this study, it was aimed to investigate the factors determining the indication for surgical excision in patients diagnosed with intraductal papilloma by needle biopsy after radiological imaging and to evaluate the role of lesion size and imaging characteristics in predicting the risk of malignancy upgrade.

Material and Methods: Between 2015 and 2025, 180 cases diagnosed with intraductal papilloma by fine-needle aspiration biopsy (FNAB) and core biopsy and treated with surgical excision at University of Health Sciences Türkiye, Şişli Hamidiye Etfal Training and Research Hospital were retrospectively analyzed. Patients' demographic characteristics, lesion size (≤10 mm and >10 mm), localization (retroareolar/peripheral), BI-RADS category, presence of microcalcifications, radiology-pathology concordance and final surgical pathology results were recorded. The detection of atypical papilloma, ductal carcinoma *in situ* (DCIS) or invasive carcinoma in the final pathology was defined as malignancy upgrade. Chi-square and Fisher's exact tests were used for statistical analyses where appropriate, and a p-value <0.05 was considered statistically significant.

Results: The median age of the 180 cases was 49 (29-72) years. Of the cases, 76 were in the ≤10 mm lesion group and 104 were in the >10 mm lesion group. The overall malignancy upgrade rate was 23.9%. While the upgrade rate was 31.7% in lesions >10 mm, this rate was 13.2% in lesions ≤10 mm ($p<0.05$). Malignancy upgrade rates were found to be significantly higher in lesions categorized as BI-RADS 4B and above, lesions accompanied by microcalcifications and peripherally located lesions. In cases with radiology–pathology discordance (benign papilloma on biopsy despite BI-RADS 4C/5 appearance), the upgrade risk was markedly increased.

Conclusion: In intraductal papillomas, the indication for surgical excision should not be based on a single parameter. In our study, it was observed that evaluating lesion size, BI-RADS category and imaging findings together was more informative in predicting upgrade risk. These findings suggest that non-surgical follow-up strategies may be discussed in selected low-risk patients.

Keywords: Intraductal papilloma, upgrade, atypia

[S-328]

Oncological safety, complications, and patient-reported outcomes of single axillary incision breast-conserving surgery in early-stage breast cancer

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Objective: Single axillary incision breast-conserving surgery (BCS) combined with sentinel lymph node biopsy (SLNB) offers a minimally invasive option for peripherally located, axillary-adjacent breast tumors. However, evidence regarding oncological safety, postoperative complications, and patient-reported outcomes of this approach remains limited. This study evaluates these outcomes in early-stage breast cancer.

Material and Methods: This retrospective study included 61 patients who underwent breast-conserving surgery through a single axillary incision for early-stage breast cancer between October 2022 and June 2025 at University of Health Sciences Türkiye, Ankara Etlik City Hospital. All tumors were peripherally located and axillary-adjacent, with a median nipple-areola complex distance of 6 cm (range: 3-10 cm). Tumor excision and SLNB were performed through the same axillary incision using a dual-mapping technique with radioisotope and indocyanine green. Surgical margins were evaluated according to SSO–ASTRO guidelines. Postoperative complications, including seroma, wound dehiscence, infection, hematoma, skin necrosis, and reoperation, were recorded. Patient satisfaction was assessed six months after completion of radiotherapy using the Turkish validated BREAST-Q® version 2.0 Breast-Conserving Therapy module. Descriptive statistical analyses were performed.

Results: The mean patient age was 55.9±12.9 years, and invasive ductal carcinoma was present in 89% of patients. Neoadjuvant therapy was administered to 30% of cases. Negative surgical margins were achieved in 93% of patients, with a re-excision rate of 3%. Overall postoperative complications occurred in 17% of patients, most commonly seroma (13%). Only one patient (2%) required reoperation due to major wound dehiscence. BREAST-Q analysis (response rate: 74%) demonstrated high patient satisfaction, particularly regarding satisfaction with the surgeon, medical team, and office staff. No local recurrence was observed during a median follow-up of 13 months.

Conclusion: Single axillary incision breast-conserving surgery is a safe and effective option for appropriately selected early-stage breast cancer patients, providing favorable oncological outcomes, acceptable complication rates, and high patient satisfaction without the need for advanced technological infrastructure.

Keywords: Breast-conserving surgery, single axillary incision, minimally invasive breast surgery, surgical complications, patient-reported outcomes, BREAST-Q

[S-330]

Impact of magnetic and metallic clip localization on surgical margin status in patients undergoing oncoplastic breast conserving surgery following neoadjuvant chemotherapy

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Objective: Neoadjuvant chemotherapy provides a prognostic advantage based on tumor biology in breast cancer, beyond increasing the rates of breast-conserving surgery by reducing tumor size. However, accurate localization of the residual tumor bed after treatment response is critical for achieving surgical margin negativity, which is essential for oncologic safety. Although metallic clips have traditionally been used to mark the tumor bed, magnetic clips have gained attention in recent years due to their ability to facilitate intraoperative real-time navigation, eliminate radiation exposure, and spare patients from additional invasive procedures such as wire localization. In this study, we aimed to compare the effects of magnetic and metallic clip marking on surgical margin negativity in patients undergoing breast-conserving surgery after neoadjuvant chemotherapy.

Material and Methods: A total of 118 patients who underwent level I-II oncoplastic breast-conserving surgery after neoadjuvant chemotherapy were prospectively included in the study. Tumor beds were marked with magnetic clips in 33 patients and metallic clips in 104 patients.In accordance with the institutional protocol, all patients underwent surgical resection guided by real-time intraoperative ultrasonography, with visualization of metallic clips and, if present, residual tumor. Routine cavity shaving was performed, and specimens were sent from all surgical margins. The primary endpoint was defined as surgical margin negativity. The secondary endpoint was defined as the necessity of routine cavity sampling.

Results: All patients were female. The median age was 55 years (range 28-78 years). In the magnetic clip group, surgical margin positivity was detected in only 1 of 33 patients (3.08%). In the metallic clip group, 3 of 104 patients (2.8%) had positive surgical margins. In all 4 patients with positive margins, margin negativity was achieved with cavity shaving, and none required re-excision. No statistically significant difference was found between the two groups (Table 1).

Conclusion: Tumor regression following neoadjuvant chemotherapy may make it more difficult to define surgical margins. Therefore, the accuracy of the marking method is crucial. In our study, magnetic clip marking demonstrated results at least equivalent to metallic clips interms of surgical margin safety. These findings suggest that magnetic clips may represent a safe and feasible marking method that could reduce the operator dependency considered one of the main disadvantages of intraoperative ultrasonography. Furthermore, considering the advantages of magnetic clips—including the absence of radiation exposure, real-time navigation capability, and elimination of the need for additional invasive procedures such as wire localization, thereby improving patient comfort—they appear to be a strong alternative in clinical practice.

Keywords: Breast conversing surgery, magnetic clip, metallic clip

Table 1. Surgical margin status regarding clip type

Group	Negative limit	Positive limit
Magnetic clip	32 (97%)	1 (3%)
Metallic clip	101 (97.2%)	3 (2.8%)

[S-331]

Recurrence rates and molecular subtype distribution in breast cancer patients achieving pathological complete response after neoadjuvant therapy: A single-center experience (2018-2022)

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Objective: Pathological complete response (pCR) after neoadjuvant therapy is considered a favorable prognostic factor in breast cancer. Achieving pCR is associated with improved survival outcomes, particularly in aggressive molecular subtypes. However, recurrence may still occur despite the absence of residual invasive disease. This study aimed to evaluate recurrence rates and molecular subtype distribution among patients achieving pCR in our institution.

Material and Methods: Breast cancer patients who received neoadjuvant therapy between 2018 and 2022 and achieved pathological complete response at İstanbul University, İstanbul Faculty of Medicine were retrospectively analyzed. pCR was defined as the absence of invasive carcinoma in both the breast and axillary lymph nodes on final pathological examination. Clinical characteristics and follow-up data were reviewed. Recurrence events and molecular subtype distribution were assessed.

Results: A total of 176 patients achieving pCR were included. During follow-up, recurrence was observed in 16 patients (9.1%). Among recurrent cases, 8 were HER2-positive, 5 were Luminal B subtype, and 3 were triple-negative breast cancer. Recurrences were observed across all molecular subtypes, with the highest number detected in the HER2-positive group.

Conclusion: Although pathological complete response is associated with favorable outcomes, recurrence may still develop in a subset of patients. In this cohort, HER2-positive tumors constituted the largest proportion of recurrent cases. These findings highlight the importance of continued surveillance even in patients achieving pCR.

Keywords: Breast cancer, pathological complete response, recurrence

Table 1. Study characteristics

Study design	Retrospective single-center analysis
Institution	İstanbul University, İstanbul Faculty of Medicine
Study period	2018-2022
Total patients achieving pCR	176
Definition of pCR	Absence of invasive carcinoma in both breast and axillary lymph nodes
Total recurrences	16
Overall recurrence rate	%9.1
HER2+ recurrence	8
Luminal B recurrence	5
Triple-negative breast cancer (TNBC) recurrence	5

[S-332]

Investigation of oxidative stress and mononuclear leukocyte DNA damage in idiopathic granulomatous mastitis patients

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Objective: Idiopathic granulomatous mastitis (IGM) is a rare, chronic inflammatory disease of the breast with an incompletely understood etiology. Although benign, it may exhibit a relapsing and treatment-resistant course and can clinically and radiologically mimic breast cancer, significantly affecting patients' quality of life. Autoimmunity has been proposed among the contributing factors; however, the underlying pathogenic mechanisms remain unclear. To date, no studies have concurrently evaluated oxidative stress and DNA damage in patients with IGM. The aim of this study was to investigate the presence of oxidative stress and mononuclear leukocyte DNA damage in patients with IGM.

Material and Methods: Between October 2023 and October 2024, 28 patients with clinically and histopathologically confirmed idiopathic granulomatous mastitis (IGM) who had not received corticosteroid or immunosuppressive therapy within the previous six months were enrolled from Bezmialem Vakıf University Faculty of Medicine Hospital and İstanbul University-Cerrahpaşa, İstanbul Faculty of Medicine. An age-matched control group of 27 healthy women was included. Venous blood and urine samples were obtained from all participants. Total oxidant status (TOS), total antioxidant status (TAS), oxidative stress index (OSI), and urinary 8-hydroxy-2′-deoxyguanosine (8-OHdG) levels were measured. Mononuclear leukocyte DNA damage was assessed using the alkaline single-cell gel electrophoresis (Comet Assay) method.

Results: The mean age of the patient and control groups was 37.3±5.3 and 35.4±8.6 years, respectively, with no significant difference between groups (p=0.081). Leukocyte, neutrophil, and lymphocyte counts, as well as the neutrophil-to-lymphocyte ratio, were significantly higher in the patient group (p<0.05). Mean C-reactive protein and erythrocyte sedimentation rate values were near the upper limit of normal. Patients with IGM exhibited significantly increased TOS, OSI, and urinary 8-OHdG levels compared with controls (p=0.009, p=0.028, and p=0.024, respectively), whereas TAS levels did not differ significantly between groups (p=0.534). Comet Assay analysis demonstrated significantly higher tail intensity and tail moment values in the patient group (p=0.029 and p=0.016, respectively).

Conclusion: These findings demonstrate that oxidative stress and oxidative DNA damage are significantly increased in patients with idiopathic granulomatous mastitis. The results suggest that oxidative stress-induced DNA damage may contribute to the pathogenesis of IGM. In the absence of a standardized treatment protocol, therapeutic strategies targeting oxidative stress, including antioxidant-based approaches, may represent potential adjunctive treatment options for IGM.

Keywords: Idiopathic granulomatous mastitis, oxidative stress, DNA damage

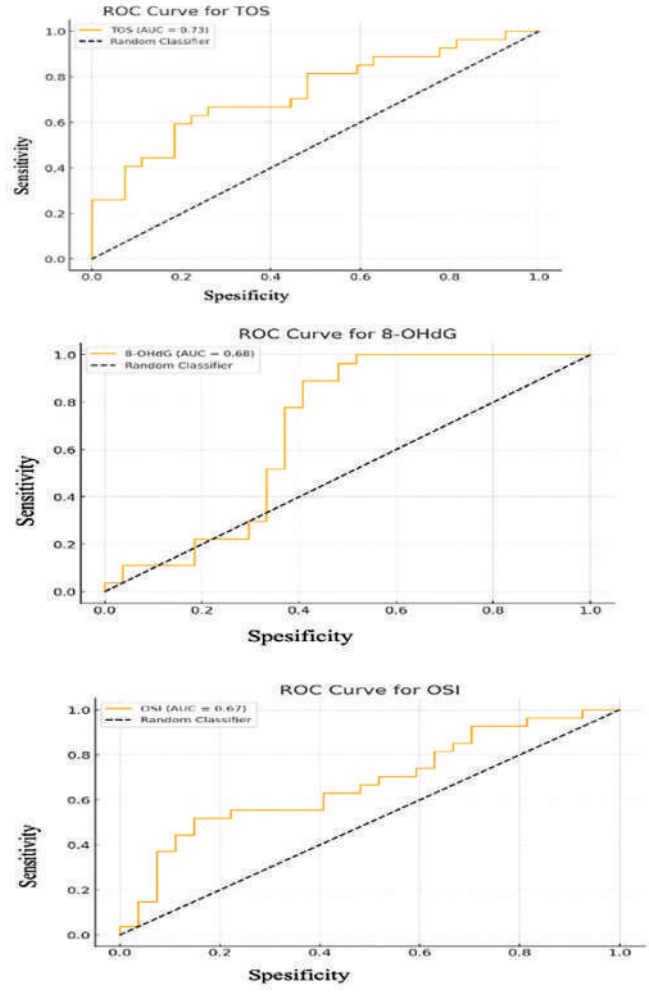


Figure 1. ROC curves of oxidative stress markers for discrimination between patient and control groups.

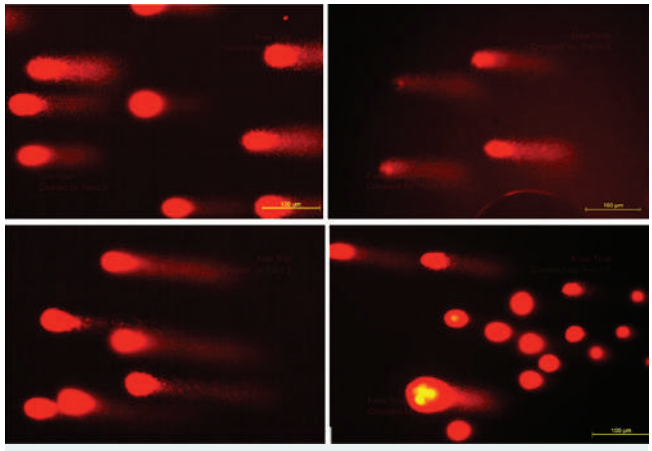


Figure 2. Representative images of damaged DNA exhibiting a comet-like appearance in the patient group, as assessed by the alkaline single-cell gel electrophoresis (Comet assay).

Table 1. Comparison of hematological, biochemical, serological, and oxidative stress parameters between patient and control groups

	Control group (n=27)				Patient group (n=28)				p	
	Mean ± SD			Median	Mean ± SD			Median		
WBC (×10⁹/L)	7.5	±	1.1	7.8	8.7	±	1.4	8.61	**0.002**	t
Neutrophil (×10⁹/L)	3.9	±	1.1	3.8	6.5	±	1.4	6.3	**0.000**	t
Lymphocyte (×10⁹/L)	1.8	±	0.4	1.8	2.2	±	0.7	2.2	**0.027**	m
NLR	2.04	±	0.57	2.06	3.02	±	1.1	3.05	**0.007**	m
HB (g/dL)	13.5	±	1.0	13.6	12.5	±	1.2	12.6	**0.003**	t
HCT (%)	43.3	±	2.8	44.4	40.4	±	4.2	41.1	**0.008**	m
PLT (×10⁹/L)	301.7	±	44.4	312.0	291.0	±	47.4	276.0	0.395	t
MCV (fL)	88.4	±	2.8	88.6	88.2	±	2.8	87.9	0.844	t
MCH (pg)	30.0	±	1.6	29.9	29.9	±	1.6	29.7	0.730	t
MCHC (g/dL)	33.6	±	1.3	33.8	33.6	±	1.2	33.7	0.821	t
Urea (mg/dL)	31.0	±	5.5	29.7	47.1	±	6.0	44.4	**0.000**	m
Creatinine (mg/dL)	0.78	±	0.20	0.74	1.14	±	0.32	1.28	**0.000**	m
AST (U/L)	20.1	±	6.1	19.0	21.5	±	6.4	21.5	0.418	m
ALT (U/L)	29.9	±	10.7	31.0	30.0	±	11.1	29.5	0.970	t
LDH (U/L)	157.5	±	35.9	149.0	274.8	±	35.6	267.0	**0.000**	t
Serum albumin (g/dL)	3.9	±	0.5	3.9	3.9	±	0.6	3.9	0.993	t
Serum sodium (mmol/L)	139.4	±	3.8	139.0	138.9	±	3.6	139.0	0.563	t
Serum potassium (mmol/L)	3.8	±	0.3	3.7	4.9	±	0.5	4.9	**0.000**	m
TOS (µmol H_2O_2 Equiv./L)	1.04	±	0.71	0.81	2.39	±	2.27	1.43	**0.009**	m
TAS (mmol Trolox Equiv./L)	0.85	±	0.32	0.91	0.89	±	0.22	0.90	0.534	t
Urine 8-OHdG (ng/ml)	23.62	±	19.2	25.63	36.3	±	8.5	35.0	**0.024**	m
OSI (arbitrary unit, AU)	155.2	±	168.2	116.7	284.7	±	296.5	178.3	**0.028**	m

Table 2. Tail intensity, tail moment analysis of control and patient groups m Mann-Whitney U test

	Min-max			Median	Mean ± SD		
Tail intensity %	0.003	-	16.58	3.45	4.84	±	5.0
Tail moment	0.0001	-	51.74	16.51	17.16	±	14.7

	Control group (n=15)				Patient group (n=14)				p	
	Mean ± SD			Median	Mean ± SD			Median		
Tail intensity %	3.15	±	4.1	1.80	6.78	±	5.3	5.26	**0.029**	m
Tail moment	10.8	±	11.9	7.71	24.0	±	15.0	22.29	**0.016**	m

[S-333]

Breast and axillary nodal response rates according to tumor molecular subtypes after neoadjuvant therapy in clinically node-positive breast cancer patients: Results of the AXSANA-EUBREAST3 prospective multicenter cohort study

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Objective: Neoadjuvant chemotherapy (NAC) produces heterogeneous responses depending on the biology of the breast tumor. Understanding subtype-specific response rates is critical for optimizing axillary management after NAC. AXSANA-EUBREAST3 (NCT04373655) is a multicenter, prospective cohort study investigating post-NAC axillary management in patients with initially node-positive breast cancer. In this study, breast and axillary nodal response rates after NAC were evaluated according to molecular subtypes within the AXSANA-EUBREAST3 cohort.

Material and Methods: Among patients enrolled in the prospective AXSANA cohort between 2020 and 2025, breast and axillary response rates after NAC were analyzed according to four intrinsic molecular subtypes (HR+/HER2−, HR+/HER2+, HR−/HER2+, and HR−/HER2−). Breast pathological complete response (pCR) was defined as the absence of residual invasive carcinoma in the breast (ypT0/is), allowing the presence of ductal carcinoma *in situ* (DCIS). Axillary pCR was defined as ypN0. Surgical axillary staging after NAC was performed using sentinel lymph node biopsy (SLNB), targeted axillary dissection (TAD), or axillary lymph node dissection (ALND).

Results: A total of 6,509 patients were included in the AXSANA cohort. Of these, 4,922 patients who underwent surgery were included in the analysis of breast and axillary nodal response rates; 1,587 patients were excluded due to not meeting study criteria, withdrawal of consent, absence of surgery, or unknown tumor subtype. The distribution of molecular subtypes in the entire cohort was 44.5% (n=2,189) HR+/HER2-, 23.4% (n=344) HR+/HER2+, 12.1% (n=595) HR-/HER2+, and 20% (n=984) HR-/HER2- ($p<0.001$). Among patients achieving breast pCR (ypT0/is), analysis of ypN status showed a statistically significant difference favoring higher ypN0 rates in triple-negative and HER2-positive tumors (93.1% and 90.1%, respectively). No significant association was demonstrated between tumor subtype and nodal burden after systemic therapy. Axillary pCR rates were 30.4% (n=665) in the HR+/HER2- group, 70.1% (n=810) in the HR+/HER2+ group, 86.4% (n=514) in the HR-/HER2+ group, and 68% (n=669) in the HR-/HER2- group ($p<0.001$). Among patients with breast ypT0/is, axillary pCR rates were 15.7%, 50.2%, 76.6%, and 51%, respectively ($p<0.001$).

Conclusion: Breast and axillary responses to NAC differ markedly according to the molecular subtype of breast cancer. The high breast and nodal pCR rates observed in HER2-positive and HR-/HER2- groups support axillary de-escalation strategies in selected patients. The prospective AXSANA-EUBREAST3 cohort provides strong subtype-specific evidence to guide personalized axillary management after NAC.

Keywords: Axillar nodal response , breast cancer, tumor molecular subtype

[S-335]

HER2-low breast cancer: A distinct biological subtype? A clinicopathological and survival analysis

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Objective: Interest has increased in whether HER2-low breast cancer, defined as immunohistochemistry (IHC) 1+ or IHC 2+/*in situ* hybridization (ISH)-negative, represents a biologically and clinically distinct subgroup compared with HER2-negative and HER2-positive tumors. Although traditionally classified as HER2-negative disease, the development of novel HER2-targeted therapies has renewed attention to its biological behavior and potential prognostic implications. This study aimed to compare the clinicopathological characteristics and survival outcomes of patients with HER2-low breast cancer to those with HER2-negative and HER2-positive disease, and to evaluate the prognostic significance of HER2-low expression through subgroup analyses stratified by hormone receptor (HR) status.

Material and Methods: A total of 1,144 patients with invasive breast cancer who underwent primary surgery were retrospectively analyzed. Patients were categorized according to HER2 status as HER2-negative (n=604), HER2-low (n=278), or HER2-positive (n=262). Demographic and clinicopathological variables including age, tumor size, histological type, tumor grade, lymph node metastasis, clinical stage, molecular subtype, and vascular, lymphatic, and perineural invasion were compared. Response to neoadjuvant chemotherapy (NACT), postoperative nodal status, local recurrence, and mortality were evaluated. Disease-free survival (DFS) and overall survival (OS) were analyzed. A p-value <0.05 was considered statistically significant.

Results: Patients with HER2-low tumors were older compared with HER2-negative and HER2-positive patients (>50 years: 66.2%; p=0.002), with a mean age of 55.4 years. No significant differences were observed in tumor size or clinical stage. Grade 2 tumors predominated in the HER2-low group (56.3%), whereas Grade 3 tumors were more frequent in the HER2-positive group (26.2%) (p<0.001). HR positivity was significantly higher in the HER2-low group (ER 88.1%; PR 77.7%; p<0.001). Vascular (30.4%), lymphatic (37.2%), and perineural invasion (16.2%) were also more common in HER2-low tumors (p≤0.001). Among patients receiving NACT (53.6%), the pathological complete response (pCR) rate was lowest in the HER2-low group (14.8%), compared with 26.5% in the HER2-negative and 42.6% in the HER2-positive groups (p<0.001). No significant differences were found in nodal status, recurrence, or mortality. In the HR-positive subgroup, differences in age and grade persisted (p<0.05). The Ki-67 index was highest in the HER2-positive group (46.7%; p<0.001). Although pCR remained lowest in HER2-low patients (11.7%; p<0.001), no significant differences were observed in DFS or OS.

Conclusion: HER2-low breast cancers are characterized by high HR positivity, predominantly luminal phenotype, and lower pCR rates compared with HER2-positive tumors. However, they do not demonstrate significant differences in survival outcomes compared with HER2-negative or HER2-positive disease, suggesting limited independent prognostic impact.

Keywords: HER2-low, prognosis, breast cancer

[S-336]

Impact of primary systemic therapy on postoperative complications following subcutaneous mastectomy with immediate reconstruction: A retrospective cohort study

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Objective: The impact of primary systemic therapy (PST) on postoperative complication rates following subcutaneous mastectomy with immediate reconstruction (SM-IR) remains a subject of debate. This study aims to assess the early complication rates in patients undergoing SM-IR after PST.

Material and Methods: This retrospective cohort study was conducted on patients who underwent SM-IR for breast cancer between January 2014 and May 2025 at Marmara University Hospital. Patients were divided into two groups according to whether they received PST: PST group or upfront surgery. Demographic, clinicopathological, surgical, and reconstruction characteristics were recorded. Postoperative complications were classified as major or minor. Univariate and multivariate logistic regression analyses were performed to identify independent predictors of postoperative morbidity.

Results: A total of 328 patients who underwent SM-IR were analyzed: comprising 184 patients in the PST group and 144 in the upfront surgery group. Patients in the PST group were younger and had more aggressive tumor biology, including higher rates of HER2-positive and triple-negative subtypes, higher Ki-67 index, and more advanced clinical T and N stages (p<0.001 for all). Autologous reconstruction was more frequently performed in the PST group (67.9% vs. 46.5%, p<0.001). Overall, 28.7% of patients developed postoperative complications, with no significant difference between the PST and upfront surgery groups (25.5% vs. 32.6%, p=0.158). Major and minor complication rates, implant loss, flap failure, and reoperation rates were comparable between groups (p>0.05 for all). In multivariate analysis, higher BMI, smoking, hypertension, and preserving nipple were independent predictors of postoperative complications. Achieving pathological complete response (pCR) was associated with a reduced risk of complications (OR 0.46, 95% CI 0.22-0.94, p=0.035). PST administration was not independently associated with increased postoperative morbidity (p=0.398).

Conclusion: This study indicate that PST does not increase complication rates associated with immediate reconstruction following subcutaneous mastectomy. These results support the conclusion that immediate reconstruction can be performed safely in patients receiving PST.

Keywords: Immediate breast reconstruction, postoperative complications, primary systemic therapy

Table 1. Demographics and clinicopathologic features

Parameters	All patients (n=328)	Patients who received PST (n=184)	Patients who did not receive PST (n=144)	p-value
Age (years)				
Median (IQR)	42 (37-47)	41 (36-48)	43 (39-48)	0.014
<45	209 (63.7%)	120 (63.7%)	89 (61.8%)	0.524
≥45	119 (36.3%)	64 (36.3%)	65 (38.2%)	
BMI (kg/m²)				
Median (IQR)	25 (23-28)	26 (23-29)	25 (22-27)	0.048
<25	140 (42.7%)	77 (41.8%)	63 (43.8%)	0.510
25-30	124 (37.8%)	67 (36.4%)	57 (39.6%)	
≥30	64 (19.5%)	40 (21.7%)	24 (16.7%)	
Comorbidities				
Hypertension	26 (7.9%)	8 (4.3%)	18 (12.5%)	0.007
Diabetes mellitus	23 (7%)	12 (6.5%)	11 (7.6%)	0.694
Smoking, n (%)				
Absence	211 (64.3%)	124 (32.6%)	87 (60.4%)	0.191
Presence	117 (35.7%)	60 (67.4%)	57 (39.6%)	
Histologic subtype, n(%)				
Ductal	265 (80.8%)	160 (87%)	105 (72.9%)	<0.001
Lobular	28 (8.5%)	6 (3.3%)	22 (15.3%)	
Mix	9 (2.7%)	3 (1.6%)	6 (4.2%)	
Other	26 (7.9%)	15 (8.2%)	11 (7.6%)	
Molecular subtype, n (%)				
Luminal A	106 (32.3%)	34 (18.5%)	72 (50%)	<0.001
Luminal B-like HER2(-)	93 (28.4%)	46 (25%)	47 (32.6%)	
Luminal B-like HER2(+)	62 (18.9%)	47 (25.5%)	15 (10.4%)	
HER2 (+) non-luminal	35 (10.7%)	28 (15.2%)	7 (4.9%)	
Triple negative	32 (9.8%)	29 (15.8%)	3 (2.1%)	
Ki-67, n (%)				
<20	110 (33.5%)	35 (19%)	75 (52.1%)	<0.001
≥20	180 54.9%)	129 (70.1%)	51 (35.4%)	
Unknown	38 (11.6%)	20 (10.9%)	18 (12.5%)	
Clinical T stage, n (%)				
cT1	105 (32%)	29 (15.8%)	76 (52.8%)	<0.001
cT2	186 (56.7%)	124 (67.4%)	62 (43.1%)	
cT3	37 (11.3%)	31 (16.8%)	6 (4.2%)	
Clinical N stage, n (%)				
cN0	167 (50.9%)	42 (22.8%)	125 (86.8%)	<0.001
cN1	104 (31.7%)	86 (46.7%)	18 (12.5%)	
cN2	57 (17.4%)	56 (30.4%)	1 (0.7%)	

Table 2. Comparison of postoperative complications according to PST status

Parameters	All patients (n=328)	Patients who received PST (n=184)	Patients who did not receive PST (n=144)	p-value
Overall complications n (%)				
Absence	224 (71.3%)	137 (74.5%)	97 (67.4%)	0.158
Presence	94 (28.7%)	47 (25.5%)	47 (32.6%)	
Complication group n (%)				
Minor	50 (53.2%)	25 (53.2%)	25 (53.2%)	1.000
Major	44 (46.2%)	22 (46.8%)	22 (46.8%)	
Emergent reoperation n (%)	17 (5.2%)	8 (4.3%)	9 (6.3%)	0.441
Complete NAC necrosis*, n (%)	6 (2.3%)	2 (1.3%)	4 (3.7%)	0.216
Complete skin necrosis, n (%)	14 (4.3%)	7 (3.8%)	7 (4.9%)	0.638
Superficial NAC necrosis* n (%)	15 (5.8%)	7 (4.7%)	8 (7.4%)	0.360
Superficial skin necrosis n (%)	27 (8.2%)	14 (7.6%)	13 (9%)	0.643
Implant loss, n (%)**	14 (10.3%)	5 (8.5%)	9 (11.7%)	0.541
Flap failure*, n (%)**	6 (3.1%)	3 (2.4%)	3 (4.5%)	0.430
Wound healing problem, n (%)	15 (4.6%)	7 (3.8%)	8 (5.6%)	0.451
Infection, n (%)	7 (2.1%)	3 (1.6%)	4 (2.8%)	0.476
Hematoma or seroma, n (%)	19 (5.8%)	7 (3.8%)	12 (8.3%)	0.081

PST: Primary systemic therapy, NAC: Nipple areola complex, *: Patients who underwent NSM were included in the analysis. **: Patients who underwent implant-based reconstruction were included in the analysis. ***: Patients who underwent autologous reconstruction were included in the analysis.

[S-337]

Intraoperative ultrasonography and routine cavity shaving performed by surgeons in non-palpitable breast cancers: Oncological safety and efficacy

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Objective: Screening programs have increased detection of non-palpable breast lesions. In breast-conserving surgery (BCS), accurate localization and negative margins are essential to achieve optimal oncologic and cosmetic outcomes.

Material and Methods: We reviewed a prospectively maintained database of 117 patients who underwent BCS for non-palpable breast tumors between January 2022 and December 2023 and received no neoadjuvant therapy. Preoperative imaging (mammography, ultrasonography, MRI), localization method [surgeon-performed intraoperative ultrasonography (IOUS) and/or surgeon-performed wire localization], histopathology, margin status and distances, re-excision requirement, postoperative complications, and local recurrence were recorded. Routine cavity shaving was performed after tumor excision in all cases.

Results: Mean age was 57.8 years (39-77) and mean BMI was 30.1 kg/m². Localization was achieved with IOUS in 106 patients (90.5%) and wire localization in 11 (9.4%). All target lesions were successfully localized and excised (100%). Most tumors were T1c invasive ductal carcinomas; mean tumor diameter was 14 mm. Positive specimen margins occurred in three patients (one wire-localized lesion not visualized on ultrasound and two IOUS cases); however, cavity-shave margins were negative in these patients, and no re-excision or mastectomy was required. Postoperative complications (e.g., bleeding, hematoma, wound infection) occurred in 6.8% of patients, without need for additional surgery. At a median follow-up of 19 months, no local recurrences were observed.

Conclusion: For sonographically visible non-palpable lesions, real-time surgeon-performed IOUS combined with routine cavity shaving provides excellent localization success and maximizes margin safety, with a very low need for re-excision. Wire localization remains useful when lesions cannot be visualized on ultrasound. Our early follow-up shows favorable oncologic outcomes with this approach.

Keywords: Non-palpable breast cancer, cavity shaping

[S-338]

The effect of mammographic breast density on sentinel lymph node biopsy positivity: A relationship that varies by molecular subtype

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Objective: To investigate the association between mammographic breast density and sentinel lymph node biopsy (SLNB) positivity in breast cancer patients and to evaluate whether this relationship varies by molecular subtype.

Material and Methods: A total of 397 female breast cancer patients who underwent SLNB between January 2015 and December 2023 were retrospectively analyzed. Breast density was dichotomized as non-dense (ACR A+B) versus dense (ACR C+D). The primary endpoint was SLNB positivity. Chi-square test, Cochran-Mantel-Haenszel stratified analysis, and multivariable logistic regression models were used.

Results: The overall SLNB positivity rate was 30.0%. Dense breast patients had significantly lower SLNB positivity compared to the non-dense group (26.5% vs. 37.7%; p=0.025). After adjustment for clinical T stage and molecular subtype, dense breast remained an independent protective factor (OR=0.609; 95% CI: 0.382-0.970; p=0.037). CMH analysis confirmed homogeneity across cT strata (Breslow-Day p=0.655; MH OR=0.615; p=0.039). Subtype-stratified analysis revealed a consistent protective effect in Luminal A (OR=0.483), Luminal B (OR=0.534), and triple-negative (OR=0.269) subtypes, whereas the association reversed in HER2-enriched tumors (OR=3.333; interaction p=0.040).

Conclusion: High mammographic breast density is inversely associated with SLNB positivity in breast cancer; however, this association does not hold in the HER2-enriched subtype. This finding suggests that breast density should be considered alongside molecular subtype in axillary surgical decision-making.

Keywords: Breast density, sentinel lymph node biopsy, axillary metastasis, molecular subtype, HER2

Table 1. Patient characteristics according to density groups

Characteristic	Non-dense A+B (n=122)	Dense C+D (n=275)	p
Age, mean ± SD	63.68±9.95	53.92±12.41	<0.001
Clinical T stage			0.536
T1	49 (40.2%)	118 (42.9%)	
T2	64 (52.5%)	131 (47.6%)	
T3	8 (6.6%)	18 (6.5%)	
T4	1 (0.8%)	8 (2.9%)	
Molecular subtype			0.715
Luminal A	49 (40.2%)	98 (35.6%)	
Luminal B	50 (41.0%)	112 (40.7%)	
HER2-positive	12 (9.8%)	35 (12.7%)	
Triple-negative	11 (9.0%)	30 (10.9%)	
SLNB positive	46 (37.7%)	73 (26.5%)	0.025

Table 2. Multivariate logistic regression models

Variable	B	SE	Wald	OR	95% CI	p
Model 1 (univariable)						
Density (C+D)	-0.516	0.231	4.967	0.597	0.379-0.940	0.026
Model 2 (primary)						
Density (C+D)	-0.497	0.238	4.365	0.609	0.382-0.970	0.037
cT2 vs. T1	0.736	0.244	9.065	2.087	1.293-3.370	0.003
cT3 vs. T1	0.415	0.477	0.757	1.515	0.594-3.860	0.384
cT4 vs. T1	-0.614	1.084	0.320	0.541	0.065-4.535	0.572
Luminal B vs. Luminal A	0.403	0.260	2.403	1.496	0.899-2.490	0.121
HER2-positive vs. Luminal A	0.338	0.372	0.825	1.402	0.676-2.907	0.364
Triple-negative vs. Luminal A	-0.517	0.450	1.321	0.596	0.247-1.440	0.250
Model 3 (+ age)						
Density (C+D)	-0.570	0.257	4.923	0.565	0.342-0.936	0.027
Age (continuous)	-0.008	0.010	0.594	0.992	0.973-1.012	0.441

[S-339]

Combination of idiopathic granulomatous mastitis, erythema nodosum and arthritis

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Objective: Idiopathic granulomatous mastitis (IGM) is a rare and benign inflammatory breast disease with a pathogenesis that has not yet been fully elucidated. It is an inflammatory breast condition that rarely presents with extra-mammary involvement and is not limited solely to erythema nodosum (EN). In the literature, a subset of cases presenting with EN and arthritis has been described as GMENA syndrome (Granulomatous Mastitis with Erythema Nodosum ± Arthritis), which is considered an under-recognized systemic inflammatory phenotype. Although an association between IGM and arthritis and/or EN has been reported in a limited number of patients, the diagnostic and therapeutic processes in these individuals have not been well documented. The aim of this study was to present our case series of patients with IGM accompanied by EN and/or arthritis and to discuss the incidence, clinical characteristics, and treatment approaches of these cases in greater detail.

Material and Methods: A retrospective analysis was conducted of approximately 150 patients diagnosed with histopathologically confirmed idiopathic granulomatous mastitis (IGM) and treated at our medical center. Patients who concurrently exhibited symptoms of erythema nodosum (EN) and arthritis were identified, and a separate subgroup was formed for a more detailed evaluation of treatment protocols and outcomes. Statistical comparisons were performed using the chi-square test and Fisher's exact test, with a p-value<0.05 considered statistically significant.

Results: A total of 153 patients diagnosed with idiopathic granulomatous mastitis (IGM), with a mean age of 38.2±8.84 years and predominantly consisting of women of reproductive age, were followed in our general surgery clinic. Definitive diagnosis was confirmed by incisional and core needle biopsies. Erythema nodosum (EN) was present in 31 patients (20.2%), and inflammatory arthritis was observed in 28 patients (18.3%). Among the 13 patients presenting with the triad of IGM, EN, and arthritis, higher recurrence rates were observed despite responsiveness to antibiotic and steroid therapy.

Conclusion: IGM is a challenging disease to diagnose and manage due to its clinical complexity. It may occur concurrently with EN and arthritis, and we believe that the frequency of this association may be higher than currently estimated. Recognition of these distinct clinical presentations highlights the necessity of a multidisciplinary approach to diagnosis. Furthermore, larger prospective studies are required to fully elucidate the clinical characteristics, diagnosis, and optimal management strategies of IGM.

Keywords: Granulomatous mastitis, erythema nodosum, arthritis



Figure 1. Typical breast lesions seen in granulomatous mastitis. Arrows indicate skin fistulas.

[S-340]

Evaluation of axillary response and surgical approach based on PET-CT and histopathological findings after neoadjuvant chemotherapy in breast cancer

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Objective: Neoadjuvant chemotherapy (NAC) has transformed breast cancer management by enabling axillary downstaging and increasing pathological complete response (pCR) rates. Because traditional axillary lymph node dissection (ALND) carries a high risk of long-term morbidity, such as lymphedema and neuropathy, surgical de-escalation strategies (e.g., sentinel lymph node biopsy [SLNB] or targeted axillary dissection) have become standard for patients achieving pCR. However, driven by profound molecular heterogeneity, axillary chemosensitivity varies widely. Nodal response is dictated by the tumor's receptor profile (ER, PR, HER2), proliferation index, and microenvironment dynamics, including tumor-infiltrating lymphocytes (TILs) and lymphovascular invasion (LVI). This study aimed to identify clinical, histopathological, and metabolic (PET-CT) predictors of axillary pCR to establish objective criteria for safe surgical de-escalation.

Material and Methods: This retrospective cohort study included 309 patients with invasive breast cancer who underwent NAC followed by surgery at Gazi University Faculty of Medicine, Department of General Surgery, between 2019 and 2025. Based on final surgical pathology, patients were stratified into axillary pCR (ypN0) and residual disease (ypN+) groups. We evaluated clinicopathologic variables including age, menopausal status, receptor status, Ki-67 index, LVI, TIL density, and pre-/post-NAC PET-CT SUV_{max} values. Independent predictors were identified using multivariate logistic regression, and optimal diagnostic cut-offs were established via receiver operating characteristic (ROC) curve analysis

Results: Axillary pCR was achieved in 50.5% (n=156) of the cohort. Patients in the ypN0 group were significantly younger (mean age 51.69±11.81; p=0.004). Multivariate analysis identified ER negativity as a strong independent predictor of pCR (OR=10.3). Furthermore, Grade 3 morphology, HER2 positivity, the absence of LVI (observed in 90.4% of the ypN0 cohort; p<0.001), and moderate-to-high TIL density (p=0.036) were significantly associated with axillary clearance. Metabolically, post-NAC axillary SUV_{max} values were markedly lower in patients with complete response (0.01±0.01 vs. 1.45±2.50; p<0.001). ROC analysis demonstrated that a post-NAC axillary SUV_{max} cut-off of ≤0.400 predicted axillary pCR with 99.4% sensitivity.

Conclusion: Younger age and aggressive tumor biology—characterized by ER negativity, high Ki-67, elevated TILs, and the absence of LVI—are robust clinical indicators of axillary chemosensitivity. Integrating these clinicopathologic risk profiles with metabolic regression data (SUV_{max} ≤0.400) derived from post-NAC PET-CT provides an objective, highly accurate framework to safely de-escalate axillary surgery and spare appropriately selected patients from ALND-associated morbidity.

Keywords: Breast cancer, neoadjuvant chemotherapy, PET-CT

Table 1. Comparison of clinical, histopathological, and metabolic factors affecting axillary pathological complete response (pCR)

Variables	Axillary complete response (ypN0) (n=156)	Axillary non-response (ypN+) (n=153)	p-value
Age (mean ± SD)	51.69±11.81	55.60±12.79	**0.004**
ER negativity (%)	46.8%	13.0%	**<0.001**
HER2 positivity (%)	41.7%	16.4%	**<0.001**
Absence of LVI (%)	90.4%	58.2%	**<0.001**
TIL presence (moderate/high) (%)	20.5%	11.8%	**0.032**
Post-NAC axillary SUV_{max}	0.01±0.01	1.45±2.50	**<0.001**

Table 2. Diagnostic performance of PET-CT and molecular markers in predicting axillary response

Parameter	Cut-off value/ratio	Sensitivity	Specificity	AUC/OR	p-value
Post-NAC axillary SUV_{max}	≤0.400	99.4%	54.9%	AUC: 0.722	**<0.001**
Post-NAC mass SUV_{max}	≤1.455	63.5%	60.8%	AUC: 0.634	**<0.001**
ER negativity	-	-	-	OR: 10.3	**0.005**

[S-341]

Non-invasive ductal and non-invasive lobular breast malignancies: A 10-year single-center experience

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Objective: Breast cancer is the most commonly diagnosed malignancy among women worldwide and in our country. Its incidence is increasing, with a trend toward younger age at diagnosis. According to the 2019 World Health Organization (WHO) classification, breast carcinoma comprises at least 21 histological subtypes. Invasive ductal carcinoma of no special type (IDC-NST) accounts for approximately 75% of cases, while invasive lobular carcinoma (ILC) represents 10-15%. This study evaluates the clinical characteristics of breast malignancies other than IDC and ILC.

Material and Methods: This study was designed as a single-center retrospective analysis. Patients who underwent breast surgery for breast malignancy at our institution between January 1, 2015, and December 31, 2025, were reviewed. Patients diagnosed histopathologically with invasive ductal carcinoma or invasive lobular carcinoma were excluded from the study. Recurrent cases and patients with mixed histopathological features were also excluded from the analysis.

Results: A total of 102 patients diagnosed with breast malignancies other than IDC and ILC were identified. Of these patients, 97.1% (n=99) were female and 2.9% (n=3) were male. The mean age was 57.5 years (range: 24-86). The most frequently observed histological subtypes were mucinous carcinoma, papillary carcinoma, and medullary carcinoma. Regarding surgical management, 62.7% of patients (n=64) underwent mastectomy, whereas 33.3% (n=34) underwent breast-conserving surgery. Axillary management revealed; Axillary dissection in 62.7% of patients, Sentinel lymph node biopsy in 26.5%, No axillary intervention in 10.8%. Three patients presented with bilateral breast cancer and underwent bilateral mastectomy. The histopathological subtypes in these cases were different from each other, and no clustering toward a specific subtype was observed. Among the case series, a particularly notable finding was a 34-year-old female patient diagnosed with primary breast myeloid sarcoma.

Conclusion: Breast malignancies other than IDC and ILC demonstrate a heterogeneous histopathological distribution. Rare histological subtypes may also be observed in younger patients and should be considered in clinical evaluation. Although breast-conserving surgery has become increasingly preferred in recent years, mastectomy was more frequently performed in non-IDC and non-ILC subtypes in our series. Rare histological subtypes may also occur in male patients and should not be overlooked. Bilateral breast involvement did not demonstrate an association with any specific histological subtype. In conclusion, systematic evaluation of breast malignancies other than IDC and ILC may contribute to a better understanding of their biological behavior and guide future therapeutic strategies.

Keywords: Rare, breast cancer, histological types

Table 1. Distribution of histopathological subtypes in breast malignancies other than IDC and ILC (n=102). Only primary breast malignancies other than IDC and ILC were included in the study

Histopathological subtype	n	%
Mucinous carcinoma	29	28.4
Papillary carcinoma (including solid papillary)	20	19.6
Medullary carcinoma (including atypical medullary)	14	13.7
Neuroendocrine carcinoma/tumor	9	8.8
Metaplastic carcinoma (squamous, spindle cell, etc.)	9	8.8
Cribriform carcinoma	6	5.9
Tubular carcinoma	5	4.9
Signet-ring cell carcinoma	3	2.9
Adenoid cystic carcinoma	2	2.0
Adenosquamous carcinoma	1	1.0
Leiomyosarcoma	1	1.0
Myeloid sarcoma (breast involvement)	1	1.0
Other rare epithelial/mesenchymal malignancies	2	2.0
Total	**102**	**100**

[S-342]

Clinicopathological features of BRCA mutation-positive patients and their correlation with PET-CT

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Objective: Breast cancer is the most common type of cancer in women worldwide and a leading cause of cancer-related deaths. Approximately 10% of breast cancer cases are hereditary, with *BRCA1* and *BRCA2* gene mutations being the most important genetic factors in this group. In patients carrying BRCA mutations, breast cancer generally presents with: earlier age, more aggressive biological behavior, and a higher risk of recurrence. Therefore, the role of imaging methods used in diagnosis, staging, and treatment planning becomes even more important in this patient group. PET-CT is frequently used, especially in advanced staging, metastasis, and suspected recurrence, due to its ability to evaluate the metabolic activity of the tumor. However, data on the clinical and prognostic value of PET-CT in BRCA-positive breast cancer patients are limited. Our study was planned based on this point.

Material and Methods: Our study included a total of 53 patients diagnosed with BRCA mutation-positive and who underwent surgery at İzmir Katip Çelebi University Atatürk Training and Research Hospital between 2019 and 2023. The study was planned retrospectively, and after obtaining ethical committee approval, patient data were examined through the hospital information management system. The main parameters evaluated were: primary tumor SUV_{max} value on PET-CT, PET-CT tumor size, axillary lymph node SUV_{max} and size, tumor diameter, Ki-67 proliferation index, surgical method used, postoperative recurrence status, overall survival. The obtained data were evaluated using statistical analyses.

Results: Of the 53 patients included in the study, 51 were women and 2 were men. Preoperative PET-CT was performed on 34 of the patients. Regarding surgical distribution; breast-conserving surgery, modified radical mastectomy, and bilateral subcutaneous mastectomy were performed. When the baseline data of the study are summarized; while no significant relationship was found between PET-CT parameters and survival, a significant relationship was observed between postoperative recurrence and survival. In the statistical analyses performed; PET-CT tumor SUV_{max}, PET-CT tumor size, axillary lymph node SUV_{max} and size, tumor diameter, Ki-67no statistically significant difference was found between survival and survival. However, it was determined that survival was significantly lower in patients who developed postoperative recurrence.

Conclusion: In conclusion: BRCA mutation-positive breast cancer patients are a high-risk patient group. Although PET-CT alone is not a prognostic marker in these patients, it contributes to patient management when evaluated together with clinical and pathological data. It has been concluded that personalized surgical and oncological treatment approaches should be prioritized in this patient group.

Keywords: Breast cancer, PET-CT, BRCA

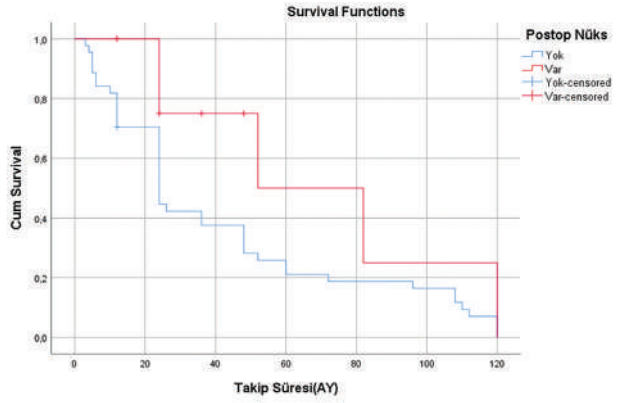


Figure 1. The effect of postoperative recurrence on survival.

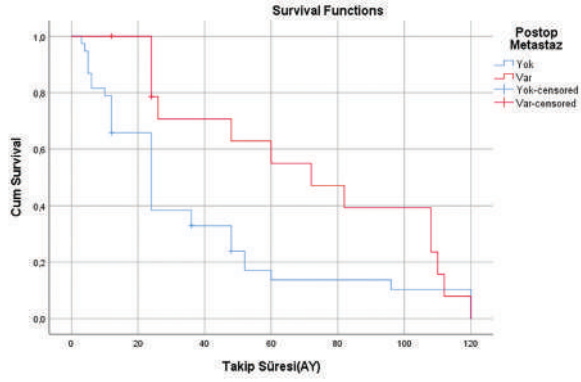


Figure 2. The effect of postoperative metastasis on survival.

[S-344]

Neoadjuvant chemotherapy-induced extracellular fluid increase in breast cancer: A prospective bioimpedance study

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Objective: Breast cancer-related lymphedema (BCRL) is a frequent complication that can impair the quality of life of survivors. While the effect of surgery and radiotherapy on lymphedema has been well established, the independent impact of neoadjuvant chemotherapy (NACT) on extracellular fluid remains unclear.

Material and Methods: In this prospective clinical study, 111 patients with breast cancer scheduled for NACT were evaluated before and after chemotherapy. Arm circumferences and bioimpedance spectroscopy (BIS, L-Dex U400®) were performed pre- and post-NACT to assess extracellular fluid changes. A ≥6.5 unit increase in L-Dex was considered significant. Demographic, clinical, and pathological variables were analyzed using univariate and multivariate logistic regression.

Results: Extracellular fluid increase was detected in 18 patients (16.2%) after NACT, with no clinical lymphedema observed. In multivariate analysis, age ≥55 years (OR: 4.47, 95% CI: 1.35-14.89; p=0.015) and higher clinical N stage (OR: 2.26, 95% CI: 1.16-4.43; p=0.017) were independent predictors of extracellular fluid increase, whereas hormone receptor positivity was protective (OR: 0.23, 95% CI: 0.07-0.72; p=0.012).

Conclusion: NACT may contribute to subclinical extracellular fluid accumulation, particularly in older patients, those with advanced nodal disease, and those lacking hormone receptor positivity. Early BIS monitoring during chemotherapy may facilitate timely detection and prevention of lymphedema. ClinicalTrials.gov registration number: NCT07315880

Keywords: Breast cancer, lymphedema, neoadjuvant chemotherapy

[S-348]

Beyond a surgical symptom: Clinical and psychosocial factors determining mastalgia severity

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Objective: Mastalgia is one of the most common reasons for admission to general surgery outpatient clinics and, although predominantly benign, significantly increases patient anxiety and healthcare utilization. Existing literature has primarily focused on hormonal and radiological factors,while psychosocial and lifestyle-related determinants of pain severity remain insufficiently explored. This study aimed to characterize the clinical profile of patients presenting with mastalgia and to identify factors associated with mastalgia severity.

Material and Methods: A total of 200 patients presenting to the general surgery outpatient clinic with mastalgia were included. Patients aged ≥40 years underwent mammography and breast ultrasonography, while patients <40 years underwent breast ultrasonography alone. Demographic characteristics, lifestyle factors, reproductive-hormonal history, and clinical and radiological features were recorded. Perceived stress was assessed using a single-item numeric rating scale ranging from 0 (no stress) to 10 (extreme stress). Patients who were actively breastfeeding, had a history of breast surgery, or were male were excluded. Mastalgia severity was evaluated using a 0-10 visual analog scale (VAS), and VAS≥7 was defined as severe mastalgia. Patients were categorized into two groups based on mastalgia severity. Statistical analyses were performed using SPSS version 26.0. Mann-Whitney U and chi-square tests were used for comparisons. A p-value <0.05 was considered statistically significant.

Results: The median age of the patients was 38 years. Severe mastalgia (VAS ≥7) was observed in 41% of patients (n=82). Age was lower in the severe mastalgia group (p=0.01). The prevalence of severe mastalgia was significantly higher among patients with stress scores ≥7 compared to those with stress scores <7 [58% (n=48) vs. 29% (n=34), p<0.001]. Patients with a BMI≥25 kg/m^2 had a higher rate of severe mastalgia than those with a BMI<25 kg/m^2 [52% (n=46) vs. 31% (n=36), p=0.002]. Severe mastalgia was more frequent in patients with primary school-level education and in those using supportive or underwired bras continuously during the day (p=0.01 and p=0.03, respectively). No statistically significant differences were observed regarding palpable mass, BI-RADS category, breastfeeding history, menopausal status, or family history of breast cancer (p=1.000, p=0.221, p=0.727, p=0.055, and p=0.443). In multivariate analysis, stress score ≥7 (OR: 3.1; 95% CI: 1.8-5.4; p<0.001), BMI ≥25kg/m^2 (OR: 2.4; 95% CI: 1.3-4.2; p=0.004) and continuous use of supportive/underwired bras (OR: 1.9; 95% CI: 1.1-3.4; p=0.02) were independent predictors of severe mastalgia. A tendency toward lower mastalgia severity was observed in postmenopausal patients and with increasing total breastfeeding duration.

Conclusion: Mastalgia severity is closely associated with modifiable factors such as perceived stress, body mass index, and mechanical breast load rather than clinical or radiological findings. The absence of significant differences in physical examination and imaging findings among patients with severe mastalgia suggests that pain severity may be driven primarily by biopsychosocial mechanisms. These findings highlight the need for a comprehensive and individualized clinical approach to mastalgia that integrates lifestyle, psychosocial, and mechanical factors alongside conventional diagnostic evaluation.

Keywords: Lifestyle factors, mastalgia, psychosocial factors

[S-350]

Impact of CERB2 status on sentinel lymph node positivity in hormone receptor-positive breast cancer: A single-center retrospective analysis

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Objective: This study aimed to evaluate the impact of CERB2 status on sentinel lymph node positivity and to identify clinicopathological factors predicting axillary metastasis in patients with hormone receptor-positive breast cancer.

Material and Methods: This single-center retrospective study included 324 female patients who underwent surgery for breast cancer between 2017 and 2023. Patients with hormone receptor-positive disease, M0 stage, no history of neoadjuvant therapy, and treated with upfront surgery were enrolled. According to CERB2 status, patients were classified into three groups: ultralow, low, and HER2+. The primary endpoint was sentinel lymph node positivity.

Results: Of the patients, 70.1% were classified as ultralow, 20.4% as low, and 9.5% as HER2+. No statistically significant differences were observed between groups regarding age, menopausal status, or tumor size. The Ki-67 proliferation index was significantly higher in the HER2+ group. Sentinel lymph node positivity rates were similar among the groups. In multivariable logistic regression analysis, CERB2 status was not identified as an independent predictor of sentinel lymph node positivity. Lymphovascular invasion emerged as the strongest determinant (OR=5.91; p<0.001)

Conclusion: In hormone receptor-positive breast cancer, CERB2 status is not associated with sentinel lymph node positivity. Lymphovascular invasion remains the main determinant of axillary metastasis risk and should be considered in surgical decision-making

Keywords: Breast cancer, HER2 low, sentinel lymph node, lymphovascular invasion

[S-351]

Factors affecting the extent of axillary lymph node sampling in cN(–) breast cancer patients undergoing upfront surgery

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Objective: Pathologic staging of the axilla plays a pivotal role in the management of breast cancer. Sentinel lymph node (SLN) biopsy remains a routine procedure, and sampling of non-SLN nodes may be required depending on intraoperative findings. As the number of excised lymph nodes increases during axillary sampling, the risk of complications such as lymphedema may also rise; therefore, achieving a balance between optimal staging and avoidance of unnecessary dissection is essential. Many authors consider sampling of 2-3 SLNs adequate, whereas removal of more than four lymph nodes is regarded as overtreatment. In this study, we aimed to investigate the factors associated with increased extent of dissection during axillary staging.

Material and Methods: Patients who underwent surgery for invasive breast cancer at the OMU Department of General Surgery between January 1, 2020, and December 31, 2024, were retrospectively reviewed. Patients without clinically or radiologically suspicious axillary lymph nodes and those who had not received neoadjuvant chemotherapy were included. All patients underwent SLN biopsy. Regardless of SLN or non-SLN status, patients were divided into two groups according to the total number of lymph nodes sampled during SLNB (≤4 vs. >4). Age, radiologic T stage, histopathologic findings from tru-cut biopsies, and axillary sampling results were analyzed. The chi-square test was used for statistical analysis.

Results: No significant association was found between excision of more than four lymph nodes and histopathologic findings on tru-cut biopsy, radiologic T stage, or patient age. While no association was observed between the number of sampled lymph nodes and detection of two or fewer axillary lymph node metastases (ALNM), patients with more than two metastatic axillary lymph nodes had significantly more lymph nodes excised during sampling (p=0.019) (Table 1).

Conclusion: Our findings demonstrate that the extent of sampling during SLNB is independent of preoperative radiologic and histopathologic variables. Although no association was observed with cases involving two or fewer metastatic lymph nodes, the fact that more lymph nodes were sampled in patients with more than two ALNMs is noteworthy. This suggests that surgeons tend to excise additional lymph nodes for sampling when extensive axillary disease is encountered intraoperatively. On the other hand, many guidelines already recommend axillary dissection when more than two metastatic SLNs are identified; therefore, this situation should not be considered overtreatment. Our retrospective data indicate that surgeons encountering extensive axillary disease may be inclined to sample more lymph nodes due to concern about understaging.

Keywords: Axilla, breast cancer, sentinel lymph node

Table 1. Factors associated with the extent of axillary sampling

		Örneklenen LN Sayısı		p
		≤ 4 n (%)	>4 n (%)	
Yaş	<40	11 (61)	7 (39)	
	≥40 - <60	70 (68)	33 (32)	
	≥60	54 (82)	12 (18)	0.079
Yön	Sağ	69 (68)	32 (32)	
	Sol	66 (77)	20 (23)	0.200
T Evresi	1	60 (74)	21 (26)	
	2	75 (71)	31 (29)	0.616
Trucut Histopatoloji	IDK	106 (74)	38 (26)	
	ILK	11 (79)	3 (21)	
	DCIS	16 (67)	8 (33)	
	Diğer	2 (40)	3 (60)	0.337
E.R	Negatif	16 (80)	4 (20)	
	Pozitif	119 (71)	48 (29)	0.410
P.R	Negatif	23 (85)	4 (15)	
	Pozitif	112 (70)	48 (30)	0.103
HER-2	Negatif	92 (74)	33 (26)	
	Pozitif	21 (72)	8 (28)	0.896
Ki-67	<14	16 (64)	9 (36)	
	≥14	119 (74)	43 (26)	0.326
Grade	I-II	51 (70)	22 (30)	
	III	84 (74)	30 (26)	0.569
Meme Cerrahi Prosedür	MKC	97 (70)	42 (30)	
	Mastektomi	33 (80)	8 (20)	
	Sbk. Mast.	5 (71)	2 (29)	0.405
ALNM (Sayıdan Bağımsız)	Yok	122 (74)	43 (26)	
	Var	13 (59)	9 (41)	0.114
>2 ALNM	Yok	133 (74)	47 (26)	
	Var	2 (29)	5 (71)	**0.019**
Toplam		135	52	

[S-353]

Evaluation of pathology results of patients who had stereotactic biopsy due to mammographic microcalcifications detected in breast cancer screenings and determination of factors related to malignancy

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Objective: Breast cancer remains the most frequently diagnosed malignancy among women worldwide, with the highest mortality rates observed in the 20-59 age group. Mammography serves as the primary imaging technique for detecting microcalcifications, which are crucial markers for the early diagnosis of breast cancer. This imaging modality enables the identification of the disease at an initial stage. While numerous studies have established a clear link between microcalcifications and breast cancer, research focusing on benign and premalignant lesions associated with microcalcifications, as well as the detailed characteristics of these calcifications, remains limited. The objective of this study is to evaluate the pathology results of patients who underwent stereotactic biopsy due to mammographic detection of microcalcifications during screenings and to determine the factors related to malignancy.

Material and Methods: This retrospective study included data from 1105 patients who underwent stereotactic biopsy between 2019 and 2024. Patients were excluded if they had a previous cancer diagnosis, had undergone breast surgery, were under 40 years old, or were male. Only patients presenting with isolated microcalcifications detected via mammography and subsequently undergoing stereotactic excisional biopsy were included. The pathology findings categorized into benign and malignant groups, and their preoperative clinical and radiological characteristics were analyzed using hospital records to assess potential malignancy-related factors.

Results: The mean age of the patients was calculated as 50.10±7.48 years. Based on the pathology findings, 37 individuals (21.4%) were diagnosed with malignant conditions, whereas 136 patients (78.6%) had benign pathology. Among the malignant cases, 5 (13.5%) were identified as invasive carcinoma, while 32 (86.5%) were diagnosed with ductal carcinoma *in situ*. The average menarche age was 13.00±1.64 years for those in the benign group and 13.49±1.56 years for those in the malignant group, showing a statistically significant difference (z=1.968, p=0.049). Additionally, a significant variation was observed between the benign and malignant groups concerning the distribution and morphology of microcalcifications.

Conclusion: Mammographic detection of microcalcifications continues to be a crucial factor in the early identification of breast cancer. The findings of this study indicate that 21.4% of patients with isolated microcalcifications were diagnosed with malignancy. Specifically, individuals with linear and regional microcalcifications exhibited a higher likelihood of malignancy, underscoring the need for timely surgical intervention to prevent disease progression.

Keywords: Breast cancer, mammography, microcalcification

Table 1. Imaging features

		n (%)
Meme Dansitesi	A	3 (1.7)
	B	23 (13.3)
	C	96 (55.5)
	D	51 (29.5)
Hangi Meme	Sağ	76 (43.9)
	Sol	92 (53.2)
	Her ikisi	5 (2.9)
Hangi Kadran	Üst dış	77 (44.5)
	Üst iç	7 (4.0)
	Üst orta	15 (8.7)
	Alt dış	9 (5.2)
	Alt iç	17 (9.8)
	Alt orta	10 (5.8)
	Dış orta	20 (11.6)
	İç orta	9 (5.2)
	Retroareolar	8 (4.6)
	Subareolar	1 (0.6)
Eşlik Eden Bulgu	Yok	125 (72.3)
	Yapısal bozulma	4 (2.3)
	Asimetrik dansite	29 (16.7)
	Nodüler dansite	15 (8.7)
Mikrokalsifikasyon Dağılımı	Grup	146 (84.4)
	Bölgesel	7 (4.0)
	Segmenter	11 (6.4)
	Lineer	8 (4.6)
	Yaygın-Diffüz	1 (0.6)
Mikrokalsifikasyon Morfolojisi	Punktat	57 (32.9)
	Amorf	30 (17.3)
	Amorf-Punktat	56 (32.4)
	Pleomorfik	15 (8.7)
	Kaba heterojen	14 (8.1)
	Lineer	1 (0.6)
Meme Usg Lezyon	Yok	153 (88.4)
	Var	20 (11.6)
Patoloji Sonuçları	Benign	%78.6 (n=136)
	Malign	%21.4 (n=37)
	Malign (4 invaziv CA, 1 mikroinvaziv CA)	%2.9 (n=5)
	In situ (32 DCIS, 5 LCIS)	%21.4 (n=37)

Table 2. Clinical features

Özellik	Ort±SS	Medyan (Min-Max)	Yok, n (%)	Var, n (%)
Yaş (yıl)	50.10±7.48	49.0 (36-74)		
BMI (kg/m2)	26.76±5.22	26.0 (15-46)		
Sigara Kullanımı			115 (66.5)	58 (33.5)
Alkol Kullanımı			164 (94.8)	9 (5.2)
Menarş Yaşı	13.10±1.63	13.0 (9-18)		
Menopoz Durumu			91 (52.6)	82 (47.4)
Parite	2.74±1.63	3.0 (0-9)		
İlk Doğum Yaşı (yıl)*	23.15±4.75	22.0 (13-38)		
Emzirme Süresi (yıl)*	2.83±2.22	2.5 (0.16-12.5)		
OKS			118 (68.2)	55 (31.8)
HRT			149 (86.1)	24 (13.9)
Aile Öyküsü			130 (75.1)	43 (24.9)

*Paritesi en az 1 olan bireylerde

Table 3. Risc factors in imaging

Değişkenler	β	Std Hata	Wald	p	Exp(B)	Exp(B) için 95% güven aralığı	
						Alt	Üst
Sabit	-3.496	1.715	4.152	0.042	0.030		
Mikrokalsifikasyon Dağılımı			10.716	0.030			
Bölgesel	1.984	0.954	4.329	**0.037**	7.274	1.122	47.15
Segmenter	0.642	0.750	0.733	0.392	1.901	0.437	8.266
Lineer	2.390	0.916	6.801	**0.009**	10.914	1.811	65.78
Yaygın-Diffüz	-19.02	$4x10^5$	0.001	0.999	0.001	0.001	
Mikrokalsifikasyon Morfolojisi			6.466	0.263			
Amorf	-0.165	0.733	0.050	0.822	0.848	0.202	3.570
Amorf-Punktat	0.577	0.511	1.278	0.258	1.781	0.655	4.845
Pleomorfik	1.596	0.721	4.904	0.027	4.932	1.201	20.24
Kaba heterojen	-0.075	0.893	0.007	0.933	0.928	0.161	5.343
Lineer	20.5	$4x10^5$	0.001	0.999	$8x10^8$	0.001	
Menarş Yaşı	0.114	0.126	0.827	0.363	1.121	0.876	1.434

Table 4. Comparison of imaging features in benign-malignant groups

	Benign (n=136)	Malign (n=37)	Test İstatistiği x^2	p
Meme Dansitesi			x^2=1.675	0.643
A	3 (2.2%)	0 (0.0%)		
B	18 (13.2%)	5 (13.5%)		
C	74 (54.3%)	22 (59.5%)		
D	41 (30.1%)	10 (27.0%)		
Hangi Meme			x^2=2.872	0.238
Sağ	61 (44.8%)	15 (40.5%)		
Sol	70 (51.5%)	22 (59.5%)		
Her ikisi	5 (3.7%)	0 (0.0%)		
Hangi Kadran			x^2=9.427	0.399
Üst dış	64 (47.1%)	13 (35.2%)		
Üst iç	6 (4.4%)	1 (2.7%)		
Üst orta	12 (8.8%)	3 (8.1%)		
Alt dış	7 (5.2%)	2 (5.4%)		
Alt iç	10 (7.4%)	7 (18.9%)		
Alt orta	6 (4.4%)	4 (10.8%)		
Dış orta	18 (13.2%)	2 (5.4%)		
İç orta	6 (4.4%)	3 (8.1%)		
Retroareolar	6 (4.4%)	2 (5.4%)		

Table 5. Comparison of imaging features in benign-malignant groups

Eşlik Eden Bulgu			x^2=2.271	0.518
Yok	95 (69.8%)	30 (81.1%)		
Yapısal bozulma	3 (2.2%)	1 (2.7%)		
Asimetrik dansite	25 (18.4%)	4 (10.8%)		
Nodüler dansite	13 (9.6%)	2 (5.4%)		
Mikrokalsifikasyon Dağılımı			x^2=22.142	**<0.001**
Grup	123 (90.4%)	23 (62.2%)		
Bölgesel	2 (1.5%)	5 (13.5%)		
Segmenter	8 (5.9%)	3 (8.1%)		
Lineer	2 (1.5%)	6 (16.2%)		
Yaygın-Diffüz	1 (0.7%)	0 (0.0%)		
Mikrokalsifikasyon Morfolojisi			x^2=18.000	**0.003**
Punktat	48 (35.3%)	9 (24.3%)		
Amorf	27 (19.9%)	3 (8.1%)		
Amorf-Punktat	43 (31.6%)	13 (35.2%)		
Pleomorfik	6 (4.4%)	9 (24.3%)		
Kaba heterojen	12 (8.8%)	2 (5.4%)		
Lineer	0 (0.0%)	1 (2.7%)		
Meme Usg'de Lezyon			-	0.233*
Yok	122 (89.7%)	31 (83.8%)		
Var	14 (10.3%)	6 (16.2%)		

x^2 :Ki kare Testi, *Fisher Exact test sonuçları verilmiştir.

[S-354]

Surgical complications and predictive factors in breast cancer patients receiving neoadjuvant chemotherapy

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Objective: Neoadjuvant chemotherapy (NACT) is widely used in breast cancer treatment due to its ability to downstage tumors, improve resectability, increase breast-conserving surgery rates, and provide *in vivo* assessment of treatment response. However, concerns remain regarding its possible negative effects on immune function, wound healing, and postoperative recovery. This study aimed to evaluate postoperative surgical complications in breast cancer patients receiving NACT using the Clavien-Dindo classification system and to identify predictive factors associated with complication development.

Material and Methods: This retrospective cohort study included breast cancer patients who underwent surgical treatment between 2023 and 2026 at the Department of General Surgery, University of Health Sciences Türkiye, İzmir City Hospital. Patients were divided into two groups: Those who received $NACT^+$ and those who did not ($NACT^-$). Recorded variables included demographic data (age, BMI), comorbidities (diabetes mellitus, smoking), ASA score, type of breast surgery (breast-conserving surgery, modified radical mastectomy, mastectomy), axillary procedure (sentinel lymph node biopsy or axillary dissection), drain usage and duration, and length of hospital stay. Postoperative complications were classified using the Clavien-Dindo grading system. Statistical analyses were performed, and $p<0.05$ was considered statistically significant.

Results: A total of 227 female patients were included; 91 (40.1%) were in the $NACT^+$ group and 136 (59.9%) in the $NACT^-$ group. Mean age was significantly lower in the $NACT^+$ group (53.4±11.3 vs. 58.2±12.3 years, p=0.003). BMI did not differ significantly (p=0.581). Diabetes mellitus prevalence was 20.9% in $NACT^+$ and 25.0% in $NACT^-$ (p=0.524), and smoking rates were similar (p=0.386). ASA score distribution showed a significant difference between groups (p=0.048). Breast-conserving surgery was performed in 64.8%, modified radical mastectomy in 26.9%, and mastectomy in 8.4%. Sentinel lymph node biopsy was performed in 91.6% and axillary dissection in 8.4%. Drain usage was higher in $NACT^+$ patients (39.6% vs. 27.2%), showing borderline significance (p=0.060), while drain duration was significantly longer in the $NACT^+$ group (p=0.028). Overall complication rate was 11.45% (26/227). Complication rates were 14.3% in $NACT^+$ and 9.6% in $NACT^-$ (p=0.293). Major complication rate (Clavien-Dindo ≥III) was 5.73%, with no significant difference between groups (p=0.384).

Conclusion: Although postoperative complication rates were numerically higher in patients receiving NACT, no statistically significant difference was observed. Prolonged drain duration in the $NACT^+$ group may be clinically relevant for perioperative management. Larger cohort studies supported by multivariate analyses are needed to better clarify the impact of NACT on postoperative surgical complications and to identify independent predictive risk factors.

Keywords: Neoadjuvant chemotherapy, postoperative complications

[S-356]

The value of preoperative ultrasonography assessment of the axilla in early-stage breast cancer for sentinel lymph node management

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Objective: Axillary lymph node involvement is crucial for staging breast cancer and guiding treatment decisions. Historically, nodal metastasis has indicated poorer prognosis, leading axillary surgery to evolve from extensive dissections to less invasive approaches. With evidence showing that lymph node dissection does not improve overall survival in selected patients when combined with systemic therapy and radiotherapy, identifying individuals who may safely avoid axillary surgery has become increasingly important. The latest step in this shift is omitting sentinel lymph node biopsy (SLNB) in appropriate cases. This retrospective study evaluated the consistency between routine axillary ultrasound findings and SLNB results to determine the value of ultrasound in axillary staging and to help define the patient profile in whom SLNB might be safely omitted. The study was conducted as a medical specialization thesis.

Material and Methods: Between September 2022 and February 2025, 338 female breast cancer patients who underwent axillary ultrasonography and SLNB at University of Health Sciences Türkiye, Ankara Etlik City Hospital were included. Patients with metastatic disease, prior neoadjuvant therapy, or DCIS were excluded from the study.

Results: Our study population largely reflects early-stage, hormone receptor-positive breast cancer. T1-T2 tumors constituted 97.3%, and luminal-A/B ($HER2^-$) subtypes 89.7%. Preoperative axillary ultrasound examination did not reveal metastatic disease in 285 patients. Positive results were found in SLNB in 67 of these patients. USG accurately identified most $SLNB^-$ patients (specificity 92%) but missed a substantial proportion of $SLNB^+$ cases (sensitivity 33%). The negative predictive value was 76.5%, with $SLNB^+$ detected in one-quarter of USGnegative patients. Discordance between USG and SLNB was associated with higher T stage, lymphovascular invasion, and lobular histology. Notably, 80.6% of discordant $SLNB^+$ patients had only 1-2 metastatic nodes.

Conclusion: In our study, although the specificity of preoperative USG was found to be 92% when compared to SLNB, its negative predictive value and sensitivity remained low. This situation demonstrates that it is insufficient to use it as an exclusion test instead of SLNB alone. The majority of patients grouped as false negatives are associated with low nodal involvement (1 or 2^+). Currently, axillary dissection cannot be performed in this group of patients with early-stage disease when breast-conserving surgery and radiotherapy are planned. Therefore, rather than viewing ultrasound as a test that can replace SLNB, it would be more appropriate to view it as a test that helps classify patients who do not need SLNB based on clinical need.

Keyword: Breast cancer

[S-357]

Breast conservation using chest wall perforator flap technique in the surgical treatment of breast cancer

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Objective: The chest wall perforator flap (CWPF) technique, a volume replacement method, has been shown to provide minimal morbidity and favorable cosmetic outcomes in selected breast cancer patients undergoing breast-conserving surgery (BCS). This retrospective study aims to present the early outcomes of breast cancer patients who underwent CWPF reconstruction at our institution.

Material and Methods: In this study, we present the results of 31 patients who underwent reconstruction with the CWPF technique following local excision for breast cancer at our institution over the past two years (2024-2025). On the morning of surgery, vascular perforator branches were identified and marked using Doppler ultrasonography according to tumor location. All procedures were performed by a single surgeon. Depending on flap positioning, either a lateral or inframammary skin incision was planned. If a skin island was not required, the skin was de-epithelialized following tumor excision. The flap, prepared with preservation of the vascular pedicle, was mobilized over the muscle and transposed to fill the defect, then secured with 2/0 Vicryl sutures. Meticulous hemostasis was achieved. The donor site was closed without tension. A sports bra was applied post-operatively.

Results: The mean patient age was 42 years (range: 38-63), and the mean tumor diameter was 31 mm (range: 18-44 mm). Tumor location was in the upper outer quadrant in 12 patients, lower outer quadrant in 8 patients, mid-outer quadrant in 5 patients, and lower inner quadrant in 6 patients. A lateral flap was performed in 25 cases and an inframammary flap in 6 cases. Primary surgery was performed in 20 patients, while 11 patients (35%) underwent CWPF following neoadjuvant chemotherapy. Histopathological subtypes included 6 cases of DCIS (19.3%), 13 invasive ductal carcinoma (41.9%), 8 invasive lobular carcinoma (25.8%), and 4 other invasive carcinomas (10.8%). Postoperatively, seroma requiring repeated aspiration developed in 6 patients, hematoma in 2 patients, and fat necrosis in 1 patient. No wound dehiscence was observed. All patients received adjuvant radiotherapy. None required re-excision or completion mastectomy. Early cosmetic outcomes were evaluated using the Harvard Scale by both patients and an independent surgeon.

Conclusion: In the surgical treatment of breast cancer, the CWPF technique is an effective oncoplastic surgical method that can be performed with acceptable cosmetic outcomes in tumors requiring wide local excision.

Keywords: Breast cancer, chest wall perforator flap, oncoplastic surgery

[S-358]

An alternative implant-free reconstruction technique in macromastia patients: Goldilocks mastectomy

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Objective: Goldilocks mastectomy is a surgical approach typically performed in patients with macromastia who are scheduled for mastectomy and are not suitable candidates for implant-based reconstruction. During the procedure, the entire breast parenchyma is removed, while the fatty dermal flaps are preserved and subsequently utilized for reconstruction. In this study, we aimed to evaluate the surgical outcomes and postoperative patient satisfaction in individuals who underwent Goldilocks mastectomy.

Material and Methods: Between October 2023 and June 2025, a total of 15 female patients who underwent Goldilocks mastectomy at İstanbul University, İstanbul Faculty of Medicine were included in the study. Postoperative patient satisfaction was assessed using the BREAST-Q questionnaire.

Results: The mean age of the patients included in the study was 49.87±8.62 years, and the mean body mass index (BMI) was 30.49±4.00 kg/m^2. Breast size was classified as large in 67% of the patients and moderate in 33%. The degree of ptosis was assessed as grade II in 40% and grade III in 60% of the cases. Regarding indications for surgery, 80% of the patients were operated on for invasive breast cancer, 6.7% for carcinoma *in situ*, 6.7% for a spindle cell tumor, and 6.7% prophylactically due to a BRCA1 mutation. In terms of surgical approach, unilateral mastectomy was performed in 20% of the patients, while 80% underwent bilateral mastectomy. Among the bilateral cases, contralateral breast surgery was performed for symmetrization in 58.3%, prophylactically in 33.3%, and due to malignancy in 8.3% of the patients. Postoperative complications occurred in 4 patients (26.7%); 2 cases were surgical site infections and 2 were hematomas. Three of these patients were managed conservatively, whereas one patient with a surgical site infection required reoperation. According to the BREAST-Q assessment, the mean psychosocial well-being score was 73.33±18.34, and the mean breast satisfaction score was 68.07±18.55. A statistically significant association was found between age and BMI and breast satisfaction ($p<0.05$).

Conclusion: High levels of aesthetic satisfaction and psychosocial well-being were observed in patients who underwent Goldilocks mastectomy. Although the complication rate was 26.7%, the majority of these complications were successfully managed with conservative treatment. Goldilocks mastectomy should be considered an effective reconstruction option with low morbidity, particularly for obese patients who are not suitable candidates for implant-based reconstruction.

Keywords: Breast reconstruction, goldilocks mastectomy, patient satisfaction

[S-359]

Laparoscopic TAPP repair for acutely incarcerated inguinal hernias: A 60-patient retrospective case series with mid-term outcomes

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Objective: Incarcerated inguinal hernias represent a challenging condition in emergency surgical practice and are associated with an increased risk of strangulation, bowel ischemia, and significant morbidity. While the safety and efficacy of laparoscopic techniques have been well established in elective hernia surgery, their role in acutely incarcerated cases remains controversial. Concerns regarding intraoperative assessment of bowel viability and the potential need for resection frequently lead many centers to prefer an open approach. Published data on laparoscopic transabdominal preperitoneal (TAPP) repair in incarcerated cases are limited and often include small cohorts with heterogeneous outcomes. This study aimed to evaluate the clinical and mid-term outcomes of laparoscopic TAPP repair in incarcerated inguinal hernias.

Material and Methods: Between September 2017 and January 2025, 60 patients who underwent emergency laparoscopic TAPP repair for incarcerated inguinal hernia were retrospectively analyzed. Patients with perforation or diffuse peritonitis requiring primary open surgery were excluded. Demographic characteristics, ASA score, hernia type, defect size, intraoperative findings,operative time, hospital stay, complications (Clavien-Dindo system), mortality, and follow-up data were assessed. All patients had a minimum follow-up of 12 months.

Results: Sixty patients were included. The mean age was 54.3±16.8 years, and 86.7% were male. The mean BMI was 26.2, and 76.7% were classified as ASA II. Indirect hernias were observed in 80% of cases, with a mean defect size of 3.2 cm. In 15 patients (25%), intraoperative reduction difficulty required anteromedial enlargement of the internal ring. Incarcerated bowel was present in 21 patients; 9 showed marked congestion and hyperemia. After laparoscopic observation and reassessment, bowel perfusion improved and no resection was required. Necrotic omentum was identified in 6 patients (10%) and treated with partial omentectomy; no bowel resection was performed. The mean operative time was 95.7±31.3 minutes, and the mean hospital stay was 2.05±1.22 days. The overall complication rate was 20%, with a major complication rate (Clavien-Dindo ≥III) of 3.3%. One ASA IV patient (1.7%) died due to respiratory failure. The median follow-up was 23 months (IQR: 18-36), and recurrence occurred in 3 patients (5%).

Conclusion: Published series on laparoscopic repair of incarcerated inguinal hernias typically include 20-40 patients, with recurrence rates ranging from 3% to 8%. With 60 patients and a median follow-up of 23 months, this study represents one of the more comprehensive experiences reported. The 5% recurrence rate and 3.3% major complication rate support the safety and feasibility of laparoscopic TAPP repair in appropriately selected emergency cases. Moreover, laparoscopy enables dynamic assessment of bowel viability, potentially reducing unnecessary bowel resections.

Keywords: Incarcerated inguinal hernia, laparoscopic TAPP, emergency hernia repair

[S-360]

Hydatid cyst of the spleen: A changing paradigm in surgical approach - a series of 28 cases

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Objective: Splenic hydatid cyst is a rare but potentially serious manifestation of hydatid disease. Historically, splenectomy has been the preferred treatment, particularly for large or complicated cysts. However, advances in surgical techniques have increasingly shifted the focus toward spleen-preserving procedures. This study aimed to evaluate surgical outcomes and contribute to the current treatment paradigm.

Material and Methods: A retrospective analysis was performed on 28 patients who underwent surgery for splenic hydatid cysts. Demographic characteristics, cyst size, location and stage, surgical approach, postoperative complications, recurrence, and mortality rates were analyzed.

Results: Eleven patients (39,3%) were male and 17 (60,7%) were female, with a mean age of 40.5 years (range 17-73). Isolated splenic involvement was present in 19 patients, while 9 had concomitant organ involvement. Most cysts were located at the upper pole of the spleen, with a mean cyst diameter of 10.7 cm. Splenectomy was performed in 8 patients (28.6%), whereas spleen-preserving surgery was applied in 20 patients (71.4%). The average cyst size in patients who underwent splenic-preserving surgery was 9.4 cm, while the average cyst size in patients who underwent splenectomy was 13.2 cm. The mean hospital stay was 5.6 days. Recurrence occurred in three patients after spleen-preserving surgery. Postoperative complications were observed in five patients (17.8%), and one patient (3.6%) died following splenectomy.

Conclusion: Surgical treatment remains the cornerstone in the management of splenic hydatid cysts. Although splenectomy is still a valid and necessary option for large, centrally located, or complicated cysts, spleen-preserving surgery should be considered the first-line approach in appropriately selected patients due to its immunological benefits and acceptable morbidity and recurrence rates.

Keywords: Spleen, hydatid cyst, organ preservative

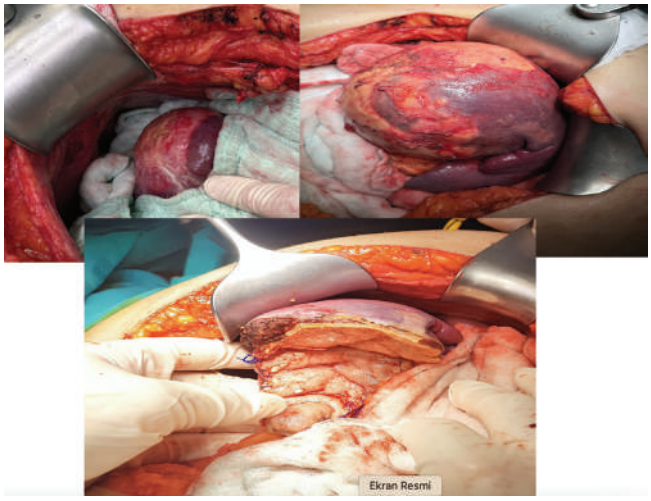


Figure 1. Intraoperative view of surgical management of splenic and hepatic hydatid cysts.

[S-361]

Early discharge after laparoscopic appendectomy in non-complicated appendicitis: A retrospective cohort study including 163 patients

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Objective: Laparoskopik apendektomi, akut apandisit için standart tedavi haline gelmiştir. Ancak ameliyat sonrası taburculuğun en uygun zamanı konusunda tartışmalar devam etmektedir. Erken taburculuk protokolleri hastanede kalış süresini ve sağlık hizmetleri maliyetlerini azaltabilir ancak ameliyat sonrası güvenlikle ilgili endişeler devam etmektedir. Bu çalışmanın amacı, laparoskopik apendektomi sonrası erken taburculuğun güvenliğini ve uygulanabilirliğini değerlendirmek ve başarılı erken taburculukla ilişkili faktörleri belirlemektir.

Material and Methods: This retrospective study included 163 adult patients who underwent laparoscopic appendectomy for uncomplicated acute appendicitis at a single center between January 2022 and January 2026. Patients were divided into two groups according to length of hospital stay: group A, consisting of patients discharged within 24 hours after surgery (n=78), and group B, consisting of patients who remained hospitalized for more than 24 hours (n=85). Demographic characteristics, intraoperative findings, postoperative clinical course, and 30 day readmission rates were retrospectively reviewed. Early discharge criteria were defined as hemodynamic stability, tolerance of oral intake, adequate pain control, and body temperature below 38 °C. Postoperative complications were classified according to the Clavien-Dindo classification. Clinical outcomes between the early and late discharge groups were compared to evaluate the safety and feasibility of early discharge after laparoscopic appendectomy.

Results: A total of 163 adult patients who underwent laparoscopic appendectomy for uncomplicated acute appendicitis were included in the study. Of these, 78 patients (47.9%) were discharged within 24 hours after surgery (group A), while 85 patients (52.1%) remained hospitalized for more than 24 hours (group B). The overall study population had an equal female-to-male ratio, and the mean age was 31.8 years. No statistically significant differences were observed between group A and group B regarding postoperative complications, including intra-abdominal abscess formation and surgical site infections. Similarly, 30 day readmission rates were comparable between the two groups. Postoperative complications, when present, were predominantly minor and classified as Clavien-Dindo grade I-II. Early discharge was more frequently achieved in patients who demonstrated hemodynamic stability, adequate pain control, tolerance of oral intake, and absence of postoperative fever (body temperature <38 °C). No mortality was observed in either group during the study period.

Conclusion: Early discharge after laparoscopic appendectomy is safe, effective, and feasible in carefully selected patients. When standardized and clearly defined discharge criteria are consistently applied, early discharge does not increase postoperative morbidity, complications, or 30 day readmission rates. The findings strongly support early discharge protocols as an integral part of enhanced recovery after laparoscopic appendectomy, reducing hospital stay and costs while maintaining patient safety and satisfaction.

Keywords: Early discharge, enhanced recovery, laparoscopic appendectomy

Table 1. Demographic characteristics and basic clinical parameters			
Characteristic	**Group A (Early discharge) (n=78)**	**Group B (Late discharge) (n=85)**	**p-value**
Age (mean ± SD, years)	31.2 ± 10.4	32.3 ± 11.1	0.45
Gender (F/M)	39 / 39	43 / 42	0.87
Mean BMI (kg/m²)	24.5 ± 3.2	25.0 ± 3.5	0.32
Presence of comorbidity (%)	12 (15.4%)	14 (16.5%)	0.82
Preoperative fever (>38°C, %)	5 (6.4%)	7 (8.2%)	0.61
Tolerated oral intake (%)	78 (100%)	79 (92.9%)	0.04
Note: p<0.05 was considered statistically significant.			

Table 2. Postoperative clinical outcomes and complications			
Outcome / complication	**Group A (early discharge, n=78)**	**Group B (late discharge, n=85)**	**p-value**
Postoperative complications (%)	6 (7.7%)	8 (9.4%)	0.68
- Clavien-Dindo I-II	5 (6.4%)	7 (8.2%)	0.65
- Clavien-Dindo III-IV	1 (1.3%)	1 (1.2%)	0.97
Wound infection (%)	3 (3.8%)	4 (4.7%)	0.78
Intra-abdominal abscess (%)	1 (1.3%)	2 (2.4%)	0.59
30-day readmission (%)	4 (5.1%)	5 (5.9%)	0.83
Mean hospital stay (hours)	18.5±3.2	36.7±10.5	<0.001
Mortality	0	0	-
Note: p<0.05 was considered statistically significant.			

[S-363]

Conversion to open surgery is not a failure but a prognostic marker: Real-world evidence from a laparoscopic colorectal cancer cohort

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Objective: In laparoscopic colorectal cancer surgery, intraoperative conversion to open surgery has traditionally been perceived as a technical failure. However, recent literature suggests that conversion may be a surrogate marker for disease severity, frailty, or adverse intraoperative anatomy, rather than solely surgeon performance. This study aims to evaluate the prognostic impact of conversion in a real-world laparoscopic colorectal cancer cohort

Material and Methods: A retrospective cohort study was conducted including patients who underwent laparoscopic resection for colorectal cancer at Erzurum City Hospital, Haydarpaşa Numune Training and Research Hospital and Koşuyolu Yüksek İhtisas Training and Research Hospital between January 2020 and December 2025. Patients were categorized into converted (laparoscopic-to-open) and completed laparoscopically groups. Primary outcomes included overall survival (OS) and disease-free survival (DFS). Secondary endpoints were major morbidity (Clavien-Dindo ≥III), anastomotic leakage, and length of stay. Multivariable Cox regression was performed to assess the independent prognostic impact of conversion

Results: Out of 524 laparoscopic colorectal resections, 74 patients (14.1%) required conversion to open surgery. Compared to non-converted cases, the conversion group had higher ASA scores, more T4 tumors, and increased intraoperative bleeding ($p<0.001$ for all). Conversion was associated with significantly lower 3-year DFS (64% vs. 78%, HR: 1.52; 95% CI: 1.08-2.22; $p=0.019$) and OS (72% vs. 84%, HR: 1.47; 95% CI: 1.03-2.21; $p=0.034$).

Conclusion: In multivariable analysis, conversion remained an independent predictor of poor DFS after adjusting for T stage, N stage, BMI, and comorbidities (HR: 1.41; $p=0.028$).

Keywords: Laparoscopy, conversion, colorectal cancer, prognosis, oncologic outcomes

[S-365]

Simultaneous laparoscopic median arcuate ligament release and duodenojejunostomy for treatment of concurrent MALS and SMAS: A novel classification and surgical approach

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Objective: Median arcuate ligament syndrome (MALS) and superior mesenteric artery syndrome (SMAS) are rare vascular and mechanical compression syndromes, respectively. Their coexistence is extremely uncommon, and no standardized surgical approach has been established for patients presenting with both conditions. This study aims to evaluate the safety and efficacy of simultaneous laparoscopic median arcuate ligament release (LMALR) and duodenojejunostomy in patients diagnosed with both MALS and SMAS.

Material and Methods: Between July 2022 and November 2024, a total of 13 patients diagnosed with MALS and with concurrent SMAS findings were evaluated. Patients were classified into three groups based on symptom presentation and imaging findings, with 8 patients from group 1 and group 2 undergoing simultaneous LMALR and duodenojejunostomy. Preoperative, intraoperative, and postoperative data were analyzed, including vascular parameters (celiac artery stenosis, peak systolic velocity), weight changes, symptom resolution, and surgical outcomes.

Results: Postoperative abdominal CT angiography demonstrated that the celiac artery narrowing had resolved, and peak systolic velocities had returned to normal in all patients. The simultaneous laparoscopic approach demonstrated a 100% technical success rate, as evidenced by improved vascular and nutritional parameters. No major complications, anastomotic leaks, or mortality were observed.

Conclusion: This study represents the first case series reporting simultaneous laparoscopic LMALR and duodenojejunostomy for MALS and SMAS. Additionally, it introduces a novel classification system to guide surgical decision-making. Our findings suggest that simultaneous laparoscopic correction is safe, effective, and beneficial in selected patients, reducing the need for secondary procedures. Further prospective studies are needed to establish standardized treatment guidelines.

Keywords: Median arcuate ligament syndrome, Dunbar syndrome, Wilkie's syndrome

Table 1. Similarities and differences between MALS and SMAS

	MALS	SMAS
Etiology	Compression of the CA by the MAL	Compression of the duodenum between the SMA and the aorta
Imaging methods used for diagnosis	Doppler USG, CT angiography, MRI, conventional angiography	USG, CT angio, MRI, contrast-enhanced gastric and duodenal emptying study
Disease-specific imaging findings	Narrowing of the CA and post-stenotic dilation PSV above 200 cm/s on doppler ultrasound	Aortomesenteric angle < 22° aortomesenteric distance < 8 mm dilation of the proximal duodenum and stomach delayed gastric emptying
Serum amylase and lipase levels	Normal	Normal/elevated
Electrolyte imbalance	-/+	++
Symptoms	Abdominal pain ++++ bloating+ nausea and vomiting + early satiety+	Abdominal pain + bloating+++ nausea and vomiting +++ early satiety+++
Exacerbation and increase in symptoms with eating	++++	++++
Exacerbation and increase in symptoms with exercise	+++	
Relief after vomiting	+	+++
Unintentional weight loss	+++	+++
Relaxation by adjusting position		++
Conservative treatment	-/+ A simple diet in small portions to lessen pain provocation	++++ Diet adjustment" Post-meal positioning" Massage (the Hayes technique) oral, enteral, and TPN feeding, and electrolyte correction"
Surgical treatment	CA relaxation (most preferred) ganglion blockade postoperative balloon and stent application	Duodenojejunostomy (most preferred) release of treitz SMA transposition

CA: Celiac artery, MALS: Median arcuate ligament syndrome, TPN: Total parenteral nutrition, SMA: Superior mesenteric artery, USG: Ultrasonografi, MRG: Magnetic resonance imaging, CT: Computed tomography, PSV: Peak systolic velocity, MAL: median arcuate ligament, SMAS: Superior mesenteric artery syndrome.

Table 2. If a patient has been diagnosed with MALS and additionally has AMA <22° and AMD <8 mm on imaging, they can be classified into three groups based on the following criteria

	Grup-1 MALS+ SMAS	Group-2 MALS + MALS a sekonder SMAS	Group-3 MALS + SMAS yok
Vomiting	+++	+++	-/+
Vomiting has been severe since the onset of the disease	yes	no	no
Relief after vomiting	++	++	
Duodenal width (mm)	>25	>25	<25
Delayed gastric emptying time	yes	yes	no
Serum amylase and lipase levels	N / ⇧	N / ⇧	N

AMA: Aortomesenteric angle, AMD: Aortomesenteric distance, MALS: Median arcuate ligament syndrome, SMA: Superior mesenteric artery.

[S-366]

The impact of laparoscopic simulation training on technical skill development in surgical residency: An OSATS evaluation

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Objective: Laparoscopic surgery requires advanced technical skills and has a pronounced learning curve. Errors during early training may compromise patient safety; therefore, simulation-based programs that enable skill acquisition in a safe environment are increasingly important. The Objective Structured Assessment of Technical Skills (OSATS) is a validated tool for standardized evaluation. This study assessed the effect of laparoscopic simulation training on residents' technical skills using OSATS and compared training gains by residency year.

Material and Methods: Thirty general surgery residents trained at our laparoscopic simulation center were included and grouped by training year: 0-1 (n=10), 1-3 (n=10), and 3-5 years (n=10). All participants were evaluated with OSATS before and after training. Between assessments, residents completed structured laparoscopic skills sessions.Seven domains were scored (1-5): respect for tissue, instrument handling, time and motion, camera navigation/visualization, flow of operation, bimanual coordination, and suturing/knot-tying. All assessments were performed by an experienced training team. Pre- and post-training total OSATS scores were compared using the Wilcoxon signed-rank test. Individual score gains (Δ=post-pre) were calculated and compared among groups using the Kruskal-Wallis test. Statistical significance was set at $p<0.05$.

Results: Post-training OSATS scores increased significantly across all participants ($p<0.001$). The greatest improvements were observed in respect for tissue, instrument handling, and bimanual coordination. By residency year, score gains were higher in the 0-1 and 1-3 year groups, while the 3-5 year group showed smaller but consistent improvement. Differences in Δ scores among groups were statistically significant ($p=0.004$) (Table 1).

Conclusion: Laparoscopic simulation training leads to significant, measurable improvement in residents' technical skills, with the greatest benefit during early and intermediate training. Simulation-based education facilitates safe acquisition of core laparoscopic skills and enhances patient safety. These findings support integrating simulation training into surgical residency programs.

Keywords: Laparoscopic surgery, simulation, surgical training

Table 1. Comparison of OSATS scores before and after training according to residency year

Residency Year	Pre-OSATS	Post-OSATS	ΔScore
0-1 years (n=10)	7.6±1.3	25.2±1.6	17.6±1.3
1-3 years (n=10)	11.8±2.6	29.6±2.5	17.8 ±1.3
3-5 years (n=10)	15.0±3.5	29.9±3.0	14.9±1.5

OSATS: Objective structured assessment of technical skills.

[S-367]

Comparison of laparoscopic and open appendectomy outcomes in geriatric and non-geriatric populations: A retrospective analysis integrated with systematic evidence on advantages in elderly patients

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Objective: Acute appendicitis (AA) in geriatric patients (≥60 years) poses unique diagnostic and therapeutic challenges due to atypical presentations, comorbidities, and higher complication rates. Laparoscopic appendectomy (LA) demonstrates advantages over open appendectomy (OA) in terms of recovery, yet OA remains common due to institutional factors. A notable 21% of geriatric appendectomy patients had prior emergency visits for non-specific abdominal pain, leading to symptomatic treatment and discharge, which exacerbates diagnostic delays and outcomes.

Material and Methods: Retrospective analysis of 761 patients (2017-2026) stratified into: Group 1 (<60/LA, n=341), group 2 (≥60/LA, n=36), group 3 (<60/OA, n=316), group 4 (≥60/OA, n=68). Outcomes included length of stay (LOS), complications, operative time, conversions. Integrated with meta-analyses and systematic reviews on LA vs. OA in elderly.

Results: In geriatrics, LA reduced LOS (2.1 vs. 3.8 days, $p<0.001$) and complications (6.8% vs. 13.2%, $p=0.028$). Conversion rate in group 2: 10.3%. Operative times longer for LA and geriatrics ($p<0.001$). Systematic evidence confirms LA lowers mortality (OR: 0.24-0.33), morbidity (OR: 0.61-0.65), wound infections (OR: 0.27), and LOS (WMD: -0.51 to -2.72 days) in elderly. Compared to non-elderly, geriatrics exhibit higher risks: complicated appendicitis (RR 2.38), peritonitis (RR: 1.88), complications (RR: 2.59), wound infection (RR: 3.80), abscess (RR: 1.84), readmission (RR: 1.61), and mortality (RR: 12.48).

Conclusion: LA is superior in geriatrics for reduced LOS, morbidity, and mortality, despite longer operative times. Institutional barriers (training, logistics) perpetuate OA; reforms are needed. Vigilance for atypical symptoms and prior non-specific pain presentations is crucial to prevent delays.

Keywords: Acute appendicitis, geriatric surgery, laparoscopic appendectomy

Table 1. Comparison of demographic and clinical characteristics

Parameters	Group 1 (<60/LA)	Group 2 (≥60/LA)	Group 3 (<60/OA)	Group 4 (≥60/OA)	p-value
n	341	36	316	68	-
Age (mean ± SD)	33.2±11.2	70.1±8.8	34.6±12.6	70.9±7.8	<0.001
Operative time (mean ± SD, min)	52.4±18.3	68.7±22.1	45.6±14.5	59.2±19.8	<0.001
Mean LOS (days)	1.4±0.6	2.1±1.1	2.2±1.4	3.8±2.4	<0.001*
SSI/abscess (%)	3.2% (11)	6.8% (2)	5.4% (17)	13.2% (9)	0.028**
Conversion (%)	2.1% (7)	10.3% (4)	N/A	N/A	0.034

LA: Laparoscopic appendectomy, OA: Open appendectomy, SD: Open appendectomy, LOS: Length of stay, SSI: Surgical site infection.

[S-368]

Ultrasound-uided percutaneous microwave ablation in the treatment of hepatic cavernous hemangioma

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Objective: Although hepatic cavernous hemangiomas (HCHs) are the most common benign tumors of the liver, there is no consensus regarding the treatment approach, particularly for small lesions. The aim of this study was to evaluate the efficacy, safety, and short- and long-term clinical outcomes of ultrasound (US)-guided percutaneous microwave (MW) ablation in HCHs that, despite being smaller than 5 cm in diameter, demonstrated a significant tendency to grow.

Material and Methods: This prospective study was conducted between March 2010 and February 2015 at the Department of General Surgery, University Clinical Hospital No. 1, I.M. Sechenov First Moscow State Medical University. A total of 38 patients were included in the study. Patients with hemangiomas larger than 5 cm were excluded. All patients were regularly monitored with US and computed tomography (CT). During follow-up, 13 patients (34.2%) exhibited a 2-2.5-fold increase in hemangioma size over 1.5-3 years, and US-guided percutaneous MW ablation was performed in these patients. Procedures were carried out under intravenous anesthesia, and early and late post-ablation evaluations were performed using US and CT.

Results: Among the 13 treated patients, 3 (23.1%) were asymptomatic. Single-session MW ablation was sufficient in 11 patients (84.6%), while 2 patients (15.4%) required a second session due to tumor recurrence. Transient elevation of liver transaminases was observed in the early post-procedural period, with no serious complications or mortality. During long-term follow-up, fibrotic tissue replacement was observed in all treated hemangioma areas.

Conclusion: US-guided percutaneous MW ablation is a safe, effective, and minimally invasive method for treating small yet progressively enlarging HCH. This approach provides an organ-preserving alternative that allows patients to avoid major liver surgeries.

Keywords: Hemangioma, ablation, minimally invasive surgery

Table 1. Study methods and patient characteristics

Feature	Description
Total number of patients	38
Patients excluded from the study	Hemangiomas >5 cm in diameter
Number of patients with growth during follow-up	13 (34.2%)
Age (mean, range)	44 years (30-58)
Sex distribution	Female: 9 (69.2%), male: 4 (30.8%)
Number of lesions	Single lesion in 12 patients; 4 lesions in 1 patient
Lesion size	2.5-5.0 cm
Lesion location	Right lobe: 9, left lobe: 3, bilobar: 1
Diagnostic method	Contrast-enhanced multislice CT
Approach route	Intercostal/subcostal
Imaging guidance	Ultrasound
Anesthesia	Intravenous
MW probe	14G, active tip 2-2.5 cm
Generator	Ave Cure MVG881 (USA)
Ablation duration	10-20 minutes
Target temperature	100-120 °C
Postoperative therapy	Antibiotics, hepatoprotective and supportive therapy

MW: Microwave, CT: Computed tomography, USA: United States of America.

Table 2. Findings after MW ablation

Parameter	Findings
Procedure tolerance	Good in all patients
Early postoperative complaints	Mild pain and discomfort
Serious complications	None observed
Patients for whom single session was sufficient	11 (84.6%)
Need for second session	2 (15.4%)
ALT-AST changes	2-3 fold increase on day 1, normalized by day 5
Long-term follow-up duration	8-32 months (mean 20 months)
Ablation area	Fibrotic tissue in all patients
Fluid collection	Observed in 6 patients, resolved within 6 months

ALT: Alanine aminotransferase, AST: Aspartate aminotransferase, MW: Microwave.

[S-369]

Comparison of clinical outcomes between single port sleeve gastrectomy and traditional sleeve gastrectomy

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Objective: Sleeve gastrectomy, one of the most commonly performed procedures in bariatric surgery, has been applied using different approaches with the advancement of surgical techniques over time. The aim of this study was to compare the clinical outcomes and patient satisfaction of single-port sleeve gastrectomy with those of conventional multiport sleeve gastrectomy, and to identify the advantages and disadvantages of each approach.

Material and Methods: In this study, 40 patients who underwent bariatric surgery were retrospectively analyzed. Patients were divided into two groups according to the surgical technique performed: single-port sleeve gastrectomy (n=18) and conventional multiport sleeve gastrectomy (n=22). For each patient, the following data were collected: total weight loss (TWL, %), excess weight loss at postoperative 3 months (EWL, %), length of hospital stay (days), and patient satisfaction assessed using a four-item questionnaire. The questionnaire included the following items: Satisfaction with postoperative pain level (1-5), Satisfaction with aesthetic appearance (1-5), Satisfaction with time to return to daily activities (1-5), Overall satisfaction with the surgical process (1-5).

Results: When weight loss parameters were evaluated the mean total weight loss (TWL) was significantly higher in the conventional multiport sleeve gastrectomy group than in the single-port group (34.7% vs. 30.3%, p<0.001). Similarly, mean excess weight loss (EWL) at postoperative 3 months was greater in the conventional sleeve group (35% vs. 30%, p<0.05). No significant difference was found between the groups in postoperative length of hospital stay (2.6 vs. 2.5 days, p=0.93). Postoperative pain satisfaction scores were similar between the conventional and single-port groups (2.73 vs. 3.22, p=0.85). Satisfaction with aesthetic appearance was significantly higher in the single-port group (5.00 vs. 3.53, p<0.01). Satisfaction with return to daily activities and overall surgical satisfaction were comparable between the groups (p>0.05).

Conclusion: Single-port sleeve gastrectomy is a safe surgical option that may be preferred in patients with high aesthetic expectations. However, in terms of weight loss outcomes, the conventional multiport approach still appears to be superior. Further large-scale prospective studies are needed to evaluate the long-term outcomes of this technique and the impact of ongoing technical advancements.

Keywords: Patient satisfaction, single port, sleeve gastrectomy, weight loss outcomes

Table 1. Hospital stay and patient satisfaction outcomes

Parameter	Conventional multiport sleeve	Single port sleeve	p-value
Mean lenght of hospital stay (days)	2.6 days	2.5 days	0.93
Questionnaire item 1 (mean)	2.73	3.22	0.85
Questionnaire item 2 (mean)	3.53	5.00	<0.01
Questionnaire item 3 (mean)	4.66	5.00	>0.05
Questionnaire item 4 (mean)	4.80	4.88	0.89

Table 2. Comprasion of weight loss outcomes

Parameter	Conventional multiport sleeve	Single port sleeve	p-value
Mean TWL(%)	34.7%	30.3%	<0.001
Mean EWL at 3 months	35%	30%	<0.05

[S-370]

The effect of specimen extraction site on postoperative clinical and technical outcomes in laparoscopic sleeve gastrectomy a retrospective single-center study

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Objective: Laparoscopic sleeve gastrectomy (LSG) is a widely performed standard surgical procedure for the treatment of morbid obesity. Although the operative technique has been largely standardized, the incision site used for specimen extraction may differ in terms of abdominal wall trauma, postoperative pain, and surgical ergonomics. The impact of extraction site localization on clinical and technical outcomes has not been clearly defined. This study aimed to evaluate the effects of different extraction sites on postoperative and technical outcomes.

Material and Methods: In this retrospective single-center study, patients who underwent LSG were divided into two groups according to the specimen extraction site. Patients who underwent extraction through the left trocar site were defined as Group 1, whereas those who underwent extraction through the supraumbilical trocar site were defined as Group 2. Standard stapler line principles were applied in all cases. Demographic characteristics and body mass index were recorded. Postoperative pain levels were assessed using the visual analog scale at predetermined time intervals. The presence of nausea and vomiting was systematically documented. Extraction time, time to mobilization, length of hospital stay, as well as postoperative and extraction-related perioperative complications were analyzed. The groups were compared using appropriate statistical methods.

Results: The groups were comparable in terms of demographic characteristics. During the early postoperative period, lower pain scores were observed in Group 2, and this difference became more pronounced in the late early postoperative phase. Extraction time was shorter in Group 2. A more favorable trend in gastrointestinal tolerance was also observed in Group 2. Overall postoperative complication rates were similar between the groups. Technical difficulties related to the extraction site were more frequently encountered in Group 1.

Conclusion: In LSG, specimen extraction through the supraumbilical trocar site (Group 2) may provide advantages in terms of postoperative comfort and technical efficiency. Considering surgical ergonomics and the minimization of abdominal wall trauma, the supraumbilical approach appears to be a safe and feasible alternative.

Keywords: Laparoscopic sleeve gastrectomy, specimen extraction site, postoperative pain

[S-371]

Evaluation of the relationship between preoperative serum albumin (g/dL) value and total length of hospital (days) in patients undergoing laparoscopic sleeve gastrectomy surgery

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Objective: Hospital stay after laparoscopic sleeve gastrectomy is an important parameter reflecting postoperative recovery and clinical course. Serum albumin level is a biochemical indicator that provides information about the patient's nutritional status and physiological reserve in the preoperative period. This study aimed to evaluate the relationship between preoperative albumin (g/dL) level and total hospital stay (days) in patients who underwent laparoscopic sleeve gastrectomy.

Material and Methods: Total length of hospital stay (days) and preoperative albumin (g/dL) values included in the dataset were used. The relationship between the variables was examined using Spearman correlation analysis, as it is less sensitive to distribution assumptions. The statistical significance level was accepted as $p<0.05$.

Results: The total length of hospital stay (days) and preoperative serum albumin (g/dL) values of 220 patients (130 women and 90 men) who underwent laparoscopic sleeve gastrectomy between December 2023 and 2025 were analyzed. The mean total length of hospital stay was 5.79±3.05 days (median 5 days). The mean preoperative serum albumin was 41.12±2.81 g/dL (median 41.35 g/dL). Spearman correlation analysis revealed a weak negative correlation between preoperative serum albumin and total length of hospital stay ($\rho=-0.127$); however, this correlation was not statistically significant ($p=0.061$).

Conclusion: In our study, no significant relationship was demonstrated between preoperative serum albumin levels and total length of hospital stay in patients undergoing laparoscopic sleeve gastrectomy (Spearman $p=0.061$). It is thought that length of hospital stay may also be affected by multiple variables such as the development of complications, concomitant diseases, and perioperative clinical factors. Further studies with multivariate analyses and more data are needed.

Keywords: Albumin, hospital stay, laparoscopic sleeve gastrectomy

[S-372]

Clinical approach to staple line suturing in laparoscopic sleeve gastrectomy: A single-center experience

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Objective: Laparoscopic sleeve gastrectomy (LSG) is one of the most commonly performed bariatric procedures worldwide. Despite its proven effectiveness, staple line–related complications such as bleeding and leakage remain important sources of postoperative morbidity. Staple line suturing is frequently employed to reduce these complications; however, the impact of different suturing strategies on operative time and short-term surgical outcomes remains controversial. This study aimed to evaluate the effects of various staple line suturing approaches on operative time and short-term outcomes in laparoscopic sleeve gastrectomy.

Material and Methods: A retrospective analysis was conducted on 163 patients who underwent laparoscopic sleeve gastrectomy at a single center between 2019 and 2025. All procedures were performed by the same surgical team using a standardized operative technique. A 36 French bougie was used in all cases. Intraoperative leak testing was routinely performed using methylene blue and air, and a drain was placed at the end of the procedure. Patients were divided into three groups according to the staple line suturing approach: no suturing, single continuous Lembert suturing, and double continuous Lembert suturing. Operative time, postoperative complications, complication severity according to the Clavien-Dindo classification, need for blood transfusion, staple line leakage, and mortality were recorded and compared among groups using appropriate statistical methods.

Results: Seventy-seven point three percent of the patients were female. The mean age was 33.2±9.9 years, and the mean preoperative body mass index was 47.5±5.3 kg/m². Baseline demographic characteristics were comparable among the three groups (Table 1). The mean operative time for the entire cohort was 81.2±11.4 minutes and differed significantly according to the suturing strategy ($p<0.001$). The shortest operative time was observed in the non-sutured group, whereas the longest duration was recorded in patients who underwent double continuous lembert suturing. The overall postoperative complication rate was 13.5%. No Clavien-Dindo grade IV or V complications were observed. Importantly, no staple line leaks or surgery-related mortality occurred during the study period (Table 2).

Conclusion: Although the presence and extent of staple line suturing significantly increased operative time, short-term safety outcomes were comparable across different suturing strategies. In experienced surgical teams, single continuous Lembert suturing appears to be a safe and feasible option in laparoscopic sleeve gastrectomy.

Keywords: Sleeve gastrectomy, staple line, suturing

Table 1. Demographic and surgical characteristics of patients according to stapler line suturing approach

Variable	No suturing (n=43)	Single continuous lembert (n=68)	Double continuous lembert (n=52)	p-value
Age (years), mean ± SD	33.5±10.1	33.3±9.5	32.9±10.6	ns
Female, n (%)	33 (76.7)	53 (77.9)	40 (76.9)	ns
Male, n (%)	10 (23.3)	15 (22.1)	12 (23.1)	ns
Preoperative BMI (kg/m²), mean ± SD	47.5±4.9	47.3±5.7	47.9±5.0	ns
Operative time (min), mean ± SD	70.2±7.7	82.1±7.7	88.9±11.1	<0.001†

†Kruskal-Wallis test.
BMI: Body mass index, SD: Standard deviation, ns: Not significant.

Table 2. Distribution of postoperative outcomes and complications in the entire cohort (n=163)

Outcome	n (%)
Any postoperative complication	22 (13.5)
Clavien-Dindo grade I	8 (4.9)
Clavien-Dindo grade II	4 (2.5)
Clavien-Dindo grade III	3 (1.8)
Clavien-Dindo ≥ grade IV	0 (0)
Blood transfusion	9 (5.5)
Staple line leak	0 (0)
Surgery-related mortality	0 (0)
Non-surgical mortality	1 (0.6)

Complications were classified according to the Clavien-Dindo system.

[S-373]

The effect of gastritis and *Helicobacter pylori* on weight loss and nutritional tolerance following laparoscopic sleeve gastrectomy

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Objective: Laparoscopic sleeve gastrectomy (LSG) is a widely performed and effective method in the treatment of morbid obesity. The impact of gastritis and *Helicobacter pylori* (*H. pylori*) infection ,frequently encountered in surgical specimens, on success metrics such as postoperative weight loss and food tolerance remains controversial in the literature. This study aims to evaluate the effects of gastritis and *H. pylori* positivity on weight loss and oral tolerance during the first six months postoperatively in patients undergoing LSG.

Material and Methods: This single-center, retrospective study included 52 patients who underwent LSG for morbid obesity. Patients' demographic data, preoperative body mass index, histopathological findings of surgical specimens (presence/severity of gastritis, *H. pylori* status), and postoperative weight measurements at 1, 3, and 6 months were recorded. Weight loss success was evaluated using percentage of total weight loss (TWL%) and percentage of excess weight loss (EWL%). Oral food tolerance at the postoperative 6th month was measured using the standardized quality of alimentation (QoA) questionnaire. Statistical analysis was performed using Mann-Whitney U and chi-square tests, with a significance level of $p<0.05$.

Results: In the study population, the prevalence of gastritis and *H. pylori* was found to be 59.6% (n=31) and 34.6% (n=18), respectively. A highly significant statistical correlation was identified between the presence of gastritis and *H. pylori* positivity ($p<0.0001$); while 58.1% of patients with gastritis were *H. pylori* positive, the pathogen was not detected in any patients without gastritis. At the 6th month, the mean EWL% was 56.02%. Neither the presence of gastritis nor *H. pylori* positivity had a statistically significant effect on weight loss metrics at the 1st, 3rd, or 6th postoperative months (all $p>0.05$). At the postoperative 6th month, 98.1% of the patients exhibited acceptable (48.1%) or excellent (50%) oral tolerance (QoA score ≥17). Furthermore, mean QoA scores were not influenced by gastritis ($p=0.324$) or *H. pylori* status ($p=0.444$). A weak but significant negative correlation was observed between patients' subjective dietary quality assessments and objective QoA scores ($p=0.037$).

Conclusion: Study findings demonstrate that gastritis or *H. pylori* in LSG specimens does not adversely affect short-term weight loss or oral tolerance. While preoperative *H. pylori* eradication remains debated, our study reveals these pathologies do not compromise surgical success or patient comfort. However, larger prospective studies are required to generalize findings and evaluate long-term outcomes.

Keywords: Laparoscopic sleeve gastrectomy, nutritional tolerance, *Helicobacter pylori*

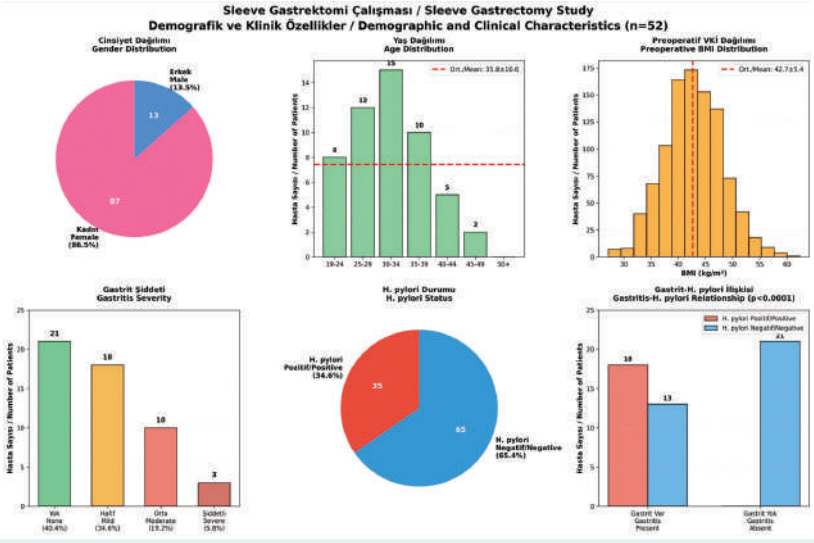


Figure 1. Demographic and clinical characteristics.

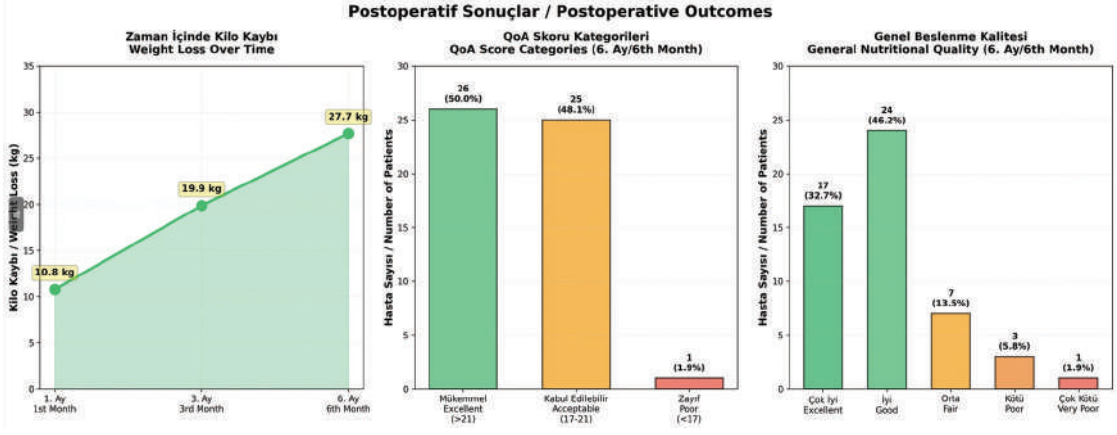


Figure 2. Postoperative outcomes.

[S-374]

Comparison of balloon volume, weight loss rates, and symptom duration in patients undergoing gastric balloon implantation at our clinic: A retrospective analysis

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Objective: The aim of this study was to compare gastric balloon volume with weight loss rate and symptom duration in patients with BMI higher than 27 kg/m^2 who underwent gastric balloon implantation due to weight loss in our clinic.

Material and Methods: This study retrospectively examined patients who underwent gastric balloon placement in our clinic between 2024 and 2025. Data were retrospectively collected from 55 consecutive overweight patients who underwent intragastric balloon (bariglobe) placement. All balloons were placed and removed by a single endoscopist. One group (group 1) received 450 mL of methylene blue-dyed saline, and the other group received 500 mL. Post-procedure, patients were given PPIs, antiemetics, and antacid analgesics to control nausea, vomiting, abdominal pain, and reflux symptoms. Pre-procedure informed consent was obtained from all patients. Demographic data, weight loss rates, and symptom durations of the patients were compared.

Results: Thirty (55) of the patients were male and 15 (45) were female. Pre-procedure weight was 102.5±19.1 kg (group 1 =105.8±17.1, group 2 =98±19.1, p>0.05). The mean weight of the patients at six months was 84.76 ±13.8. The mean weight loss rate of all patients was 17.2±8% (mean weight loss of group 1 was 18.3±7.5, group 2 was 15.6±9.2%, p>0.05). The mean body mass index (BMI) at balloon placement was 36.6±3.3 kg/m^2 (group 1 36.8±3.2, group 2 36.5±3.7), while the mean total BMI loss at 6 months was 18.4±7.7% (group 1 18.2±7.3%, group 2 18.6±8.7%, p>0.05). Symptom duration was 1±10 days for group 1 and 2±12 days for group 2 (p<0.001).

Conclusion: In our retrospective study of patients who underwent intragastric balloon placement, no statistically significant difference was observed in weight loss rates between the two groups; however, a statistically significant difference was observed in symptom duration. Based on these results, we concluded that inflating intragastric balloons with 450 cc of methylene blue shortens the symptom duration in overweight patients. Further comprehensive prospective studies are needed in the future.

Keywords: Gastric balloon ,symptom duration

[S-375]

Sleeve gastrektomi sonrası erken dönem kilo kaybında rezeke edilen mide hacmi ve stapler hattı uzunluğunun rolü

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Amaç: Laparoskopik sleeve gastrektomi (LSG), morbid obezite cerrahisinde hem kısıtlayıcı hem de hormonal etkileri nedeniyle dünya genelinde altın standart yöntemlerden biri haline gelmiştir. Operasyonun temel teknik prensibi, midenin büyük kurvatur boyunca rezeke edilerek hacminin kalıcı olarak azaltılmasına dayanmaktadır. Ancak literatürde, çıkarılan mide dokusunun boyutlarının veya oluşturulan zımba (stapler) hattı uzunluğunun, özellikle cerrahi sonrası erken dönemdeki kilo kaybı başarısı üzerindeki etkisi halen tartışmalıdır. Bu çalışmanın amacı, rezeke edilen mide spesimenine ait hacim ve uzunluk ölçümlerinin, hastaların preoperatif vücut kitle indeksi (VKİ) değerleriyle birlikte postoperatif üçüncü ay kilo kaybı parametreleri üzerindeki prediktif değerini değerlendirmektir.

Gereç ve Yöntem: Bu çalışmada, Temmuz–Ekim 2025 tarihleri arasında kliniğimizde primer LSG uygulanan ardışık 90 hastanın verileri retrospektif olarak incelenmiştir. Revizyonel olgular ve ek bariyatrik prosedürler analiz dışı bırakılmıştır. Hastaların demografik özellikleri ile preoperatif antropometrik ölçümleri ve postoperatif üçüncü ay kilo ile VKİ değerleri standart protokoller doğrultusunda kaydedilmiştir. Cerrahi sonrası patolojik incelemede elde edilen spesimen boyutları ve stapler hattı uzunlukları kullanılarak, geometrik varsayımlar aracılığıyla tahmini rezeke mide hacmi hesaplanmıştır. Erken dönem kilo kaybı başarısı; mutlak kilo kaybı (kg), toplam kilo kaybı yüzdesi (%TWL) ve fazla kilo kaybı yüzdesi (%EWL) parametreleri kullanılarak değerlendirilmiştir. Değişkenler arasındaki istatistiksel ilişkiler Pearson korelasyon analizi ile %5 anlamlılık düzeyinde test edilmiştir.

Bulgular: Çalışmaya dahil edilen 90 hastanın 68'i kadın, 22'si erkek olup yaş ortalaması 34,7±10,8 yıl olarak saptanmıştır. Preoperatif VKİ ortalaması 45,3±5,7 kg/m² iken üçüncü ay sonunda ortalama VKİ değeri 36,6±5,0 kg/m²'ye gerilemiştir. Ortalama kilo kaybı 23,2±9,6 kg olarak bulunmuştur. Operatif veriler incelendiğinde ortalama stapler hattı uzunluğu 19,8±3,7 cm, hesaplanan rezeke mide hacmi ise 206,5±95,3 cm³ olarak belirlenmiştir. İstatistiksel analizde %TWL ile stapler uzunluğu (r=0,021; p=0,847) ve rezeke mide hacmi (r=-0,164; p=0,123) arasında anlamlı bir korelasyon saptanmamıştır. Buna karşılık preoperatif VKİ değerinin mutlak kilo kaybı üzerinde pozitif (r=0,339; p=0,001), %EWL başarısı üzerinde ise negatif yönde anlamlı ilişki gösterdiği izlenmiştir (r=-0,313; p=0,003).

Sonuç: Elde edilen bulgular, LSG sonrası erken dönem kilo kaybı başarısının rezeke edilen mide hacmi veya stapler hattı uzunluğu gibi cerrahi teknik parametrelerden bağımsız olduğunu düşündürmektedir. Bu durum, erken dönemde gözlenen kilo kaybında mide hacmindeki mekanik daralmadan ziyade hastanın başlangıç antropometrik özelliklerinin ve operasyon sonrası gelişen fizyolojik adaptasyonların daha belirleyici olabileceğini göstermektedir. Cerrahi teknik detayların kilo korunumu ve uzun dönem sonuçlar üzerindeki etkisini daha net ortaya koyabilmek için daha geniş örneklemli ve uzun takip süreli prospektif çalışmalara ihtiyaç vardır.

Anahtar Kelimeler: Sleeve gastrektomi, erken dönem kilo kaybı, rezeke mide hacmi

[S-378]

The effect of omentopexy after sleeve gastrectomy on quality of life and reflux symptoms

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Objective: Sleeve gastrectomy is the most commonly performed procedure in bariatric surgery. Postoperative complications such as nausea, vomiting, reflux, torsion, and staple-line leak may occur. Omentopexy is defined as suturing the omentum to the staple line. The addition of omentopexy to conventional sleeve gastrectomy aims to reinforce the staple line, prevent torsion, and reduce leak and reflux symptoms.The aim of this study is to evaluate the effect of omentopexy added to sleeve gastrectomy on quality of life and reflux symptoms.

Material and Methods: This was a prospective comparative study conducted between January 2024 and March 2025. A total of 100 patients were included: 50 underwent conventional sleeve gastrectomy and 50 underwent sleeve gastrectomy with omentopexy. The questionnaires used were the bariatric quality of life (BQL) and the Gastroesophageal Reflux Disease-Health-Related Quality of Life (GERD-HRQL). Patient characteristics: Demographic data were similar between the groups. Age, sex, and BMI distributions were comparable.

Results: BQL scores: at 6 months, the BQL score was significantly higher in the omentopexy group compared to the conventional group (51.84±2.72 vs. 38.74±2.62; $p<0.001$). Category distribution was as follows: 68% Moderate, 18% Poor, and 14% Good. GERD-HRQL scores: at 6 months, GERD-HRQL scores were significantly lower in the omentopexy group compared to the conventional group (9.80±2.65 vs. 29.94±2.80; $p<0.001$). Score distribution was: 46% minimal, 32% moderate, 12% mild, 8% severe, and 2% Very severe. Postoperative complaints: hair loss: 28%; bloating/gas: 21%; heartburn: 14%; vomiting: 14%; no complaints: 10%. Medication use: Aanalgesics: 21%; antihypertensive drugs: 10%; proton pump inhibitors: 10%; antidepressants: 7%; no regular medication: 17%. Comparative findings: the omentopexy group demonstrated higher quality of life and lower reflux symptoms. No anastomotic leaks were observed in either group. Based on preoperative and postoperative day 1 complete blood counts, a mean decrease of 1.07 g/dL in hemoglobin levels was observed.

Conclusion: The findings of this study are consistent with the advantages reported in the literature. Omentopexy reinforces the staple line and may reduce postoperative complications. Limitations of the study include its single-center design and short follow-up period. Sleeve gastrectomy with added omentopexy improves quality of life and reduces reflux symptoms. It is a safe and feasible technique.

Keywords: Sleeve gastrectomy, omentopexy, bariatric surgery, GERD-HRQL, BQL

[S-379]

Five-year follow-up attendance after bariatric surgery, reasons for non-attendance, and its association with weight loss outcomes

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Objective: Long-term follow-up after bariatric surgery is considered part of routine clinical practice in many centers; however, the impact of follow-up attendance on weight loss outcomes remains unclear. This study aimed to identify the reasons for non-attendance during the five-year follow-up period in patients undergoing bariatric surgery and evaluate the relationship between follow-up attendance and fifth-year weight loss outcomes, specifically percentage of excess weight loss (EWL) and percentage of total weight loss (TWL).

Material and Methods: A total of 189 patients who underwent bariatric surgery between January 2018 and December 2019 at the Marmara University Pendik Training and Research Hospital, Department of General Surgery, were retrospectively analyzed. According to our clinic's standard protocol, patients were scheduled for follow-up visits at postoperative months 1, 3, 6, 9, 12, 18, 24, 36, 48, and 60. Follow-up attendance was calculated as the ratio of attended visits to the total number of scheduled visits. Reasons for non-attendance were identified through telephone interviews. For the evaluation of fifth-year weight loss outcomes, patients were categorized based on EWL (<50% ≥50%) and TWL (<20% ≥20%). Patients who underwent revision surgery, diagnosed with malignancy during follow-up, or died during the follow-up period were excluded from the analysis assessing the association between attendance and weight loss outcomes. After exclusions, 153 patients were included in the final analysis.

Results: The mean age was 40.9±10.2 years, and 76.5% of patients were female. The median preoperative body mass index (BMI) was 46.5 (10) kg/m², while the median BMI at five years was 32.5 (8.75) kg/m². At the fifth year, median EWL was 56% (34.1) and median TWL was 23% (12.7). The median follow-up attendance rate was 40% (30). Only 5.8% of patients attended all scheduled visits, whereas 94.2% had incomplete follow-up. The most common reasons for non-attendance were distance from the center (27.2%), work-related constraints (22.7%), and perceiving follow-up as unnecessary (22.7%). In the 153-patient analysis group, no significant difference in attendance was found between EWL <50% and ≥50% groups ($p=0.291$). Similarly, no significant difference in attendance was observed between TWL <20% and ≥20% groups ($p=0.329$).

Conclusion: Long-term follow-up attendance after bariatric surgery was low, and no significant association was found between attendance and fifth-year weight loss outcomes. These findings suggest that the frequency of recommended follow-up visits may not be equally necessary for all patients in terms of weight loss results. Transportation difficulties and time constraints were the leading causes of non-attendance, indicating a need to reconsider follow-up strategies.

Keywords: Obesity, sleeve, weigt loss

Table 1. Baseline demographic and clinical characteristics

Parameter	Value [Median (IQR)/Mean ± SD / n (%)]
Age (years)	40.9±10.2
Sex	Female: 117 (76.5%) Male: 36 (23.5%)
Height (cm)	164 (13)
Preoperative BMI (kg/m²)	46.5 (10)
Follow-up rate (%)	40 (30)
Postoperative BMI (kg/m²)	32 (8.75)
5th Year EWL (%)	56 (34.1)
5th Year TWL (%)	23 (12.7)

EWL: Excess weight loss, TWL: Total weight loss.

Table 2. Reasons for non-attendance among contacted patients with incomplete follow-up

Reason for non-attendance	Number of patients (n)	Percentage (%)
Transportation problems/Distance	42	27.2
Considered follow-up unnecessary	35	22.7
Work-related reasons	35	22.7
Due to the pandemic	31	20.1
Other health problems	21	13.6
Lack of awareness	20	12.9
Family-related reasons	12	7.7
Did not believe in the benefit	10	6.5
Reoperated and enrolled in another follow-up program	4	2.6

**Percentages exceed 100% because patients were allowed to report multiple reasons.

[S-380]

Evaluation of early postoperative outcomes after metabolic surgery using BRI and BMI: Comparison of sasi and sleeve gastrectomy

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Objective: Morbid obesity is a major public health problem closely associated with metabolic disorders such as type 2 diabetes mellitus, dyslipidemia, and insulin resistance. Metabolic surgery is considered an effective treatment option as it provides significant weight loss along with rapid and marked improvement in metabolic parameters. Sleeve gastrectomy and single anastomosis sleeve ileal bypass (SASI) are among the most commonly performed metabolic surgical techniques today. Postoperative success in bariatric surgery is generally assessed using body mass index (BMI); however, BMI does not adequately reflect body fat distribution or central obesity. The body roundness index (BRI) is a newer anthropometric parameter reflecting body shape and central adiposity and may be more strongly associated with metabolic risk.This study aimed to evaluate early postoperative changes in weight loss, BMI, BRI, and metabolic parameters in morbidly obese patients undergoing SASI or sleeve gastrectomy, and to compare the two surgical techniques.

Material and Methods: This retrospective study analyzed data from patients who had both preoperative and postoperative 1-month follow-up records. The evaluated variables included body weight, BMI, BRI, HbA1c, HDL, LDL, triglycerides, C-peptide, HOMA-IR, and fasting blood glucose. Continuous variables were presented as mean ± standard deviation. Comparisons between preoperative and postoperative 1-month values were performed using paired tests. Differences in changes between the SASI and sleeve gastrectomy groups were evaluated using the Welch two-sample test. A p-value <0.05 was considered statistically significant.

Results: A total of 64 patients were included, with a mean age of 40.50±12.88 years. The baseline BMI (in patients with available data) was 45.08±6.95 kg/m². Comparison between SASI and sleeve gastrectomy. 1-month weight loss (kg): • Sleeve: 14.89±6.07 (n=46) • SASI: 12.62±6.40 (n=16) •Between-group difference: p=0.228. 1-month %TWL: oSleeve: 12.23±4.38 oSASI: 10.56±5.22 • Between-group difference: p=0.263. Change in BRI (Δ): •Sleeve: -1.66 • SASI: -1.73 o Between-group difference: p=0.812 Both BMI and BRI showed statistically significant reductions at the first postoperative month (p<0.001). However, since BRI reflects central obesity, it demonstrated a closer association with early improvements in metabolic parameters.

Conclusion: At one month after SASI and sleeve gastrectomy, significant weight loss and reductions in BRI were observed, along with marked improvements in glycemic control and insulin resistance markers (HbA1c and HOMA-IR). No statistically significant differences were found between SASI and sleeve gastrectomy in terms of weight loss or changes in BRI during the early postoperative period.BRI appears to be a more effective parameter than BMI in reflecting early metabolic improvement in the postoperative period.

Keywords: Metabolic surgery, sleeve gastrectomy, SASI, body roundness index (BRI), body mass index (BMI)

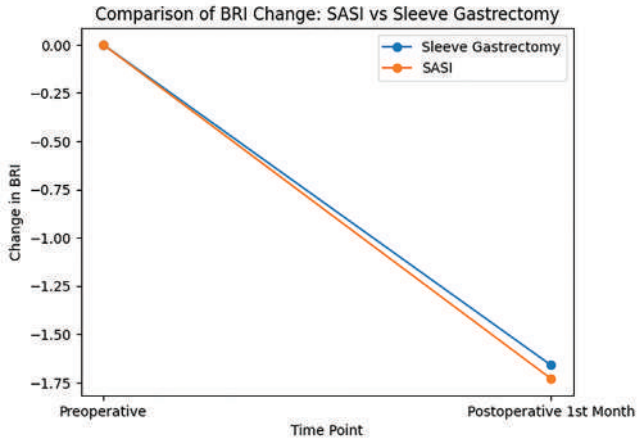


Figure 1. Change in body roundness index (BRI) from preoperative period to postoperative 1st month.

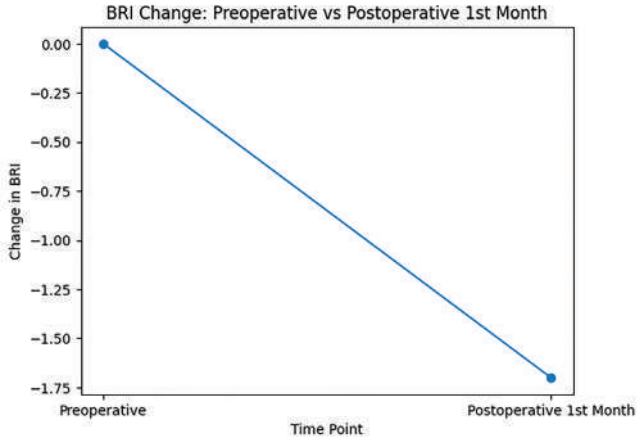


Figure 2. Change in BMI from preoperative period to postoperative 1st month.

BMI: Body mass index.

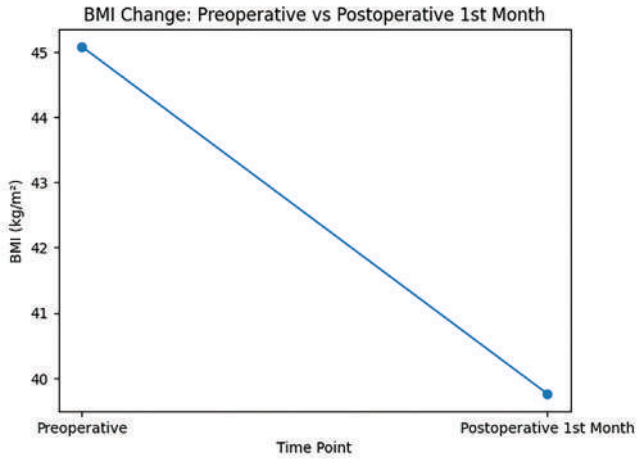


Figure 3.

[S-382]

Necessity of postoperative intensive care unit admission in patients undergoing bariatric surgery

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Objective: Routine intensive care unit (ICU) admission was historically standard for bariatric surgery patients due to high BMI and complex comorbidity profiles. However, the paradigm has shifted with the implementation of enhanced recovery after surgery (ERAS) protocols, which advocate for selective, evidence-based critical care utilization. Identifying patients who truly require ICU-level monitoring is essential for optimizing patient safety, managing hospital resources effectively, and improving cost-benefit ratios. This study aims to determine independent perioperative risk factors predicting the necessity of ICU admission across diverse bariatric procedures.

Material and Methods: A retrospective analysis was performed on 291 patients who underwent bariatric surgery at a single center between January 2015 and December 2025. Evaluated variables included demographics, BMI, American Society of Anesthesiologists (ASA) scores, smoking history, total operative duration, perioperative blood transfusion, and conversion to open surgery. The primary outcome measure was postoperative ICU admission. Independent predictors were identified using a multivariate logistic regression model, with statistical significance defined as $p<0.05$.

Results: The cohort included 229 females (78.7%) and 62 males (21.3%), undergoing [laparoscopic sleeve gastrectomy (LSG); n=264] or [laparoscopic gastric bypass (LGB); n=27]. Mean BMI was 44.99±4.5 kg/m², with no significant difference between the LSG (45.00±4.5 kg/m²) and LGB (44.87±5.0 kg/m²) groups ($p>0.05$). The overall ICU admission rate was 41.9% (n=122); 95.1% (n=116) were planned monitorings, while only 4.9% (n=6) were unplanned. Mean ICU stay was 1.08±0.8 days. Multivariate analysis identified a high ASA score (ASA 3) as the strongest predictor, increasing ICU risk 12.1-fold (OR: 12.16, 95% CI: 6.14-24.09, $p<0.001$). Smoking independently increased risk 1.9-fold (OR: 1.93, 95% CI: 1.03-3.61, $p=0.039$). Each one-minute increase in operative duration correlated with a 1.2% higher probability of admission (OR: 1.012, $p<0.001$). Unplanned admissions due to major complications remained rare, involving only 0.8% of the total cohort.

Conclusion: Postoperative ICU admission in bariatric surgery is primarily dictated by the patient's baseline physiological reserve (ASA score) and operative duration rather than the specific surgical technique. Smoking remains a critical modifiable risk factor influencing monitoring requirements. Patients with ASA 2 status, non-smokers, and those with shorter predicted operative times can be safely managed in general wards under ERAS protocols, optimizing ICU resources for truly high-risk cases.

Keywords: Bariatric surgery, intensive care unit, postoperative, morbid obesity

Table 1. Comparison of demographic and clinical characteristics

Variable	Total (n=291)	LSG (n=264)	LGB (n=27)	p-value
Gender (female/male)	229/62	205/59	24/3	0.210
BMI (kg/m²), (mean ± SD)	44.99 (±4.5)	45.00 (±4.5)	44.87 (±5.0)	0.890
Operative duration (min)	171.4 (±48)	165.2 (±42)	256.4 (±65)	<0.001
ASA 3 (%)	30.9%	28.4%	55.5%	0.002
Smoking status (n, %)	74 (25.4%)	65 (24.6%)	9 (33.3%)	0.320

Table 2. Independent risk factors predicting the need for intensive care (multivariate analysis)

Risk factor	Odds ratio (OR)	95% Confidence interval (CI)	p-value
High ASA score (ASA 3)	12.16	6.14-24.09	<0.001
Smoking status	1.93	1.03-3.61	0.039
Operative duration (min)	1.012	1.006-1.018	<0.001
Age	1.013	0.983-1.043	0.392
Body mass index	1.068	0.995-1.137	0.067

[S-384]

The effect of laparoscopic sleeve gastrectomy on serum cobalamin levels: A study of 126 cases

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Objective: Laparoscopic sleeve gastrectomy has become one of the most frequently performed bariatric surgical methods today due to its effective weight loss and acceptable complication rates. This study aimed to evaluate the effect of laparoscopic sleeve gastrectomy on serum cobalamin levels before and at 6 months postoperatively in patients who underwent the procedure.

Material and Methods: The study included 126 patients (56 men and 70 women) who underwent laparoscopic sleeve gastrectomy at a single center between January 2025 and 2026 and had a complete data set. Preoperative and 6-month postoperative serum cobalamin levels were compared using paired t-tests in dependent groups. Patients with missing cobalamin measurements at follow-up and those who received preoperative cobalamin supplementation were excluded from the study. All patients received the same multivitamin (Argivit®) supplementation in the postoperative period.

Results: In patients who underwent laparoscopic sleeve gastrectomy, the mean preoperative cobalamin level was found to be 395.2±191.4 pg/mL, while it was measured as 318.1±132.6 pg/mL at 6 months postoperatively. The mean decrease of 77.1 pg/mL was found to be statistically significant ($p<0.001$). The rate of cobalamin deficiency detected in patients in the preoperative period was 4.8%, while the rate of cobalamin deficiency detected in patients at 6 months postoperatively increased to 14.3%.

Conclusion: An patients who underwent laparoscopic sleeve gastrectomy, a statistically significant decrease in serum cobalamin levels was observed at 6 months postoperatively. As a result, routine cobalamin monitoring and, if necessary, replacement therapy are recommended in patients who underwent laparoscopic sleeve gastrectomy in the postoperative period.

Keywords: Cobalamin, nutritional deficiency, sleeve gastrectomy

[S-386]

Results of paragastric autonomic neural blockage after sleeve gastrectomy

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Objective: Visceral pain (VP) after laparoscopic sleeve gastrectomy remains a clinically significant challenge. It is frequently accompanied by autonomic manifestations such as nausea and vomiting and responds poorly to conventional analgesic strategies primarily targeting somatic incisional pain. This study aimed to assess the safety and efficacy of laparoscopic paragastric autonomic neural blockade (PG-ANB) for the management of VP-related symptoms following sleeve gastrectomy.

Material and Methods: Between June 1, 2025, and January 1, 2026, 102 adult patients undergoing laparoscopic sleeve gastrectomy for the treatment of obesity at our institution were prospectively enrolled. Patients younger than 18 years, those who underwent concomitant surgical procedures, and individuals with known hypersensitivity to the study medications were excluded. The primary outcome was postoperative pain intensity, measured using a 10-point visual analog scale (VAS). Secondary outcomes included postoperative analgesic consumption and the incidence of autonomic symptoms, including nausea, vomiting, and hiccups.

Results: Postoperative pain, the primary outcome of the study, was evaluated using patient-reported VAS scores. Patients demonstrated low pain intensity at both 1 hour (4.0±2.7) and 8 hours (2.8±2.2) following surgery. Postoperative vomiting was observed in 1 patient at 1 hour and in 2 patients at 8 hours. Additionally, hiccups were reported in 1 patient during the first postoperative hour.

Conclusion: Laparoscopic PG-ANB appears to be a safe and effective adjunct for the management of VP following sleeve gastrectomy. The technique was associated with reduced early postoperative pain and a low incidence of autonomic symptoms such as nausea, vomiting, and hiccups. These findings suggest that targeting autonomic pathways may improve postoperative comfort after bariatric surgery and support further investigation of PG-ANB as part of multimodal pain management strategies.

Keywords: Laparoscopic sleeve gastrectomy, visceral pain, autonomic neural blockade, postoperative pain management, bariatric surgery

[S-387]

Association of gas- and liquid-based gastric distensibility with mid-term weight loss after laparoscopic sleeve gastrectomy

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Objective: Laparoscopic sleeve gastrectomy (LSG) is an effective bariatric procedure; however, factors influencing postoperative weight loss outcomes remain incompletely understood. The contribution of physical characteristics of the resected gastric specimen, including liquid capacity and distensibility, to mid-term weight loss outcomes has not been fully elucidated. This study aimed to evaluate the relationship between the *ex vivo* fluid capacity and elasticity of the resected gastric specimen and 12-month weight loss outcomes following LSG.

Material and Methods: A retrospective analysis was performed on 87 patients who underwent LSG between January 2023 and December 2024. All patients were operated on using a standardized surgical technique by the same surgical team. Gastric resection was initiated adjacent to the pylorus, using a 38-Fr orogastric tube for calibration. Following resection, the gastric specimen was assessed *ex vivo*. Gastric distensibility was measured by insufflating carbon dioxide until intragastric pressures of 10 mmHg and 14 mmHg were reached, and the corresponding gas volumes were recorded. A distensibility ratio was calculated based on these measurements. Gastric liquid capacity was determined by filling the resected specimen with water and measuring the maximum volume. Patients were evaluated according to preoperative BMI (<45 vs. ≥45 kg/m²) and postoperative 12-month BMI (<30 vs. ≥30 kg/m²). Primary outcomes included postoperative 12-month BMI, percent total weight loss (TWL%), and percent excess weight loss (EWL%). Logistic regression analysis was performed to identify predictors of achieving a postoperative 12-month BMI <30 kg/m². Postoperative length of hospital stay and complication rates were recorded.

Results: The mean age was 38.6±10.6 years, and 91% of patients were female. The median preoperative BMI was 43.5 kg/m². The median postoperative hospital stay was 4 days. At 12 months, median BMI was 27 kg/m², mean TWL% was 37.2±7.7%, and mean EWL% was 87.4±21.9%. Patients with preoperative BMI ≥45 kg/m² had significantly higher postoperative complication rates compared to those with BMI <45 kg/m² (43% vs. 21%, p=0.033). In multivariate analysis, gastric liquid capacity of the resected specimen was independently associated with achieving a postoperative 12-month BMI <30 kg/m² (OR 0.994, 95% CI 0.990-0.997, p=0.042).

Conclusion: Gastric liquid capacity of the resected specimen appears to be an independent predictor of successful mid-term weight loss following LSG. Higher preoperative BMI was associated with increased postoperative complication rates. *Ex vivo* assessment of resected gastric liquid capacity and distensibility may provide valuable insights into postoperative weight loss variability at mid-term follow-up.

Keywords: Gastric distensibility, sleeve, weigt loss



Figure 1. The excised stomach filled with water after laparoscopic sleeve gastrectomy.

[S-388]

Does the rate of weight loss after sleeve gastrectomy predict gallstone formation?

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Objective: Rapid weight loss after laparoscopic sleeve gastrectomy (LSG) is widely believed to increase the risk of gallstone formation. However, the quantitative relationship between the rate of weight loss and the development of gallstones has not been clearly established. This study aimed to evaluate whether the postoperative rate of weight loss is associated with gallstone formation following LSG.

Material and Methods: Patients who underwent LSG between 2010 and 2025 at a single bariatric center were retrospectively analyzed. Patients with available abdominal ultrasonography both before and after surgery were included. A total of 134 patients were enrolled and divided into two groups based on the presence or absence of gallstone formation during follow-up. For each patient, body weight, body mass index (BMI), total weight loss, percentage of total weight loss (%TWL), and rate of weight loss (monthly %TWL) were calculated at the final follow-up visit or at the time of gallstone diagnosis. Comparative analyses were then performed between the two groups.

Results: During a median follow-up period of 13 months, gallstones developed in 53 of 134 patients (39.6%). There were no significant differences between patients with and without gallstones in terms of age, preoperative or postoperative body weight, or BMI. Total weight loss (40.4±16.8 vs. 38.4±15.2, p=0.482) and %TWL (32.4±12.7% vs. 31.5±11.7%, p=0.677) were similar between the gallstone and non-gallstone groups, respectively. However, the rate of weight loss was significantly higher in patients who developed gallstones compared with those who did not (3.8±3.4 vs. 2.9±2.3, p=0.048).

Conclusion: In this LSG cohort, the rate of postoperative weight loss, rather than the absolute amount of weight loss, was associated with gallstone formation. Patients experiencing very rapid weight loss after surgery may be ideal candidates for closer gallbladder surveillance and selective ursodeoxycholic acid prophylaxis.

Keywords: Gallstones, laparoscopic sleeve gastrectomy, rate of weight loss

Table 1. Demographic and clinical characteristics of the patients

	Patients with gallstones (n=53)	Patients without gallstones (n=81)	p-value
Follow-up duration, mean ± SD (months)	20.9±25.7	21.8±21.6	0.839[1]
Age, mean ± SD (years)	34.8±10.9	36±10.5	0.526[1]
Sex Female, n (%) Male, n (%)	 41 (77.4) 12 (22.6)	 75 (89.3) 9 (10.7)	0.059[2]
Weight (preoperative), mean ± SD (kg)	125.5±16.2	122.5±12.7	0.349[1]
BMI (preoperative), mean ± SD (kg/m²)	46±4.7	45.6±5.5	0.676[1]
Weight (postoperative), mean ± SD (kg)	85.1±20.9	84±20.6	0.769[1]
BMI (postoperative), mean ± SD (kg/m²)	31.1±6.5	31.3±7.2	0.830[1]
Total weight loss, mean ± SD (kg)	40.4±16.8	38.4±15.2	0.482[1]
%TWL	32.4±12.7	31.5±11.7	0.677[1]
Months/%TWL	3.8±3.4	2.9±2.3	*0.048[1]

[1]: Student's t-test, [2]: Pearson's chi-square test, *: p<0.05 indicates statistical significance, %TWL: Percentage of total weight loss, BMI: Body mass index.

[S-389]

The effect of omentopexy on reflux and dysmotility symptoms in sleeve gastrectomy: A comparative study using the F-scale questionnaire

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Objective: Gastroesophageal reflux and dysmotility symptoms are common problems after sleeve gastrectomy and negatively affect patient comfort. Mechanical factors such as gastric twist and hiatal hernia are thought to play a role in the development of these symptoms. In recent years, it has been suggested that performing omentopexy at the end of the operation may reduce these mechanical complications and, consequently, improve reflux symptoms. The aim of this study was to evaluate the effect of omentopexy performed during sleeve gastrectomy on postoperative reflux and dysmotility symptoms using the F-scale reflux questionnaire.

Material and Methods: A total of 100 patients who underwent sleeve gastrectomy without preoperative reflux symptoms were included in this retrospective, comparative study. Patients were divided into two groups. Group 1 (n=50): patients who underwent omentopexy (operated between 2018-2019). Group 2 (n=50): Patients who did not undergo omentopexy (operated between 2017-2018). The F-scale reflux questionnaire was administered to all patients in the postoperative period, and total F-scale scores were calculated. A cut-off value of ≥10 was accepted for clinically significant reflux symptoms. To exclude the possibility that dysmotility and reflux symptoms were related to other surgical interventions, patients who underwent gastric surgery for any reason during the postoperative period were excluded from the study.

Results: The mean follow-up period for all patients was 92.2±10.34 months. The mean total F-scale score was 6.0±3.52 in the omentopexy group and 15.04±13.27 in the non-omentopexy group. The difference between the two groups was statistically significant (p=0.012). When the cut-off value of ≥10 was applied, clinically significant reflux and dysmotility symptoms were observed in 14% of patients in the omentopexy group and in 48% of patients in the non-omentopexy group.

Conclusion: Omentopexy performed in conjunction with sleeve gastrectomy surgery significantly reduces postoperative reflux and dysmotility symptoms. Omentopexy stands out as an effective and feasible surgical modification for reducing the development of reflux after sleeve gastrectomy. However, prospective studies and objective interventional methods beyond questionnaires are needed to increase the reliability of the results when evaluating the presence of reflux in the postoperative period.

Keywords: Dysmotility, gastroesophageal reflux, omentopexy, dleeve gastrectomy

Table 1. Comparison of demographic and clinical data between groups

	Omentopexy group (n=50)	Non-omentopexy group (n=50)	p-value
Age, mean ± SD (year)	46.6±5.88	48.3±7.03	0.270[1]
Gender Female, n (%) Male, n (%)	 28 (56) 22 (44)	 27 (54) 23 (46)	0.841[2]
ASA score, n (%) 1 2 3 4	 0 14 (28) 32 (64) 4 (8)	 0 14 (28) 32 (64) 4 (8)	1.000[3]
BMI (preoperative period), mean ± SD (kg/m²)	47.6±4.09	48±3.83	0.659[1]

[1]: Mann-Whitney U test, [2]: Pearson chi-square test, [3]: Fisher's exact test.
BMI: Body mass index, SD: Standard deviation.

Table 2. Comparison of intraoperative and postoperative outcomes between groups

	Omentopexy group (n=50)	Non-omentopexy group (n=50)	p-value
Operation time, mean ± SD (minute)	117.6±19.01	118.2±18.59	0.868[1]
BMI (postoperative period), mean ± SD	31.4±4.75	30.9±4.13	0.717[1]
F-scale test, mean ± SD	6±3.51	15±13.27	0.012[1*]

[1]: Mann-Whitney U test, *p<0.05 significant, BMI: Body mass index, SD: Standard deviation.

[S-390]

Metabolic improvement and micronutrient profile at 12 months after laparoscopic sleeve gastrectomy: Evaluation of clinical and biochemical outcomes

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Objective: Obesity is a chronic disease closely associated with metabolic and endocrine disorders, and surgical treatment is considered the most effective method for long-term weight control. Laparoscopic sleeve gastrectomy (LSG) not only promotes weight loss but also induces changes in metabolic parameters and hormonal balance. However, the effects of LSG on micronutrient levels remain controversial. In this study, we aimed to evaluate changes in weight loss, metabolic indicators, and micronutrient parameters in patients who underwent LSG during a 12-month follow-up period.

Material and Methods: This retrospective study included 269 patients who underwent LSG. Demographic characteristics, preoperative and postoperative 12-month anthropometric measurements, and biochemical parameters were analyzed. Paired comparisons were performed using the Wilcoxon signed-rank test. The level of statistical significance was set at $p<0.05$.

Results: The mean age of the patients was 33.82±10.59 years, and 84.8% were female. The mean preoperative body weight was 123.57±18.47 kg, and the body mass index (BMI) was 47.16±7.02 kg/m². At twelve months, the mean weight was 74.62±10.89 kg and BMI was 28.88±3.89 kg/m². The mean excess weight loss (%EWL) was 83.80±14.99% and total weight loss (%TWL) was 38.71±6.91%. Significant improvement was observed in metabolic parameters. Significant decreases were detected in HbA1c, free T3, TSH, and triglyceride levels ($p<0.001$). While a significant increase was observed in HDL levels ($p<0.001$), no significant changes were observed in LDL and free T4 levels. Significant increases were observed in serum iron, vitamin B12, and magnesium levels, while no significant changes were found in ferritin levels.

Conclusion: LSG provides significant and sustainable weight loss over a 12-month follow-up period while producing meaningful improvements in metabolic parameters. However, changes in some micronutrient levels are observed, and regular biochemical monitoring is important during the postoperative period.

Keywords: Laparoscopic sleeve gastrectomy, metabolic improvement, micronutrient changes

[S-391]

Six-month results and early complications of intragastric balloons used for obesity

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Objective: While obesity remains a global health crisis, intragastric balloon (IGB) implantation has gained popularity as a minimally invasive weight loss method as an alternative to surgery. The aim of this study is to evaluate the outcomes and short-term complications of 132 patients who successfully completed 6 months of IGB treatment through a retrospective analysis and a comprehensive literature review.

Material and Methods: This study consists of two parts. In the first part, data from 132 patients who underwent IGB treatment and successfully completed it between 2022 and 2026 were retrospectively analyzed. Demographic data, baseline anthropometric measurements, weight loss outcomes, and complication rates were examined. In the second part, a systematic literature review was conducted in PubMed, Scopus, and Google Scholar databases.

Results: In the retrospective series, patients (mean age: 32.5±8.5 years, baseline BMI: 36.1±5.5 kg/m²) lost an average of 11.4±8.1 kg after 6 months, with an average weight loss rate of 11.8%±8.4%. Gastric ulcers were detected in 11 patients who underwent pre-procedure endoscopy, and balloon placement was performed after 21 days of anti-ulcer treatment. The complication rate was found to be 12.1%; the most frequent complications were balloon deflation (2.3%) and Mallory-Weiss hemorrhage (1.5%). The rate of early removal was 8.3%. Literature review confirmed that 6 months of treatment resulted in an average weight loss of 12-16 kg and that major complications were rare.

Conclusion: With appropriate patient selection and close monitoring, intragastric balloon angioplasty is an effective and relatively safe short-term weight loss method for obesity. A notable advantage is the ability to identify and treat any pre-procedure contraindications in the stomach via endoscopy. Treatment success depends on effective management of early symptoms and patient compliance.

Keywords: Complications, gastric balloon, obesity

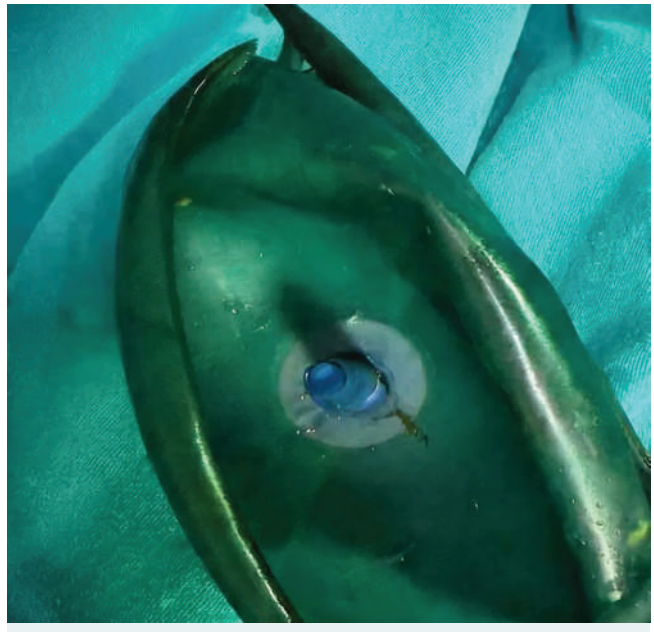


Figure 1. IGB that was perforated during the procedure.

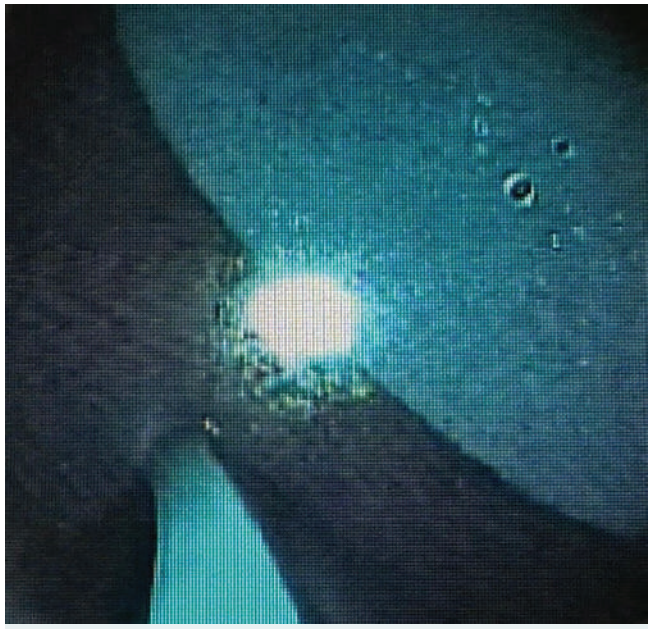


Figure 2. Following the procedure, hyperinflation occurred due to anaerobic reproduction in the IGB.

Table 1. Observed short-term complications and their classification

Complication	Number of patients (n)	Rate (%)	Classification	Management
Balloon deflation	3	2.3	Major	Endoscopic removal
Mallory-weiss bleeding	2	1.5	Major	Endoscopic hemostasis
Acute pancreatitis	1	0.8	Major	Conservative treatment
Balloon migration	1	0.8	Major	Endoscopic removal
Spontaneous deflation	2	1.5	Minor	Conservative treatment
Early migration	2	1.5	Minor	Follow-up
Hyperinflation	1	0.8	Minor	Conservative treatment

[S-392]

The impact of preoperative neutrophil-to-lymphocyte ratio and thyroid function on early weight loss after bariatric surgery

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Objective: Identifying simple and cost-effective biomarkers that can predict early weight loss after bariatric surgery is important for improving outcomes and optimizing patient follow-up. The neutrophil-to-lymphocyte ratio (NLR), considered a marker of systemic inflammation, and thyroid function tests have been associated with obesity pathophysiology and metabolic response. In this study, the relationship between preoperative NLR and thyroid-stimulating hormone (TSH) levels and early weight loss at 6 and 12 months was retrospectively evaluated in candidates for bariatric surgery.

Material and Methods: In this retrospective cohort study, adult patients who underwent bariatric surgery (sleeve gastrectomy) at a single center between 2019 and 2025 were included. Data were obtained from the electronic medical record system. Preoperative NLR and TSH values were compared with percentage total weight loss (%TWL) and percentage excess weight loss (%EWL) measured at 6 and 12 months. Patients were divided into high and low groups based on the median NLR and TSH values. Chi-square test, Mann-Whitney U test, and multivariable logistic regression analyses were performed. A p-value <0.05 was considered statistically significant.

Results: A total of 312 patients were included in the study (mean age 42.8±10.5 years; 74% female). The median preoperative NLR was 2.8 (IQR: 2.1-3.9), and the median TSH was 2.1 mIU/L (IQR: 1.6-2.8). In the high NLR (>2.8) group, %TWL at 6 months was significantly lower (median %TWL 23.4 vs. 27.1; p=0.011). Similarly, the high preoperative TSH group had lower %TWL at 6 months (24.0 vs. 26.8; p=0.027). At 12 months, both high NLR and high TSH groups had lower EWL% (median EWL% 58.7 vs. 64.9, p=0.014; and 59.3 vs. 63.8, p=0.032, respectively). In multivariable analysis adjusted for age, sex, baseline BMI, and surgical type, high NLR (OR 1.93, 95% CI 1.21-3.09, p=0.006) and high TSH (OR 1.74, 95% CI 1.10-2.76, p=0.018) were identified as independent predictors of the risk of TWL% <25% at 6 months (Table 1).

Conclusion: According to our retrospective data, preoperative NLR and TSH levels may serve as independent predictors of early weight loss after bariatric surgery. The evaluation of these simple and accessible parameters before surgery may provide clinical benefit in identifying high-risk individuals and planning personalized follow-up strategies. Prospective studies are warranted to confirm these findings.

Keywords: Bariatric surgery, neutrophil-to-lymphocyte ratio, thyroid function

Table 1. Baseline characteristics and early outcomes according to preoperative NLR and TSH levels

Variable	Low NLR (≤2.8) (n=156)	High NLR (>2.8) (n=156)	p-value	Low TSH (≤2.1) (n=158)	High TSH (>2.1) (n=154)	p-value
Age (years, mean ± SD)	41.9±10.2	43.7±10.8	0.118	42.1±10.4	43.5±10.6	0.221
Female sex (%)	76%	72%	0.447	75%	73%	0.693
Baseline BMI (kg/m²)	44.2±5.8	45.0±6.3	0.289	44.5±6.0	44.7±6.1	0.812
6-month %TWL (median)	27.1	23.4	0.011	26.8	24.0	0.027
%TWL <25 at 6 months (%)	18.6%	34.0%	0.004	20.3%	31.8%	0.019
12-month %EWL (median)	64.9	58.7	0.014	63.8	59.3	0.032

[S-393]

Effects of omentopexy on gastric anatomy, motility, and dyspeptic symptoms following laparoscopic sleeve gastrectomy

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Objective: Laparoscopic sleeve gastrectomy (LSG) is a commonly performed restrictive bariatric procedure. Postoperative anatomical changes, particularly at the incisura angularis, may affect gastric motility and dyspeptic symptoms. This study aimed to evaluate the effect of omentopexy on the incisura angularis angle, gastric motility, and dyspeptic symptoms after LSG.

Material and Methods: Between June 2023 and September 2024, 36 patients undergoing LSG were prospectively evaluated; five were excluded due to follow-up non-compliance. Patients were randomized into omentopexy and non-omentopexy groups. Intraoperative incisura angularis angle measurements were recorded (Figure 1), and gastric emptying times were assessed preoperatively and at 3 months postoperative using scintigraphy. Dyspeptic symptoms were evaluated using the Leeds dyspepsia questionnaire.

Results: A total of 18 out of 31 patients underwent omentopexy. The change in the incisura angularis angle was significantly greater in the non-omentopexy group (p=0.046). In both groups, gastric emptying time was significantly reduced postoperatively, indicating increased gastric emptying rate (p<0.01) (Table 1). No significant difference was observed between the groups in dyspeptic symptoms (p=0.089).

Conclusion: Although omentopexy limits postoperative changes in the incisura angularis angle after LSG, it does not provide a significant clinical advantage in gastric motility or dyspeptic symptoms. Further studies with longer follow-up are warranted.

Keywords: Obesity, laparoscopic sleeve gastrectomy, omentopexy, dyspepsia

Table 1. Comparison of the incisura angularis angle in pregastrectomy and postgastrectomy patients with and without omentopexy, and preoperative and postoperative (3-month) gastric motility time

Parameter	Omentopexy (+) (n=18)			p	Omentopexy (−) (n=13)			p
	Pregastrectomy	Postgastrectomy	Mean difference		Pregastrectomy	Postgastrectomy	Mean difference	
Incisura angularis angle (degrees)	109.5	107.5		0.983	115.5	119.6		**0.002**
	(101.7-125.6)	(101.2-121.7)	3.8		(107.9-120.5	(116.7-133)	6.5	
			(-11.2, 8.3)				(1.3, 11.9)	
			p*=0.046				**p*=0,046**	
	Preoperative	**Postoperative (3rd month)**			**Preoperative**	**Postoperative (3rd month)**		
Gastric emptying time (minutes)	60.8	48.6		**0.004**	72.9	49.3		**0.002**
	(58.6-70)	(45.4-55.1)	-12.1		(66.3-82.3)	(44.9-54.3)	-26.4	
			(-22.6,-6,6)				(-28,9,- 9,7)	
			p$^{\Omega}$=0.211				p$^{\Omega}$=0,211	

Median (25th-75th percentile) p=Mann-Whitney U test for incisura angularis angle and gastric motility time, preoperative and postoperative 3rd month differences within-group omentopexy and non omentopexy. p*=Mann-Whitney U test for Incisura angularis angle, preoperative and postoperative mean differences between omentopexy and non-omentopexy group. p$^{\Omega}$=Mann-Whitney U test for gastric motility time, preoperative and postoperative mean differences between omentopexy and non-omentopexy group.

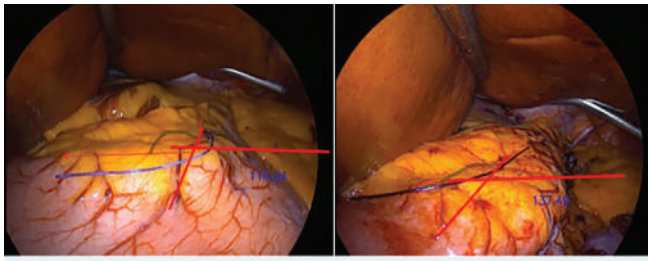


Figure 1. Preoperative and postoperative angle measurement of the incisura angularis.

[S-394]

Is *Helicobacter pylori* positivity a risk factor for postoperative complications following laparoscopic sleeve gastrectomy?

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Objective: Laparoscopic sleeve gastrectomy (LSG), despite being the most commonly performed bariatric surgical procedure, continues to be a significant cause of morbidity due to early-stage complications such as stapler line leakage and bleeding. The effect of *Helicobacter pylori* (HP) infection on these complications remains controversial. The aim of this study is to evaluate the relationship between HP positivity detected in resection specimens in patients undergoing LSG and early postoperative clinical outcomes.

Material and Methods: This single-centre retrospective cohort study included 502 patients who underwent LSG during the specified period. The patients' demographic data, comorbidities, laboratory parameters, and perioperative outcomes were examined. Resection specimens were histopathologically evaluated for the presence of HP. HP-positive (HP+) and HP-negative (HP-) groups were compared in terms of early-stage (first 30 days) postoperative complications. Complications were graded according to the Clavien-Dindo classification. For statistical analysis, $p<0.05$ was considered significant.

Results: HP positivity was detected in 119 (23.7%) of the total 502 patients. No significant difference was found between the HP+ and HP- groups in terms of age, gender, body mass index, and comorbidities. Anticoagulant use was significantly higher in the HP+ group ($p<0.001$) and haemoglobin levels were lower ($p=0.002$). However, the overall postoperative complication rate (HP+ 4.4% vs. HP- 4.6%; $p=0.91$), staple line leakage rate (HP+ 2.6% vs. HP- 2.4%; $p=0.92$), and Clavien-Dindo ≥3 complication rate (HP+ 2.6% vs. HP- 3.0%; $p=0.84$).

Conclusion: HP positivity detected in resection specimens does not appear to be an independent risk factor for early postoperative complications following laparoscopic sleeve gastrectomy. Our findings suggest that routine HP eradication prior to LSG may have a limited role in improving early surgical outcomes.

Keywords: *Helicobacter pylori*, laparoscopic sleeve gastrectomy, stapler line leak

Table 1. The effect of *Helicobacter pylori* on postoperative outcomes

Parameters	All patients (n=502)	HP positive (n=119)	HP negative (n=383)	p-value
Operation duration [min, median (min-max)]	53 (25-190)	50 (30-120)	55 (25-190)	0.18
İntraoperative blood loss [mL, median (min-max)]	10 (0-700)	5 (0-700)	10 (0-150)	0.048
Lenght of stay [day, median (min-max)]	4 (2-177)	3 (3-55)	4 (2-177)	<0.001
Staple-line leak (Y/N)	12/490	3/116	9/374	0.92
Surgical site infection (Y/N)	12/490	3/116	9/374	0.92
Distant infeciton (Y/N)	0/501	0/119	1/382	0.58
Re-admission (Y/N)	12/490	4/115	8/375	0.43
Postoperative complication (Y/N)	22/480	5/114	17/366	0.91
≥Clavien Dindo 3 classification (Y/N)	14/488	3/116	11/372	0.84

HP: *Helicobacter pylori,* Y/N: Yes/No, min-max: Minimum-maximum.

[S-395]

Is routine histopathological examination necessary in pilonidal sinus surgery? A single-center retrospective analysis of 1,056 cases

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Objective: Pilonidal sinus disease is a common condition in surgical practice, predominantly affecting young and productive individuals. Although routine histopathological examination of excised specimens after surgery is widely performed, its clinical contribution and cost-effectiveness remain controversial. The aim of this study was to evaluate the clinical value of routine histopathological examination in a large cohort of patients operated on for pilonidal sinus disease.

Material and Methods: The medical records of patients who underwent surgery for pilonidal sinus disease between January 2020 and December 2025 were retrospectively reviewed. Inclusion criteria were age ≥18 years, a preoperative diagnosis of pilonidal sinus disease, and availability of postoperative histopathological examination results. Patients with incomplete archival data were excluded. Demographic characteristics, surgical techniques, and histopathological findings of patients meeting the study criteria were analyzed.

Results: A total of 1.098 patients underwent surgery for pilonidal sinus disease during the study period. Of these, 1.056 patients met the inclusion criteria and constituted the final study cohort. The majority of patients were male (861 patients, 81.5%), while 195 patients (18.5%) were female. The mean age was 28.9±9.3 years, with a median age of 26 years. The surgical techniques performed included excision with primary closure in 463 patients (43.8%), excision with marsupialization in 65 patients (6.2%), excision with Limberg flap in 260 patients (24.6%), excision with open healing in 71 patients (6.7%), and excision with Karydakis flap in 197 patients (18.7%) (Table 1). Histopathological examination revealed no malignancy in any patient.

Conclusion: In this large series of patients operated on for pilonidal sinus disease, routine postoperative histopathological examination did not provide additional information that altered clinical management. Considering the increasing number of patients and rising healthcare costs, limiting histopathological examination to selected cases rather than routine use may represent a more rational and cost-effective approach.

Keywords: Pilonidal sinus disease, histopathological examination, surgical pathology, retrospective study, cost-effectiveness

[S-396]

Comparison of the results of patients undergoing crystallized phenol and laser ablation due to pilonidal sinus

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Objective: Pilonidal sinus is a chronic suppurative disease occurring subcutaneously in the sacrococcygeal region. In recent years, minimally invasive techniques have gained popularity. In this study, we aimed to compare the results of patients treated with phenol and those treated with laser ablation, both of which are minimally invasive methods.

Materials and Methods: The results of 94 patients treated with phenol between April 2021 and July 2022 were compared with those of 62 patients who underwent laser ablation between January 2025 and December 2025. Data were analyzed using the SPSS software; in addition to descriptive statistics, Student's t-test and chi-square tests were utilized for comparisons between the groups.

Results: The mean healing time was determined as 18.29±5.07 days in the phenol group and 16±8.4 days in the laser group, with no statistically significant difference found between the groups ($p>0.05$). Recurrence rates were observed as 14.8% (14 patients) in the phenol group and 8.0% (5 patients) in the laser group; this difference did not reach statistical significance ($p=0.198$). Similarly, no statistically significant difference was observed between the 4.25% minor complication rate in the phenol group (3 skin burns, 1 abscess) and the 3.2% rate in the laser group (2 abscesses) ($p=0.735$).

Conclusion: The data from our study reveal that both minimally invasive techniques possess a similar efficacy and safety profile in the surgical management of pilonidal sinus. Although the laser ablation method tended to exhibit clinically shorter healing times and lower recurrence rates compared to phenol treatment, these findings did not reach a statistically significant difference. In conclusion, it was determined that phenol treatment is a strong and feasible alternative to laser ablation in the treatment of pilonidal sinus, especially considering its cost-effectiveness advantage and similar complication rates.

Keywords: Pilonidal sinus, laser ablation, crystallized phenol

[S-397]

Evaluation of the effectiveness of the tropis (transanal opening of intersphincteric space) technique in complex anal fistula

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Objective: Complex anal fistulas represent a challenging disease process, characterized by a sophisticated pathophysiology rooted in the cryptoglandular theory, which has evolved alongside historical advancements in surgical understanding. Effective management requires an integrated approach to classification and treatment, with the dual goals of preventing recurrence and minimizing complications. The transanal opening of the intersphincteric space (TROPIS) technique, a relatively novel surgical method, aims toeliminate pathogenic agents by transanally opening the intersphincteric space, while preserving sphincter function and reducing the risk of incontinence.

Material and Methods: In this study, 44 patients meeting the inclusion criteria were treated with the TROPIS technique for complex anal fistula at Pamukkale University between January 2022 and January 2025. Patients were discharged on postoperative day one and monitored monthly for the first three months, followed by biannual follow-ups after complete healing. Outcomes assessed included wound healing, presence of discharge, epithelialization, and complication rates. A 49-year-old female patient previously operated on for an anal abscess subsequently developed a fistula. She presented with persistent discharge and underwent the TROPIS procedure. (A) The external fistula opening was identified using a probe, and the fistula tract was delineated. (B) The fistula tract was excised from the external opening using the core-out technique with preservation of the sphincter structures. (C) The intersphincteric space was opened transanally at the level of the internal opening. (D) Final appearance after fistulectomy and transanal intersphincteric opening.

Results: The cohort comprised 77.3% male and 22.7% female patients, with a mean age of 44.66±11.6 years and a mean BMI of 29.7±4.7. The average healing time was 2.1 months. Fistula types were classified as transsphincteric (72.7%), intersphincteric (22.7%), and extrasphincteric (4.5%). Uneventful healing occurred in 86.4% of patients, while 13.6% experienced delayed healing, with symptoms such as persistent discharge, delayed epithelialization or rectal pain. At six-month follow-up, 70.5% of patients achieved complete healing without recurrence, whereas 29.5% experienced recurrence. One patient reported gas incontinence, resulting in an overall continence preservation rate of 97.7%. Statistical analysis demonstrated a significant association between the number of fistula tracts and prolonged healing time (p=0.006).

Conclusion: In conclusion, the TROPIS technique demonstrates high continence-preservingefficacy and favorable therapeutic outcomes in the treatment of complex anal fistulas. Increased fistula complexity, such as a higher number of tracts or horseshoe configurations, was associated with longer healing times and higher recurrence rates. These findings support the role of TROPIS as an effective sphincter-sparing option in the surgical management of complex anal fistulas.

Keywords: Complex anal fistula, TROPIS, sphincter-sparing surgery, recurrence, continence

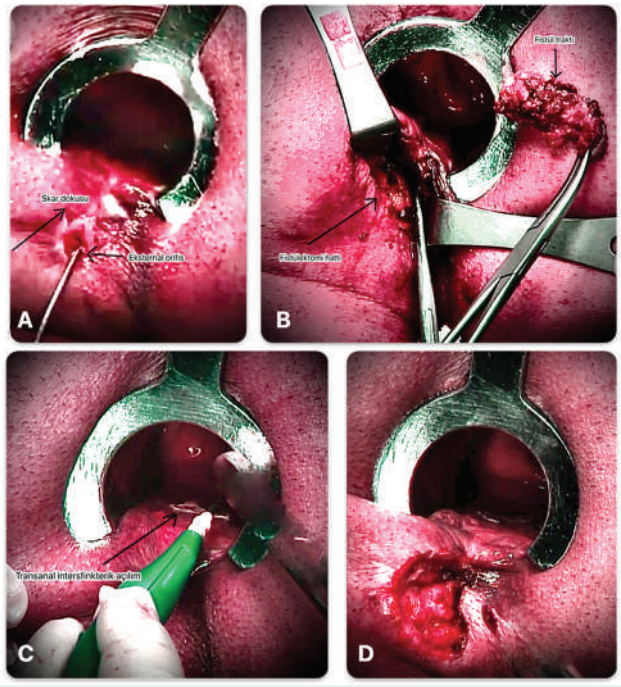


Figure 1. Application of the TROPIS technique.

[S-399]

Long-term recurrence rates in pilonidal sinus with crystallized phenol apparatus: A single-center experience

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Objective: Treatment failure and recurrence of pilonidal sinus are significant complications that prolong hospital stay and negatively affect quality of life. In the literature, the long-term recurrence rate after phenol treatment ranges from 5-15%. In our study, we aimed to evaluate the long-term postoperative recurrence rates of phenol application performed with the crystallized phenol apparatus developed by our clinic in patients diagnosed with pilonidal sinus.

Material and Methods: Patients who underwent phenol application with a crystallized phenol apparatus for pilonidal sinus at our clinic between January 1, 2024, and December 31, 2024, were retrospectively reviewed. Data on age, gender, diagnosis, patient stage according to Tezel classification, number of phenol applications, and recurrence requiring surgery were recorded. Patients under 18 years of age, those with previous pilonidal sinus surgery, and those presenting with pilonidal sinus abscess were excluded from this study.

Results: A total of 130 patients were included in the study. The average age of the patients was 28.125 years, and 109 (83.84%) were male. Treatment failure/recurrence was detected in 3 patients, and surgical treatment (Karydakis flap) was applied. 61 patients received 1 session, 48 patients received 2 sessions, 18 patients received 3 sessions, and 4 patients received 3 sessions of the innovative phenol approach. Minimally invasive applications applied in pilonidal sinus are important in the treatment of the disease and in preserving patient functionality during this process. With the crystallized phenol apparatus developed by our clinic, the low recurrence rates in 1-year follow-ups are comparable to the literature. In addition, other advantages of the apparatus include the absence of skin burns, minimization of phenol exposure for the practitioner, and the homogeneous distribution of crystallized phenol throughout the entire tract.

Conclusion: The innovative pilonidal sinus approach developed by our clinic can reduce recurrence rates due to its ease of application and treatment success.

Keywords: Pilonidal sinus, crystallized phenol, pilonidal cyst, recurrence

Table 1. Findings		
Age (SD)		**28.73 (10.68)**
Gender (%)	Woman	21 (16.16)
	Male	109 (83.84)
P. sinus stage	1	51 (39.23)
	2	79 (60.77)
	3	0 (0)
	4	0 (0)
Number of applications (%)	1	61 (46.93)
	2	48 (36.93)
	3	17 (13.07)
	4	4 (3.07)
Skin burn		0 (0)
SD: Standard deviation.		

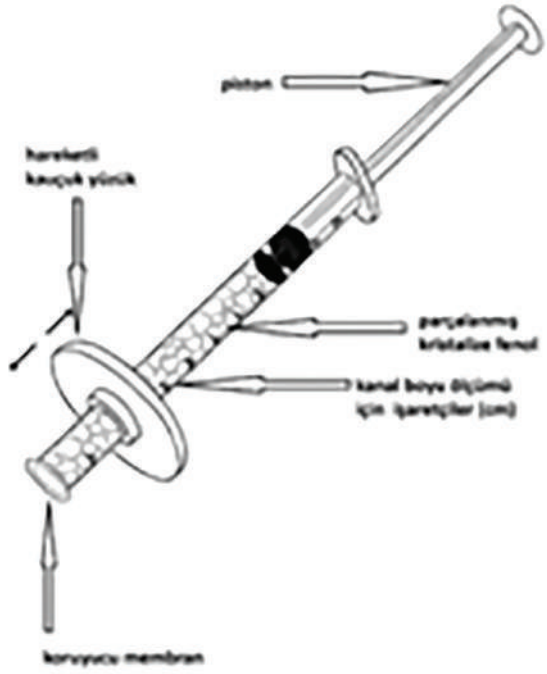


Figure 1. Phenol application apparatus.

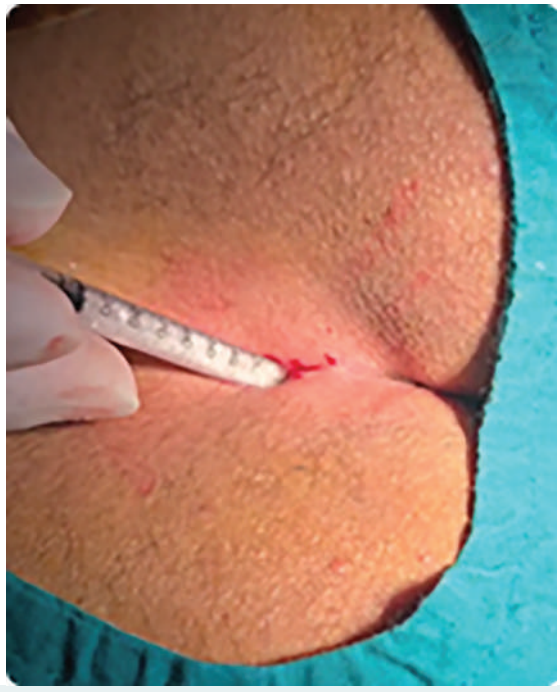


Figure 2. Application with phenol apparatus.

[S-400]

Anal fissürde botulinum toksin enjeksiyonuna eşzamanlı bupivakain uygulamasinin erken dönem postoperatif ağri üzerine etkisi

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Amaç: Anal fissür tedavisinde botulinum toksin enjeksiyonu, internal sfinkter basıncını azaltarak semptomları azaltır ve iyileşmeye imkan sağlar. Ancak etkisinin gecikmeli başlaması erken postoperatif dönemde ağrı kontrolünde yetersizlik oluşturabilir. Bu çalışmada, botulinum toksin uygulamasına eşzamanlı lokal bupivakain enjeksiyonunun erken dönem ağrı üzerine etkisi değerlendirildi.

Gereç ve Yöntem: Anal fissür nedeniyle botulinum toksin enjeksiyonu yapılan toplam 16 hasta retrospektif olarak değerlendirildi. Hastaların 8'ine botulinum toksine ek olarak lokal etkili uzun süreli anestezik olan bupivakain enjeksiyonu uygulanırken, 8 hastaya yalnızca botulinum toksin enjeksiyonu yapıldı. Tüm hastalarda postoperatif ilk 5 gün boyunca ağrı düzeyi görsel analog skala (VAS) ile günlük olarak sorgulandı. Gruplar arasındaki fark istatistiksel olarak analiz edildi.

Bulgular: Botulinum toksine ek olarak Bupivakain uygulanan grupta ortanca VAS skoru 3 olarak saptanırken yalnızca botulinum toksin uygulanan grupta ortanca VAS skoru 5 idi. Bupivakain eklenen grupta daha düşük ağrı skorları gözlenmesine rağmen, iki grup arasındaki fark istatistiksel olarak anlamlı bulunmadı.

Sonuç: Botulinum toksin enjeksiyonuna eşzamanlı bupivakain kullanılması, erken postoperatif dönemde ağrı skorlarında klinik olarak anlamlı görünen bir azalma sağlamakla birlikte, bu küçük örneklemli çalışmada istatistiksel anlamlılık gösterilememiştir. Daha geniş hasta serileri ile yapılacak randomize kontrollü çalışmalara ihtiyaç vardır. Bu yaklaşım, özellikle botulinum toksinin gecikmeli etki başlangıcı göz önünde bulundurulduğunda, erken dönem konforu artırmaya yönelik umut verici bir strateji olabilir.

Anahtar Kelimeler: Anal fissür, botulinum toksin, ağrı

[S-401]

Global and national trends in pilonidal disease literature: A bibliometric analysis

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Objective: Pilonidal sinus disease (PSD) remains a prominent topic in surgical literature; however, shifts in treatment modalities have significantly increased publication diversity. Identifying the developmental trajectory and thematic focal points of this scientific output is crucial for recognizing gaps in the literature. This study analyzes global and national PSD literature through bibliometric parameters.

Material and Methods: Data ranging from 1980 to December 2025 were retrieved from the Web of Science database. R-based biblioshiny and VOSviewer software were utilized for the analysis and visualization of bibliographic data. The analysis was conducted based on publication volume, citation distributions, and annual growth rates.

Results: A total of 2,133 documents meeting the criteria were analyzed. This body of literature received 30,503 citations with an H-index of 74. The development process, which began in the 1980s, gained significant momentum particularly after 2005, reaching an annual growth rate of 1.9%. Global publication volume peaked during the 2022-2024 period, while peak citation traffic was recorded in 2019 and 2025. The top three countries with the highest document production globally were Türkiye (n=386), the USA (n=290), and the UK (n=207). Thematic analyses indicate a paradigm shift from radical excision methods toward minimal invasive approaches such as EPSiT and Cleft-lift. Additionally, "negative pressure wound therapy (VAC)" forms prominent clusters in current literature. Analysis of Turkish-addressed publications revealed an h-index of 47 and an average citation count per document of 17.12, which is notably above the global average of 14.3. Within the national literature, studies examining the clinical efficacy of SiLaC (Laser ablation) and crystallized phenol applications, alongside oncological studies regarding the management of the rare complication "squamous cell carcinoma,"were found to form significant subgroups. At the institutional level, GATA (n=20) is the most productive center.

Conclusion: Bibliometric findings demonstrate that PSD literature has gained substantial momentum over the last 20 years, with a dominant trend toward surgical minimization. Both the quantitative volume and the above-average citation rate of Turkish-addressed studies reflect the high level of interest and methodological contribution of the national literature to the field.

Keywords: Pilonidal disease, bibliometric analysis

[S-402]

Clinical outcomes of stoma formation in Fournier's gangrene: A retrospective analysis

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Objective: Fournier's gangrene (FG) is a life-threatening necrotizing infection involving the external genital region and perineum, predominantly affecting men. The rarity of the disease and its variable clinical course make it difficult to establish a standardized approach to wound management after debridement. Although a diverting stoma may be used to reduce wound contamination, its clinical benefit and indications remain unclear. The aim of this study was to investigate the impact of stoma presence in patients operated on for FG.

Material and Methods: The medical records of 118 patients operated with FG at our hospital between January 2015 and December 2024 were retrospectively reviewed, and clinical and laboratory outcomes were analyzed according to the presence or absence of a stoma.

Results: A total of 118 patients operated on for FG were included in the study. A diverting stoma was performed in 56.8% of the patients. The groups were comparable in terms of age, diabetes mellitus, chronic kidney disease, ASA score, and source of infection. The proportion of male patients was significantly higher in the non-stoma group (p=0.003). When laboratory parameters were evaluated, CRP levels were significantly higher in the non-stoma group (186.6 mg/L vs. 105 mg/L; p=0.009), while albumin levels were lower (2.6 g/dL vs. 2.77 g/dL; p=0.048). Vacuum-assisted closure was used more frequently in the non-stoma group (92.2%, n=47 vs. 76.1%, n=51; p=0.021). The non-stoma group had a significantly longer intensive care unit stay (2 days vs. 1 day; p=0.007), hospital length of stay (25 days vs. 16 days; p=0.001), and a higher number of debridements (7 vs. 5; p=0.002). The rate of postoperative complications was also significantly higher in the non-stoma group (45.1%, n=23 vs. 17.9%, n=12; p=0.001). The interval between surgery and reconstruction was significantly longer in the non-stoma group (28.5 days vs. 14 days; p<0.001). Although 30-day mortality was higher in the non-stoma group (21.6% vs. 10.4%), this difference was not statistically significant. No significant differences were observed between the groups in terms of wound healing pattern or specimen size.

Conclusion: In patients with FG, the presence of a diverting stoma was significantly associated with shorter intensive care unit and hospital stays, fewer debridements, lower postoperative complication rates, and a shorter interval between surgery and reconstruction. These findings indicate that diverting stoma may contribute to improved postoperative clinical outcomes in selected patients with FG.

Keywords: Diverting stoma, necrotizing fasciitis

[S-403]

Early postoperative wound complications and clinical predictors after bascom cleft lift: A systematic review and meta-analysis

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Objective: Bascom cleft lift (BCL) is an off-midline closure technique for pilonidal sinus disease and is commonly used, particularly in complex or recurrent cases. However, the frequency of early postoperative (approximately 30-45 days) wound complications and the contribution of clinical factors such as obesity, recurrence, or a history of abscess remain unclear. This study systematically evaluated early wound complications after BCL and potential clinical predictors.

Material and Methods: Studies published between 2015 and 2025 reporting early (≈30-45 days) postoperative complications following BCL were searched. Inclusion criteria were: (i) use of the BCL/cleft lift technique, (ii) reporting of early wound complications [surgical site infection (SSI)/infection, seroma, hematoma, wound dehiscence, or overall complications], and (iii) reporting of at least one clinical variable (BMI/obesity, primary vs. recurrent disease, or history of abscess). Case reports were excluded. Event/N data were extracted, and complication rates were pooled.

Results: Seven studies comprising 1,547 patients were included. In six studies reporting complication subtypes as event/N (n=1.312), pooled early complication rates were: SSI/wound infection 3.7% (48/1.312), seroma 1.4% (18/1.312), hematoma 0.8% (10/1.312), and wound dehiscence 2.5% (33/1.312). One multicenter study reported an overall complication rate of 28.9% in the BCL arm. In the largest single-center series, minor and major complication rates were 34.5% and 19.1%, respectively, and obesity was identified as an independent risk factor for complications (OR≈2.3-2.6). Across several studies, approximately 40-50% of patients had recurrent disease or a history of prior failed surgery.

Conclusion: Early wound complications after BCL are generally low to moderate in the literature. SSI/wound infection is the most frequently reported complication, whereas seroma and hematoma appear less common. Available evidence suggests that obesity may represent a clinically meaningful risk factor for early postoperative complications. Even in series with a high proportion of recurrent/complex cases, the early safety profile of BCL appears acceptable. Prospective, multicenter studies using standardized complication definitions are needed to strengthen predictor analyses.

Keywords: Pilonidal sinus, bascom cleft lift, early postoperative complications

[S-405]

Clinical and surgical markers predicting fistula development after anal abscess: A single-center retrospective study

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Objective: Anal abscess is one of the most common infectious conditions of the anorectal region and may lead to anal fistula formation in a considerable proportion of patients despite adequate surgical drainage. Identifying clinical and surgical factors that predict fistula development is important for optimizing follow-up and reducing complications. This study aimed to evaluate factors associated with fistula development during follow-up in patients operated on for anal abscess.

Material and Methods: This single-center retrospective study included 94 patients who underwent surgery for anal abscess. Demographic characteristics, comorbidities, laboratory parameters, abscess type, presence of horseshoe abscess, surgical approach, abscess diameter, and follow-up outcomes were analyzed. The primary endpoint was fistula development during follow-up. Patients with and without fistula formation were compared. Categorical variables were analyzed using the chi-square test and continuous variables using the Mann-Whitney U test. A p-value <0.05 was considered statistically significant.

Results: The median age was 43 (22-86) years, and 71.3% were male. The median BMI was 25.25 (20-38.1). Diabetes was present in 21.3% of patients and 57.4% were smokers. The most common abscess type was perianal (68.1%), followed by ischiorectal (17%), intersphincteric (7.4%), and supralevator (7.4%) abscesses. Horseshoe abscess was identified in 20.2% of patients. Most patients underwent primary drainage, and the median follow-up duration was 7 (1-60) months. Fistula developed in 26 patients (27.7%). Female sex was significantly associated with fistula development, with higher rates compared to males (p=0.021). The presence of a horseshoe abscess was also significantly associated with fistula formation (p=0.032). Ischiorectal abscess was identified as a strong risk factor (p=0.001). Patients who developed recurrent abscess during follow-up had significantly higher fistula rates (p=0.001). Although abscess diameter was smaller in the fistula group, the difference was statistically significant (p=0.030). Age, BMI, diabetes, smoking, immunosuppression, fever at admission, spontaneous drainage, concomitant fistula at initial surgery, and laboratory parameters were not significantly associated with fistula development (p>0.05).

Conclusion: The fistula development rate after anal abscess was 27.7%. Female sex, horseshoe abscess, ischiorectal abscess type, and recurrent abscess were significant risk factors. Closer follow-up should be considered in patients with complex anatomical abscesses and recurrent disease. These findings may improve risk stratification and support earlier diagnosis and intervention in high-risk patients.

Keywords: Anal abscess, anal fistula, risk factors

Table 1. Comparison of patients with and without fistula development during follow-up and factors affecting fistula development

Parameters		No fistula development	Fistula development is present	p-value
Gender	Woman	15 (55.6%)	12 (44.4%)	***0.021**
	Male	53 (79.1%)	14 (20.9%)	
Diabetes status	None	53 (71.6%)	21 (28.4%)	*0.764
	There is	15 (75%)	5 (25%)	
Smoking	None	29 (72.5%)	11 (27.5%)	*0.976
	There is	39 (72.2%)	15 (27.8%)	
Immunosuppressed state	None	67 (73.6%)	24 (26.4%)	*0.184
	There is	1 (33.3%)	2 (66.7%)	
Temperature status at the time of initial application	None	60 (75.9%)	19 (24.1%)	*0.112
	There is	8 (53.3%)	7 (46.7%)	
Horseshoe abscess condition	None	58 (77.3%)	17 (22.7%)	***0.032**
	There is	10 (52.6%)	9 (47.4%)	
Abscess culture status	No reproduction	51 (70.8%)	21 (29.2%)	*0.555
	Reproduction is present.	17 (77.3%)	5 (22.7%)	
Preoperative spontaneous drainage status	None	54 (69.2%)	24 (30.8%)	*0.219
	There is	14 (87.5%)	2 (12.5%)	
Fistula accompanying abscess during initial surgery	None	55 (75.3%)	18 (24.7%)	*0.215
	There is	13 (61.9%)	8 (38.1%)	
Recurrent abscess status during follow-up	None	58 (80.6%)	14 (19.4%)	***0.001**
	There is	10 (45.5%)	12 (54.5%)	
Abscess type	Ischiorectal abscess	6 (37.5%)	10 (62.5%)	***0.001**
	Other abscess types	62 (79.5%)	16 (20.5%)	

Table 1. Continued

Parameters	No fistula development	Fistula development is present	p-value
Age (years)	45.5 (22-86)	39.5 (23-73)	**0.437
BMI	25 (20-38.1)	26 (20-35)	**0.438
Hospital stay duration	2 (1-35)	1.5 (1-15)	**0.322
Symptom duration until drainage (days)	3 (1-10)	3 (1-10)	**0.286
WBC at the time of initial application	13.24 (4.96-29.76)	12.28 (6.51-23.67)	**0.491
Neutrophil count at the time of initial application.	10.22 (3.02-27.44)	9.92 (3.67-21.34)	**0.823
Albumin levels at initial application	43 (16-53)	45 (29-53)	**0.161
Lymphocytes at the time of initial application	1.93 (0.69-23.5)	1.7 (0.55-4.84)	**0.415
Platelets at the time of initial application	277 (152-711)	291.5 (210-489)	**0.437
Hemoglobin at the time of initial application	14.35 (10-17.4)	14 (10.9-17.1)	**0.672
CRP at the time of initial application.	45 (1-330)	22.5 (1-317)	**0.102
Glucose levels at initial application	103 (77-498)	97.5 (75-480)	**0.252
Based on imaging and surgical data (mm)	34.5 (10-182)	25 (8-90)	****0.030**
Postoperative IV antibiotic duration	2 (1-35)	2 (1-14)	**0.370
Postoperative oral antibiotic duration	7 (0-14)	7 (5-10)	**0.201

Comparison of patients with and without fistula development during follow-up and factors affecting fistula development.

Table 2. Demographic, clinical, laboratory, and surgical characteristics of patients operated on for anal abscess (n=94)

Parameters	Values
Age (years)	43 (22-86)
Gender	
Woman	27 (28.7%)
Male	67 (71.3%)
BMI	25.25 (20-38.1)
Diabetes status	
None	74 (78.7%)
There is	20 (21.3%)
Smoking	
None	40 (42.6%)
There is	54 (57.4%)
Immunosuppressed state	
None	91 (96.8%)
There is	3 (3.2%)
Symptom duration until drainage (days)	3 (1-10)
Fever status at the time of initial application	
None	79 (84%)
There is	15 (16%)
WBC at the time of initial application	13.02 (4.96-29.76)
Neutrophil count at the time of initial application.	10.22 (3.02-27.44)
Albumin levels at initial application	44 (16-53)
Lymphocytes at the time of initial application	1.91 (0.55-23.5)

Table 2. Continued

Parameters	Values
Platelets at the time of initial application	282.5 (152-711)
Hemoglobin at the time of initial application	14.15 (10-17.4)
CRP at the time of initial application.	38.5 (1-330)
Glucose levels at initial application	102.5 (75-498)
Abscess type	
Perianal abscess	64 (68.1%)
Ischiorectal abscess	16 (17%)
Intersphincteric abscess	7 (7.4%)
Supralevator abscess	7 (7.4%)
Horseshoe abscess condition	
None	75 (79.8%)
There is	19 (20.2%)
Abscess culture status	
No reproduction in culture.	72 (76.6%)
Reproduction occurs in culture	22 (23.4%)
Preoperative imaging	
USG	20 (21.3%)
BT	56 (59.6%)
No imaging/physical examination only	18 (19.1%)
Preoperative spontaneous drainage status	
None	78 (83%)
There is	16 (17%)
Based on imaging and surgical data (mm)	32 (8-182)

Table 2. Continued

Parameters	Values
Drainage type	
Primary drainage	89 (94.7%)
Modified Henley procedure	4 (4.3%)
No drainage, just follow-up with antibiotics.	1 (1.1%)
Type of anesthesia	
Spinal	82 (87.2%)
General	12 (12.8%)
Fistula accompanying abscess during initial surgery	
None	73 (77.7%)
There is	21 (22.3%)
Suprasphincteric fistula	1 (1.1%)
Intersphincteric fistula	8 (8.5%)
Transsphincter fistula	8 (8.5%)
Extrasphincteric fistula	4 (4.3%)
Postoperative IV antibiotic duration	2 (1-35)
Postoperative oral antibiotic duration	7 (0-14)
Hospital stay duration	2 (1-35)
Recurrent abscess status during follow-up	
None	72 (76.6%)
There is	22 (23.4%)
Fistula development during follow-up	
None	68 (72.3%)
There is	26 (27.7%)
Suprasphincteric fistula	1 (1.1%)
Intersphincteric fistula	17 (18.1%)
Transsphincter fistula	8 (8.5%)
Extrasphincteric fistula	1 (1.1%)
Patient follow-up period (months)	7 (1-60)

[S-407]

Surgical outcomes of pilonidal sinus patients treated with the cleft lift technique in our clinic

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Objective: Pilonidal sinus disease is a chronic inflammatory condition that typically occurs in the sacrococcygeal region and is characterized by pain, discharge, and recurrent infections. It most commonly affects young adult males and can significantly impair quality of life. The pathogenesis is multifactorial, with a deep natal cleft, hair penetration, local trauma, and a moist environment playing key roles. The primary goals of treatment are complete eradication of the disease, prevention of recurrence, and rapid return to daily activities. In this context, the cleft lift procedure, which aims to flatten the natal cleft and lateralize the incision away from the midline, has emerged as an effective surgical option, particularly in recurrent and complex pilonidal sinus cases.

Material and Methods: A total of 56 patients who underwent surgical treatment for pilonidal sinus disease at our clinic between January 1, 2025, and January 1, 2026, were included in the study. The primary aim of the study was to evaluate early postoperative complications and recurrence rates. Additionally, we aimed to investigate the effect of the Tezel classification, used to assess disease extent, on postoperative complication and recurrence rates.Patients who were immunosuppressed, had a diagnosis of diabetes mellitus, or could not be followed regularly during the postoperative period were excluded from the study. Patients were categorized according to the Tezel classification, and demographic data, clinical characteristics, and surgical outcomes were analyzed.

Results: The patients were followed for a mean duration of 12 months. During the follow-up period, recurrence was observed in 1 patient (1.8%). Postoperative seroma developed in 25 patients (44.6%), all of which were managed by aspiration during outpatient wound care. Incisional dehiscence occurred in 6 patients (10.7%), and all cases of dehiscence were localized to the most caudal part of the incision.When outcomes were analyzed according to the Tezel classification, no statistically significant association was found between disease extent and postoperative complication or recurrence rates ($p>0.05$).

Conclusion: The cleft lift technique is an effective surgical method for pilonidal sinus disease, with low recurrence rates and manageable complications. The Tezel classification showed no significant impact on postoperative complication or recurrence rates. Further studies with larger cohorts are needed.

Keywords: Pilonidal sinus, cleft lift technique, surgical treatment, recurrence, complication

Table 1. Postoperative complications according to the Tezel classification

Tezel classification	Number of patients (n)	Recurrence (n, %)	Seroma (n, %)	Incisional dehiscence (n, %)
I	20	0 (0%)	8 (40%)	2 (10%)
II	22	1 (4.5%)	10 (45.5%)	3 (13.6%)
III	14	0 (0%)	7 (50%)	1 (7.1%)
Total	56	1 (1.8%)	25 (44.6%)	6 (10.7%)

[S-408]

Early postoperative continence as a predictor of long-term functional outcomes after surgery for low anal fistulas

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Objective: Surgical management of low-located anal fistulas aims to achieve fistula eradication while preserving anal continence and quality of life. Although fistulotomy remains the standard treatment for selected low fistulas, functional impairment may occur even after limited sphincter division. The prognostic value of early postoperative functional outcomes for predicting long-term continence remains insufficiently defined.

Material and Methods: This single-center cohort study included adult patients undergoing surgery for low-located anal fistulas managed with individualized, sphincter-conscious strategies. Preoperative assessment included endoanal ultrasonography and/or pelvic magnetic resonance imaging. Functional outcomes were evaluated using the fecal incontinence severity index (FISI) and the fecal incontinence quality of life (FIQL) questionnaire preoperatively, at 6 weeks, and at approximately 1 year postoperatively. The primary outcome was the association between early postoperative functional status and long-term continence. Secondary outcomes included factors influencing functional recovery, reoperation rates, and the exploratory impact of anesthesia type.

Results: Eighty-seven patients were included, with complete one-year follow-up available for 66 patients. Overall continence improved over time, with a significant reduction in FISI scores between 6 weeks and 1 year (mean ΔFISI -2.27±3.96, $p<0.05$). Early postoperative FISI scores at 6 weeks strongly predicted continence at 1 year (β 0.49, $p<0.001$). Age was independently associated with greater functional improvement, whereas Crohn's disease was associated with worse long-term continence. In contrast, FIQL scores remained relatively stable over time and were not significantly influenced by surgical technique or early functional status. Caudal anesthesia was associated with earlier return to work without increased complication rates.

Conclusion: Early postoperative continence status is a strong predictor of long-term functional outcomes following surgery for low-located anal fistulas. These findings support the integration of early functional assessment into postoperative surveillance and emphasize the importance of sphincter-preserving, individualized surgical strategies.

Keywords: Low anal fistula, fecal incontinence, quality of life

[S-409]

Comparison of microwave ablation and laser hemorrhoidectomy in grade II-III hemorrhoidal disease: A prospective pilot study demonstrating equivalent outcomes

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Objective: Hemorrhoidal disease is one of the most common anorectal conditions, with approximately 50% of adults experiencing symptoms in their lifetime. While conventional excisional techniques remain the gold standard, they cause considerable postoperative pain and prolonged recovery. Minimally invasive energy-based techniques, including microwave ablation and laser hemorrhoidectomy, offer reduced morbidity. However, direct comparative data remain limited. This prospective pilot study compared safety, efficacy, and outcomes of microwave ablation versus laser hemorrhoidectomy.

Material and Methods: Between March-August 2025, 52 patients with symptomatic Grade II-III hemorrhoids failing conservative management were screened; 2 declined. Fifty patients were allocated to microwave ablation (n=25) or laser hemorrhoidectomy (n=25) based on equipment availability and patient preference. Microwave used 2450 MHz at 60-80W; laser used 1470nm at 12-15W. The primary endpoint was postoperative pain assessed by VISUAL ANALOG SCALE (VAS). Secondary endpoints included operative time, analgesic use, hospital stay, epithelialization, return to work, complications, and satisfaction. Follow-up occurred at day 1, weeks 1-2, months 1-3. All completed follow-up. Analysis used Student's t-test and chi-square ($p<0.05$ significant). The microwave probe (2450 MHz, 60-80 Watts) is positioned at the base of hemorrhoidal tissue under direct visualization in lithotomy position. The procedure demonstrates precise energy delivery and tissue coagulation with minimal tissue trauma.

Results: Both groups were comparable: age (47.3±11.2 vs. 45.8±10.7 years, p=0.634), gender (56% vs. 64% male, p=0.567), BMI (26.8±3.4 vs. 27.2±3.8 kg/m^2, p=0.712), grade (p=0.773). Operative time was similar (19.8±5.1 vs. 21.3±5.4 minutes, p=0.314). VAS scores were comparable: day 1 (5.4±1.5 vs. 5.8±1.6, p=0.357), week 1 (3.7±1.3 vs. 4.0±1.4, p=0.434), week 2 (2.2±1.1 vs. 2.4±1.2, p=0.537), month 1 (0.6±0.7 vs. 0.7±0.8, p=0.639). Analgesic consumption was similar (218±65 vs. 235±72 mg, p=0.381). Hospital stay (1.2±0.4 vs. 1.3±0.5 days, p=0.489), epithelialization (4.2±0.8 vs. 4.3±0.9 weeks, p=0.673), and return to work (9.5±2.7 vs. 10.1±2.9 days, p=0.448) were comparable. Complication rates were low and similar (16% vs. 20%, p=0.709), no major complications. Minor bleeding: 2 (8%) microwave vs. 3 (12%) laser. Urinary retention: 1 (4%) vs. 2 (8%), with 1 laser patient experiencing both complications. Perianal hematoma: 1 each. No stenosis, severe bleeding, or recurrence occurred. Satisfaction scores were equivalent (8.4±1.3 vs. 8.3±1.4, p=0.788).

Conclusion: This pilot study demonstrates equivalent safety and efficacy between microwave ablation and laser hemorrhoidectomy for Grade II-III hemorrhoids. No significant differences were observed. Both techniques achieved low complications and high acceptance. Choice can be guided by equipment availability, cost, and surgeon preference rather than clinical superiority. However, as a pilot study (n=50), findings require cautious interpretation. The 3-month follow-up precludes recurrence assessment, requiring 12-24 months. Validation in larger randomized trials with extended follow-up is needed to establish long-term efficacy, recurrence, and cost-effectiveness.

Keywords: Hemorrhoid, minimally invasive surgery, microwave ablation, laser hemorrhoidectomy, postoperative pain



Figure 1. Intraoperative view of microwave ablation procedure.

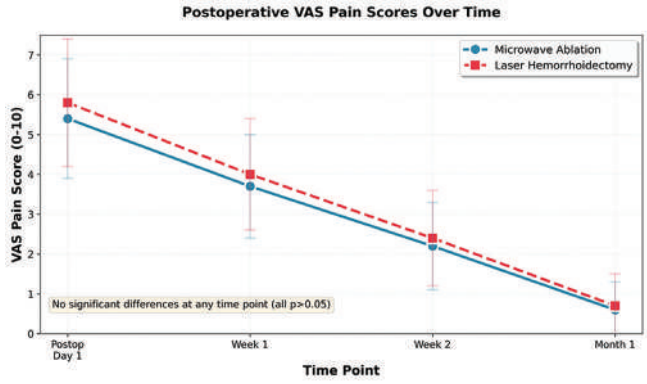


Figure 2. Postoperative VAS pain scores over time.

Both techniques demonstrated similar pain trajectories with no significant differences at any time point (all p>0.05). Error bars represent standard deviation. VAS: Visual analog scale.

Table 1. Demographic and clinical characteristics

Variable	Microwave (n=25)	Laser (n=25)	p-value
Age (years)	47.3±11.2	45.8±10.7	0.634
Male gender, n (%)	14 (56)	16 (64)	0.567
Grade III, n (%)	14 (56)	15 (60)	0.773
Operative time (min)	19.8±5.1	21.3±5.4	0.314
VAS day 1	5.4±1.5	5.8±1.6	0.357
Complications, n (%)	4 (16)	5 (20)	0.709
Satisfaction (0-10)	8.4±1.3	8.3±1.4	0.788

Data are presented as mean ± standard deviation or number (percentage). No significant differences were observed between groups (all p>0.05). VAS: Visual analog scale.

[S-410]

Analysis of factors associated with recurrence and incontinence in anal fistula surgery: A retrospective single-center experience

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Objective: Anal fistula surgery is among the most frequently performed procedures in general surgery. Predicting the risk of recurrence, in addition to functional outcomes postoperatively, remains clinically significant. This single-center study aimed to evaluate the potential associations between surgical technique, patient factors, and postoperative recurrence and incontinence.

Material and Methods: We retrospectively reviewed 84 patients who underwent fistulotomy (n=47) or seton placement (n=37) at Batman Training and Research Hospital between March 2024 and September 2025. Analyzed variables included fistula characteristics (Park classification, ST.JAMES score), history of recurrent fistula, and postoperative outcomes (recurrence, Wexner incontinence score at 1st and 6th months). Statistical analysis employed Fisher's exact, chi-square, and Mann-Whitney U tests.

Results: The overall recurrence rate was 6.0% (5/84). Recurrence was observed more frequently in patients with a preoperative history of recurrent fistula (2/5, 40%) compared to those without (3/79, 3.8%; p=0.015). No significant difference in recurrence was found between the fistulotomy (4.3%) and seton (8.1%) groups (p=0.65). Postoperative incontinence at 1 month affected 9.5% of patients (8/84), with no significant association to surgical technique (p=0.45). Incontinence was associated with older age (p=0.04) and higher preoperative Wexner scores (p<0.01), and persisted in only 2 patients at 6 months.

Conclusion: In this cohort derived from a general surgical practice without a specific colorectal unit, a preoperative history of recurrent fistula was associated with higher recurrence rates, while surgical technique showed no significant association with recurrence or early incontinence. These observations may assist in risk stratification in similar clinical settings but require validation in larger studies.

Keywords: Anal fistula, recurrence, incontinence, recurrent fistula, surgical outcomes

Table 1. Preoperative characteristics of fistulotomy and seton groups

Characteristic	Fistulotomy (n=47)	Seton (n=37)	p-value
Age (years, Mean ± SD)	35.9±11.7	40.1±14.1	0.15
Male gender, n (%)	42 (89.4%)	28 (75.7%)	0.10
Preop. Recurrent Fistula, n(%)	2 (4.3%)	3 (8.1%)	0.65
Park Classification, n (%) Intersphincteric Transsphincteric Suprasphincteric	 38 (80.9%) 9 (19.1%) 0 (0%)	 18 (48.6%) 18 (48.6%) 1 (2.7%)	0.001
ST.JAMES Score ≥3, n (%)	9 (19.1%)	18 (48.6%)	0.005
Coexisting Abscess, n (%)	8 (17.0%)	5 (13.5%)	0.77

Table 2. Main outcomes

Outcome	Fistulotomy (n=47)	Seton (n=37)	Total (n=84)	p-value
Recurrence, n (%)	2 (4.3%)	3 (8.1%)	5 (6.0%)	0.65
Incontinence (1 month, Wexner >0), n (%)	3 (6.4%)	5 (13.5%)	8 (9.5%)	0.45
Mean Wexner change (Preop → 1 month)	+0.17	+0.29	+0.22	0.50

[S-411]

Should all surgical specimens from pilonidal sinus patients be sent for histopathological examination, or is this an unnecessary routine workload?

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Objective: Pilonidal sinus disease (PSD) most commonly occurs in the sacrococcygeal region; however, it may also be observed less frequently in other parts of the body. Although several risk factors have been identified, it is widely accepted that the disease is acquired in nature. Despite being a common clinical entity, malignancy is rarely detected following histopathological examination of surgical specimens. This raises the question of whether it is necessary to routinely submit all surgical specimens for histopathological evaluation in cases of PSD. Therefore, we aimed to share our current clinical outcomes in order to shed light on this issue.

Material and Methods: Patients who underwent elective surgical procedures for pilonidal sinus disease at our clinic between 2017 and 2025 were retrospectively evaluated. Patients under 18 years of age, those who underwent minimally invasive surgical procedures, and those whose specimen histopathological examination results were not compatible with pilonidal sinus disease were excluded from the study. A total of 1115 patients were included. Demographic characteristics of the patients and histopathological examination results were retrospectively recorded. Statistical analyses were performed using SPSS (IBM SPSS Statistics, version XX.0).

Results: Of the 1115 patients included in the study, 828 (74.3%) were male and 287 (25.7%) were female, with a male-to-female ratio of 2.9:1. The mean age of the patients was 29.7±9.1 years, and the youngest and oldest patients were 18 and 69 years old, respectively (min-max: 18-69). A total of 1,064 patients (95.4%) were under 50 years of age, while 51 patients (4.6%) were in the 50 years and older age group (Table 1). Benign pathology was identified in 1114 (99.91%) of the 1,115 pilonidal sinus cases included in the study, whereas malignancy was detected in only 1 patient (0.09%). The single case with malignancy was in the ≥50-year age group, and no malignancy was observed in patients under 50 years of age (Table 2).

Conclusion: PSH is most commonly observed in the sacrococcygeal region, with a wide range of treatment options extending from minimally invasive techniques to flap procedures. The incidence of malignancy in surgical specimens is low (0.1%), making the necessity of routinely submitting specimens for histopathological examination controversial. Based on the existing literature and the data obtained from our study, we believe that histopathological examination in patients with PSH should be performed selectively rather than routinely, particularly in patients over 50 years, those with a long-standing history of PSH, or those with macroscopic suspicion of malignancy.

Keywords: Malignancy, pathology, pilonidal sinus, specimen, squamous cell

Table 1. Distribution of malignancy according to age groups

Age group	Total patients, n	Malignant, n (%)	Benign, n (%)
<50 years	1064	0 (0)	1064 (100)
≥50 years	51	1 (1.96)	50 (98.04)
Total	1115	1 (0.09)	1114 (99.91)

Table 2. Demographic and clinical characteristics of the cases

Variable	Value
Total number of patients (n)	1115
Age (years), mean ± SD	29.7±9.1
Age range (min-max)	18-69
Sex, n (%)	
Male	828 (74.3%)
Female	287 (25.7%)
Male/ratio	2,9:1
Age groups, n (%)	
20-30 years	577 (51.7%)
30-40 years	339 (30.4%)
40-50 years	46 (4.1%)
50-60 years	37 (3.3%)
≥60 years	14 (1.3%)
<50 years, n (%)	1064 (95.4%)
≥50 years, n (%)	51 (4.6%)
Pathology result, n (%)	
Benign	1114 (99.91%)
Malignant	(0.09%)

[S-412]

Evaluation of modified intersphincteric ligation technique in anorectal fistula surgery

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Objective: The primary challenge in anorectal fistula surgery is to achieve complete eradication of the fistula tract while preserving anal sphincter function and continence. Sphincter-sparing techniques are preferred in the treatment of fistulas of cryptoglandular origin. In this study, the clinical outcomes of a modified ligation of the intersphincteric fistula tract (LIFT) method, involving epithelial destruction and double ligation, were evaluated.

Material and Methods: Twenty-two patients who underwent modified intersphincteric ligation for perianal fistula between January 2020 and December 2023 were retrospectively analyzed. All operations were performed in the lithotomy position. The fistula tract was identified using a probe, and irrigation with 40-42 °C sterile hot water was applied for epithelial destruction. Through a micro-incision in the intersphincteric space, double ligation was performed 1 cm from the internal opening using 0 silk sutures with a 0.5 cm interval. The tract between the ligation lines was excised, and the anal mucosa was closed primarily with 3/0 vicryl.

Results: The mean age of the patients was 39.8 years, and 72.7% (n=16) were male. According to Parks' classification, 68.1% of the fistulas were intersphincteric, 18.1% were transsphincteric, and 13.6% were suprasphincteric. During a mean follow-up period of 19.5 months, no loss of continence or incontinence was observed in any patient. Recurrence was detected in three complex fistula cases (13.6%), which is within the acceptable range reported in the literature.

Conclusion: The modified intersphincteric ligation technique is a safe method that requires minimal dissection and eliminates the risk of sphincter injury. It should be considered an effective alternative, particularly in cases with a high risk of sphincter damage, due to its low morbidity and acceptable recurrence rates.

Keywords: Anorectal fistula, intersphincteric ligation (LIFT), modified LIFT technique, Sphincter-preserving surgery

[S-413]

Comparative treatment outcomes of a small transsphincteric seton in complex and non-complex anal fistulas

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Objective: Anal fistula remains a challenging anorectal condition, with recurrence and sphincter preservation being the primary concerns, particularly in complex disease. In this context, the present study aimed to compare the demographic and clinical characteristics and treatment outcomes of patients with complex and non-complex anal fistulas treated using a modified cutting seton technique, to evaluate recurrence rates, and to identify factors associated with disease recurrence.

Material and Methods: In this planned cohort study, a total of 93 patients who underwent surgery for anal fistula between 2020 and 2025 were evaluated. Patients were divided into two groups: 57 with complex fistulas and 36 with non-complex fistulas. Complex fistulas were defined as horseshoe fistulas, fistulas with multiple tracts, or those with ascending tracts. The modified cutting seton technique applied in our clinic is the "small transsphincteric seton" (STS) method, which creates a minimal sphincteric defect, and the seton is progressively tightened at three-week intervals. Disease duration, smoking status, abscess drainage method, fistula type, external opening location, time to seton drop-off, total treatment duration, postoperative complications, and recurrence rates were comparatively analyzed between the two groups. Statistical analyses were performed using the chi-square or Fisher's exact test for categorical variables and the Student's t-test or Mann-Whitney U test for continuous variables.

Results: The mean age of the patients was 43.9 years; 80.6% were male and 24.7% presented with recurrent disease, with these characteristics being comparable between the two groups (Table 1). The location of the external opening, compliance with Goodsall's rule, and the presence of preoperative incontinence were similar in both groups. Although transsphincteric fistulas were the most common type in both groups, their distribution differed significantly between groups ($p<0.001$). The median disease duration was 36 months and was significantly longer in the complex fistula group ($p<0.05$). Smoking rate, operative time, and time to seton drop-off were significantly higher in complex cases ($p<0.05$). Regarding treatment outcomes, the healing rate was 91.7% in the non-complex anal fistula group compared with 50.9% in the complex fistula group ($p<0.001$) (Table 2).

Conclusion: In anal fistula surgery, complex or recurrent disease status, posterior location of the fistula, and suprasphincteric or high transsphincteric fistulas negatively affect surgical success. The "STS" technique appears to be a minimally invasive cutting seton method with low rates of postoperative infection and incontinence and may be safely applied, particularly in non-complex anal fistula cases; however, its effectiveness should be further evaluated in prospective studies.

Keywords: Anal fistula, modified seton, cutting seton

Table 1.

	Total (n=93)	Grup-1 Basit (n=36)	Grup-2 Kompleks (n=57)	p-value
Yaş (Ortalama±ss)	43,90±13,09	43,08±13,38	44,42±13,00	0,634*
Cinsiyet n(%)				
Erkek	75 (80,6)	29 (80,6)	46 (80,7)	1,000**
Kadın	18 (19,4)	7 (19,4)	11 (19,3)	
Hastalık Süresi (ay) [Median (IQR)]	36 (59)	24 (36)	48 (79)	**0,039*** **
Primer/Nüks Vaka				
Primer	70 (75,3)	28 (77,8)	42 (73,7)	0,656**
Nüks	23 (24,7)	8 (22,2)	15 (26,3)	
Sigara n(%)				
Yok	52 (55,9)	25 (69,4)	27 (47,4)	**0,037****
Var	41 (44,1)	11 (30,6)	30 (52,6)	
Geçmişte Apse Drenaj Şekli n (%)				
Spontane	37 (39,8)	17 (47,2)	20 (35,1)	0,444**
Cerrahi	49 (52,7)	16 (44,4)	33 (57,9)	
Geleneksel	7 (7,5)	3 (8,3)	4 (7,0)	
Preoperatif Gaz İnkontinansı n (%)				
Yok	86 (91,4)	32 (88,9)	53 (93,0)	0,706**
Var	8 (8,6)	4 (11,1)	4 (7,0)	
Dış Delik Lokalizasyonu n (%)				
Anterior	34 (36,6)	16 (44,4)	18 (31,6)	0,210**
Posterior	59 (63,4)	20 (55,6)	39 (68,4)	
Goodsal Kuralına Uygunluğu n (%)				
Uygun	58 (62,4)	19 (52,8)	39 (68,4)	0,129**
Değil	35 (37,6)	17 (47,2)	18 (31,6)	
Hastadaki En Yüksek Tip Fistül n (%)				
Aşağı Trans	11 (11,8)	8 (22,2)	3 (5,3)	
Transsfinkterik	47 (50,6)	23 (63,9)	24 (42,1)	**<0,001****
Yüksek Trans	12 (12,9)	4 (11,1)	8 (14,0)	
Suprasfinkterik	23 (24,7)	1 (2,8)	22 (38,6)	
Ameliyat Süresi (dakika) [Median (IQR)]	55 (15)	45 (9)	60 (18)	**<0,001*** **
Seton Düşme Süresi (hafta) [Median (IQR)]	10 (9)	9 (7)	12 (9)	**0,032*** **
Takip Süresi (ay) [Median (IQR)]	44 (23)	47,5 (19)	34 (26)	0,114***
Komplikasyon Varlığı n (%)				
Var	23 (24,7)	9 (25,0)	14 (24,6)	0,962**
Yok	70 (75,3)	27 (75,0)	43 (75,4)	
Komplikasyon Tipi n (%)				
Yüzeyel Trakt-Rezidü Sinüs	13 (13,9)	6 (16,7)	7 (12,3)	0,790**
Yara Yeri Enfeksiyonu	5 (5,4)	2 (5,6)	3 (5,3)	
İnkontinans	5 (5,4)	1 (2,8)	4 (7,0)	
Sonuç n (%)				
Şifa	62 (66,7)	33 (91,7)	29 (50,9)	**<0,001****
Nüks	31 (33,3)	3 (8,3)	28 (49,1)	

Table 2.

	Tek Değişkenli Analiz			Çok Değişkenli Analiz		
	OR	%95 CI	p value	OR	%95 CI	p value
Yaş						
	0,99	0,96-1,03	0.878			
Cinsiyet						
Erkek		Ref				
Kadın	0,73	0,23-2,26	0,579			
Hasta Grubu						
Grup-1		Ref			Ref	
Grup-2	10,62	2,92-38,62	**<0,001**	6,22	1,38-27,97	**0,017**
Hastalık Süresi						
	1,00	0,99-1,01	0,278			
Primer/Nüks Vaka						
Primer		Ref			Ref	
Nüks	2,29	0,87-6,03	0,093	2,32	0,72-7,51	0,162
Sigara						
Yok		Ref				
Var	1,58	0,66-3,76	0,303			
Geçmişte Apse Drenaj Şekli						
Spontan		Ref				
Cerrahi	2,50	0,95-6,58	0,064			
Geleneksel	2,72	0,50-14,72	0,246			
Postoperatif Gaz İnkontinansı						
Yok		Ref				
Var	1,21	0,27-5,48	0,794			
Fistül Sayısı						
1		Ref				
2 ve üzeri	2,35	0,79-7,02	0,127			
Dış Delik Sayısı						
1		Ref			Ref	
2 ve üzeri	2,86	1,05-7,77	**0,039**	2,10	0,60-7,45	0,248
Dış Delik Lokalizasyon						
Anterior		Ref			Ref	
Posterior	2,65	0,99-7,05	0,052	2,48	0,74-8,31	0,140
Goodsal Kuralına Uygunluğu						
Uygun		Ref				
Değil	0,45	0,18-1,16	0,100			
En Yüksek Tip						
Aşağı Trans		Ref			Ref	
Transsfinkterik	3,43	0,40-29,66	0,263	2,57	0,24-26,55	0,429
Yüksek Trans	10,00	0,96-104,49	0,054	6,12	0,46-81,60	0,171
Suprasfinkterik	10,91	1,19-99,69	**0,034**	3,49	0,30-40,27	0,317
Komplikasyon						
Yok		Ref				
Var	0,47	0,15-1,41	0,180			
Seton Düşme Süresi						
	1,05	0,98-1,13	0,145			
Takip Süresi						
	0,98	0,96-1,01	0,267			

[S-416]

Long-term evaluation of fecal incontinence after lateral internal sphincterotomy: A single-center study

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Objective: Lateral internal sphincterotomy (LIS) is an effective surgical method commonly used in the treatment of chronic anal fissure; however, the risk of long-term incontinence remains controversial. This study aimed to evaluate long-term incontinence rates and associated factors in patients who underwent LIS between 2015 and 2020.

Material and Methods: Between 2015 and 2020, a total of 94 patients who could be contacted, agreed to participate in the study, and had not undergone any subsequent proctologic surgery after LIS were retrospectively analyzed out of 170 patients who underwent LIS. The Wexner incontinence score was applied to evaluate incontinence symptoms during long-term follow-up. Patients with a total Wexner score ≥1 were considered incontinent. Demographic data, surgical characteristics, and concomitant anorectal procedures were analyzed. Vaginal delivery and obstetric history were evaluated only in female patients.

Results: During long-term follow-up of the 94 patients: ● Wexner score >0 was observed in 19 patients (20.2%). ● Wexner score ≥5 was observed in 9 patients (9.6%).The rate of clinically significant incontinence was higher in female patients (15.9%) compared to male patients (4.0%). Among patients with diabetes mellitus, the rate of Wexner score ≥5 was 16.7%, whereas it was 8.5% in patients without diabetes. This rate was found to be 50% in patients with preoperative incontinence.

Conclusion: The rate of clinically significant incontinence in the long term after LIS is low. Preoperative incontinence, female sex, and the presence of diabetes mellitus appear to be associated with an increased risk of incontinence. Patient selection and preoperative evaluation are of critical importance for functional outcomes after LIS.

Keywords: Lateral internal sphincterotomy, anal fissure, long-term outcomes, fecal incontinence, Wexner score

[S-417]

Five-year recurrence and GIQLI outcomes in patients undergoing ligasure-assisted hemorrhoidal packet excision: A series of 84 patients

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Objective: This study aimed to evaluate demographic characteristics, five-year recurrence rate, and changes in quality of life using the gastrointestinal quality of life index (GIQLI) in patients who underwent hemorrhoidal packet excision with the aid of Ligasure.

Material and Methods: Eighty-four patients who underwent Ligasure-assisted hemorrhoidal packet excision at a single center between 2019 and 2020 were retrospectively reviewed. Age, gender, body mass index (BMI), hemorrhoid stage, and comorbidities were recorded. Recurrence was assessed based on clinical examination and/or symptoms at the fifth-year follow-up. Quality of life was measured using the **GIQLI (0–144)** scale before surgery and at the fifth year. Paired tests were used for statistical analysis.

Results: The mean age of the patients was **44.8±12.1** years, with **52 (61.9%) males and **32 (38.1%) females**. Hemorrhoid stage was determined as **stage III in 58 patients (69.0%)** and **stage IV in 26 patients (31.0%)**. The median follow-up period was **62 months (IQR 60–66)**. Recurrence was detected in **7 patients (8.3%)** during the five-year follow-up, and **3 patients (3.6%)** required repeat surgery. The total GIQLI score was **96.4±14.8** preoperatively and **124.2±12.3** at the fifth year (**p<0.001**). Significant improvement was observed in all sub-dimensions.

Conclusion: Ligasure-assisted hemorrhoidal packet excision provides significant and lasting improvement in quality of life as measured by GIQLI, along with low recurrence rates at five-year follow-up. The method can be considered a safe and effective surgical option in suitable patients.

Keywords: GIQLI, hemorrhoids, ligasure, quality of life, recurrence

Table 1. Demographic and clinical characteristics (n=84)

Değişken	Değer
Yaş (yıl), ort±SS	44,8 ± 12,1
Cinsiyet, n (%)	Erkek 52 (%61,9) / Kadın 32 (%38,1)
VKİ (kg/m²), ort±SS	27,6 ± 3,9
Hemoroid evresi, n (%)	Evre III: 58 (%69,0) / Evre IV: 26 (%31,0)
Kabızlık öyküsü, n (%)	49 (%58,3)
En az bir komorbidite, n (%)	28 (%33,3)
Antikoagülan/antiagregan kullanımı, n (%)	9 (%10,7)

Table 2. Five-year follow-up results

Parametre	Değer
Takip süresi (ay), medyan (IQR)	62 (60–66)
Nüks (+), n (%)	7 (%8,3)
Tekrar cerrahi gereksinimi, n (%)	3 (%3,6)
Konservatif tedavi ile izlenen, n (%)	4 (%4,8)

Table 3. GIQLI Scores (0-144)

Alt Boyut	Preop (ort±SS)	5. yıl (ort±SS)	p
Semptom (0–76)	50,8 ± 9,4	64,6 ± 7,1	<0,001
Fiziksel fonksiyon (0–28)	18,0 ± 3,6	23,1 ± 3,0	<0,001
Duygusal durum (0–20)	13,2 ± 3,1	17,2 ± 2,3	<0,001
Sosyal fonksiyon (0–16)	10,6 ± 2,8	15,4 ± 1,8	<0,001
Medikal tedavi memnuniyeti (0–4)	3,8 ± 0,5	3,9 ± 0,4	0,08
Toplam GIQLI (0–144)	**96,4 ± 14,8**	**124,2 ± 12,3**	**<0,001**

[S-418]

Clinical outcomes of botulinum toxin a injection in chronic anal fissure: A retrospective analysis of 50 patients

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Objective: Chronic anal fissure (CAF) is a common anorectal disorder characterized by internal anal sphincter hypertonia and anodermal ischemia, resulting in severe anal pain and impaired quality of life. Although lateral internal sphincterotomy (LIS) remains the gold standard treatment with high healing rates, concerns regarding permanent fecal incontinence have increased interest in sphincter-preserving therapies. Botulinum toxin A (BoNT-A) induces reversible chemical sphincterotomy by reducing resting anal pressure and improving local blood flow, thereby facilitating fissure healing. This study aimed to evaluate the efficacy and safety of a standardized high-dose Dysport protocol in patients with refractory CAF.

Material and Methods: Between January 2024 and August 2025, 50 adult patients with CAF refractory to at least 3 months of medical therapy were retrospectively analyzed. All patients received a total of 75 IU Dysport injected into the internal anal sphincter at three injection sites under topical anesthesia in an outpatient setting. At week 4, patients with persistent symptoms received a 20 IU booster dose.The primary endpoint was complete fissure healing at 12 weeks confirmed by anoscopy. Secondary endpoints included change in visual analog scale (VAS) pain scores, need for booster injection, requirement for salvage LIS, 6-month recurrence rate, and treatment-related complications.

Results: The mean patient age was 45.8±12.3 years, and 56% were male. Posterior fissures accounted for 84% of cases. Chronic constipation was the most common etiology (80%), and sentinel pile was present in 60% of patients.The mean VAS pain score decreased from 7.8±1.2 at baseline to 3.2±1.0 at 1 month and to 1.1±0.6 at 3 months. The complete healing rate at 3 months was 90%. Booster injection was required in 60% of patients. Salvage LIS was necessary in 10% of cases. Transient mild flatus/fecal incontinence occurred in 6% of patients and resolved with conservative measures. No major complications were observed. The recurrence rate at 6 months was 10%, and recurrent cases were successfully managed with repeat BoNT-A injection.

Conclusion: High-dose dysport injection (75 IU) is a safe and effective sphincter-preserving treatment for refractory CAF. It provides significant pain reduction, high healing rates, and a low complication profile. Selective booster application enhances treatment success, while surgical intervention is required in a limited subset of patients. BoNT-A represents a valuable minimally invasive therapeutic option prior to considering surgical sphincterotomy in appropriately selected patients.

Keywords: Chronic anal fissure, botulinum toxin A, dysport, chemical sphincterotomy

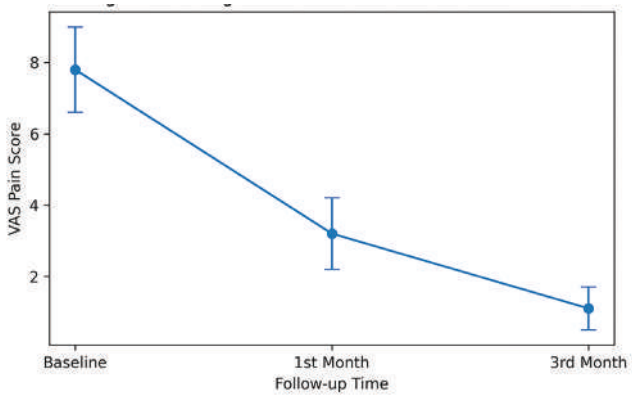


Figure 1. Change in VAS pain scores over time.

High-dose Dysport, time-dependent change of mean VAS pain scores at baseline, 1-month, and 3-month follow-up (mean ± SD).

VAS: Visual analog scale, SD: Standard deviation.

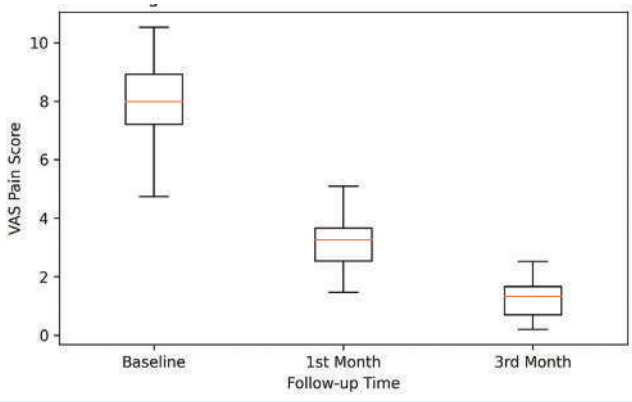


Figure 2. Box plot (distribution of VAS scores).

Distribution of VAS scores at baseline, 1 month, and 3 months, presented as median, interquartile range, and minimum-maximum values.

VAS: Visual analog scale.

[S-419]

Evaluation of the deepithelialization technique in pilonidal sinus surgery: A novel approach with clinical advantages

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Objective: Pilonidal sinus disease predominantly affects men and, if not adequately and appropriately treated during the initial surgical intervention, may negatively impact patients' quality of life for many years. In this study, the deepithelialization technique, a novel surgical method for the treatment of pilonidal sinus disease, will be retrospectively compared with the Karydakis procedure, and the prominent advantages of the deepithelialization technique will be highlighted.

Material and Methods: In our clinic, patients who underwent surgery for pilonidal sinus disease between January 2020 and December 2025 using either the Karydakis procedure or the deepithelialization technique were retrospectively evaluated. Length of hospital stay, operative time, visual analog scale pain scores, wound healing time, and cosmetic satisfaction were compared between the two groups.

Results: A total of 315 patients were included in the study, of whom 255 were male (81%). In the overall cohort, wound dehiscence was observed in 26 patients and hematoma in 20 patients. Among these, one patient with wound dehiscence and one patient with hematoma were in the deepithelialization group. Intergroup analysis demonstrated statistically significant differences in length of hospital stay, operative time, wound healing duration, and cosmetic satisfaction ($p<0.05$).

Conclusion: Although the deepithelialization technique is primarily used in breast surgery and plastic surgical procedures, it has demonstrated favorable outcomes in the surgical treatment of pilonidal sinus disease. It was associated with an earlier return to normal daily activities, fewer postoperative complications, and higher cosmetic satisfaction. We believe that more robust and significant evidence will be obtained in the future through the wider adoption of this technique and multicenter studies involving larger patient populations.

Keywords: Pilonidal sinus, Karydakis procedure, deepithelialization

[S-420]

Phenol for pilonidal sinus disease: A nationwide survey of practice patterns and safety gaps among surgeons in Türkiye

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Objective: Phenol is widely used as a minimally invasive treatment for pilonidal sinus disease (PSD); however, its clinical application shows substantial heterogeneity, particularly regarding safety practices. This nationwide survey aimed to evaluate real-world phenol use patterns among surgeons in Türkiye, with a focus on safety infrastructure and exposure control.

Material and Methods: A nationwide, internet-based, cross-sectional survey was conducted among surgeons managing PSD between July and August 2025. The 38-item questionnaire assessed demographics, surgical experience, phenol procurement and formulation, dosing practices, safety measures, and perceived complications. Data were analyzed using descriptive statistics.

Results: A total of 132 surgeons participated. Most respondents managed more than 30 PSD patients annually (81.1%). Crystalline phenol was the most commonly used form (77.3%), and only 7.6% reported measuring the dose per procedure. Dedicated ventilation and institutional exposure-prevention policies were lacking in many centers. Patient complications were reported in 20.5%, while operator-related adverse effects occurred in 5.3%.

Conclusion: Phenol use in PSD is common in Türkiye but is associated with marked variability and insufficient safety infrastructure. Establishing standardized national safety and dosing guidelines is warranted.

Keywords: Pilonidal sinus disease, phenol, occupational exposure, safety

[S-421]

Comparison of hybrid seton and Sailor's knot techniques in the treatment of perianal fistula: A single-center experience

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Objective: The primary goal in the treatment of perianal fistula is to eradicate the fistulous tract while preserving anal continence. In complex fistulas involving a significant portion of the sphincter muscles, cutting seton techniques are frequently preferred due to the risk of incontinence associated with fistulotomy. The clinical outcomes of seton techniques applied with different materials and tying methods remain controversial. This study aimed to compare the surgical outcomes of two different cutting seton techniques used in our clinic: the Hybrid seton and the polypropylene seton applied with the Sailor's knot technique.

Material and Methods: This single-center, retrospective observational study included 270 patients who underwent surgical treatment for perianal fistula. Patients with fistulas related to inflammatory bowel disease, a history of malignancy or trauma, horseshoe fistulas, and multiple fistulas were excluded. Patients were divided into two groups according to the surgical technique applied: Sailor's knot group (n=124) and hybrid seton group (n=146). Demographic data, fistula types, postoperative pain scores (VAS), continence status (CCIS), seton fall-off time, complications, and recurrence rates were evaluated. Cox proportional hazards regression analysis was used to assess the time to recurrence.

Results: The median age of the patients was 38.0 years (IQR: 16.25), and a statistically significant difference in age distribution was observed between the groups (p=0.033). The most common fistula type in both groups was intersphincteric fistula (70.4%). No postoperative complications were observed. There were no significant differences between the groups in terms of length of hospital stay, readmission rates, or seton fall-off time (p>0.05). The overall recurrence rate was 11.1%, with rates of 9.7% in the Sailor's knot group and 12.3% in the Hybrid seton group (p=0.490). Cox regression analysis revealed no significant association between the surgical technique and time to recurrence, whereas seton fall-off time was independently associated with recurrence (adjusted HR: 1.009; 95% CI: 1.002-1.016; p=0.018). No patient developed permanent incontinence.

Conclusion: Hybrid seton and Sailor's knot techniques are safe and effective methods for the treatment of perianal fistula. No significant differences were observed between the two techniques in terms of clinical outcomes or recurrence rates. Seton fall-off time may be an important predictor of recurrence. With appropriate patient selection, both techniques can be successfully applied while preserving continence.

Keywords: Perianal fistula, seton, continence, recurrence

[S-423]

Our clinical experience with laser hemorrhoidoplasty

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Objective: Hemorrhoidal disease is a common anorectal condition affecting approximately 4% of the general population worldwide. Although conservative and medical treatments are preferred in early stages, surgical intervention becomes inevitable in patients who do not respond to these approaches. Conventional hemorrhoidectomy is effective but often associated with significant postoperative pain, prolonged recovery, and procedure-related complications. Laser Hemorrhoidoplasty (LHP) has emerged as a minimally invasive alternative aimed at improving patient comfort while maintaining surgical efficacy.

Material and Methods: Between September 2024 and January 2026, a total of 243 patients diagnosed with Grade II and III hemorrhoidal disease underwent laser hemorrhoidoplasty. All procedures were performed under spinal or general anesthesia by a single experienced surgeon using a 1470 nm laser system. Perioperative pudendal nerve block was applied in all patients. Postoperative outcomes including operative time, hospital stay, pain, complications, and recurrence rates were evaluated during follow-up visits at the 3rd week, 3rd month, and 6th month.

Results: Of the 243 patients, 158 (65.02%) were male and 85 (34.98%) were female, with a mean age of 45.1 years (range: 20-65). The mean operative time was 18.5 minutes (range: 12-25), and the average length of hospital stay was 1.16 days. 176 patients had Grade II and 67 had Grade III hemorrhoids. Total 135 patients observed for follow-ups. At one-year follow-up, recurrence was observed in 3 Grade II patients (1,7%). Among the 42 Grade III patients who completed follow-up, recurrence occurred in 9 patients (13%). Postoperative bleeding not requiring blood transfusion was observed in three Grade III patients; one patient required reoperation with conventional hemorrhoidectomy due to persistent bleeding. Postoperative hematoma occurred in two Grade III patients and resolved with conservative management.

Conclusion: Laser hemorrhoidoplasty is a safe and effective minimally invasive treatment option for Grade II and III hemorrhoidal disease. The procedure offers short operative time, minimal postoperative morbidity, low complication rates, and acceptable recurrence rates, particularly in Grade II hemorrhoids. LHP represents a reliable alternative to conventional surgical techniques with the advantage of improved postoperative patient comfort.

Keywords: Laser hemorrhoidoplasty, minimal invasive surgery, hemorrhoid

[S-424]

Less is more? Early clinical outcomes of radiofrequency ablation in sacrococcygeal pilonidal disease

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Objective: Wide excision techniques in pilonidal sinus disease are associated with prolonged healing and work loss. Radiofrequency (RF) ablation is a minimally invasive technique based on controlled energy delivery to ablate the sinus tract. This study evaluated early clinical and functional outcomes and factors influencing day-15 epithelialization.

Material and Methods: Twenty-six consecutive patients undergoing RF ablation were analyzed. Demographic data, disease characteristics (pit number, location, MRI tract diameter), procedure time, and delivered energy were recorded. Pain was assessed using VAS at 0, 6, and 24 hours and on day 7. Analgesic use duration, return-to-work time, and complete epithelialization at day 15 were documented. Non-parametric and Fisher's exact tests were applied.

Results: Mean age was 21.1±3.1 years, and mean follow-up was 7.3±2.6 months. Mean procedure time was 18.1±6.9 minutes. VAS scores were 2.1±0.9 (0h), 3.8±0.9 (6h), 2.6±0.8 (24h), and 1.5±0.5 (day 7). Pain peaked at 6 hours in 96% of patients. Mean analgesic use was 2.5±1.1 days, and mean return-to-work time was 1.8±0.9 days. Complication rate was 11.5% (all minor), and recurrence rate was 3.8%. Complete epithelialization at day 15 was observed in 34.6% (9/26). Patients receiving more than 1000 Joules intraoperatively demonstrated no complete epithelialization at day 15 (0/8), whereas the rate was 50% (9/18) in the lower-energy group (p=0.023).

Conclusion: RF ablation provides low postoperative pain, rapid functional recovery, and low complication rates. Higher delivered energy may negatively influence early wound healing. Larger studies are required to validate these findings.

Keywords: Pilonidal sinus, radiofrequency ablation, minimally invasive surgery

Table 1. Factors associated with complete epithelialization on postoperative day 15			
Variable	**No complete epithelialization on day 15 (n=9)**	**Complete epithelialization on day 15 (n=17)**	**p-value**
Applied energy			
≤1000 J	9/18 (50.0%)	9/18 (50.0%)	—
>1000 J	0/8 (0.0%)	8/8 (100%)	0.023
MRI tract diameter (mm), mean ± SD	22.4±7.9	25.7±9.7	0.239
Smoking (yes), n (%)	3/13 (23.1%)	10/13 (76.9%)	0.411
Number of pits, mean ± SD	1.33±0.50	1.53±0.80	0.308
History of abscess, n (%)	4/15 (26.7%)	11/15 (73.3%)	0.507
Procedure time (min), mean ± SD	17.0±6.5	18.6±7.2	0.722

Table 2. Patient characteristics		
Category	**Variable**	**Value**
Population	Number of patients	26
	Age (years), mean ± SD	21.15±3.13
	Sex (male/female)	17/9
	BMI (kg/m^2), mean ± SD	24.97±3.69
Lifestyle	Smoking, n (%)	13 (50.0%)
	Sedentary lifestyle, n (%)	13 (50.0%)
	Family history, n (%)	20 (76.9%)
Disease characteristics	Disease type (primary/recurrent)	25/1
	Symptom duration (months), mean ± SD	7.46±6.67
	History of abscess, n (%)	15 (57.7%)
	Number of pits, mean ± SD	1.46±0.71
	Pit location (midline / lateral / combined), n	18/5/3
Imaging	MRI tract diameter (mm), mean ± SD	24.54±9.17
Procedure characteristics	Procedure time (min), mean ± SD	18.08±6.94
	Applied energy (≤1000 J / >1000 J), n	18/8
	Anesthesia (local/local + sedation), n	22/4
Follow-up	Follow-up duration (months), mean ± SD	7.31±2.56

[S-425]

Outcomes of primary closure compared with secondary intention healing in pilonidal sinus disease

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Objective: Pilonidal disease, derived from the Latin words pilus (hair) and nidus (nest), is an acquired condition mainly associated with three factors: hair, forces promoting hair accumulation, and skin vulnerability. Diagnosis is primarily clinical, and imaging is rarely required, usually reserved for differential diagnosis. Despite various non-operative treatment options, pilonidal disease remains primarily a surgical condition. Surgical approaches include primary closure, flap techniques, and secondary intention healing. This study aims to compare surgical outcomes according to operative technique, particularly in terms of postoperative pain, wound healing, and recurrence.

Material and Methods: This prospective, observational study was conducted at a single center. All procedures were performed by one surgeon, and outcomes were assessed by an independent physician to ensure objectivity. Patients aged 18-65 years without comorbidities or prior pilonidal surgery were included. Patients were followed for six months, with biweekly visits during the first three months and monthly follow-ups thereafter. Exclusion criteria included prior pilonidal surgery, inadequate mental capacity, and systemic or connective tissue diseases affecting wound healing.

Results: The primary closure (PC) and secondary intention (SI) groups were comparable in terms of age, sex, and smoking or alcohol use. No significant associations were found between these descriptive variables and clinical outcomes. Primary closure was associated with significantly shorter wound healing time, lower VAS scores, smaller specimen size, and shorter hospital stay compared to secondary intention healing.

Conclusion: In conclusion, primary closure appears to be more advantageous in terms of patient comfort, analgesic requirements, and wound healing time. Although the choice of surgical technique for pilonidal disease should be individualized, the potential benefits of wound closure for both patients and the healthcare system should not be overlooked. Our study is ongoing, and we believe that increasing patient numbers will yield more robust results and contribute meaningfully to the literature.

Keywords: Pilonidal disease, primary closure, secondary intention, pain, healing

[S-427]

Effectiveness and safety of elliptical midline excision and rectangular flap reconstruction in the treatment of pilonidal sinus disease

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Objective: Pilonidal sinus disease (PSD) is a chronic and recurrent condition primarily affecting young adults, significantly reducing their quality of life. Effective surgical management is crucial to maximize patient comfort and achieve satisfactory aesthetic outcomes while minimizing recurrences and complications. Among commonly employed techniques, the classical Limberg flap has demonstrated notable success; however, its square design increases susceptibility to complications such as corner necrosis. This study presents a surgical technique combining elliptical midline excision with rectangular flap reconstruction. Addressing the limitations of the traditional method, this approach aims to reduce the risk of corner necrosis and promote faster wound healing and improved patient satisfaction by providing a tension-free closure. This new technique specifically focuses on optimizing the patient recovery process by minimizing tension-related complications.

Material and Methods: A retrospective cohort analysis was conducted on patients who underwent elliptical midline excision and tension-free rectangular flap closure between February 2019 and February 2024. Preoperative ultrasonography was routinely used to assess sinus tract extension. Postoperative outcomes including recurrence rate, wound healing time, and complication rates were recorded. Statistical analysis was performed using SPSS version 25.0.

Results: A total of 102 patients (78 males, 24 females; mean age 26.4±5.8 years) were included. The mean wound healing time was 9.1±2.3 days. The overall complication rate was 7.8%, primarily consisting of minor wound dehiscence and seroma. The recurrence rate at one-year follow-up was 4.9%. No major complications or flap necrosis were observed. Patients returned to daily activities within a mean of 11.6±3.2 days.

Conclusion: Elliptical midline excision combined with rectangular flap reconstruction is a safe and effective surgical technique for PSD. It offers low recurrence and complication rates, rapid wound healing, and early return to daily life. Routine preoperative ultrasonography may enhance surgical planning and reduce postoperative morbidity.

Keywords: Flap reconstruction, pilonidal sinus disease, surgical treatment



Figure 1. Flap drawing. Preoperative flap plan.



Figure 2. Postoperative result.

Table 1. Patient demographics, procedure details, and postoperative outcomes

Parameter	Details
Study period	February 2019-February 2024
Number of patients	102
Gender distribution	93.1% male (95 patients), 6.9% female (7 patients)
Average age (male)	28.78 years
Average age (female)	23.71 years
Procedure performed	Elliptical midline excision and rectangular flap reconstruction
Anesthesia used	Spinal anesthesia
Average operation time	45±7 minutes (range: 35-52 minutes)
Average hospital stay	1.2±0.5 days (range: 1-3 days)

Table 2. Complications, pain scores, and recurrence rates

Parameter	Values
Minor complications	4.9% (5 patients)
Wound infection	2.9% (3 patients)
Seroma	2.0% (2 patients)
Major complications	2.9% (3 patients)
Wound dehiscence	2.9% (3 patients)
VAS pain scores	
Preoperative	4.2±1.1 (range: 3.0-5.5)
6 hours postoperative	3.8±0.8 (range: 3.0-4.5)
24 hours postoperative	2.5±0.5 (range: 2.0-3.0)
1 week postoperative	1.2±0.4 (range: 0.5-1.5)
Recurrence rates	
1 year	4.9% (5 patients)
Mean follow-up duration	12 months (range: 12 months)

[S-428]

Our experience with robotic surgery in colorectal cancer: A retrospective analysis of 110 cases

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Objective: Robotic surgery represents a major step in the evolution of minimally invasive approaches for colorectal cancer, particularly by providing technical advantages in pelvic dissection. However, its true clinical and oncological impact should be evaluated in large patient series. This study presents our center's retrospective experience with robotic colorectal cancer surgery.

Material and Methods: This single-center retrospective study included 110 patients who underwent robotic surgery for colorectal cancer at the Clinic of General Surgery, Ankara Bilkent City Hospital, between August 2022 and December 2025. Demographic characteristics, procedure type, operative time, postoperative length of stay, ostomy formation, and pathological lymph node counts were recorded. Major complications (Clavien-Dindo ≥III), reoperations, and their causes were classified. Medical oncology data were reviewed, and receipt of adjuvant therapy was evaluated.

Results: The mean age was 61.5±10.5 years; 35.5% were female and 64.5% were male. Procedures included robotic low anterior resection in 63 patients (57.3%), anterior resection in 16 (14.5%), right hemicolectomy in 24 (21.8%), left hemicolectomy in 5 (4.5%), and abdominoperineal resection in 2 (1.8%). An ostomy was created in 27 patients (24.5%). The mean operative time was 300 minutes and the mean hospital stay was 6 days. The overall mean lymph node count was 17.2. Mean lymph node numbers were 17.6 for low anterior resection, 16.3 for anterior resection, 17.6 for right hemicolectomy, 12.0 for left hemicolectomy, and 21.0 for abdominoperineal resection.The overall reoperation rate was 10.0% (11/110). Nine cases were due to surgery-related major complications, yielding a major morbidity rate of 8.2%. Six occurred within 30 days, corresponding to a 30-day major morbidity rate of 5.5%. All reoperations occurred in the low anterior resection group (17.5%). The most frequent complications were intra-abdominal abscess and anastomotic stricture (each 2.7%), followed by anastomotic leakage, bladder injury, and ostomy detorsion (each 0.9%). Oncological reoperations due to recurrence were observed in two patients (1.8%). Adjuvant therapy was administered in 58 patients (52.7%). No 30-day mortality was observed.

Conclusion: Robotic colorectal cancer surgery provides adequate lymph node dissection and acceptable perioperative outcomes. Major morbidity (8.2%) and 30-day major morbidity (5.5%) support the safety of the robotic approach. The concentration of reoperations in rectal resections emphasizes the importance of complication-prevention strategies in this subgroup.

Keywords: Colorectal cancer, robotic surgery, surgical oncology

Table 1. Outcomes of robotic colorectal cancer surgery (n=110)	
Clinical and follow-up characteristics	**Value**
Age (mean ± SD)	61.5±10.5
Gender, n (%)	
- Male	71 (64.5)
- Female	39 (35.5)
Type of surgery, n (%)	
- Low anterior resection	63 (57.3)
- Anterior resection	16 (14.5)
- Right hemicolectomy	24 (21.8)
- Left hemicolectomy	5 (4.5)
- Abdominoperineal resection	2 (1.8)
Ostomy formation, n (%)	27 (24.5)
Operative time (min), mean	300
Postoperative length of stay (days), mean	6
Total lymph node count, mean	17.2
Total reoperations, n (%)	11 (10.0)
Major morbidity (Clavien-Dindo ≥III), n (%)	9 (8.2)
30-day major morbidity, n (%)	6 (5.5)
Oncologic reoperation (recurrence), n (%)	2 (1.8)
Adjuvant therapy, n (%)	58 (52.7)
30-day mortality, n (%)	0 (0)

[S-429]

Totally robotic Ivor-Lewis esophagectomy in esophageal cancer: Early clinical and oncological outcomes

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Objective: Esophagectomy is a procedure with a high degree of morbidity. Minimally invasive esophagectomy performed with intrathoracic dissection and anastomosis is increasingly being performed. Robotic surgery enables complex resections to be performed, offering potential advantages over other surgical methods. The aim of this study is to share our perioperative and early postoperative clinical and oncological outcomes.

Material and Methods: Our study included patients who underwent total robotic Ivor-Lewis esophagectomy for esophageal cancer between 2015 and 2025. Data were obtained from a prospectively maintained database and analyzed retrospectively. Patients who underwent McKeown esophagectomy, open esophagectomy, or surgery for benign reasons were excluded from the study. Patients' demographic data, perioperative and postoperative outcomes, and 90-day follow-up data were evaluated.

Results: Of the 27 patients, 15 were male. The mean body mass index was 24±4 kg/m^2 and the mean age was 59±12 years. Seventeen patients received neoadjuvant radiotherapy and 24 received neoadjuvant chemotherapy. The mean operative time was 518±79 minutes. Overall, complications occurred in 7 patients (25.9%). The most common complications were chylous fistula in 3 patients (11.1%) and anastomotic leakage in 2 patients (7.4%). One patient died on postoperative day 40 due to septic shock secondary to massive pleural effusion and anastomotic leakage (3.7%). Patients were discharged after a median of 9 days (range, 6-120). R0 resection was achieved in 24 patients (88.9%). The mean tumor diameter was 3.81±2.21 cm. The mean number of harvested lymph nodes was 30±12. No statistically significant association was found between demographic variables, operative time, intraoperative blood loss, tumor size, neoadjuvant therapy, and complication rates

Conclusion: Robotic Ivor-Lewis esophagectomy is a safe surgical technique that can be performed in experienced centers, providing an alternative to standard minimally invasive and open techniques. It may contribute to improved postoperative clinical and oncological outcomes.

Keywords: Esophagus cancer, Ivor-Lewis esophagectomy, robotic surgery

[S-430]

Integration of robotic colorectal surgery into clinical practice: First year experience and early clinical outcomes

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Objective: Robotic surgery (da Vinci surgical system) offers advanced visualization and instrumentation advantages in colorectal resections. However, data regarding the early phase of integration of a robotic platform into an established surgical practice remain limited in the literature. This study aimed to evaluate the safety and early clinical outcomes of a robotic colorectal surgery program initiated at our center between December 2024 and December 2025.

Material and Methods: A total of 48 patients who underwent robotic colorectal surgery between December 2024 and December 2025 were retrospectively analyzed. Demographic characteristics, ASA score, type of operation, operative time, estimated blood loss, conversion rate (to open surgery), postoperative complications, and length of hospital stay were recorded. Major complications were defined as Clavien-Dindo grade ≥III. Continuous variables were analyzed using appropriate parametric or non-parametric tests, and categorical variables were compared using the chi-square test. A p-value <0.05 was considered statistically significant. All procedures were performed by the same experienced surgical team following standardized surgical principles.

Results: Among the 48 patients included in the study, 56.3% were male, and the median age was 61.5 years (range, 38-81). ASA ≥3 was present in 20.8% of patients. The most frequently performed procedures were anterior resection (n=20, 41.7%) and right hemicolectomy (n=16, 33.3%). The mean operative time was 213 minutes, and the median estimated blood loss was 120 mL. Conversion to open surgery occurred in 5 patients (10.4%). The overall complication rate was 18.8%, and the major complication rate was 6.2%. The anastomotic leak rate was 4.2%, and no mortality was observed. The median length of hospital stay was 7 days (range, 4-14). All oncologic resections achieved negative surgical margins (R0). Comparison between the early (first 24 cases) and late (last 24 cases) periods demonstrated a statistically significant reduction in operative time, blood loss, overall complication rate, and length of hospital stay (p<0.05).

Conclusion: The integration of robotic colorectal surgery into a tertiary referral center appears to be safe, with low mortality, acceptable complication rates, and conversion rates consistent with the literature during the first year of implementation. The observed improvements in clinical parameters suggest a structured learning curve. Although the retrospective design and limited sample size restrict generalizability, these findings support that robotic colorectal surgery can be effectively and sustainably integrated into clinical practice in the presence of an experienced surgical team and appropriate institutional organization.

Keywords: Robotic colorectal surgery, learning curve, clinical outcomes

Table 1. Learning curve analysis according to clinical parameters

Parameter	Overall	First 24 cases	Last 24 cases	p
Operative time, min (mean)	213.2	232.6	193.8	<0,001[a]
Blood loss, mL (median)	120.5	155.5	100.5	<0,001[b]
Length of hospital stay, days (median)	7.0	9.5	5.0	<0,001[b]
Conversion, n (%)	10.4	12.5	8.3	1,000[c]
Complications, n (%)	18.8	33.3	4.2	0,023[c]
Anastomotic leakage, n (%)	4.2	8.3	0.0	0,489[c]

[S-433]

Evaluation of early postoperative complications and oncological outcomes of laparoscopic vs. robotic surgery in colorectal cansers: A single-center retrospective study

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Objective: Laparoscopic surgery has been used in treatment of colorectal cancer for years and is well-established in the literature. Robotic surgery has become increasingly widespread in recent years, with rising number cases. This study aims to contribute to literature by comparing the early postoperative complications, oncological outcomes of patients who underwent laparoscopic and robotic colorectal surgery at between 2019-2025.

Material and Methods: A total of 362 colorectal cancer patients underwent surgery at the Ankara Bilkent City Hospital, General Surgery Clinics between 2019-2025. Of these patients, 250 were operated on laparoscopic technique, and 112 with robotic technique. Demographic data including age, gender, comorbidities, ASA scores were evaluated. Oncological factors T&N stages, number of lymph nodes, presence of LVI/PNI, and tumor grades were examined. Postoperative 30-day complications based on Clavien-Dindo, reoperation rates, mortality numbers were also investigated. Patients were divided into two groups: The laparoscopic surgery group and the robotic surgery group.

Results: No differences were detected in the demographic data of patients in the laparoscopic and robotic surgery groups. The mean age was 60.2 years in laparoscopy group, 59.13 years in the robotic group. Females constituted 36% of laparoscopy group and 35.7% of the robotic group. Intraoperative complications occurred in 12 patients (4.8%) in the laparoscopy group and 2 patients (1.8%) in the robotic group (p=0.169). Conversion to open surgery was observed in 25 cases in the laparoscopic group, compared to 2 in the robotic group (p<0.05). In terms of oncological outcomes, N1 stage was more frequent in laparoscopic group, while N0&N2 rates were relatively higher in the robotic group (p<0.05). Early reoperation was seen in 13 patients (4.9%) in the laparoscopy group and 7 patients (5.9%) in the robotic group (p=0.686). No significant difference was found in the comparison of Clavien-Dindo complications. When comparing hospital stay durations, the laparoscopic group was hospitalized for an average of 9.77 days, while the robotic group's average hospitalization was 8.50 days (p<0.05). This difference was accepted as statistically significant. Lower rates of conversion and shorter hospital stays were found in the robotic surgery group compared to the laparoscopy group. It is thought that the differences may be due to robotic surgery being performed by certified and experienced surgeons, while laparoscopic surgery was performed by a greater number of operators, including training cases in the laparoscopy group.

Conclusion: Although there is no significant difference in oncological outcomes and early postoperative complications, clear superiority or disadvantage of one technique over the other cannot be stated. Consequently, multi-center studies with larger sample sizes will contribute to literature.

Keywords: Colorectal, laparoscopy, robotic surgery

Table 1. Demographic data and postoperative complication data

	Laparoskopik Cerrahi (n=250)	Robotik Cerrahi (n=112)	İstatiksel değerler (p-value)
Yaş	60,22±10,59	59,13±10,08	0,459
Cinsiyet			0,958
Kadın	90(%36)	40(%35,7)	
Erkek	160(%64)	72(%64.3)	
ASA			0,375
I	35(%14)	10(%8.9)	
II	146(%58,4)	73 (%65,2)	
III	67(%26,8)	29 (%25,9)	
IV	2(%0,8)	0	
Komorbiditeler			
DM	53 (%21,2)	27(%24,1)	0,538
HT	90(%36)	44(%39,3)	0,550
KAH	40(%16)	21(%18,8)	0,518
Pulmoner	12(%4,8)	3 (%2,7)	0,348
Geçirilmiş Batın Cerrahi	24(%9,6)	9 (%8)	0,633
Clavien-Dindo			0,468
1	85 (%34)	32 (%28,6)	
2	26 (%10,4)	16 (%14,3)	
3a	9 (%3,6)	3 (%2,7)	
3b	10 (%4)	7 (%6,3)	
4a	1 (%0,4)		
4b	0	0	
5	1 (%0,4)	0	
Reoperasyon	13 (%5,2)	7(%6,3)	0,686
Anastomoz Kaçağı	5 (%2)	3 (%2,7)	0,737
Mortalite	1 (%0,4)	0	
Yatış Süresi(gün)	9,77± 6,20	8,50 ± 5,20	**0,013**

Table 2. Perioperative data and oncological outcomes

	Laparoskopik Cerrahi (n=250)	Robotik Cerrahi (n=112)	İstatiksel değerler (p-value)
Cerrahi Prosedür			0,233
Sağ Hemikolektomi	56 (%22,4)	24 (%21,4)	
Sol Hemikolektomi	27(%10,8)	13 (%11,6)	
LAR	158 (%63,2)	75 (%67)	
Subtotal Kolektomi	9 (%3,6)	0	
İntraoperatif Komplikasyo	12 (%4,8)	2 (%1,8)	0,169
Konversiyon	25 (%10)	2 (%1,8)	**0,006**
Stoma	78 (%31,2)	30 (%26,8)	0,396
T			0,470
Tis	8 (%3,2)	7 (%6,3)	
T1	16 (%6,4)	7 (%6,3)	
T2	39 (%15,6)	13 (%11,6)	
T3	170 (%68)	74 (%66,1)	
T4	17 (%6,8)	11 (%9,8)	
N			0,025
N0	144 (%57,6)	73 (%65,2)	
N1	86 (%34,4)	24 (%21,4)	
N2	20 (%8)	15 (%13,4)	
Grade			0,573
İyi	56 (%22,4)	31 (%27,7)	
Orta	185 (%74)	78(%69,6)	
Kötü	7 (%2,8)	3(%2,7)	
Total LN	19,12 ± 10,59	18,08 ± 9,43	0,732
Pozitif LN	1,19 ± 2,20	1,66 ± 3,91	0,955
LVI	110 (%44)	44 (%39,3)	0,402
PNI	74 (%29,6)	36 (%32.1)	0,624

[S-434]

Robotic surgery vs. laparoscopic surgery for rectal cancer: A systematic review and meta-analysis

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Objective: Minimally invasive surgery has become the standard approach for rectal cancer resection. While laparoscopic surgery offers advantages over open surgery, technical difficulties in the narrow pelvis have raised concerns about the conversion rate to open surgery. Robotic surgical systems potentially overcome these limitations by offering advanced 3D visualization, improved instrument handling, and better ergonomics. This systematic review and meta-analysis evaluated the comparative efficacy and safety of robot-assisted surgery versus conventional laparoscopic surgery for rectal cancer.

Material and Methods: We conducted a comprehensive systematic review in accordance with the PRISMA 2020 guidelines. The "scispace-deep agent" artificial intelligence program was used in the review. A total of 19 studies were screened from multiple databases (PubMed, Embase, CENTRAL, Google Scholar) up to January 2026. Following a rigorous screening process, five randomized controlled trials (RCTs) involving 1,588 patients (794 robotic, 794 laparoscopic) were included. The main studies were: ROLARR 2017 (International, n=471), Kim 2018 (South Korea, n=70), COLRAR 2023 (South Korea, n=280), Feng 2022 APR (China, n=117), and REAL 2025 (China, n=650). All studies were assessed as having a low risk of bias across all domains. A random-effects meta-analysis was performed using the DerSimonian-Laird method.

Results: Robotic surgery showed a significant 48.2% reduction in conversion to open surgery compared to laparoscopic surgery (risk ratio: 0.52, 95% CI: 0.35-0.76, p<0.001), with no heterogeneity observed (I^2=0%). Conversion rates were 4.5% in robotic surgery and 9.2% in laparoscopic surgery. Operating time tended to be longer in the robotic group, but this trend was not statistically significant (mean difference: +14.7 minutes, 95% CI: -0.4 to 29.8, p=0.06). No significant differences were observed in overall complications (RR: 0.91, 95% CI: 0.79-1.04), positive peripheral resection margin (RR: 0.90, 95% CI: 0.57-1.42), hospital stay, blood loss, or lymph node harvest. Long-term oncological outcomes from the COLRAR study showed comparable 3-year disease-free survival rates (robotic 82.5%, laparoscopic 81.8%).

Conclusion: Evidence from 5 RCTs shows that robotic-assisted surgery for rectal cancer significantly reduces conversion to open surgery while maintaining equivalent safety profiles and oncological outcomes compared to laparoscopic surgery. The slight increase in operative time appears clinically acceptable given the significant reduction in conversion rates to open surgery. Robotic surgery should be seriously considered as a safe and effective minimally invasive approach for rectal cancer resection, particularly for mid- and lower-rectal tumors and cases with complex pelvic anatomy.

Keywords: Laparoscopic surgery, meta-analysis, rectal cancer, robotic surgery

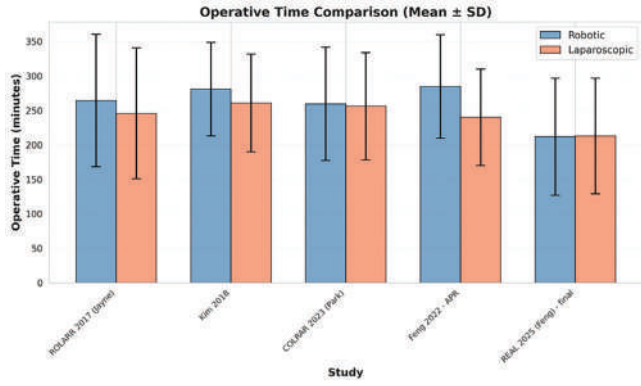


Figure 1. Comparison of operation time.

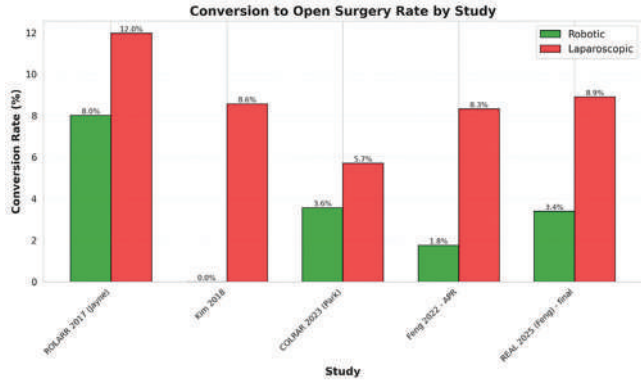


Figure 2. Comparison of the convertion to open surgery.

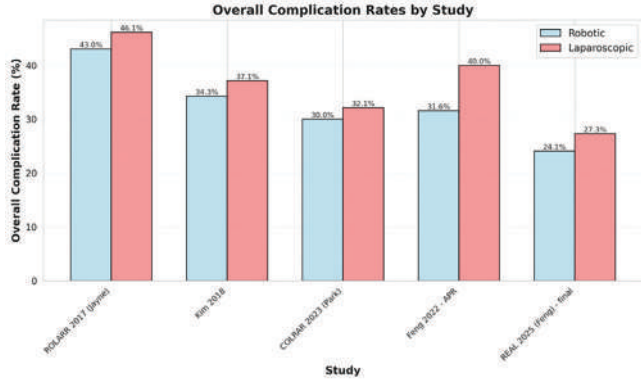


Figure 3. Complication rates.

[S-435]

Robotic pancreaticoduodenectomy for periampullary tumors

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Objective: The use of robotic systems in pancreatic surgery has increased worldwide in recent years. Although robotic surgery offers several potential advantages, adequate surgical experience and technical infrastructure are essential to ensure its safe and effective application in pancreaticoduodenectomy. We aimed to present the clinical and pathological characteristics of patients who underwent totally robotic pancreaticoduodenectomy at our institution.

Material and Methods: A total of 25 patients who underwent totally robotic pancreaticoduodenectomy between April 2022 and February 2026 were retrospectively analyzed in terms of treatment modalities, postoperative follow-up, complications and pathological outcomes.

Results: The cohort consisted of 14 male and 11 female patients with a mean age of 62 years. Among patients with a pancreatic head mass, 22 underwent pylorus-preserving pancreaticoduodenectomy, 1 underwent conventional pancreaticoduodenectomy, and 2 underwent total pancreaticoduodenectomy. The descriptive characteristics and perioperative and postoperative outcomes of patients who underwent robotic pancreaticoduodenectomy are presented in the table.

Conclusion: Robotic pancreaticoduodenectomy can be performed safely and effectively in appropriately selected patients at centers with sufficient experience and technical infrastructure, yielding clinical outcomes and complication rates comparable to those of the open approach.

Keywords: Minimally invasive, pancreaticoduodenectomy, robotic surgery

Table 1. Patients' demographic and clinical characteristics

Variable	RPD (n=25)
Age, years (mean ± SD)	62.11±9.07
Sex (male), n (%)	14 (56)
ASA score, n (%)	
- ASA I	8(32)
- ASA II	11(44)
- ASA III	6(24)
- ASA IV	0 (0)
Comorbidities, n (%)	
- Diabetes mellitus	9 (36)
- Hypertension	10 (40)
- Cardiac disease	12 (48)
- COPD	2 (8)

Table 2. Postoperative complications and oncologic outcomes

Complication	RPD (n=25)
Any complication, n (%)	14 (56)
Clavien-Dindo ≥3, n (%)	1 (4)
POPF (ISGPS)	
- Grade A	4 (16)
- Grade B	1 (4)
- Grade C	0 (0)
- Clinically relevant (B/C), n (%)	1 (4)
Resection margin	RPD (n=25)
- R0 resection, n (%)	25 (100)
- R1 resection, n (%)	0 (0)
Total number of lymph nodes	27.16±26.18
Number of positive lymph nodes	1.21±1.9
Lymph node positivity rate, %	4.45

[S-436]

Comparison of short-term outcomes of robotic and laparoscopic gastric cancer surgery

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Objective: In recent years, robotic surgery has rapidly gained popularity in gastric cancer resections. Robotic surgery is thought to provide advantages in terms of surgeon comfort during anastomosis, particularly in patients with high body mass index, short esophagus, and narrow operative fields. The aim of this study was to compare robotic and laparoscopic techniques in gastric cancer resections with respect to surgical outcomes.

Material and Methods: Patients who underwent total gastrectomy for gastric cancer at our clinic between 2020 and 2025 were retrospectively analyzed. Patients were divided into two groups according to the surgical technique: Laparoscopic surgery (Group 1) and robotic surgery (Group 2). The groups were compared in terms of demographic characteristics, perioperative findings, and pathological outcomes.

Results: A total of 63 patients were included in the study. The mean age was 62.22±12.17 years, and the female/male ratio was 23 (36.5%)/40 (63.5%). There was no statistically significant difference between the groups in total length of hospital stay or intensive care unit stay (p=0.573 and p=0.386, respectively). Similarly, no significant difference was observed in postoperative anastomotic leakage rates (p=0.687). One patient died in the postoperative period; this patient belonged to the laparoscopic group. There was no significant difference between the groups regarding T and N stages (p=0.268 and p=0.943, respectively). The median total number of harvested lymph nodes was 26.28±11.64. No significant difference was found between the groups in terms of total lymph node count or positive lymph node count (p=0.155 and p=0.923, respectively). During postoperative follow-up, metastasis was detected in two patients in the laparoscopic group and in one patient in the robotic group (lung, liver, central nervous system). The patient who underwent robotic total gastrectomy developed central nervous system metastasis within the first 6 months, whereas the other two patients developed liver and lung metastases one year after surgery.

Conclusion: Robotic total gastrectomy provides short-term surgical and oncological outcomes comparable to those of the laparoscopic approach in gastric cancer surgery. However, further prospective, randomized studies with larger patient cohorts and long-term follow-up are required to determine whether the potential advantages of robotic surgery—such as improved ergonomics, superior image quality, and enhanced surgeon comfort—translate into improved clinical and long-term oncological outcomes.

Keywords: Gastric, laparoscopic, robotic

Table 1. Comparison of demographic, clinical and perioperative characteritics

	Total cohort	Group 1 (laparoscopic) (n=40)	Group 2 (robotic) (n=23)	p-value
Age	62.22±12.17	61.45±13.67	63.56±9.12	0.592
Sex				
Female	23 (36.5%)	15 (37.5%)	8 (34.8%)	0.829
Male	40 (63.5%)	25 (62.5%)	15 (65.2%)	
ASA score				
2	55 (87.3%)	34 (85%)	21 (91.3%)	0.469
3	8 (12.7%)	6 (15%)	2 (8.7%)	
Comorbidities				
≤2	41 (65.1%)	24 (60%)	17 (73.9%)	0.265
>2	22 (34.9%)	16 (40%)	6 (26.1%)	
NACT				
No	39 (61.9%)	25 (65%)	13 (56.5%)	0.505
Yes	24 (38.1%)	14 (35%)	10 (43.5%)	
Interval after NACT				
0-4 weeks	15 (62.5%)	10 (7.4%)	5 (50%)	0.358
4-8 weeks	8 (33.3%)	4 (28.6%)	4 (40%)	
8-12 weeks	1 (4.2%)	-	1 (10%)	
Tumor location				
EGJ	2 (3.2%)	2 (5%)	-	0.588
Cardia	29 (46%)	18 (45%)	11 (47.8%)	
Fundus	8 (12.7%)	6 (15%)	2 (8.7%)	
Corpus	19 (30.2%)	12 (30%)	7 (30.4%)	
Antrum	5 (7.9%)	2 (5%)	3 (13%)	
Length of hospital stay (days)	9.84±5.90	9.77±5.12	9.95±7.18	0.573
ICU stay (days)	2.46±2.42	2.67±2.64	2.08±1.97	0.386
Anastomotic leakage				
No	61 (96.8%)	39 (97.5%)	22 (95.7%)	0.687
Yes	2 (3.2%)	1 (2.5%)	1 (4.3%)	

Table 2. Comparison of oncological and short-term follow-up outcomes				
	Total cohort	**Group 1 (laparoscopic) (n=40)**	**Group 2 (robotic) (n=23)**	**p-value**
T				
0	1 (1.6%)	1 (2.5%)	-	0.268
1	15 (23.8%)	8 (20%)	7 (30.4%)	
2	4 (6.3%)	2 (5%)	2 (8.7%)	
3	27 (47.9%)	21 (52.5%)	6 (26.1%)	
4	16 (25.4%)	8 (20%)	8 (34.8%)	
N				
0	24 (38.1%)	16 (40%)	8 (34.8%)	0.943
1	19 (30.2%)	11 (27.5%)	8 (34.8%)	
2	3 (4.8%)	2 (5%)	1 (4.3%)	
3	17 (27%)	11 (27.5%)	6 (26.1%)	
TLN count	26.28±11.64	24.65±10.59	29.13±13.01	0.155
PLN count	4.69±7.99	4.55±7.08	4.95±9.54	0.923
30 day readmission				
No	61 (96.8%)	38 (95%)	23 (100%)	0.276
Yes	2 (3.2%)	2 (5%)	-	
Metastasis during follow-up				
No	60 (95.2%)	38 (95%)	22 (95.7%)	0.907
Yes	3 (4.8%)	2 (5%)	1 (4.3%)	
Time to metastasis				
0-6 months	1 (33.3%)	-	1 (100%)	0.083
>1 year	2 (66.7%)	2 (100%)	-	
Site of metastasis				
CSS	1 (33.3%)	-	1 (100%)	
Lung	1 (33.3%)	1 (50%)	-	
Liver	1 (33.3%)	1 (50%)	-	
Mortality				
No	62 (98.4%)	39 (97.5%)	23 (100%)	0.445
Yes	1 (1.6%)	1 (2.5%)	-	

[S-437]

Robotic hepatopancreatobiliary surgery at a single center: A six-month clinical experience

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Objective: Minimally invasive surgery is superior to open surgery in terms of tissue trauma, risk of wound infection, postoperative pain, and length of hospital stay. Within minimally invasive surgery, robotic surgery offers advantages over laparoscopic surgery in terms of surgeon-patient interaction, three-dimensional visualization, and the maneuverability of robotic arms. In this study, we aimed to present our experience with robotic hepatopancreatobiliary surgery over a six-month period.

Material and Methods: For this study, patients who underwent robotic hepatopancreatobiliary surgery in the Liver, Pancreas, and Biliary Tract Surgery Unit at our center in 2025 were retrospectively evaluated. Patients' demographic data, clinical findings, perioperative findings, and histopathological findings were analyzed.

Results: The median age of the 16 operated cases was 54 years; 62.5% (10 patients) were male and 37.5% (6 patients) were female. Of these patients, 8 (50%) underwent the Whipple procedure, 5 (31%) underwent distal pancreatectomy with splenectomy, 1 (6%) underwent spleen-preserving distal pancreatectomy, 1 (6%) underwent the Partington-Rochelle procedure, and 1 (6%) underwent lateral sectionectomy of the liver. The mean length of hospital stay was calculated as 11 days. Conversion to open surgery was required in two patients: One due to invasion of the portal vein by a mass in the pancreatic uncinate process, and the other due to invasion of the inferior vena cava by a duodenal mass. In the five patients who underwent the Whipple procedure, the mean number of harvested lymph nodes was 23, while in patients who underwent distal pancreatectomy with splenectomy, the mean number of harvested lymph nodes was 12.

Conclusion: Robotic hepatopancreatobiliary surgery is a safe and feasible minimally invasive approach that can provide oncologic outcomes comparable to those of conventional surgery, even in major resections. Conversion was required in a limited number of cases with vascular invasion, highlighting the importance of appropriate patient selection and surgical experience. The findings support robotic surgery as an effective and sustainable alternative for hepatopancreatobiliary procedures in experienced centers.

Keywords: Hepatopancreatobiliary surgery, liver, pancreas, spleen, robot

Table 1. Clinical data analysis of robotic hepatopancreatobiliary surgery patients

	PD	DP + splenectomy	DP	Hepatic bisegmentectomy	Surgery for chronic pancreatitis
Gender	7 male 1 female	2 male 3 female	1 male	1 female	1 male
Median age	58	57	29	56	21
LOS	18	7	7	5	7
Pathology	Adeno ca	Adeno ca Mucinous cystic neoplasm	Serous cystadenoma	Adeno ca	Pancreatitis

[S-438]

Impact of PIPAC therapy on symptom management and quality of life in peritoneal surface malignancies

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Objective: In patients with peritoneal carcinomatosis (PC), improving quality of life (QoL) impaired by refractory ascites and pain is as important as prolonging survival. This study aimed to objectively evaluate the effects of PIPAC therapy on subjective well-being and quality of life scores in patients with PC who were resistant to standard treatments.

Material and Methods: Data from 28 patients who underwent PIPAC were analyzed. The EORTC QLQ-C30 questionnaire was used to assess quality of life, and the global health status score was considered the primary QoL outcome. The preoperative questionnaire was administered during hospitalization, and the postoperative questionnaire was conducted via telephone interview. Global health status scores before treatment and after the first PIPAC session (mean 6 weeks) were compared. Twenty-one patients completed the questionnaire.

Results: Fourteen patients (50%) were female, with a mean age of 56.9±12.4 years. The primary tumor was gastric cancer in 57% (n=16), ovarian cancer in 14% (n=4), and colorectal cancer in 11% (n=3). Among patients who did not complete the questionnaire, four (57.1%) were unreachable, two (28.6%) declined participation, and one (14.3%) had died. Among the 21 patients who completed the EORTC QLQ-C30, a statistically significant improvement in global QoL scores was observed after PIPAC compared to baseline ($p<0.001$), with a mean increase of 11.5 points. According to the EORTC QLQ-C30 symptom scales, pain decreased in 16 patients, remained unchanged in 3, and increased in 2; anxiety decreased in 12 patients, remained unchanged in 7, and increased in 2. Self-care, mobility, and daily activities improved in 8 patients, worsened in 2, and remained stable in 11. Parallel to symptomatic improvement, the majority of patients with massive ascites experienced elimination or reduction in the need for paracentesis. Radiological and clinical responses were consistent with the observed improvement in quality of life.

Conclusion: Beyond reducing tumor burden, PIPAC represents an effective palliative option that significantly improves quality of life in patients with peritoneal surface malignancies. In this population, often challenged by systemic chemotherapy toxicity and disease progression, PIPAC plays a critical role in symptom control and preservation of functional capacity.

Keywords: Peritoneal carcinomatosis, PIPAC, quality of life

[S-439]

Prognostic factors in peritoneal mesothelioma: Physiological reserve, inflammatory markers, or surgery

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Objective: Peritoneal mesothelioma (PM) is an aggressive malignancy with a challenging treatment course. Cytoreductive surgery (CRS) combined with hyperthermic intraperitoneal chemotherapy (HIPEC) represents the current standard of care. The aim of this study is to determine the factors affecting survival in patients treated for PM at our clinic, specifically by comparing the prognostic value of surgical quality parameters (CC Score, PCI) and intraoperative management (albumin requirement) against preoperative inflammatory indices (NLR, PLR, PNI, CALLY).

Material and Methods: Thirty-six patients diagnosed with PM who underwent CRS and/or HIPEC were analyzed retrospectively. Demographic data, peritoneal cancer index (PCI), completeness of cytoreduction score (CC Score), complications (Clavien-Dindo), intraoperative albumin replacement requirement, preoperative laboratory parameters and indices (NLR, PLR, PNI, and CALLY Index), and other relevant data were recorded. Survival analyses were performed using the Kaplan-Meier method, while group comparisons were conducted using the Log-rank, Mann-Whitney U, and Kruskal-Wallis tests. Correlations between variables were evaluated using the Spearman correlation test. Statistical significance was defined as $p<0.05$.

Results: The mean follow-up period for the 36 patients included in the study was 28.9 months, with a median overall survival (OS) of 18.5 months. The 1-, 3-, and 5-year survival rates were 61.1%, 33.3%, and 16.7%, respectively. Survival analysis revealed that the median survival was 48.0 months in patients who achieved complete cytoreduction (CC-0), whereas it decreased to 4.0 months in the group undergoing incomplete surgery (CC-1/2/3); this difference was highly statistically significant ($p<0.05$). Survival in patients requiring high perioperative albumin replacement (>2.5 units) (Median: 5.0 months) was significantly shorter compared to those with lower requirements (Median: 40.5 months) ($p<0.05$). The development of major postoperative complications (Clavien-Dindo Grade ≥ 3) was also identified as an independent factor negatively affecting survival ($p<0.05$). Conversely, NLR ($p=0.43$), PLR ($p=0.64$), PNI ($p=0.49$), and CALLY ($p=0.55$) scores—which are reported as prognostic in many diseases and malignancies in the literature—were not found to have any statistically significant value in predicting overall survival in our series.

Conclusion: Our study results demonstrate that "surgical quality (CC-0)" and "physiological reserve" are the most significant prognostic factors in the treatment of peritoneal mesothelioma. Successful complete cytoreduction and an uncomplicated recovery period represent the most critical determinants for long-term survival. In contrast, systemic inflammatory or nutritional scores prove insufficient in predicting outcomes in this patient group. In particular, the association between increased albumin replacement requirement and poor prognosis -reflecting the severity of surgical trauma- warrants evaluation in larger patient cohorts and further studies.

Keywords: Peritoneal mesothelioma, cytoreductive surgery, completeness of cytoreduction score

Table 1. Patient demographic and clinical characteristics table

Parameter	Value/distribution
Patients	36
Mean age	56.4±12.3
Gender	Female: 14 (39%) Male: 22 (61%)
Histopathology	Epithelioid: 32 (89%) Other: 4 (11%)
Median PCI score	16.5 (Range: 2-39)
Median follow-up	28.9 Months
Median overall survival (OS)	18.5 Months

[S-440]

How do complicatıons affect surgical architectural outcomes in complex cytoreductive surgery?

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Objective: Peritoneal metastasis (PM) surgery is defined as a complex architectural structure. The selection, preoperative optimization and postoperative management of this patient group, who have often undergone multiple treatment modalities, are exceptionally difficult. It is suggested that the development of high-grade complications in major oncologic surgery worsens outcomes. This study investigated how complications impact postoperative results in complex cytoreductive surgery (CRS).

Material and Methods: The data of 723 patients who underwent the CRS-HIPEC procedure for PM between 2003 and 2024 were retrospectively reviewed. Various parameters were evaluated, including age, BMI, CRP, albumin, smoking status, comorbid diseases, peritoneal recurrence surgery, peritoneal cancer index (PCI), CC score, symptom severity (ascites, hydronephrosis, ileus), and history of prior abdomino-pelvic operations. Additionally, the number of resected organs, gastrointestinal resections, number of anastomoses, surgical technical difficulties due to tumor location (diaphragm, pancreas, liver, pelvic side wall, major vascular structures, and mesenteric root), iatrogenic injury, operation time, surgeon experience, intraoperative blood product (ES/TDP) replacement, splenectomy, ileum resection, stoma creation, and duration of ICU stay were assessed. Patients undergoing complex CRS (defined as PCI ≥14) were divided into two groups: Those with and without complications. The relationship between this classification and peritoneal recurrent disease, distant metastasis, and survival was investigated using conventional statistical analyses, with the Clavien-Dindo (C-D) classification used to define complications.

Results: In this series, 497 patients (68.7%) are alive, while 226 patients (31.3%) are deceased. The mean follow-up period is 62.87±4.2 months. The 1, 2, and 5-year overall survival rates were found to be 82%, 64%, and 33%, respectively. The development of complications in patients undergoing complex CRS was found to be statistically significant concerning survival ($p<0.001$). Furthermore, a statistically significant correlation was identified between patients with complications and the development of local peritoneal recurrence ($p<0.01$). No significant correlation was found regarding distant metastasis ($p=0.743$). Ultimately, complicated complex PM cytoreduction results in a dramatic decrease in patient survival ($p<0.001$).

Conclusion: The cytoreductive surgery team bears the burden of not only the disease's complexity but also the oncologic outcomes that are adversely affected if complications arise. The best survival results are achieved in complex CRS patients who complete the process without developing complications.

Keywords: Complicated cases, complicated cytoreductive surgery, peritoneal cancer index, surgical complexity

[S-441]

Pressurized intraperitoneal aerosol chemotherapy (PIPAC) in the management of peritoneal carcinomatosis: Evaluation of efficacy in PCI response and ascites control

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Objective: In patients with peritoneal carcinomatosis (PC) who are not suitable for cytoreductive surgery or who receive neoadjuvant therapy due to high tumor burden, pressurized intraperitoneal aerosol chemotherapy (PIPAC) has increasingly been used for tumor regression or palliative purposes. Treatment response can be assessed by changes in the peritoneal cancer index (PCI) or by biopsy. In patients with malignant ascites, a reduction in ascites volume is also considered a response to PIPAC. The aim of this study was to evaluate the efficacy of PIPAC using PCI and ascites response.

Material and Methods: Data from 28 patients who underwent single or multiple PIPAC sessions for PC were retrospectively analyzed. PIPAC was administered under 12 mmHg CO_2 pneumoperitoneum for 45 minutes using pressurized aerosolized chemotherapy (cisplatin + doxorubicin or oxaliplatin). Demographic data, primary tumor origin, PCI, ascites volume, and postoperative complications (Clavien-Dindo classification) were prospectively recorded. In patients who underwent repeated sessions, changes in PCI were analyzed using the Wilcoxon signed-rank test. Tumor response was evaluated based on sequential PCI scores and changes in ascites volume.

Results: Fourteen patients (50%) were female, with a mean age of 56.9±12.4 years. The primary tumor was gastric cancer in 57% (n=16), ovarian cancer in 14% (n=4), and colorectal cancer in 11% (n=3). A total of 41 PIPAC sessions were performed (mean 1.5 sessions/patient). Ten patients (35.7%) underwent two sessions and one patient (3.6%) underwent three sessions. Multiple sessions could not be performed due to comorbidities (28.6%), death during follow-up (17.9%), patient refusal (14.3%), or recent prior PIPAC (3.6%). Mean operative time was 75 minutes and mean hospital stay was 2.4 days. Major complications (Clavien-Dindo ≥3) occurred in two patients. Among patients receiving at least two sessions (n=10), mean PCI decreased significantly from 14.5 to 11.1 ($p=0.041$). In patients with >1000 cc ascites preoperatively, 83% demonstrated a significant reduction in ascites volume ($p<0.001$). Twenty patients (71.4%) died during follow-up. One patient died during the index hospitalization due to postoperative respiratory complications. Median follow-up was 16.7 (2-100) months.

Conclusion: PIPAC may achieve objective tumor regression even in patients with high tumor burden and resistance to systemic therapy. Its significant impact on ascites control and PCI reduction suggests that it can be safely used in PC patients and may serve as a bridge to curative surgery.

Keywords: Cytoreductive surgery, peritoneal carcinomatosis, PIPAC

[S-442]

What are the determinants of long-term survival in colorectal carcinoma-peritoneal metastasis patients: An observational, ambispective cohort study

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Objective: Long-term survivors after cytoreductive surgery and hyperthermic intraperitoneal chemotherapy (CRS-HIPEC) for colorectal carcinoma peritoneal metastasis (CRC-PM) are quite rare. We investigated the factors determining long-term survival in this specific patient subgroup.

Material and Methods: Between 2003 and 2024, 244 patients who underwent CRS-HIPEC for CRC-PM were divided into two groups: Long-term survivors (≥36 months, n=47, 19.3%) and short-term survivors (<36 months, n=197, 80.7%). Following the consensus of multi-institutional studies of the Peritoneal Surface Oncology Group International, ≥36 months accepted as a long-term survival for CRC-PM patients. All the clinico-demographical factors were analyzed in both groups.

Results: In univariate analysis (chi-squared test), Clavien-Dindo complication classification (p=0.028), general

morbidity (p=0.024), intensive care unit (ICU) stay (p=0.038), peritoneal cancer index (PCI) (p=0.01), resected organ count ≥5 (p<0.01), extreme cytoreduction (p=0.035), ostomy creation (p=0.004), presence of an existing stoma(p=0.008), infection (p=0.014), and operation time(p=0.007) were statistically significant. Logistic regression analysis revealed that ICU stay (p=0.049, OR: 2.39; CI: 1.00-5.68), lack of neoadjuvant chemotherapy (p=0.016, OR: 2.56; CI 1.49-5.51), ostomy creation (p=0.034, OR: 2.78; CI: 1.08-7.16), number of resected organ ≥5 (p=0.012, OR: 5.22; CI: 1.44-18.90), and previous stoma formation (p=0.030, OR: 9.99; CI: 1.24-80.19) were strong independent predictive factors for short-term survival. Specifically, existing stoma from previous surgical attempts reduced survival 10-fold, while high organ resection counts reduced it 5-fold. PCI was not a direct determinant of long-term survival. PM severity (number of resected organs) and the complexity of surgical technique (stoma creation, prolonged operative time and ICU stay) were highly decisive for short-term survival. Patients receiving neoadjuvant chemotherapy showed significant survival benefit.

Conclusion: This study demonstrated that the primary determinants of long-term survival in CRC-PM patients after CRS-HIPEC were neoadjuvant treatment success and the extent of surgical intervention. PCI alone did not determine survival; however, factors mirroring surgical difficulty—such as ≥5 organ resections, ICU requirement and stoma presence—reduced survival by 5 to 10 times, respectively. Thus, the findings pointed out that these complex cancer patients must be treated at the specialised cancer care center. To achieve long-term survival, strategies should focus on controlling tumor burden with neoadjuvant chemotherapy and minimizing surgical morbidity.

Keywords: Colorectal carcinoma peritoneal metastasis, long-term survival

[S-443]

Perioperative inoperability despite radiological PCI assessment in peritoneal carcinomatosis: Analysis of 555 CRS/HIPEC cases

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Objective: Cytoreductive surgery (CRS) combined with hyperthermic intraperitoneal chemotherapy (HIPEC) is an effective treatment modality that improves survival in selected patients with peritoneal carcinomatosis (PC). Appropriate patient selection is crucial, and the Peritoneal Cancer Index (PCI) represents one of the key parameters in this process. Preoperatively, PCI is commonly estimated using radiological imaging modalities such as magnetic resonance imaging (MRI), computed tomography (CT), and positron emission tomography (PET)-CT. However, discrepancies between radiological PCI assessment and intraoperative findings may occur. This study aimed to analyze the incidence of perioperative inoperability due to unexpectedly high PCI despite preoperative eligibility for CRS/HIPEC, as well as the distribution of primary tumor origins, in the context of current literature.

Material and Methods: A total of 555 patients diagnosed with PC secondary to intra-abdominal malignancies and scheduled for CRS and HIPEC between June 2016 and January 2026 were retrospectively evaluated. All patients were discussed preoperatively in a multidisciplinary tumor board, and radiological PCI was calculated using MRI, CT, and/or PET-CT imaging. Patients who were deemed inoperable during perioperative exploration due to a higher-than-expected PCI and extensive peritoneal disease were analyzed in detail.

Results: Among the 555 PC cases, 24 patients (4.3%) were considered inoperable during perioperative assessment because of a high PCI score and diffuse peritoneal involvement. Of these inoperable cases, 21 were related to gastric cancer-associated PC, 1 to gastrointestinal stromal tumor-related diffuse peritoneal involvement (gistosis), 1 to pancreatic cancer-associated PC, and 1 to malignant melanoma-related melanomatosis. Extensive involvement of the small bowel serosa, mesentery, and widespread upper abdominal disease were identified as the main factors precluding complete cytoreduction. In the literature, particularly in gastric cancer-associated PC, radiological imaging methods have been reported to underestimate the actual PCI, with intraoperative inoperability rates ranging between 5% and 10%.

Conclusion: Patient selection for CRS and HIPEC in PCs is of critical importance. Although radiological PCI assessment is a valuable tool in preoperative evaluation, it may be discordant with intraoperative findings, especially in gastric cancer-related PC. The predominance of gastric cancer among perioperatively inoperable cases in our study highlights the need for more meticulous preoperative assessment in this patient group. Wider use of diagnostic laparoscopy and integration of advanced imaging techniques may help reduce unnecessary laparotomies and improve appropriate patient selection.

Keywords: Peritoneal carcinomatosis, cytoreductive surgery, inoperability

[S-444]

Oncologic outcomes after cytoreductive surgery and HIPEC for colorectal peritoneal metastases: The impact of cytoreduction completeness and pelvic disease CRS-HIPEC outcomes in colorectal peritoneal metastases

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Objective: Colorectal peritoneal metastasis (CRC-PM) represents a distinct oncologic entity associated with poor prognosis. Cytoreductive surgery (CRS) with hyperthermic intraperitoneal chemotherapy (HIPEC) has been adopted in selected patients; however, the relative prognostic impact of surgical completeness, disease burden, pelvic involvement, and evolving treatment-related factors remains incompletely defined.

Material and Methods: Patients with CRC-PM who underwent CRS + HIPEC between 2010 and 2025 were retrospectively analyzed. Eligibility required resectable abdominopelvic disease, ASA ≤III, ECOG 0-2, and complete operative and follow-up data. Peritoneal tumor burden was assessed using intraoperative Peritoneal Cancer Index (PCI), and cytoreduction completeness (CC) was graded using the CC score. Pelvic involvement was recorded based on multidisciplinary preoperative assessment and intraoperative findings. Overall survival (OS) and disease-free/recurrence-free survival (DFS/RFS) were evaluated using Kaplan-Meier analysis and multivariable Cox regression, with sensitivity analyses addressing key assumptions.

Results: Seventy-four patients were included. Meaningful cytoreduction (CC0-1) was achieved in 79.7%. Median OS and DFS/RFS were 21.7 and 15.1 months, respectively. On multivariable analysis, CC0-1 cytoreduction independently predicted improved OS (HR: 0.17, 95% CI: 0.08-0.35; p<0.001) and DFS/RFS (HR: 0.17, 95% CI: 0.08-0.34; p<0.001). Metachronous peritoneal metastasis was associated with inferior OS (HR: 2.61; p=0.015) and DFS/RFS (HR: 3.06; p=0.004). Increasing PCI adversely affected DFS/RFS but not OS after adjustment. Pelvic involvement was associated with inferior survival on univariable analysis and remained an adverse prognostic factor after multivariable adjustment, with partial attenuation of effect size. Major postoperative morbidity did not independently influence long-term outcomes.

Conclusion: In CRC-PM patients undergoing CRS + HIPEC, completeness of cytoreduction remains the dominant determinant of survival. Disease timing, peritoneal tumor burden, and pelvic involvement provide important contextual prognostic information. These findings support a selective, multidisciplinary approach emphasizing surgical radicality in real-world practice.

Keywords: Colorectal cancer, cytoreductive surgery, peritoneal cancer index

[S-447]

Predicting the development of complicatıons with complexity score in peritoneal metastases of colorectal carcınoma

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Objective: Patients with colorectal cancer peritoneal metastasis (CRC-PM) are often individuals with multiple organ involvement and comorbidities, who had received numerous chemotherapy treatments and previous operations. Cytoreductive surgery and hyperthermic intraperitoneal chemotherapy (CRS-HIPEC) is a complex surgical oncological intervention. This study aimed to determine the correlation between objectively defined preoperative and intraoperative complexity factors and postoperative complications and mortality.

Material and Methods: Data from 251 patients who underwent the CRS-HIPEC procedure due to primary CRC-PM between 2003 and 2024 were retrospectively analyzed. A complexity score (0-52) was created by scoring age, body mass index, CRP, albumin, smoking, comorbid disease, peritoneal recurrence surgery, peritoneal cancer index (PCI) and CC score, symptom severity (ascites, hydronephrosis, ileus), history of previous abdomino-pelvic operations, number of resected organs, presence of GIT resection, number of anastomosis, technical difficulties due to tumor location (diaphragm, pancreas, liver, pelvic side wall, major vascular structure, and mesenteric root), iatrogenic injury, operation time, surgeons' experience, intraoperative ES/TDP replacement, splenectomy, ileum resection, ostomy formation, and length of stay in ICU. Patients with a complexity score <16 were defined as the low complexity group, and those with a score ≥16 were defined as the high complexity group. With this classification, the relationship of patients with complications, peritoneal recurrent disease, development of distant metastasis, and survival was investigated using conventional statistical analyses. The Clavien-Dindo (C-D) classification was used to define the development of complications.

Results: Regarding survival, the PCI score (p<0.01), number of resected organs (p<0.01), performance of extreme cytoreduction (p<0.01), anastomosis leak (p<0.01), ostomy formation (p<0.01), and neoadjuvant therapy (p=0.037) were statistically significant. While the PCI score was significant in the development of distant metastasis (p<0.01); the PCI score (p=0.028), presence of extreme cytoreduction (p=0.054), and neoadjuvant therapy (p<0.01) were found to be statistically significant in the development of peritoneal recurrence. PCI score, number of resected organs, ileum resection, type of intraperitoneal chemotherapy, presence of an ostomy, and neoadjuvant therapy were determined to be strong independent risk factors for the development of high-grade Clavien-Dindo complications (C-D III-IV). The complexity score was able to predict major complication development (p=0.01) and mortality (p=0.01). The development of high-grade complications was associated with increased local recurrence (p<0.001) and decreased overall survival (p<0.001).

Conclusion: An increasing complexity score can predict the development of major complications and early mortality. The development of major complications increases peritoneal local recurrence and reduces survival.

Keywords: Complexity, cytoreductive surgery and HIPEC, Peritoneal Cancer Index, peritoneal metastasis, postoperative complications

[S-448]

Comparative evaluation of ileocolic anastomosis techniques in patients undergoing cytoreductive surgery and hyperthermic intraperitoneal chemotherapy (HIPEC)

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Objective: Anastomotic leaks are the main cause of mortality and morbidity in patients who underwent hyperthermic intraperitoneal chemotherapy (HIPEC) with cytoreductive surgery. Many known risk factors (malnutrition, anemia, corticosteroid use, preoperative chemotherapy, etc.) are more common in this patient group. This increases the importance of surgical technique selection in anastomoses. In this study, we aimed to compare the clinical results of two different surgical techniques applied in ileocolic anastomosis during CRC + HIPEC.

Material and Methods: Patients who underwent SRC + HIPEC in the Surgical Oncology Clinic of Ankara University Faculty of Medicine between January 2018 and November 2025 were retrospectively analyzed. Regardless of the origin of the primary cancer, patients who underwent ileocolic anastomosis were divided into two groups according to the two surgical techniques applied (side-to-side linear stapler vs. end-side circular stapler). Patients who underwent additional gastrointestinal anastomosis proximal to the anastomosis or who had a diverting stoma opened were excluded. Patients who underwent additional distal anastomosis were not excluded. Anastomosis of all patients included in the study was performed before HIPEC. Patients with missing data were not included in the analysis. Demographic, clinical variables and postoperative outcomes of the patients were compared between the two groups. The International Rectal Cancer Study Group classification was used to define and grade anastomotic leakage.

Results: A total of 43 patients were included in the analysis. It was observed that 60.5% (n=26) of the patients underwent side-to-side linear stapler anastomosis and 39.5% (n=17) of the patients underwent end-side circular stapler. Both groups; were homogeneous and similar in terms of clinical variables, including age, gender, primary tumor origin, PSI score, comorbidities, HIPEC regimen, peroperative chemotherapy history, preoperative hemoglobin and albumin levels. Anastomotic leakage was detected in 4 (15.3%) patients in the side-to-side linear stapler group and 1 (5.8%) patient in the end-side circular stapler group. There was no statistically significant difference between the two techniques in terms of anastomotic leakage (p=0.192). There was no difference between the two groups in terms of the degree of anastomotic leakage and the need for re-operation (p=0.647, p=0.735, respectively). There was no 30-day anastomosis leak -related mortality in both groups.

Conclusion: Although the incidence of anastomotic leakage was observed to be lower in the end-side circular stapler group, the technique did not demonstrate statistically significant superiority. Further prospective studies with larger sample sizes and well-controlled risk factors for anastomotic leakage are warranted.

Keywords: Anastomotic leakage, cytoreductive surgery

Table 1. Comparison of clinical data and surgical outcomes between groups

	Linear stapler/side to side n=26 (60.5%)	Circular stapler/end to side n=17 (39.5%)	p
Age (years)	60.3 (±8.67)	59.6 (±7.55)	0.549
Gender Male Female	 11 (42.3) 15 (57.6)	 7 (41.1) 10 (58.9)	0.791
Body mass index (mean)	22.6 (±3.54)	21.8 (±2.81)	0.418
Diabetes mellitus	4 (15.3)	2 (11.7)	0.398
Hypertension	7 (26.9)	5 (29.4)	0.465
Chronic kidney disease	2 (7.6)	1 (5.8)	0.612
Chronic lung disease	5 (19.2)	3 (17.6)	0.748
ASA score I-II III-V	 14 (53.8) 12 (46.2)	 9 (52.9) 8 (47.1)	0.831
Primer origin Appendix Colorectal Ovarian Peritoneal mesothelioma	 15 (57.7) 2 (7.6) 6 (23.1) 3 (11.6)	 9 (52.9) 2 (11.7) 4 (23.5) 2 (11.7)	0.501
HIPEC regime Mitomycin + cisplatin Cisplatin Oxaliplatin	 13 (50.0) 5 (19.2) 8 (30.8)	 9 (52.9) 2 (11.7) 6 (35.4)	0.556
PCI (median)	10 (8-17)	11 (9-15)	0.788
Preoperative albumin	34.5 (33.1-40.5)	35.3 (30.3-38.5)	0.523
Preoperative Hgb, g/dL	11.5 (10.7-12.4)	11.85 (10.9-12.6)	0.805
History of chemotherapy (adjuvan/ neoadjuvan)	14 (53.8)	10 (58.8)	0.602

Table 1. Continued

	Linear stapler/side to side n=26 (60.5%)	Circular stapler/end to side n=17 (39.5%)	p
Number of anastomoses 1 2	 24 (92.3) 2 (7.6)	 16 (94.1) 1 (5.8)	0.773
Intraoperative blood transfusion	12 (46.1)	7 (41.1)	0.681
Anastomotic leakage	4 (15.3)	1 (5.8)	0.192
Anastomotic leakage Grade A Grade B Grade C	 0 (0%) 1 (5.8) 2 (7.6)	 0 (0%) 0 (0%) 1 (5.8)	0.647
Reoperation	2 (7.6)	1 (5.8)	0.735
Hospitalization (days)	17 (9-28)	19 (8-25)	0.578
Mortality (30-days associated with leakage)	0 (0%)	0 (0%)	>0.999

[S-449]

Decreasing threshold to identify and protect the external branch of superior laryngeal nerve (EBSLN) in neuromonitored thyroidectomy, a multicenter study

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Objective: During neuromonitored thyroidectomy, the external branch of the superior laryngeal nerve may not be detected due to lower amplitude or anatomic variations. In this study, we aimed to demonstrate the importance of identifying and protecting more nerves by lowering the threshold.

Material and Methods: Neuromonitoring data of patients who underwent thyroid surgery between October 2023 and October 2025 at two centers were retrospectively analysed. Patients with a history of previous thyroid surgery and neurologic disorder were excluded. The amplitude value for EBSLN before (S1) and after (S2) resection was evaluated. When amplitude could not be obtained from EBSLN, the device's default threshold setting of 100 µV was first lowered to 50 µV or lower to obtain amplitude.

Results: A total of 801 patients' neuromonitoring data (1,459 nerves at risk) were analysed. Total thyroidectomy was performed in 658 patients (82%). A total of 68 (4.6%) S1 amplitudes and 156 (10.6%) S2 amplitudes were obtained below 100 µV. The mean S1 amplitude on both sides was 253 µV, consistent with the literature. The mean S1 and S2 amplitudes, which were below 100 µV, were 89.45 µV (min 40-max 99) and 71.94 µV (min 13-max 99), respectively.

Conclusion: With a low mean amplitude, EBSLN may not be detected at a high neuromonitoring device threshold. During surgery, it is recommended to lower the threshold to below 100 µV (to 50 µV or lower) to better identify and protect the EBSLN.

Keywords: Nerve, neuromonitoring, thyroidectomy

[S-450]

The role of cadaveric multiorgan procurement surgery in resident training

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Objective: Unlike medical specialties, general surgery residency training prioritizes operative practice alongside theoretical knowledge. Mastery of surgical anatomy is a fundamental requirement for resident physicians. Cadaveric organ procurement is highly significant as it encompasses all abdominal quadrants and provides exposure to retroperitoneal anatomy, facilitating anatomical mastery and operative planning. This study aims to evaluate the contribution of cadaveric multiorgan procurement surgery to the technical proficiency and vascular surgical skills of residents.

Material and Methods: A cross-sectional study was conducted between January 2020 and December 2025, involving 26 general surgery residents who participated in multiorgan procurement operations at our center. Data were collected using an 18-item, 5-point Likert-type scale designed to assess operative gains. Statistical analyses were performed using Shapiro-Wilk, Independent Samples t-test, and Spearman correlation analyses, with a significance level of $p<0.05$.

Results: A total of 26 general surgery residents participated in this research study. Senior residents (4th and 5th years) comprised 53.8% of participants, while 46.2% were junior residents. Regarding case experience, 46.2% reported 1-5 cases, 11.5% reported 6-10 cases, 11.5% reported 11-20 cases, and 15.4% had over 20 cases. Highest educational gain scores were recorded for "recognizing anatomical variations" (4.00±1.57 points) and "mastery of retroperitoneal anatomy" (3.92±1.54 points). Residents reported that this process significantly increased trauma surgery readiness (3.84±1.51 points) and self-confidence in achieving vascular control (3.69±1.49 points). The lowest competency score involved supraceliac aortic dissection (2.03±0.95). Spearman correlation analysis revealed strong positive relationships between case volume and technical competency. Notably, a very strong positive correlation ($r=0.86$; $p<0.001$) was observed for supraceliac aortic dissection. Statistically significant parallel increases in Mattox ($r=0.65$) and Cattell-Braasch ($r=0.62$) maneuver competencies with case volume were also identified ($p<0.001$). Scarcity of cases was cited by 46.2% as being the primary factor limiting efficiency. Finally, 69.2% of residents believe participating in at least 6-10 cases is absolutely necessary during the current surgical residency training process.

Conclusion: Our findings demonstrate that multiorgan procurement surgery serves as a valuable operative platform for experiencing anatomy and complex vascular maneuvers, consistent with the literature. This process is a critical component in compensating for the reduced exposure to open surgery caused by the prevalence of minimally invasive techniques. Due to its unique contribution to vital skills such as supraceliac aortic control, it is essential to systematically integrate multiorgan procurement surgery into surgical training curricula.

Keywords: Organ procurement, surgical education, cadaver, resident

Table 1. Demographic characteristics and experience levels of participants

Variable	Category	n	%
Residency seniority	Years 1, 2, and 3	12	46.2
	Years 4 and 5	14	53.8
Total case experience	1-5 cases	12	46.2
	6-10 cases	3	11.5
	11-20 cases	3	11.5
	>20 cases	4	15.4

Table 2. Correlation analysis between case volume and technical proficiency

Variable	Correlation coefficient (r)	p value	Strength of relationship
Supraceliac aortic dissection	0.86	<0.001	Very Strong
Hepatoduodenal ligament dissection	0.78	<0.001	Strong
Mattox maneuver proficiency	0.65	<0.001	Strong
Cattell-braasch maneuver proficiency	0.62	<0.001	Strong
Vascular control confidence	0.40	0.041	Moderate

[S-451]

Comparison of postoperative renal function tests in living-donor and deceased-donor kidney transplantations in our organ transplant unit: A 10-year clinical experience

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Objective: Organ transplantation is a crucial treatment option that improves quality of life and prolongs survival in patients with end-stage organ failure. Living-donor kidney transplantation generally yields better outcomes when optimal donor–recipient compatibility is achieved, whereas deceased-donor kidney transplantation is frequently preferred in regions where organ donation is limited. Based on our ten-year clinical experience, the long-term effects of both transplantation methods on postoperative renal function were evaluated. Another primary objective of this study was to identify potential improvement strategies to enhance functional outcomes of kidney transplantation.

Material and Methods: This study was conducted on 197 patients who underwent renal transplantation in our clinic between January 2015 and December 2025. Demographic data such as age, sex, presence of diabetes mellitus (DM) and hypertension (HT), and donor type (living or cadaveric), as well as preoperative and postoperative urea, creatinine, and GFR values, were retrospectively analyzed. The aim was to determine whether there were significant differences according to donor type.

Results: Among the 197 patients followed in our transplant unit, the male/female ratio was 132/65. The mean age was 40.8 years (min 17-max 66). Eight patients had only DM, 81 had only HT, and 22 had both HT and DM. The cadaveric/living donor transplantation ratio was 65/132. After discharge, 169 patients did not require dialysis, while 24 patients required dialysis. Graft nephrectomy due to rejection was performed in 5 patients, all of whom had received cadaveric transplants. Of the 24 patients requiring dialysis, 15 had received kidneys from living donors and 9 from cadaveric donors. In our study, preoperative and postoperative urea, creatinine, and GFR values on postoperative days 1, 2, 7, and 30 were compared between cadaveric and living donor kidney transplants. The findings are presented in Tables 1 and 2.

Conclusion: When comparing renal function test measurements between living-donor and cadaveric kidney transplants, significant differences were observed in postoperative values. Creatinine and urea levels were lower in patients who received kidneys from living donors compared to those with cadaveric donors. On postoperative day 30, the mean creatinine level was 1.12 in living-donor transplants and 1.72 in cadaveric transplants ($p<0.001$). Additionally, GFR values showed a greater increase in patients transplanted from living donors. On postoperative day 30, the mean GFR was 80.9 in living-donor transplants and 60.84 in cadaveric transplants. It was concluded that optimization of organ preservation and the transplantation process is necessary to improve the long-term outcomes of cadaveric donor transplants.

Keywords: Kidney, transplantation, living, deceased

Table 1. The numerical values of kidney function tests in living-donor transplants

		n	Mean	p
Creatinine	Preoperative	67	5.94	<0.001
	Postoperative day 1	65	2.51	
	Postoperative day 2	65	1.52	
	Postoperative day 7	65	1.20	
	Postoperative day 30	65	1.12	
Urea	Preoperative	67	136.7	<0.001
	Postoperative day 1	65	115.8	
	Postoperative day 2	65	102.4	
	Postoperative day 7	65	68.4	
	Postoperative day 30	65	48.3	
GFR	Preoperative	48	9.24	<0.001
	Postoperative day 1	46	20.4	
	Postoperative day 2	46	35.2	
	Postoperative day 7	46	57.3	
	Postoperative day 30	46	80.9	

Table 2. The numerical values of kidney function tests in cadaveric transplants

		n	Mean	p
Creatinine	Preoperative	67	6.42	<0.001
	Postoperative day 1	65	5.34	
	Postoperative day 2	65	4.28	
	Postoperative day 7	65	2.77	
	Postoperative day 30	65	1.72	
Urea	Preoperative	67	138.4	<0.001
	Postoperative day 1	65	123.2	
	Postoperative day 2	65	111.4	
	Postoperative day 7	65	80.2	
	Postoperative day 30	65	60.6	
GFR	Preoperative	48	8.22	<0.001
	Postoperative day 1	46	10.63	
	Postoperative day 2	46	19.34	
	Postoperative day 7	46	46.85	
	Postoperative day 30	46	60.84	

[S-452]

The unwanted child of kidney transplantation: graft nephrectomy-when should the surgical decision be made, and how should it be performed?

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Objective: Graft nephrectomy (GN) is a rarely performed but technically demanding surgical procedure associated with significant morbidity after kidney transplantation (KT). There is no clear consensus regarding which patients should undergo GN or under which clinical circumstances it should be performed. This study aimed to evaluate the indications, timing of surgical decision-making, and early postoperative outcomes of GN performed at our center.

Material and Methods: Patients who underwent GN at our center were included. Demographic characteristics, GN indications, interval between KT and GN, mortality rates, and emergency versus elective procedures were analyzed and compared.

Results: Between June 2021 and June 2025, 200 KT were performed. Among these, 34 patients undergoing GN (24 males, 10 females) were included. The mean interval between KT and GN was 55.1 months. Transplantation had been performed at our center in 39% and at external centers in 61% of patients. Nineteen GN procedures were performed under emergency conditions and 15 were elective. Emergency indications included hemophagocytic syndrome (n=7), pyelonephritis (n=4), pancytopenia (n=4), hematuria (n=3), and renal vein thrombosis (n=1). Elective indications were most commonly PRA positivity (n=5) and pyelonephritis (n=5), followed by vesicoureteral reflux (n=2) and hematuria (n=1). Mortality occurred in 9 patients in the emergency GN group, while no mortality was observed in the elective group. The difference in mortality was statistically significant (p=0.012). In our center, iliac vascular injury occurred in two patients (right cadaveric graft) during GN. In one of these cases, an approximately 4-cm segment of the iliac artery was excised together with the graft kidney. Primary arterial repair was performed using the native iliac artery ends dissected from the graft kidney. The venous defect was repaired using a cadaveric iliac vein graft (the yellow vascular loop indicates the iliac vein, and the blue vascular loop indicates the iliac artery). A statistically significant difference in mortality was observed between emergency and elective groups (Fisher's exact test, p=0.006).

Conclusion: GN represents an undesirable yet sometimes unavoidable intervention following KT. Whether every failed graft should be removed and the optimal timing of GN remain unresolved. Some studies suggest that a failed graft may contribute to chronic inflammation and antibody formation, whereas others indicate that leaving the graft *in situ* may promote immunological tolerance, particularly in patients awaiting retransplantation. The technical difficulty of GN is multifactorial. Reoperative surgery results in distorted anatomical planes, and the proximity of the graft to iliac vascular structures increases the risk of vascular injury, especially in right-sided grafts. Hematological abnormalities related to chronic kidney disease, cardiovascular comorbidities, and septic conditions further increase surgical risk. A subcapsular approach is a safe and effective technique for GN. Dissection close to the graft kidney minimizes vascular injury, and in cases of diffuse bleeding, clamping of the graft renal artery and vein is the most effective method for hemorrhage control. Femoral pulse assessment after hilar control is essential for early detection of vascular complications. Emergency GN is associated with significantly higher mortality than elective procedures, emphasizing the importance of timely surgical decision-making careful patient selection

Keywords: Kidney transplantation, graft nephrectomy

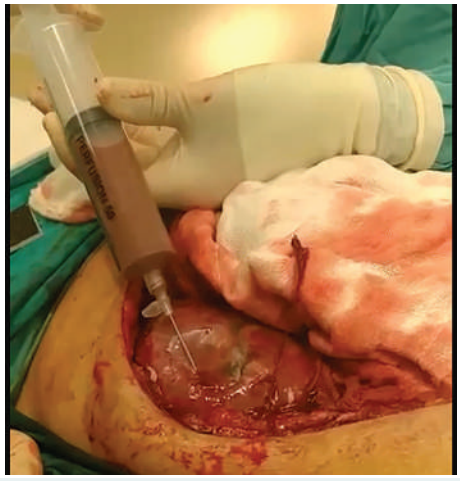


Figure 1. Pyelonephritic graft kidney.



Figure 2. Intraoperative view during graft nephrectomy.

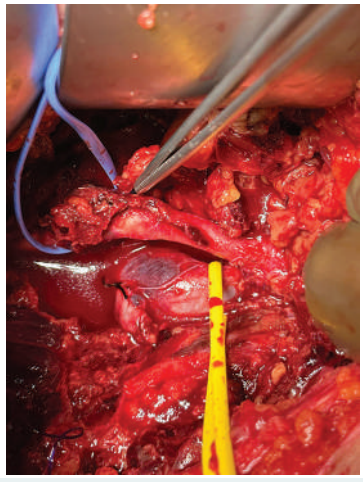


Figure 3. Iliac artery and iliac vein injury and repair during graft nephrectomy.

Table 1. Indications for graft nephrectomy

	Emergency surgery	Elective surgery	Total
Hemophagocytic syndrome	7	0	7
Pancytopenia	4	0	4
Pyelonephritis	4	5	9
Hematuria	3	1	4
Panel reactive antibody positivity	0	5	5
Renal vein thrombosis	1	0	1
Vesicoureteral reflux	0	2	2
Third kidney transplantation	0	2	2
Total	19	15	34

Table 2. Mortality in emergency and elective graft nephrectomy cases

	Mortality (+)	Mortality (-)	Total
Elective GN	0	15	15
Emergency GN	9	10	19
Total	9	25	34

[S-454]

Diagnostic performance of the inflammatory severity index in acute appendicitis: A retrospective single-center analysis

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Objective: Acute appendicitis remains one of the most common causes of emergency abdominal surgery. Despite advances in imaging, diagnostic uncertainty persists and negative appendectomy rates remain considerable. The Inflammatory Severity Index (ISI), combining the neutrophil-to-lymphocyte ratio and normalized C-reactive protein, has been proposed as a novel composite marker. This study aimed to evaluate the diagnostic performance of ISI in acute appendicitis.

Material and Methods: This retrospective observational study included 781 adult patients operated for suspected acute appendicitis between January 2014 and January 2024. Admission laboratory parameters (WBC, NLR, PLR, SII, CRP) and histopathological results were recorded. ISI was calculated as "NLR × (CRP/reference CRP)". Diagnostic accuracy was assessed using ROC analysis and optimal cut-off values were determined by the Youden index.

Results: The median age was 40 years and 52.2% were male. Acute appendicitis was confirmed in 92.1% of cases. WBC and NLR levels were significantly higher in the appendicitis group ($p<0.05$). Although ISI values were higher, no significant difference was observed ($p=0.314$). ROC analysis demonstrated poor diagnostic performance for ISI (AUC: 0.53). In subgroup analyses, NLR and SII showed better discrimination for complicated appendicitis.

Conclusion: Despite its theoretical appeal, ISI does not provide sufficient diagnostic accuracy for acute appendicitis. Clinical assessment and imaging remain the cornerstone of diagnosis.

Keywords: Acute appendicitis, inflammation, biomarker

[S-455]

Can the CALLY index predict complicated acute diverticulitis? A single-center retrospective study

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Objective: Acute diverticulitis is a common gastrointestinal disease with a clinical spectrum ranging from uncomplicated cases to severe complications. Predicting complicated diverticulitis in the early stages is crucial for determining the appropriate treatment strategy. This study aimed to evaluate the predictive value of the CALLY index in predicting complicated diverticulitis in patients diagnosed with acute diverticulitis.

Material and Methods: A total of 154 patients whose diagnosis of acute diverticulitis was confirmed by contrast-enhanced computed tomography were retrospectively analyzed. Patients were divided into two groups: non-complicated (n=136, 88.3%) and complicated diverticulitis (n=18, 11.7%). The CALLY index was calculated using laboratory data at the time of admission. Groups were compared using the Mann–Whitney U test, and discriminative performance was evaluated by ROC analysis.

Results: The mean age of the patients was 59.8±14.7 years, and 57.1% were female. The mean CALLY index value was 0.97±4.97 and did not show a normal distribution ($p<0.001$). A statistically significant difference was found between the complicated and non-complicated groups in terms of the CALLY index ($U=729.5$; $p=0.005$). However, ROC analysis revealed that the discriminative power of the CALLY index was low (AUC: 0.298; $p=0.005$), and no clinically significant cut-off value could be determined.

Conclusion: This study demonstrated that the CALLY index is not a clinically significant marker for predicting complicated diverticulitis. Despite a statistical difference between groups, an AUC below 0.5 revealed weak predictive power. While elevated CRP and decreased albumin are expected in complicated cases, the CALLY index's inadequacy may stem from the heterogeneous inflammatory response, small sample size, and low complication rate. Although CRP remains the most evaluated parameter -with values above 150 mg/L increasing complication risk- combined indices do not always yield the expected performance. Our findings suggest the CALLY index does not meaningfully contribute to clinical decision-making in acute diverticulitis. Limitations include the retrospective design and small complicated group, while strengths include CT-confirmed diagnoses and complete data. In conclusion, the CALLY index is not a reliable biomarker for predicting complicated diverticulitis, necessitating larger prospective studies.

Keywords: Acute diverticulitis, biomarker, CALLY index, complicated diverticulitis, inflammation

[S-456]

Analysis of etiology and resection rates in surgically treated ileus cases: A single-center one-year experience

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Objective: Ileus is a clinical condition characterized by the cessation of distal progression of intestinal contents. It is classified into mechanical and paralytic types. Paralytic ileus results from temporary impairment of intestinal peristalsis, whereas mechanical ileus occurs due to the presence of a physical barrier that obstructs luminal passage. Management depends on the underlying etiology and includes fluid and electrolyte resuscitation and nasogastric decompression for stabilization, followed by surgical intervention in cases of mechanical obstruction or strangulation, and medical and supportive treatment in functional cases. In this study, we evaluated patients who required surgical intervention for ileus over a one-year period.

Material and Methods: This single-center retrospective study included patients who underwent surgery for ileus at the Department of General Surgery, Necmettin Erbakan University Faculty of Medicine Hospital, within one year. Demographic characteristics, etiologies, operative findings, and surgical procedures were analyzed.

Results: A total of 60 patients underwent surgery for ileus during the study period. The mean age was 59.8±15.4 years (range, 18-87), with 40 males (66.7%) and 20 females (33.3%). Adhesions were the most common etiology (46.7%), followed by malignancy-related ileus (31-32%). Crohn's disease accounted for 6.7% of cases. Ileus due to endometriosis and pancreatic adenocarcinoma metastasis was identified in one patient each. Early postoperative and inflammatory causes of obstruction were also observed. Among malignancy-related cases, 8 patients had a known history of intra-abdominal malignancy, while 11 patients (18.3%) had no prior history but were found intraoperatively to have an obstructing mass or colorectal cancer and were classified as newly diagnosed malignant ileus. Most newly diagnosed cases were colorectal adenocarcinomas. The resection rate was higher in this group, whereas palliative procedures were more frequent in patients with previously known malignancy. Surgically, bowel resection was performed in 35 patients (58.3%), stoma formation in 13 (21.7%), adhesiolysis in 7 (11.7%), and jejunojejunal or ileosigmoidal anastomosis in 5 (8.3%).

Conclusion: Adhesions were the leading cause of surgically treated ileus, followed by malignancy. A notable proportion of malignant cases represented the initial presentation of colorectal cancer. The high resection rate suggests a predominance of complicated pathology. Rare causes such as endometriosis and pancreatic metastasis further demonstrate the broad etiological spectrum of ileus.

Keyword: Etiology

Table 1. Etiological distribution (n=60)

Etiology	n	%
Adhesions	28	46.7
Malignancy (total)	19	31.7
├─ Previously known malignancy	8	13.3
└─ Newly diagnosed obstructive malignancy	11	18.3
Crohn's disease	4	6.7
Endometriosis	1	1.7
Pancreatic adenocarcinoma metastasis	1	1.7
Early postoperative/inflammatory causes	7	11.7
Total	60	100

[S-457]

Our experience with omental patch and falciform ligament patch in the surgical management of perforated peptic ulcer

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Objective: Perforated peptic ulcer (PPU) is a clinical condition requiring emergency surgical intervention and is associated with high morbidity and mortality. Although omental patch (Graham patch) repair is considered the standard surgical approach, its use may be limited in certain patients due to previous malignancy-related resections, prior abdominal surgeries, anatomical inadequacy, or inflammation-related fragility of the omentum. The aim of this study was to evaluate the clinical characteristics of patients operated on for PPU in a single center and to present the early postoperative outcomes of falciform ligament patch repair in selected cases where the omentum was unavailable or unsuitable.

Material and Methods: In this retrospective descriptive study, 19 patients who underwent emergency surgery for PPU by a single surgeon at our institution between January 2023 and March 2025 were evaluated. Demographic data, perforation localization, surgical techniques applied (omental patch or falciform ligament patch), intensive care unit requirements, and early postoperative clinical outcomes were reviewed. Falciform ligament patch was considered an alternative option in selected cases with inadequate omentum, a history of previous abdominal surgery, or the presence of intra-abdominal malignancy. The collected data were presented descriptively.

Results: Of the 19 patients included in the study, 15 were male and 4 were female, with a mean age of 64 years. Standard omental patch repair was performed in 10 patients (52.6%), while falciform ligament patch was applied in 9 patients (47.4%). Perforations were predominantly located in the duodenum. The mean perforation diameter was 15 mm (range: 10-30 mm). The overall mortality rate was 15.7% (n=3), and all mortal cases were elderly patients with a high preoperative risk profile. In the falciform ligament patch group, no early postoperative leakage, need for reoperation, or technique-related major complications were observed.

Conclusion: Based on our experience, falciform ligament patch repair may represent a safe and feasible alternative in selected cases of PPU where the omentum is unsuitable for use. Owing to its anatomical proximity and well-vascularized structure, the falciform ligament provides an appropriate tissue option for surgical repair. Although the limited number of cases precludes definitive statistical conclusions, the present findings suggest that this technique can be applied without increasing morbidity. Further studies with larger patient series are warranted to validate these results.

Keywords: Omental patch, perforated peptic ulcer, falciform ligament patch

[S-458]

Serum LRG1 in acute mesenteric ischemia: A case-control study with exploratory mortality analysis

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Objective: We asked whether serum leucine-rich α2-glycoprotein-1 (LRG1) differs in acute mesenteric ischemia (AMI) and whether it predicts short-term mortality.

Material and Methods: In this case-control study, we enrolled 25 adults with abdominal pain and computed tomography angiography (CTA)-confirmed AMI and 25 volunteer controls. Peripheral venous blood was drawn in the emergency department before ward admission; serum LRG1 was measured by enzyme-linked immunosorbent assay. Groups were compared with appropriate parametric or non-parametric tests. Receiver operating characteristic (ROC) analysis was used to quantify discrimination (area under the curve, AUC). Within the AMI group, mortality was explored using ROC analysis and a multivariable logistic regression model including symptom duration and LRG1.

Results: Median LRG1 was higher in AMI than in controls (7.27 vs. 5.40 µg/mL; p<0.001), with an AUC of 0.788 (95% confidence interval 0.657-0.901) for distinguishing AMI from controls; the Youden cut-off was 6.08 µg/mL (80% sensitivity, 68% specificity). Eight AMI patients (32%) died. Non-survivors presented later (median 8.5 vs. 4 hours; p=0.006) and had higher LRG1 (median 10.37 vs. 6.96 µg/mL; p=0.086). For mortality, LRG1 showed an AUC of 0.721; in multivariable analysis, symptom duration remained independently associated with mortality (odds ratio: 2.42 per hour; p=0.012), while LRG1 showed a borderline association (odds ratio: 1.55 per 1 µg/mL; p=0.058).

Conclusion: Serum LRG1 is elevated in CTA-confirmed AMI and may add prognostic information, but the mortality signal needs confirmation in larger, prospectively validated cohorts.

Keywords: LRG1, acute mesenteric ischemia, biomarker

[S-459]

From emergency department to operating room in acute mesenteric ischemia

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Objective: Acute mesenteric ischemia (AMI) is a life-threatening surgical emergency associated with extremely high mortality rates, requiring rapid decision-making under the principle that time is critical. Delayed laparotomy has been consistently associated with intestinal necrosis and multiorgan failure. However, treatment delay may not solely depend on prehospital factors; in-hospital processes from emergency department admission to surgical intervention may also influence outcomes. This study aimed to evaluate the time intervals from emergency department admission to operation and to investigate the impact of these temporal parameters and laboratory findings on mortality in patients with AMI.

Material and Methods: Thirty-five patients who underwent laparotomy for AMI during the last two years at our tertiary care center were retrospectively analyzed. Patients were classified into two groups: survivors (group I) and non-survivors (group II). Time parameters were defined as admission-to-laparotomy time, admission-to-general surgery consultation time, and general surgery consultation-to-laparotomy time. Laboratory data (lactate, WBC, pH, creatinine), surgical procedures, and intensive care unit stays were recorded. Statistical analyses were performed using IBM SPSS version 25. A p value <0.05 was considered statistically significant.

Results: Overall mortality was 74.3%. For the entire cohort, the median admission-to-operation time was 10.0 hours (IQR: 5.5-25.0), admission-to-consultation time was 1.0 hour (IQR: 1.0-5.5) consultation-to-laparotomy time was 6.0 hours (IQR: 3.0-14.0). Surprisingly, patients in mortality group underwent surgery earlier than survivors. Admission-to-operation time was 26.0 hours (IQR: 15.0-44.0) in group I versus 7.5 hours (IQR: 4.25-13.5) in group II. Similarly, admission-to-consultation times were 4.0 and 1.0 hours, consultation-to-laparotomy intervals were 11.0 and 5.0 hours in groups I and II, respectively. Half of the patients were operated within 10 hours, while laparotomy performed after ≥24 hours demonstrated four-fold trend toward increased mortality. Preoperative lactate, WBC levels were significantly higher in non-survivors. Multivariate analysis identified preoperative lactate as the only independent predictor of mortality (OR ≈ 1.32; p<0.05). Regarding resected organs, jejunum and ileum involvement was most common among survivors (33.3%), whereas combined jejunum, ileum, and right colon resections predominated in non-survivors (38.5%).

Conclusion: The pathway to laparotomy in AMI reveals a clinical paradox. Patients with the most severe metabolic derangement and extensive bowel ischemia were operated on the fastest, yet experienced the highest mortality. These findings suggest that operative speed alone cannot overcome advanced ischemic burden at presentation. While minimizing time to surgery remains essential, the biological severity reflected by elevated lactate levels and extensive bowel involvement appears to be the strongest determinant of survival in AMI

Keywords: Urgent, mortality, mesenteric ischemia

[S-461]

Diagnostic value of computed tomography in bowel injuries due to penetrating abdominal trauma

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Objective: Bowel injuries resulting from penetrating abdominal trauma continue to pose diagnostic challenges. Although computed tomography (CT) is widely used in hemodynamically stable patients, its diagnostic accuracy for detecting bowel injuries remains variable. The aim of this study was to evaluate the sensitivity and specificity of CT in identifying bowel injuries in selected patients with penetrating abdominal trauma.

Material and Methods: This retrospective study included patients who presented to the Hacettepe University Faculty of Medicine, Department of Emergency with penetrating abdominal trauma between 2015 and 2025 and were hemodynamically stable at admission. Hemodynamically unstable patients and those requiring immediate surgical intervention were excluded. Demographic data, mechanisms of injury, CT findings, operative findings, and clinical outcomes were analyzed. To determine the sensitivity and specificity of CT in detecting bowel injuries, CT findings were compared with intraoperative findings or results from clinical follow-up.

Results: Between 2015 and 2025, a total of 304 penetrating trauma patients were admitted to the Emergency Department of Hacettepe University. Of these, 256 patients were consulted to the general surgery department due to abdominal penetrating trauma. Only 34 patients who met the study inclusion criteria were analyzed. The majority of patients were young males (93%) median age being 30 years old, and the most common mechanism of injury was stab wounds (88%). All included patients underwent abdominal CT imaging. CT demonstrated a sensitivity of 55.6% with a 95% CI (30.76% to 78.47%) and a specificity of 87% with a 95% CI (47.35% to 99.68%) for the detection of bowel injuries.

Conclusion: In hemodynamically stable patients with penetrating abdominal trauma, CT shows high specificity but limited sensitivity for the detection of bowel injuries. While a positive CT finding can be useful in guiding clinical decision-making, a negative CT scan does not reliably exclude bowel injury. Therefore, careful clinical assessment, close observation, and a low threshold for surgical exploration remain essential, particularly in patients with suspicious clinical findings. Further studies with larger patient populations are needed to improve diagnostic strategies and optimize the management of these patients.

Keywords: Penetrating trauma, bowel injury, computed tomography

[S-462]

Prediction of complication risk in acute appendicitis using the CALLY index

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Objective: Acute appendicitis is one of the most common surgical emergencies and shows significant differences between complicated and uncomplicated forms in terms of clinical course and treatment requirements. Preoperative prediction of complicated appendicitis is important for surgical planning, antibiotic management, and efficient utilization of hospital resources. This study aimed to investigate the predictive value of certain clinical and laboratory parameters for complicated appendicitis in patients undergoing laparoscopic appendectomy.

Material and Methods: This retrospective study included patients who underwent laparoscopic appendectomy with a diagnosis of acute appendicitis between September 2024 and December 2025. Based on intraoperative and histopathological findings, patients were divided into complicated and uncomplicated appendicitis groups. Demographic characteristics (age, sex), inflammatory markers such as white blood cell count (WBC) and C-reactive protein (CRP), CALLY index values, and total hospital length of stay were retrospectively analyzed. Data were analyzed using SPSS version 23.0. Categorical variables were presented as number and percentage, while continuous variables were expressed as mean ± standard deviation or median (interquartile range). Differences between categorical variables were analyzed using appropriate chi-square tests, and differences in continuous variables were evaluated using the Mann-Whitney U test. A p value <0.05 was considered statistically significant.

Results: A total of 97 patients were included in the study. The mean age of the patients was 43.1±18.8 years, and 50.5% were female. No statistically significant differences were observed between the complicated (18 patients) and uncomplicated (79 patients) appendicitis groups in terms of age ($p=0.203$), sex ($p=0.462$), or WBC values ($p=0.305$). Compared to the uncomplicated appendicitis group, the complicated appendicitis group had a significantly higher median CRP value ($p<0.001$) and a significantly lower median CALLY index value ($p<0.001$). The median hospital length of stay was 5.0 (3.0-6.0) days in the complicated appendicitis group and 2.0 (1.0-3.0) days in the uncomplicated appendicitis group. Hospital stay was significantly longer in patients with complicated appendicitis ($p<0.001$).

Conclusion: The study findings suggest that certain laboratory and clinical parameters reflecting inflammatory response may be clinically useful in predicting complicated appendicitis. The association of CRP and the CALLY index with complicated appendicitis indicates that these parameters may serve as supportive tools in preoperative risk stratification. Additionally, the longer hospital stay observed in patients with complicated appendicitis highlights the greater clinical burden associated with this condition. Combined evaluation of these easily accessible parameters in routine clinical practice may contribute to early prediction of complication risk. However, further studies with larger sample sizes and prospective designs are required to confirm these findings.

Keywords: Acute appendicitis, CALLY index

[S-463]

Management of biliary complications in liver lacerations: A preliminary assessment of clinical outcomes of cysticostomy in high-grade injuries

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Objective: High-grade liver lacerations are clinically challenging injuries due to postoperative bile leaks and the resulting secondary interventions. This study aimed to evaluate the effect of cysticostomy, performed to decompress the bile ducts in severe liver injuries, on the development of postoperative bile leakage and the need for additional drainage catheters.

Material and Methods: Data from 34 patients who underwent surgery for liver laceration at our hospital were retrospectively reviewed. Four patients (11.8%) who died peroperatively or in the early postoperative period were excluded from the analysis. The remaining 30 patients were divided into two groups: those who underwent cysticostomy (n=8) and those who did not (n=22). The severity of injury, need for transfusion, and rates of additional postoperative interventional radiological procedures were compared between the groups.

Results: Of the 34 patients included in the study (mean age 31.9), 47.1% had grade 4 injuries. Two patients died peroperatively and two died postoperatively within the first 24 hours. A total of 8 patients (23.5%) underwent cholecystectomy with tube cystostomy; 87.5% (n=7) of these patients were in the grade 4 injury group. The group that underwent cystostomy (group 1) was observed to have statistically higher grade injuries compared to the group that did not undergo cystostomy (group 2) (mean grade: 3.88 vs. 2.68, p=0.011; mean laceration length: 8.88 cm vs. 5.33 cm, p=0.035). In the clinical course, no additional interventional drainage was required due to postoperative bile leakage in group 1 (0%), while in group 2, 22.7% (n=5) of patients required additional percutaneous drainage catheters for various reasons. However, due to the limited sample size, these differences did not reach statistical significance (p>0.05). Similar results were observed between the groups in terms of mean length of hospital stay and concomitant organ injuries.

Conclusion: Although the limited number of patients in our series prevents us from drawing a definitive conclusion, we observed that although cases undergoing cysticostomy had a more severe injury profile, clinically successful biliary decompression was achieved in the postoperative period. It is thought that cysticostomy may be a helpful surgical maneuver in managing postoperative biliary complications in high-grade liver injuries. Larger series and prospective studies are needed to confirm this clinical trend.

Keywords: Bile duct decompression, cysticostomy, liver laceration

Table 1. Comparative analysis of patients with and without cysticostomy (n=30)

Parameter	Cysticostomy (+) (n=8)	Cysticostomy (-) (n=22)	p value
AAST injury grade (grade)	3.88±0.35	2.68±1.17	0.011*
Laceration length (cm)	8.9±3.8	5.4±3.2	0.035*
Age (year)	29.0±15.4	33.1±15.5	0.398
Hospitalization (day)	18.2±14.1	23.5±32.3	0.851
Need for additional postoperative drainage	1 (12.5%)	5 (22.7%)	
Associated pancreatic injury	1 (12.5%)	4 (18.2%)	1.000
Associated vena cava injury	1 (12.5%)	0 (0%)	0.267

[S-464]

Preoperative lactate and HALP score as predictors of perforated appendicitis: A single-center retrospective cohort study

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Objective: Appendiceal perforation is a major cause of morbidity and mortality in acute appendicitis, and reliable preoperative predictors remain limited. In this study, we evaluated the diagnostic value of routinely available laboratory parameters, particularly serum lactate and the hemoglobin, albumin, lymphocyte, and platelet (HALP) score, for predicting perforated appendicitis.

Material and Methods: This retrospective cohort study included 233 adult patients who underwent surgery for acute appendicitis between January 2022 and November 2025. Patients were classified as perforated or non-perforated based on intraoperative findings. Preoperative laboratory parameters were recorded. Diagnostic performance was evaluated using receiver operating characteristic (ROC) curve analysis, and independent predictors were identified by multivariable logistic regression.

Results: Perforated appendicitis was identified in 48 patients (20.6%). Patients with perforation were significantly older and had higher lactate levels and neutrophil-to-lymphocyte ratios, while HALP scores were significantly lower (all p<0.001). White blood cell count did not differ between groups. Lactate demonstrated the highest discriminative ability (AUC: 0.808), whereas the HALP score showed an inverse association with perforation (AUC: 0.315). In multivariable analysis, higher lactate levels and increasing age were independently associated with perforation, while a lower HALP score remained an independent inverse predictor. Baseline demographic and laboratory characteristics of patients with perforated and non-perforated appendicitis

Conclusion: Serum lactate is a strong independent predictor of appendiceal perforation, and lower HALP scores are associated with increased perforation risk. Their combined assessment may improve preoperative risk stratification in acute appendicitis.

Keywords: Acute appendicitis, perforation, lactate, HALP score, biomarkers

Table 1. Regression analysis

	OR	95% CI	p value
Age	1.02	1.00-1.05	0.024
Lactate	3.20	1.87-5.51	<0.001
HALP score	0.97	0.96-0.99	0.004

HALP score was included as a composite variable; its individual components were not simultaneously entered into the model to avoid multicollinearity.
OR: Odds ratio, CI: Confidence interval.

Table 2. Multivariable logistic regression analysis for predictors of perforated appendicitis			
Parameters	**Non-perforated (n=185)**	**Perforated (n=48)**	**p value**
Age, median (IQR)	31 (24-45)	51 (34-64)	<0.001
Lactate (mmol/L), median (IQR)	1.1 (0.9-1.4)	1.8 (1.4-2.2)	<0.001
WBC (×10³/mm³), mean ± SD	14±4.2	14.3±4.1	0.64
Hemoglobin (g/L), mean ± SD	13.8±1.8	13.7±1.7	0.79
Albumin (g/L), mean ± SD	4.5±0.5	4±0.7	<0.001
Neutrophil, mean ± SD	10.9±4.1	11.9±4.1	0.13
Lymphocyte (×10³/mm³), median (IQR)	1.9 (1.4-2.6)	1.3 (0.9-1.9)	<0.001
Platelet (×10³/mm³), median (IQR)	243 (213-298)	235 (199-273)	0.21
HALP score, median (IQR)	49.4 (32.6-66.9)	31.6 (19.7-50.9)	<0.001
N/L ratio, median (IQR)	5.4 (3.5-8.5)	8.2 (5-14.5)	<0.001

N/L: Neutrophil-to-lymphocyte ratio, IQR: Interquartile range (25th-75th percentiles). Continuous variables are presented as mean ± standard deviation for normally distributed data and as median (interquartile range, IQR) for non-normally distributed data.

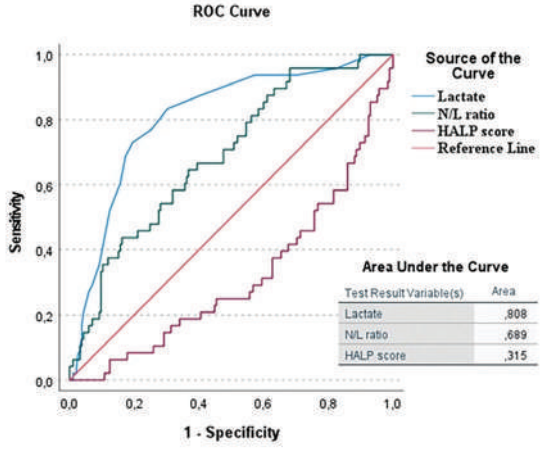


Figure 1. Receiver operating characteristic (ROC) curves of lactate, neutrophil-to-lymphocyte ratio (N/L), and HALP score for predicting perforated appendicitis. Lactate demonstrated the highest discriminative ability, while HALP showed an inverse association, with its curve lying below the reference line.

[S-465]

The value of lactate/albumin ratio (LAR) and inflammatory indices in predicting 30-day mortality in patients with acute mesenteric ischemia: A retrospective analysis of 104 patients

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Objective: Acute mesenteric ischemia (AMI) is a surgical emergency with mortality rates ranging from 60-80% despite early diagnosis and treatment. Predicting prognosis in the early stages is critical for determining treatment strategies. In this study, we aimed to investigate the relationship between next-generation biomarker ratios such as CALLY index, NLR, CAR, and lactate/albumin ratio (LAR) with 30-day mortality and anastomotic leakage in AMI patients.

Material and Methods: Data from 104 patients diagnosed and treated for AMI at our clinic between 2010 and 2025 were retrospectively analyzed. Patients' demographic data, ASA scores, and laboratory parameters (lactate, albumin, CRP, complete blood count) were recorded. CALLY, NLR, PNR, CAR, LAR, SII, and L/CR ratios were calculated. Mann-Whitney U test, Spearman correlation, and ROC analysis were used for statistical analysis.

Results: Mean age was 69.9±13.8 years, and 67.3% were in the ASA 4 group. The 30-day mortality rate was 62.5%. Surgical intervention was performed in all patients, 89 patients were eligible for resection and 30-day mortality was observed in 65 patients. •Mortality Analysis: LAR (1.56 vs. 0.79, p<0.001), age (74 vs. 66, p=0.002), and ASA score (4 vs. 4, p=0.004) were significantly higher in the mortality group. •ROC Analysis: LAR showed the highest success in predicting mortality (AUC: 0.744, p<0.001). The optimal cut-off value for LAR was determined as 1.38 (sensitivity 61%, specificity 85%). •Operations and Complications: LAR (2.35 vs. 1.07, p=0.005) and CAR (92.3 vs. 47.6, p=0.027) levels were significantly elevated in the non-resected group. Regarding patients with anastomotic leakage, no statistically significant difference was observed across the biomarkers studied (p>0.05).

Conclusion: The admission LAR is a stronger predictor of mortality in AMI patients than age and ASA score. Specifically, a LAR value above 1.38 can be used in clinical practice as an alarming parameter for poor prognosis.

Keywords: Lactate/albumin ratio, CALLY, biomarkers

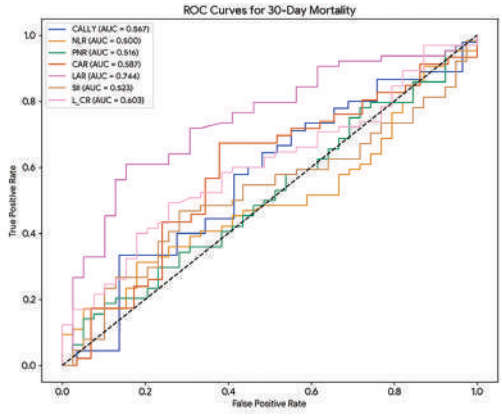


Figure 1. ROC curves for 30-day mortality. ROC analysis was conducted to evaluate the effectiveness of the examined biomarkers in predicting 30-day mortality.

Table 1. The effect of biomarkers and demographic characteristics on 30-day mortality

	Mortality (+) (n=65)	Mortality (-) (n=39)	p value
Age	74.0 (68-81)	66.0 (57-76)	**0.002**
ASA score	4.0 (4-4)	4.0 (3-4)	**0.004**
LAR	**1.56 (0.9-2.5)**	**0.79 (0.5-1.2)**	**<0.001**
CAR	65.6 (22-112)	39.3 (16-81)	0.209
L/CR	2.43 (1.4-4.2)	1.85 (1.4-2.6)	0.079
CALLY	0.01 (0.0-0.0)	0.02 (0.0-0.0)	0.335
NLR	14.5 (7.8-29.5)	16.1 (11-23.6)	1.000
SII	2900 (1483-7685)	3273 (2160-6020)	0.701
PNR	15.2 (10.6-23.9)	15.2 (11.3-25.5)	0.783

Table 2. The relationship between biomarkers and demographic characteristics and resection status

	Resection (+) (n=89)	Resection (-) (n=15)	p value
Age	70.0 (63-80)	69.0 (53-76)	0.195
ASA score	4.0 (3-4)	4.0 (3-4)	0.244
LAR	1.07 (0.7-1.9)	2.35 (1.3-7.2)	**0.005**
CAR	47.6 (16-94)	92.3 (55-136)	**0.027**
L/CR	2.11 (1.3-3.6)	3.19 (2.1-7.1)	**0.014**
CALLY	0.02 (0.0-0.0)	0.01 (0.0-0.0)	0.057
NLR	15.7 (9.6-24.5)	21.7 (6.0-33.4)	0.740
SII	3145 (1822-6383)	3538 (1110-15927)	0.819
PNR	15.2 (10.6-25.9)	15.3 (13.2-20.1)	0.691

[S-466]

Clinical-laboratory models in acute appendicitis diagnosis and complication prediction

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Objective: Acute appendicitis is the most common intra-abdominal pathology requiring emergency surgical intervention. Imaging modalities such as ultrasound (US) and computed tomography are frequently used to confirm diagnosis. The Alvarado score, commonly used in clinical practice, has limited diagnostic performance. Preoperatively determining whether appendicitis is simple or complicated (perforation, gangrene) is critical for surgical strategy and patient management. This study aimed to develop two logistic regression models based on clinical findings and laboratory parameters at presentation and compare their diagnostic performance with Alvarado score and imaging findings.

Material and Methods: Between 2021-2025, 584 patients underwent laparoscopic appendectomy. Pathology results were categorized as: (0) Normal appendix, (1) Acute appendicitis, (2) Complicated appendicitis (gangrenous or perforated), (3) Other pathologies. For model 1, acute and complicated appendicitis were classified as "true appendicitis". For model 2, only patients with confirmed appendicitis (n=543) were included. Preoperative data included age, symptom duration, body temperature, pain migration, right lower quadrant tenderness, rebound/guarding, nausea/vomiting, WBC count, and neutrophil percentage. Multivariate logistic regression models were developed. Model performance was evaluated using ROC analysis and AUC calculation.

Results: The clinical-laboratory model (AUC: 0.735) demonstrated significantly higher discriminatory ability than Alvarado score (AUC: 0.633). The model correctly identified 66.5% of patients with appendicitis and 72.5% without appendicitis. Right lower quadrant tenderness and WBC were the strongest predictors. The complication risk model showed moderate discriminatory ability (AUC: 0.638) with high specificity (89.2%) for identifying uncomplicated appendicitis but limited sensitivity (32.9%) for complicated cases. Laboratory parameters (WBC, neutrophil percentage) contributed more strongly to complication prediction than clinical findings.

Conclusion: Model 1 demonstrated significantly higher diagnostic performance than Alvarado score, supporting the hypothesis that traditional scoring systems have limited ability to provide individualized risk prediction. The low AUC of imaging-based approach reflects its application to selected patient groups. The limited diagnostic power of model 2 for complication prediction suggests that complicated appendicitis depends not only on presentation parameters but also on disease biological progression. The model's high specificity provides clinical value in correctly identifying low-risk patients and preventing unnecessary aggressive treatment approaches. Logistic regression models based on clinical and laboratory data at presentation provide valuable decision support tools for acute appendicitis diagnosis and complication risk stratification. The diagnostic model demonstrates higher accuracy than Alvarado Score and imaging-based assessment, potentially reducing dependence on imaging for appendicitis confirmation. The complication risk model provides modest but clinically meaningful ability for disease severity stratification in confirmed appendicitis patients. Integrated use of both models can be useful.

Keywords: Acute appendicitis, emergency surgery

Tablo 1. Özgüllük

Performans metriği	Değer
AUC	0,638
Duyarlılık	%32,9
Özgüllük	%89,2
Doğruluk	%81,0
Optimal cut-off olasılığı	0,21

[S-468]

HALP skoru ve CALLY indeksinin perfore apandisitlerde ameliyat süresi, uzamış yatış ve operatif zorluk üzerine etkisi

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Objective: Perforated appendicitis is associated with increased morbidity and a heterogeneous clinical course, making preoperative risk stratification critical for surgical planning and patient management. Laboratory-based inflammatory and nutritional scores have recently gained interest for outcome prediction. This study evaluated the impact of the HALP score (albumin × hemoglobin × lymphocyte/platelet) and the CALLY index (albumin × lymphocyte/CRP) on operative time, length of hospital stay, operative difficulty (conversion to open surgery), and their ability to predict prolonged hospitalization.

Material and Methods: This retrospective study included 232 patients who underwent surgery for perforated appendicitis between January 2021 and December 2025. Demographic data, surgical technique, conversion status, operative time, and hospital stay were recorded. HALP and CALLY scores were calculated from preoperative laboratory values. Continuous variables were expressed as mean ± standard deviation. Group comparisons were performed using the Mann-Whitney U test, and correlations were analyzed using Spearman's rank correlation. Prolonged hospitalization was defined as >5 days. The predictive performance of both scores was assessed using ROC analysis.

Results: Of the patients, 158 were male (68.1%) and 74 were female (31.9%). The mean age of the patients was 44.54±17.15 years, and the mean length of hospital stay was 4.44±2.97 days. The majority of cases underwent laparoscopic surgery, and the conversion rate to open surgery was determined to be 6.0% (n=14). In patients who underwent conversion, the duration of surgery and length of stay were significantly longer (p=0.00015 and p=0.0007, respectively). In these patients, the HALP score (mean 14.35 vs. 36.49) and CALLY index (mean 0.137 vs. 0.677) were significantly lower (p<0.001 for both). The HALP score and CALLY index showed a weak but statistically significant negative correlation with length of stay (ρ=-0.258 and ρ=-0.356; p<0.001) and surgery duration (ρ=-0.248 and ρ=-0.299; p<0.001). The AUC value of the HALP score for predicting prolonged hospitalization was 0.668, while the AUC value of the CALLY index was 0.708, indicating that the CALLY index performed better in predicting prolonged hospitalization.

Conclusion: The HALP score and CALLY index are significantly associated with operative time, prolonged hospitalization, and operative difficulty in patients with perforated appendicitis. Low HALP and low CALLY values are associated with more complex surgical procedures and prolonged hospital stays, and these scores can be used as practical and accessible biomarkers for preoperative risk classification.

Keywords: Perforated appendicitis, HALP, CALLY

[S-469]

Do serum lactate levels, metabolic acidosis, and resection length predict mortality in acute mesenteric ischemia?

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Objective: Acute mesenteric ischemia (AMI) is a life-threatening surgical emergency that develops as a result of sudden impairment of mesenteric arterial or venous circulation, leading to reduced or completely interrupted intestinal perfusion and potentially rapid progression to bowel necrosis. Reliable markers that can predict prognosis in the early stage of acute mesenteric ischemia are needed. This study aimed to evaluate the relationship between demographic characteristics, preoperative biochemical parameters (particularly serum lactate and pH), hematological indicators, and surgical findings with 30-day mortality in patients who underwent surgery for acute mesenteric ischemia, and to identify independent clinical risk factors that may predict mortality.

Material and Methods: Thirty-six patients who underwent surgery for acute mesenteric ischemia between January 2023 and December 2025 were retrospectively analyzed. Demographic data, comorbidities, preoperative pH, serum lactate levels, hematological parameters, resection length, surgical method (ostomy vs. anastomosis), and intensive care unit and hospital length of stay were recorded. The primary endpoint was 30-day mortality.

Results: Mortality occurred in 11 of the 36 patients (30.5%). In the mortality group, serum lactate levels were significantly higher (4.9±2.8 mmol/L vs. 2.3±1.4 mmol/L, p=0.004), pH values were significantly lower (7.27±0.12 vs. 7.40±0.07, p=0.001), and resection length was significantly greater (132±70 cm vs. 71±45 cm, p=0.01). Regarding the surgical technique, mortality was higher in patients who underwent ostomy compared with those who underwent anastomosis (42% vs. 15%), and this difference was statistically significant (p=0.048). Intensive care unit and hospital length of stay were longer in the mortality group (mean 10.6±6.8 days) compared to the survival group (3.9±3.1 days) (p=0.02).

Conclusion: Preoperative metabolic acidosis, elevated serum lactate levels, and extensive bowel resection due to ischemic intestinal segments during surgery are associated with mortality in acute mesenteric ischemia. These parameters may be useful in predicting mortality in patients with acute mesenteric ischemia.

Keywords: Acute mesenteric ischemia, bowel resection, ostomy

[S-470]

Evaluation of hematological parameters in complicated and uncomplicated acute cholecystitis: A retrospective study

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Objective: Acute cholecystitis is a frequently encountered surgical condition with a clinical course that may range from mild disease to severe forms accompanied by local or systemic complications. Identifying patients who are at risk of developing complicated acute cholecystitis at an early stage is essential for appropriate clinical management and surgical decision-making. Hematological parameters derived from routine complete blood count tests are inexpensive, rapidly available, and commonly used in daily practice. The present study aimed to compare demographic characteristics and hematological parameters between patients with complicated and uncomplicated acute cholecystitis and to investigate the potential predictive value of these parameters for complicated disease.

Material and Methods: This retrospective study was conducted on patients diagnosed with acute cholecystitis between December 2024 and December 2025. Patients were divided into two groups based on clinical, radiological, and intraoperative findings: uncomplicated acute cholecystitis (n=116) and complicated acute cholecystitis (n=46). Demographic data such as age and gender, as well as laboratory values measured at the time of admission, were recorded. The hematological parameters evaluated included hemoglobin, white blood cell count (WBC), neutrophil and lymphocyte counts, platelet count, neutrophil/lymphocyte ratio (NLR), platelet/lymphocyte ratio (PLR), and platelet indices. Comparisons between groups were performed using appropriate statistical tests. Variables considered clinically significant were included in a multivariate logistic regression analysis to assess whether they were independent predictors of complicated acute cholecystitis.

Results: Patients with complicated acute cholecystitis were significantly older than those with uncomplicated disease (median age: 70 vs. 55 years, p<0.001). No significant difference was observed between the groups regarding sex distribution. In univariate analyses, neutrophil count, WBC, and NLR values were significantly higher in the complicated group. In contrast, hemoglobin levels, platelet counts, PLR, and platelet indices did not differ significantly between the groups. When these parameters were evaluated in the multivariable logistic regression model, none of the hematological variables remained independent predictors of complicated acute cholecystitis.

Conclusion: The findings of this study indicate that neutrophil count, WBC, and NLR are elevated in patients with complicated acute cholecystitis; however, these parameters do not independently predict complicated disease in multivariable analysis. This suggests that hematological parameters may reflect disease severity rather than serve as standalone predictors of complications. Therefore, assessment of acute cholecystitis should rely on a comprehensive evaluation that integrates hematological findings with clinical and radiological features. Further prospective studies with larger patient populations are warranted to better define the role of hematological parameters in risk stratification of acute cholecystitis.

Keywords: Acute cholecystitis, complicated cholecystitis, hematological parameters, complete blood count, neutrophil-to-lymphocyte ratio

Table 1. Results of multivariable logistic regression analysis for complicated acute cholecystitis

Variable	B	(95% CI)	p-value
Neutrophil count	−0.008	0.99 (0.82-1.20)	0.930
White blood cell count	0.087	1.09 (0.96-1.24)	0.196
Neutrophil-to-lymphocyte ratio	0.045	1.05 (0.96-1.14)	0.289
CI: Confidence interval.			

Table 2. Comparison of demographic and hematological characteristics between complicated and uncomplicated acute cholecystitis patients

Variable	Uncomplicated (n=116)	Complicated (n=46)	p-value
Age, median (IQR)	55 (45-63)	70 (62-75)	<0.001
Sex, n (%) Male Female	 42 (36.2%) 74 (63.8%)	 18 (39.1%) 28 (60.9%)	0.680
Hemoglobin, median (range), g/dL	12.95 (8.20-17.80)	12.70 (8.30-18.00)	0.478
Lymphocyte count, median (range), ×10⁹/L	1.89 (0.43-14.93)	1.60 (0.41-24.85)	0.270
Platelet count, median (range), ×10⁹/L	244 (111-447)	225 (132-555)	0.328
Neutrophil count, median (range), ×10⁹/L	7.64 (1.17-23.29)	9.83 (1.18-22.54)	0.008
White blood cell count, median (range), ×10⁹/L	10.78 (2.54-25.34)	13.50 (1.49-30.78)	0.015
PDW, median (range), fL	13.75 (7.70-20.20)	15.70 (8.30-16.60)	0.484
RDW, median (range), %	13.70 (10.30-112.90)	13.80 (11.90-22.40)	0.755
MPV, median (range), fL	10.35 (8.30-20.20)	10.15 (8.40-14.20)	0.297

10⁹/L: 10⁹ cells per liter, CV%: Coefficient of variation, dL: Deciliter, fL: Femtoliter, g: Gram, L: Liter, MPV: Mean platelet volume, NLR: Neutrophil-to-lymphocyte ratio, PDW: Platelet distribution width, PLR: Platelet-to-lymphocyte ratio, RDW: Red cell distribution width, WBC: White blood cell.

[S-471]

Adult intussusception secondary to diffuse intestinal lipomatosis: A systematic review and clinical analysis

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Objective: Intestinal lipomatosis is a rare disorder characterized by multiple intramural lipomas that may remain asymptomatic but can lead to mechanical complications. Adult intussusception secondary to diffuse intestinal lipomatosis is uncommon, and data regarding recurrence patterns and optimal surgical strategy remain limited.

Material and Methods: A systematic search was performed in PubMed using the phrase "intestinal lipomatosis" (n=41) and "intestinal lipomatosis" AND intussusception (n=13), without time restriction. English-language publications describing adult patients with histologically confirmed diffuse or multiple intestinal lipomatosis complicated by intussusception were included. Reviews, solitary lipomas, pediatric cases, and studies without true intussusception were excluded.

Results: Among 13 full-text articles screened, 8 publications met inclusion criteria (Table 1). The reported patients ranged from 25 to 66 years of age, with no clear sex predominance. Most cases presented with obstructive symptoms and were managed with segmental resection. Ileocolic and jejunojejunal intussusception were the most frequently reported patterns. Computed tomography commonly demonstrated intramural fat-density lesions serving as lead points. Recurrence was rarely documented in the literature, and long-term follow-up data were limited. In addition to the cases reported in the literature, a patient managed at our institution was also evaluated. A 49-year-old female experienced recurrent intussusception secondary to diffuse intestinal lipomatosis over an 18-year period. In 2008, she underwent small bowel resection for intussusception associated with diffuse intestinal lipomatosis. Between 2008 and 2017, recurrent episodes of intestinal obstruction were observed and managed conservatively. In 2017, surgery included plication of the invaginated segment, resection of a dilated previous anastomotic site, and multiple ileotomies with selective submucosal lipoma excisions to preserve bowel length. In 2026, she developed jejunojejunal intussusception with mechanical obstruction, and approximately 20 cm of jejunum was resected with primary anastomosis (Figure 1). Histopathological examination confirmed diffuse intestinal lipomatosis containing more than fifteen mural and intramucosal lipomas (largest 5.5 cm), with no evidence of malignancy. The postoperative course was uneventful, and the patient remains asymptomatic on follow-up.

Summary of published adult cases of intussusception secondary to histologically confirmed diffuse intestinal lipomatosis, including patient demographics, anatomical location, type of intussusception, and management approach.

Conclusion: Adult intussusception secondary to diffuse intestinal lipomatosis is rare but may demonstrate recurrent and multifocal behavior over long-term follow-up. Although segmental resection remains the standard treatment in acute obstruction, bowel-preserving strategies may be considered in selected patients with diffuse disease to reduce cumulative bowel loss. Long-term surveillance appears essential due to recurrence potential.

Keywords: Intestinal lipomatosis, adult intussusception, bowel obstruction

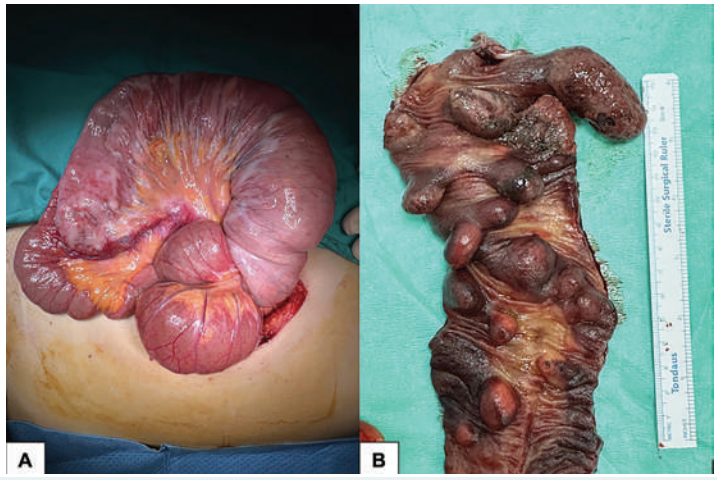


Figure 1. Small bowel intussusception secondary to diffuse intestinal lipomatosis. (A) Intraoperative view demonstrating segmental small bowel intussusception. (B) Resected jejunal segment showing multiple transmural and submucosal lipomatous nodules consistent with diffuse intestinal lipomatosis.

Table 1. Adult intussusception associated with diffuse intestinal lipomatosis

Author (year)	Age/sex	Location	Type of intussusception	Management
Tatsuguchi et al. (1999)	66/M	Ileocecal	Ileocolic	Endoscopic reduction + segmental resection
Shenoy et al. (2003)	33/M	Jejunum	Jejunojejunal	Segmental resection
Lee et al. (2010)	48/F	Jejunum	Jejunojejunal	Double-balloon endoscope-assisted reduction + surgery
Karthikeyan et al. (2012)	60 / M	Jejunum	Jejunojejunal	Segmental resection
Eyselbergs et al. (2014)	56 / F	Ileum	Ileocolic	Segmental resection
Gao et al. (2014)	52 / F	Ileum	Ileocolic	Segmental resection
Tabone et al. (2019)	25 / M	Jejunum	Jejunojejunal	Segmental resection
Yoshimoto et al. (2019)	47 / F	Jejunum + Ileum	Recurrent	Multiple local excisions + duodenal endoscopic submucosal dissection
Present case (2026)	49 / F	Jejunum + Ileum	Recurrent	Segmental resection, plication, multiple local excisions

[S-472]

Our outcomes of laparoscopic appendectomy: A retrospective analysis of 583 patients

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Objective: Acute appendicitis is one of the most common surgical emergencies, and laparoscopic appendectomy (LA) is currently considered the standard treatment modality due to its advantages over open appendectomy, including less postoperative pain, shorter hospital stay, and superior cosmetic outcomes. Nevertheless, negative appendectomy (NA) rates—defined as appendectomies performed in patients without histopathological evidence of appendicitis—remain a significant clinical concern. The aim of this study was to retrospectively analyze the demographic characteristics, clinical findings, laboratory and imaging results, and pathological outcomes of patients who underwent LA at our clinic between 2021 and 2026, and to evaluate our LA outcomes and NA rates.

Material and Methods: A total of 583 patients who underwent laparoscopic appendectomy at our clinic between January 2021 and February 2026 were included in this study. Demographic characteristics (age, sex), duration of symptoms, clinical findings (fever, pain migration, right lower quadrant tenderness, rebound tenderness/guarding, nausea/vomiting), laboratory parameters (WBC, neutrophil percentage, CRP), Alvarado scores, imaging findings (ultrasonography, computed tomography), and postoperative pathology results were retrospectively reviewed from the hospital database.

Results: 583 patients with a mean age of 36.5±15.6 years (range: 17-88). Of these, 54.2% (n=316) were male and 45.8% (n=267) were female. The mean duration of symptoms was 28.3±30.8 hours. The most common clinical findings were right lower quadrant tenderness (90.7%), rebound tenderness/guarding (58.5%), and nausea/vomiting (48.0%), respectively. The mean WBC count was 13.05±4.34 (×10³/μL), and the mean Alvarado score was 6.36±1.59. According to pathological evaluation, 79.6% of patients (n=464) were diagnosed with acute appendicitis, while 13.6% (n=79) had complicated appendicitis. The negative appendectomy rate was 2.4% (n=14). When patients who underwent negative appendectomy (Group 1) were compared with those diagnosed with appendicitis (Group 2), no statistically significant differences were observed in terms of age (30.1 vs. 36.6 years, p=0.124) or Alvarado score (5.57 vs. 6.38, p>0.05). However, the WBC count was significantly lower in Group 1 (10.78±3.15) compared to Group 2 (13.11±4.35) (p=0.047).

Conclusion: Laparoscopic appendectomy remains a safe and effective treatment for acute appendicitis. The negative appendectomy rate of 2.4% in our cohort is consistent with previously reported rates (2-10%), indicating high preoperative diagnostic accuracy. Lower WBC values in the negative appendectomy group support its role as a key biomarker, whereas age and Alvarado score alone were not reliable predictors. These findings highlight the importance of combining clinical judgment with laboratory and imaging modalities to improve diagnostic accuracy and reduce unnecessary surgery.

Keywords: Acute appendicitis, appendectomy

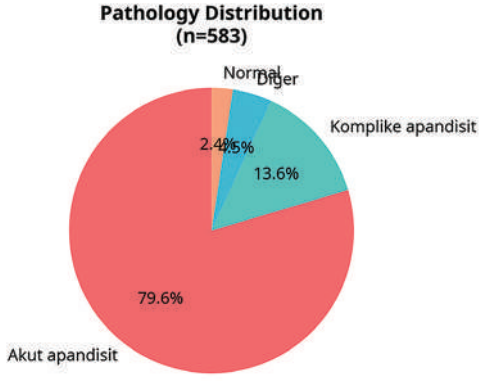


Figure 1. Outcomes of pathology.

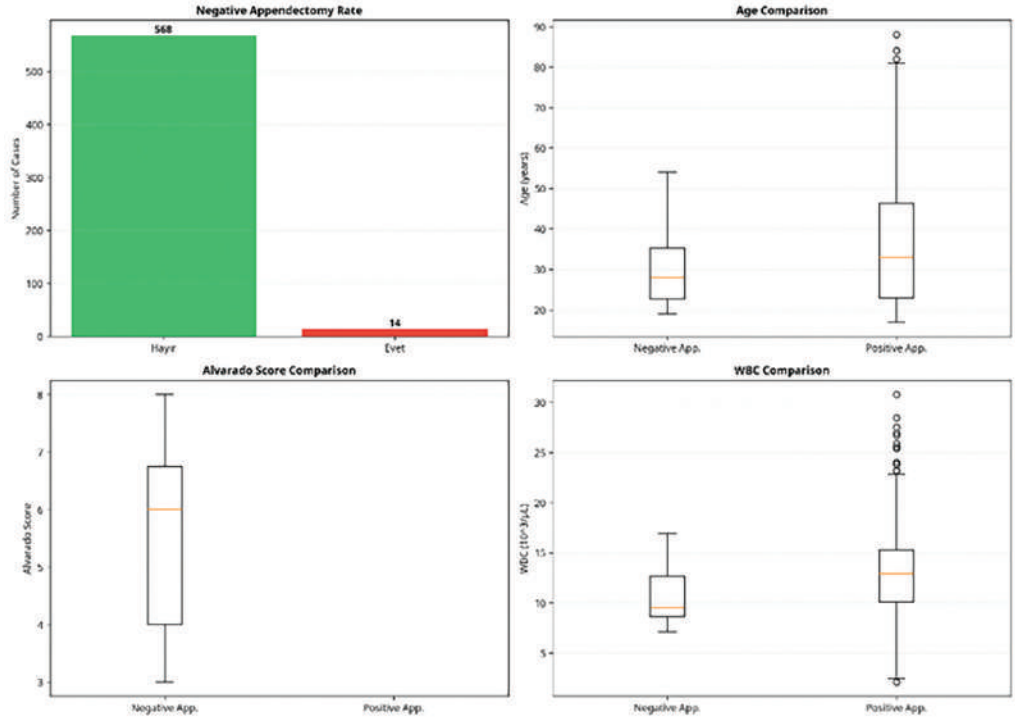


Figure 2. Negative appendectomy.

[S-473]

Assessment of clinical severity in acute diverticulitis: Hinchey stage and early laboratory findings

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Objective: Clinical decisions in acute diverticulitis are mostly based on the Hinchey classification; however, clinical burden indicators (length of hospital stay, intensive care need, and intervention requirement) cannot always be adequately explained by Hinchey stage alone. This study evaluated whether presentation CT findings and 48-hour laboratory parameters predict clinical severity in addition to Hinchey stage.

Material and Methods: Fifty-one patients admitted with acute diverticulitis within the last year were retrospectively reviewed and grouped as non-complicated or complicated. CT localization and abscess presence were recorded. Antibiotic treatment, culture results, percutaneous drainage, surgical intervention, intensive care requirement, length of hospital stay, and laboratory parameters at admission and 48 hours were analyzed.

Results: Twenty-seven patients (52.9%) were female and 24 (47.1%) were male. The median age was 55 years and the median body mass index was 30 kg/m². Hypertension was present in 14 patients (27.5%) and diabetes mellitus in 9 patients (17.6%). Age, gender, and BMI were not associated with clinical burden (p>0.05). Hinchey distribution was stage 1 in 66.6% (n=34), stage 2 in 5.9% (n=3), stage 3 in 3.9% (n=2), and stage 4 in 9.8% (n=5); complicated diverticulitis rate was 33.3% (n=17). The sigmoid colon was predominant (80.4%; n=41), and localization was not related to length of hospital stay, surgery, percutaneous drainage, or intensive care requirement (p>0.05). Antibiotic therapy was initiated in all patients: ceftriaxone + metronidazole in 96.1% and piperacillin/tazobactam in 3.9%. Culture results were available in three patients and all isolated pathogens were *Escherichia coli*; culture results were not associated with clinical burden (p>0.05). CT revealed abscesses in 14 patients (27.5%); hospital stay was longer in patients with abscesses. Abscess diameter showed a moderate positive correlation with hospital stay (p=0.009) and was a significant risk factor for prolonged hospitalization (≥7 days) (p=0.025) (Table 1). Percutaneous drainage was performed in 5 patients (9.8%), all in the complicated group (p=0.003). Surgical intervention was performed in 7 patients (13.7%) and occurred only in complicated cases (p<0.001). Intensive care was required in 2 patients (3.9%). Admission CRP correlated positively with length of hospital stay (rho=0.334; p=0.020), while lymphocyte count correlated negatively (rho=-0.375; p=0.006); as HCO_3 decreased, hospital stay increased (rho=-0.477; p=0.025). From admission to 48 hours, white blood cell, neutrophil, and platelet counts decreased significantly (p<0.001), CRP showed no significant change (p=0.71), and albumin decreased significantly (p=0.035) (Table 2).

Conclusion: Early laboratory profile and CT findings add meaningful predictive value beyond Hinchey staging for assessing clinical severity in acute diverticulitis. The lack of early CRP change despite decreases in other inflammatory parameters suggests that overemphasis on CRP alone may be misleading, supporting combined clinical, laboratory, and radiological assessment.

Keywords: Acute diverticulitis, Hinchey classification, computed tomography

Table 1. Length of hospital stay according to abscess diameter

Abscess diameter	n	Length of stay (days), mean ± SD	Median (IQR)
<3 cm	6	5.2±2.1	5 (4-6)
3-5 cm	4	7.1±2.8	7 (5-9)
≥5 cm	4	9.4±3.6	9 (7-12)

Spearman correlation: rho=0.364; p=0.009 Logistic regression for prolonged hospitalization (≥7 days): OR=1.31 (for each 1 cm increase), 95% CI 1.04-1.65; p=0.025.

Table 2. Comparison of application and 48-hour laboratory parameters

	Application	48th hour	p-value
WBC (×10⁹/L)	12.8±4.1	9.6±3.5	<0.001
NEU (×10⁹/L)	10.1±3.9	7.2±3.1	<0.001
PLT (×10⁹/L)	312±108	276±96	0.001
CRP (mg/L)	96.4±78.2	92.1±74.6	0.71
AST (U/L)	32.4±18.6	28.1±15.9	0.047
ALT (U/L)	41.2±29.7	34.6±24.8	<0.001
Albumin	3.4±0.5	3.1±0.4	0.035

[S-475]

Delay in consultation request, reconsultation burden, and diagnostic contribution of CT according to triage area in emergency general surgery consultations: Analysis of 10615 cases

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Objective: Timely surgical consultation requests in the emergency department are critical for patient safety. The triage area (red/yellow/green) may influence workflow; however, consultation request delays, reconsultation burden, and the diagnostic contribution of computed tomography (CT) have not been sufficiently quantified according to triage areas.

Material and Methods: In this single-center retrospective observational study, 10615 protocols and 15033 consultation records were analyzed. The first consultation was defined as the initial request within each protocol; subsequent requests within the same protocol were classified as reconsultations. Request time was calculated as the difference in minutes between arrival time and consultation request time; negative values and values exceeding 24 hours were excluded. The presence of CT was extracted from free-text fields; CT findings ("positive/acute") and consultation acceptance diagnoses were coded using a keyword-based approach. CT–diagnosis concordance was assessed by category matching. Continuous variables were summarized as median (IQR). Comparisons of request times were performed using the Kruskal–Wallis test, and proportions were compared using the chi-square test.

Results: For the first consultation, the median request time was 141.1 minutes in the red area, 239.0 minutes in the yellow area, and 188.4 minutes in the green area (p<0.001). The proportion of requests made within ≤60 minutes was 28.8% in red, 16.3% in yellow, and 22.9% in green. A total of 4418 reconsultation records were identified; 32.7% of protocols involved at least one reconsultation, with a higher rate in the red area (39.9%). The presence of CT was more frequently associated with reconsultation, particularly in the red area. The overall CT utilization rate was 74.0%, being highest in red (87.9%), followed by yellow (77.6%) and green (69.3%). The overall hospitalization rate was 15.2%, and the surgery rate was 52.1%; hospitalization rates were similar across triage groups (red 16.2%, yellow 16.7%, green 14.5%). In the CT-positive group, the surgery rate was 40.7%. A specific diagnostic category could be extracted from CT reports in 40.8% of cases; within this subgroup, CT category and consultation acceptance diagnosis matched in 51.8% of cases. Trauma protocols accounted for 7.6% of cases, with a median request time of 84 minutes, compared with 198 minutes in non-trauma cases (p<0.001).

Conclusion: The triage area is significantly associated with surgical consultation request delays and reconsultation burden, with the most pronounced delay observed in the yellow area. CT utilization is highest in the red area, and CT positivity is associated with a higher likelihood of surgical intervention. Early consultation triggers in the yellow area and standardization of CT–consultation timing should be considered key targets for quality improvement initiatives.

Keywords: Emergency department triage, surgical consultation, computed tomography (CT)

[S-476]

Determinants of clinical severity in rectus sheath hematoma: A single-center experience

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Objective: Rectus sheath hematoma (RSH) is a rare but clinically misleading cause of acute abdominal pain. Its incidence is increasing, particularly with the rise in anticoagulant use. In this study, we aimed to evaluate the relationship between clinical and laboratory parameters in patients diagnosed with RSH and the treatment approach and clinical course.

Material and Methods: Between 2014 and 2024, 37 patients diagnosed with RSH at our clinic were retrospectively reviewed. Demographic data, comorbidities, anticoagulant/antiplatelet use, INR levels, hemoglobin values at presentation and follow-up, hematoma size, location, treatment method, intensive care requirement, and transfusion need were recorded. Patients were divided into two groups based on treatment approach: conservative and invasive.

Results: A total of 37 patients were included in the study. Fourteen patients were male (37.8%) and 23 were female (62.2%). The mean age was 59.2±17.2 years. Most patients were managed conservatively, while invasive intervention was performed in 6 patients (16.2%). No statistically significant differences were found between patients requiring invasive intervention and those monitored conservatively in terms of age (p=0.680), hematoma diameter (p=0.606), and INR values (p=0.469). Twelve patients (32.4%) developed a need for intensive care. Patients requiring intensive care were significantly older [mean 68.7±16.4 vs. 54.6±15.6 years; p=0.011]. Furthermore, hematoma diameter was significantly larger in the group requiring intensive care [median: 117.5 mm vs. 50 mm; p=0.011]. No significant difference was observed between the groups in terms of INR values (p=0.159). No significant difference was found between patients requiring transfusion and those not requiring transfusion in terms of age, hematoma diameter, and INR values (p>0.05). Seventeen patients (45.9%) had a history of anticoagulant therapy. Although patients using anticoagulants were found to be significantly older, no significant difference was found between patients using anticoagulants and those not using anticoagulants in terms of hematoma diameter (median: 75 mm vs. 51 mm; p=0.307).

Conclusion: Rectus sheath hematoma is a benign clinical condition that can usually be managed with conservative treatment; however, large hematoma size and significant hemoglobin decline may indicate the need for invasive intervention. Early diagnosis and close hemodynamic monitoring are particularly important in elderly patients using anticoagulants. The combined assessment of clinical and radiological parameters can guide the determination of the treatment strategy.

Keywords: Rectus hematoma, pain, trauma, anticoagulant

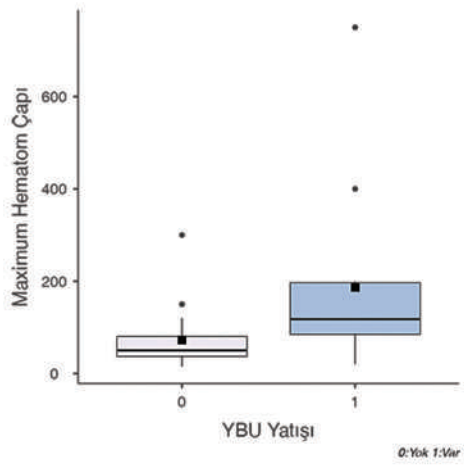


Figure 1. Relationship between ICU admission and hematoma diameter.

[S-477]

The impact of preoperative electrolyte imbalances on morbidity in intestinal obstruction surgery: A novel risk score model derived from a 764-patient cohort (TOES)

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Objective: The aim of this study was to investigate the impact of preoperative electrolyte imbalances (Na, K, Cl, Ca, Mg) on perioperative morbidity and mortality in patients undergoing surgery for acute intestinal obstruction, and to develop a novel risk score model—the Torun Obstruction Electrolyte Score (TOES)—using multivariable analysis.

Material and Methods: A total of 764 patients who underwent surgery for intestinal obstruction between 2013 and 2023 were retrospectively evaluated. Preoperative serum electrolyte levels, lactate concentrations, vital signs, and laboratory parameters were recorded. Intestinal viability, need for bowel resection, anastomotic leakage, and 30-day mortality were defined as primary outcomes. The associations between electrolyte abnormalities and clinical outcomes were analyzed using univariable and multivariable logistic regression models. A TOES risk score was developed based on significant parameters identified through receiver operating characteristic (ROC) analysis.

Results: Hyponatremia was present in 38% of patients, hypokalemia in 29%, hypochloremia in 33%, hypocalcemia in 24%, and hypomagnesemia in 9%. The bowel resection rate was significantly higher in patients with hyponatremia compared with those without (62% vs. 41%, $p<0.001$). Elevated lactate levels (≥2.5 mmol/L) were strongly associated with intestinal necrosis (OR=3.1, $p<0.001$). Multivariable analysis identified hyponatremia (OR=2.4), hypokalemia (OR=1.8), and lactate ≥2.5 mmol/L (OR=3.5) as independent risk factors. The TOES score derived from these three parameters demonstrated strong performance in predicting 30-day mortality (AUC=0.82). Mortality was 27% in patients with TOES ≥2 compared with 6% in those with TOES <2 ($p<0.001$).

Conclusion: Preoperative electrolyte imbalances and elevated lactate levels are strong predictors of morbidity and mortality in intestinal obstruction surgery. The TOES score developed in this study represents a practical and clinically applicable tool for risk stratification and surgical decision-making.

Keywords: Intestinal obstruction, electrolyte imbalance, hyponatremia, lactate, mortality

[S-478]

Clinical burden in fournier gangrene: An assessment beyond mortality

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Objective: Fournier gangrene is a life-threatening necrotizing infection, and disease severity is mostly assessed based on mortality. However, decreasing mortality rates due to early diagnosis and aggressive surgical treatment have raised concerns regarding the adequacy of mortality as a sole indicator of disease burden. This study aimed to identify clinical factors associated with morbidity and hospital resource utilization in Fournier gangrene, independent of mortality.

Material and Methods: Fifty-three patients diagnosed with Fournier gangrene and treated at our clinic between 2023 and 2025 were retrospectively analyzed. Age, gender, presence of diabetes mellitus, defect area according to computed tomography, microbiological findings, ostomy application and timing, ostomy closure time, sphincter involvement, fecal incontinence, infection recurrence, flap requirement, and length of hospital stay were recorded. Fournier-related mortality was evaluated separately.

Results: The study included 53 patients with a mean age of 58.6±12.9 years (median: 59). Sixteen patients (30.2%) were female and 37 (69.8%) male. Diabetes mellitus was present in 23 patients (43.4%). The median length of hospital stay was 18 days. Fournier-related mortality occurred in one patient (1.9%). Seven patients (13.2%) who died later due to other causes were excluded from Fournier-related mortality analysis. Ostomy was performed in 18 patients (34.0%). Patients who underwent ostomy had a significantly longer hospital stay than those who did not (median 27 vs. 15 days; $p=0.008$). The median time to ostomy was 3 days (range: 1-13 days). Two patients required permanent ostomy. In 8 patients with ostomy closure, the median closure time was 7 months (range: 3-18 months). Sphincter involvement was present in 17 patients (32.1%). Fecal incontinence occurred in 18 patients (34.0%), all of whom had undergone ostomy. Recurrent infection and flap requirement were each observed in five patients (9.4%). The median defect area was 1300 cm^2 (IQR: 476-3500 cm^2; range: 12-21,600 cm^2). *Escherichia coli* was the most frequently isolated microorganism–26 patients (49.1%). Gram-negative microorganisms were detected in 36 (67.9%) and Gram-positive microorganisms in 15 (28.3%) patients. No significant association was found between classical risk factors, microbiological findings, and clinical burden indicators.

Conclusion: Fournier gangrene causes substantial morbidity with functional impairment and prolonged hospitalization. Ostomy requirement is the main determinant of hospital resource utilization. Disease severity assessment should therefore focus on morbidity and clinical course rather than mortality alone.

Keywords: Perianal Fournier's gangrene, mortality, morbidity

[S-479]

Causes of pneumoperitoneum without intestinal perforation: Analysis of 28 cases

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Objective: The detection of free intraperitoneal air on radiological imaging is generally considered an indication for emergency surgery, most commonly suggesting perforation of a hollow viscus. However, in selected cases, surgical exploration reveals no evidence of gastrointestinal perforation (Figure 1). The aim of this study was to evaluate patients who underwent surgical exploration due to radiologically detected free intraperitoneal air but in whom no perforation was identified intraoperatively, and to investigate potential etiologies and clinical outcomes.

Material and Methods: Between October 2023-December 2025, 228 patients presenting with intra-abdominal free air were evaluated at the Department of General Surgery, University of Health Sciences Türkiye, Ankara Etlik City Hospital. Patients with confirmed perforated hollow viscus were excluded. 28 patients who underwent surgical exploration without detection of perforation were retrospectively analyzed. Demographic data, laboratory parameters, possible etiological factors, surgical approach, and postoperative complications were recorded. Major complications were defined as Clavien-Dindo ≥3. Statistical analyses were performed using SPSS 22, and p-value <0.05 was considered statistically significant.

Results: Among the 28 patients, the female-to-male ratio was equal, and the mean age was 61.4 years (18-94). Laparoscopic exploration was performed in 8 cases, while 20 patients underwent primary open exploration. The median length of hospital stay was 8.2 days (2-40) (Table 1). Twelve patients (42.9%) had no identifiable etiology, whereas 16 patients (57.1%) had a definable cause. Four patients had pneumothorax-hemothorax secondary to trauma. Eight patients presented with infectious findings such as mesenteric lymphadenopathy, diarrhea, nausea-vomiting, and emphysematous cystitis. Four patients had undergone gastroscopy-colonoscopy within the previous 24-48 hours (Table 2). When patients were grouped according to identifiable versus non-identifiable etiology, no statistically significant difference was found between the groups in terms of age (p>0.005). No significant differences were observed between the groups regarding CRP levels (Mann-Whitney U=78.5, p=0.423) or white blood cell counts (≥10 vs. <10) (Mann-Whitney U test, p=0.314). Similarly, no statistically significant difference was found in major complication rates (Clavien-Dindo ≥3) between the groups (Fisher's exact test, p=0.223). No statistically significant associations were identified when patients with definable etiologies were analyzed within subgroups.

Conclusion: The presence of intra-abdominal free air remains an emergency surgical indication with hollow viscus perforation as the primary suspected diagnosis. However, as demonstrated in our study and supported by the literature, rare cases of pneumoperitoneum may occur in the absence of visceral perforation. In particular, free intraperitoneal air without perforation may be observed in patients with a history of trauma associated with pneumothorax-hemothorax, in those who have undergone gastroscopy-colonoscopy within the preceding 24-48 hours, and in patients with recent inflammatory bowel attacks or abdominal infections such as emphysematous cystitis. Although radiologically detected free air strongly supports the diagnosis of perforation, clinicians should keep in mind that the underlying etiology may remain unidentified in a subset of patients.

Keywords: Pneumoperitoneum, perforation, negative exploration

Table 1. Baseline demographic and clinical characteristics

Variable	Value
Total number of patients	28
Female/male	14/14
Mean age (years)	61.4±18.2
Surgical approach (laparotomy/laparoscopy)	20/8
Mean length of hospital stay (days)	8.2

Table 2. Etiological distribution of patients according to possible causes and findings

Possible cause	n	%
No identifiable finding	12	43%
Post-trauma	4	14.5%
Gastroscopy/colonoscopy within 24-48 hours	4	14.5%
Infectious findings	8	28%
Total	28	100%

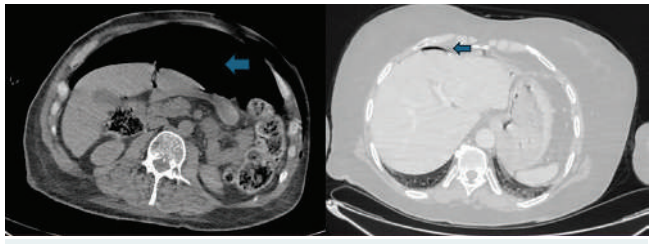


Figure 1. CT image demonstrating intra-abdominal free air.

[S-481]

Do we really need clips? Handmade loop ligation versus Hem-o-lok clip for appendiceal stump closure: A propensity score-matched study

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Objective: Laparoscopic appendectomy is currently regarded as the standard surgical treatment for acute appendicitis. Secure closure of the appendiceal stump is one of the most critical steps of the procedure. Common techniques include handmade loop suture ligation and Hem-o-lok clip application. While Hem-o-lok clips provide technical simplicity and ease of use, they are associated with higher procedural costs. In contrast, handmade loop suture ligation requires greater surgical expertise but is a low-cost technique believed to ensure reliable stump security. This study aimed to compare handmade loop suture ligation and Hem-o-lok clip closure in laparoscopic appendectomy with respect to perioperative outcomes and postoperative complications while minimizing selection bias using propensity score matching (PSM).

Material and Methods: In this retrospective study, patients undergoing laparoscopic appendectomy were analyzed. Patients were divided into two groups based on the stump closure technique: handmade loop suture ligation or Hem-o-lok clip application. Demographic characteristics, clinical data, radiological findings, perioperative outcomes, and postoperative complications were recorded. To reduce baseline differences, propensity scores were calculated using a logistic regression model including age, sex, ASA score, previous abdominal surgery, preoperative white blood cell count, histopathologic type, appendix diameter, periappendiceal fluid, and cecal edema. One-to-one nearest-neighbor matching without replacement was performed using a caliper width of 0.2 standard deviations of the logit of the propensity score.

Results: A total of 731 patients were included (handmade loop suture n=689, Hem-o-lok clip n=42). After PSM, 41 well-matched pairs (n=82) were obtained. Following matching, no significant differences were observed between groups in baseline characteristics, including age, sex, ASA classification, and histopathologic severity. Perioperative outcomes—operative time, length of hospital stay, and time to first flatus—were comparable. Rates of drain placement and conversion to open surgery were similar. Postoperative complications, including wound infection, intra-abdominal abscess, ileus, postoperative bleeding, total complications, and major complications (Clavien-Dindo grade ≥III), showed no significant differences. Thirty-day readmission rates were also comparable.

Conclusion: Handmade loop suture ligation for appendiceal stump closure during laparoscopic appendectomy was at least as safe as Hem-o-lok clip application regarding perioperative outcomes and postoperative complications. Additionally, the handmade loop technique offers a clear economic advantage by avoiding the cost of disposable devices. These findings suggest that, when sufficient surgical expertise is available, handmade loop suture ligation is a safe, effective, and cost-efficient alternative to Hem-o-lok clips.

Keywords: Laparoscopic appendectomy, appendiceal stump closure, propensity score matching

[S-482]

Prediction of the need for bowel resection in patients with incarcerated hernia: A retrospective analysis of preoperative clinical and laboratory parameters

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Objective: Incarcerated hernias are serious clinical conditions requiring emergency surgery and are associated with a high risk of bowel ischemia and necrosis. The need for bowel resection increases morbidity and prolongs hospital stay. Therefore, predicting bowel resection in the preoperative period is crucial for surgical decision-making and patient management. This study aimed to evaluate whether the need for bowel resection in patients with incarcerated hernia can be predicted using preoperative clinical and laboratory parameters.

Material and Methods: This retrospective study included 106 patients who underwent surgery for incarcerated hernia at University of Health Sciences Türkiye, Gülhane Training and Research Hospital between January 2022 and December 2025. Demographic characteristics, hernia location, time to hospital admission, presence of clinical and radiological ileus, and preoperative laboratory parameters (urea, creatinine, albumin, lactate dehydrogenase, C-reactive protein, lactate, and complete blood count) were recorded. Patients were divided into two groups according to whether bowel resection was performed. Categorical variables were analyzed using the chi-square test, while continuous variables were analyzed using Student's t-test or the Mann-Whitney U test, as appropriate. Receiver operating characteristic (ROC) analysis was performed to assess the diagnostic performance of significant parameters. A p-value <0.05 was considered statistically significant.

Results: The mean age of the patients was 63.1±14.5 years; 48.1% were female. The median body mass index was 27.5 kg/m², and 59.4% had comorbidities. No in-hospital mortality was observed. Median hospital stay was 6 days, and median time to admission was 20 hours. Clinical and radiological ileus were present in 68.9% and 70.8% of patients, respectively. The inguinal region was the most common hernia location (50.9%). Bowel resection was required in 44 patients (41.5%) (Table 1). Patients undergoing bowel resection had significantly higher rates of clinical and radiological ileus and longer time to admission (p<0.05). Preoperative urea, LDH, C-reactive protein, lactate, and platelet levels were higher, whereas albumin levels were lower in the resection group (all p<0.05). No differences were observed in age, body mass index, creatinine, or leukocyte count (Table 2). ROC analysis showed that LDH predicted bowel resection with an AUC of 0.646 (cut-off 222.5 U/L; p=0.011), while lactate demonstrated better accuracy (AUC 0.760; cut-off 1.85 mmol/L; p=0.001), with 70.5% sensitivity and 64.5% specificity (Table 3, Figure 1).

Conclusion: In patients with incarcerated hernia, clinical and radiological ileus and delayed hospital admission are significantly associated with the need for bowel resection. Elevated preoperative lactate, CRP, LDH, platelet, and urea levels, together with low albumin, may help predict bowel resection. Among these markers, lactate appears to be a practical and reliable biomarker for preoperative clinical decision-making.

Keywords: Incarcerated hernia, bowel resection, lactate

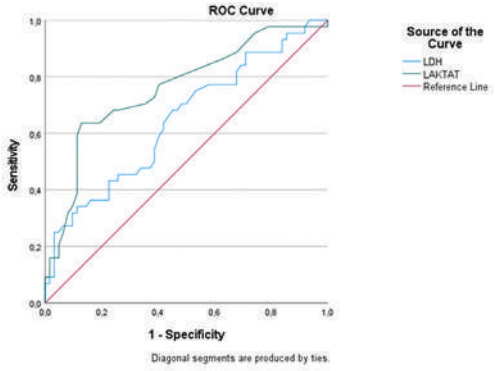


Figure 1. Receiver operating characteristic curves of LDH and lactate levels for predicting the need for bowel resection in patients with incarcerated hernia.

Table 1. Demographic, clinical, and laboratory characteristics of patients operated on for incarcerated hernia

Parameters	Values
Age (years)	63.09±14.46
Sex	
Female	51 (48.1%)
Male	55 (51.9%)
Body mass index (kg/m²)	27.5 (20.5-49.6)
Presence of comorbidity	
Absent	43 (40.6%)
Present	63 (59.4%)
In-hospital mortality	
Absent	106 (100%)
Length of hospital stay (days)	6 (1-22)
Time to admission (hours)	20 (1-120)
Presence of clinical ileus	
Absent	33 (31.1%)
Present	73 (68.9%)
Presence of radiological ileus	
Absent	31 (29.2%)
Present	75 (70.8%)
Hernia location	
Inguinal	54 (50.9%)
Umbilical	27 (25.5%)
Incisional	15 (14.2%)
Femoral	10 (9.4%)
Bowel resection	
Absent	62 (58.5%)
Present	44 (41.5%)
Urea (mg/dL)	41 (11-184)
Creatinine (mg/dL)	0.94 (0.56-7.85)
Albumin (g/dL)	3.7 (2.1-5.7)

Table 1. Continued

Parameters	Values
LDH (U/L)	221 (140-937)
C-reactive protein (mg/L)	17 (1-385)
Lactate (mmol/L)	1.85 (0.7-8.9)
White blood cell count (×10⁹/L)	10.25 (2.9-28.43)
Hemoglobin (g/dL)	14.19±2.08
Hematocrit (%)	42.67±6.06
Platelet count (×10⁹/L)	256.72±81.51
Neutrophil count (×10⁹/L)	7 (0.5-24.82)
Lymphocyte count (×10⁹/L)	1.59 (0.28-5)
Monocyte count (×10⁹/L)	0.6 (0.2-1.8)
Basophil count (×10⁹/L)	0.01 (0-0.5)
RDW-SD (fL)	44.4 (36.8-76.1)

Table 2. Comparison of clinical and laboratory parameters between patients with and without bowel resection

Parameters	Bowel resection (+)	Bowel resection (–)	p-value
Sex			
Female	25 (49.0%)	26 (51.0%)	*0.131
Male	19 (34.5%)	36 (65.5%)	
Comorbidity			
Absent	17 (39.5%)	26 (60.5%)	*0.733
Present	27 (42.9%)	36 (57.1%)	
Clinical ileus			
Absent	8 (24.2%)	25 (75.8%)	*0.015
Present	36 (49.3%)	37 (50.7%)	
Radiological ileus			
Absent	6 (19.4%)	25 (80.6%)	*0.003
Present	38 (50.7%)	37 (49.3%)	
Age (years)	63.98±12.53	62.47±15.76	**0.599
Body mass index (kg/m²)	26.55 (20.5-49.6)	27.85 (20.8-46.9)	***0.194
Time to admission (hours)	25 (2-120)	19.5 (1-60)	***0.015
Urea (mg/dL)	44 (21-184)	38 (11-137)	***0.015
Creatinine (mg/dL)	0.91 (0.56-7.82)	0.95 (0.60-7.85)	***0.758
Albumin (g/dL)	3.35 (2.1-5.7)	3.80 (2.6-5.0)	***0.011
LDH (U/L)	228.5 (153-937)	212 (140-514)	***0.011
C-reactive protein (mg/L)	36.5 (1-385)	11.5 (1-239)	***0.048
Lactate (mmol/L)	2.55 (0.7-8.9)	1.60 (0.9-5.9)	***0.001
White blood cell count (×10⁹/L)	11.10 (2.9-28.43)	10.05 (4.0-21.62)	***0.530
Hemoglobin (g/dL)	14.23±2.59	14.16±1.66	**0.879
Hematocrit (%)	42.93±7.67	42.49±4.65	**0.735
Platelet count (×10⁹/L)	277.09±94.84	242.26±67.71	**0.029
Neutrophil count (×10⁹/L)	8.1 (1.8-24.82)	6.9 (0.5-17.63)	***0.459

*: Chi-square test, **: t-test, ***: Mann-Whitney U test.

Table 3. ROC analysis results of LDH and lactate levels for predicting the need for bowel resection in patients with incarcerated hernia

Risk factor	AUC (95% CI)	Cut-off value	p-value	Sensitivity (%)	Specificity (%)
LDH (U/L)	0.646 (0.539-0.753)	222.5	0.011	59.1	59.7
Lactate (mmol/L)	0.760 (0.665-0.855)	1.85	0.001	70.5	64.5

[S-483]

Predictors of complicated appendicitis in adults: The role of the systemic immune-inflammation index

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Objective: Acute appendicitis is one of the most common surgical emergencies in adults. While many patients present with uncomplicated inflammation, others develop perforation, abscess or generalized peritonitis. This study aimed to evaluate clinical and laboratory predictors of complicated appendicitis in adult patients undergoing emergency appendectomy and to investigate the predictive value of the systemic immune–inflammation index (SII).

Material and Methods: This retrospective study included adult patients (≥18 years) who underwent emergency appendectomy for acute appendicitis between 28 August 2024 and 27 May 2025. Patients were classified as having uncomplicated or complicated appendicitis based on intraoperative and histopathological findings. Demographic data, symptom duration, Alvarado score, white blood cell count (WBC), C-reactive protein (CRP), neutrophil-to-lymphocyte ratio (NLR), and systemic immune–inflammation index (SII) were recorded. ROC curve analysis and multivariable logistic regression analysis were performed.

Results: A total of 99 patients were included; 55 had uncomplicated and 44 had complicated appendicitis. Patients with complicated appendicitis were significantly older (p=0.001). Symptom duration ≥48 hours was more common in the complicated group (p=0.012). CRP, NLR, and SII values were significantly higher in complicated cases. ROC analysis showed that SII had a moderate discriminative ability with an AUC of 0.692. In multivariable analysis, only age remained an independent predictor.

Conclusion: Complicated appendicitis is associated with advanced age and increased inflammatory markers. SII may assist early risk stratification, while advanced age remains the strongest independent predictor.

Keywords: Acute appendicitis, complicated appendicitis, systemic immune-inflammation index

Table 1. Clinical and laboratory characteristics according to complication status

Variable	Non-complicated (n=55)	Complicated (n=44)	p-value
Age (years)	26 (22-40)	41 (26-58.8)	0.001
Sex (M/F)	32/23	22 / 22	0.913
Symptom ≥48 h	14 (25.5%)	22 (50.0%)	0.012
Alvarado score	5 (3-6)	5 (4-6)	0.376
WBC	11.88	12.90	0.183
CRP	15.41	76.96	<0.001
NLR	4.59	7.66	0.002
SII	1098.8	1798.4	0.001

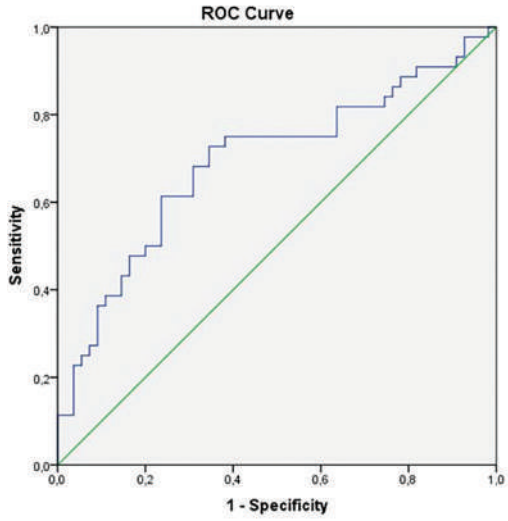


Figure 1. ROC curve of the systemic immune–inflammation index (SII) for predicting complicated appendicitis (AUC=0.692; 95% CI: 0.584-0.800; p=0.001).

[S-484]

The effect of enterostomy on clinical outcomes in Fournier's gangrene: A single center retrospective study

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Objective: Fournier's gangrene is a rapidly progressive necrotizing soft tissue infection involving the perineum and genital region and is associated with high morbidity and mortality. Early surgical debridement is the cornerstone of treatment; however, the role of enterostomy remains controversial and is generally reserved for selected cases. This study aimed to evaluate the impact of enterostomy on clinical outcomes and mortality in patients undergoing surgical treatment for Fournier's gangrene.

Material and Methods: This retrospective study included 78 patients who underwent surgical treatment for Fournier's gangrene at a tertiary referral center in 2025. Patients were divided into two groups based on whether enterostomy was performed during surgical management: Group 1 (no enterostomy, n=59) and Group 2 (enterostomy, n=19). Demographic characteristics, comorbidities, laboratory parameters, Fournier's gangrene severity index (FGSI) scores, perioperative management, and clinical outcomes were analyzed. Primary outcomes were mortality and intensive care unit (ICU) length of stay, while secondary outcomes included hospital length of stay and wound management methods.

Results: The mean age was 59.43±15.22 years, with no significant difference between the groups (p=0.807). The proportion of male patients was significantly higher in Group 2 (84.2% vs. 52.5%, p=0.016). Hypertension and chronic obstructive pulmonary disease were more common in the enterostomy group (p=0.016 and p=0.043, respectively). Preoperative WBC, CRP, and hemoglobin levels were similar between groups. However, lymphocyte count and albumin levels were significantly lower (p=0.005 and p=0.017), and procalcitonin levels were significantly higher in Group 2 (p=0.033). FGSI scores were comparable between groups. ICU length of stay was significantly longer in patients who underwent enterostomy (8.15±10.88 vs. 4.86±13.25 days, p=0.004). Hospital length of stay was longer in Group 2, but the difference was not statistically significant (p=0.051). Mortality was higher in the enterostomy group (31.6% vs. 20.3%), although this difference was not statistically significant (p=0.354).

Conclusion: Patients undergoing enterostomy had significantly worse inflammatory and nutritional parameters at presentation, suggesting more severe disease. Although enterostomy was associated with longer ICU stays, it did not significantly affect mortality. These findings indicate that enterostomy should be selectively performed rather than routinely applied in Fournier's gangrene. Further prospective studies with larger cohorts are needed to define optimal patient selection criteria.

Keywords: Enterostomy, Fournier's gangrene

Table 1. Tissue culture results

Crosstab

			Enterostomi		
			yok	var	Total
Kültür	,00	Count	7	1	8
		% within Enterostomi	11,9%	5,3%	10,3%
	E.coli	Count	25	6	31
		% within Enterostomi	42,4%	31,6%	39,7%
	Proteus	Count	2	2	4
		% within Enterostomi	3,4%	10,5%	5,1%
	enterobakter	Count	0	1	1
		% within Enterostomi	0,0%	5,3%	1,3%
	Enterokok	Count	5	3	8
		% within Enterostomi	8,5%	15,8%	10,3%
	Candida	Count	5	1	6
		% within Enterostomi	8,5%	5,3%	7,7%
	Streptokok	Count	6	1	7
		% within Enterostomi	10,2%	5,3%	9,0%
	Corynebacterium	Count	2	0	2

Table 2. Demographic information and preoperative assessment				
	Total cohort (n=78)	**Group 1 no enterostomy (n=59)**	**Group 2 enterostomy (n=19)**	**p-value**
Age (years)	59.43±15.22	59.61±14.99	58.89±16.34	0.807
Sex				
Female	31 (39.7%)	28 (47.5%)	3 (15.8%)	0.016
Male	47 (60.3%)	31 (52.5%)	16 (84.2%)	
ASA score				
1	3 (3.8%)	1 (1.7%)	2 (10.5%)	0.283
2	56 (71.8%)	43 (72.9%)	13 (68.4%)	
3	18 (23.1%)	14 (23.7%)	4 (21.1%)	
4	1 (1.3%)	1 (1.7%)	-	
BMI	26.21±3.90	26.42±3.84	25.57±4.1	0.403
Hypertension				
No	41 (52.6%)	36 (61%)	5 (26.3%)	0.016
Yes	37 (47.4%)	23 (39%)	14 (73.7%)	
COPD				
No	74 (94.9%)	58 (98.3%)	16 (84.2%)	0.043
Yes	4 (5.1%)	1 (1.7%)	3 (15.8%)	
DM				
No	33 (42.3%)	27 (45.8%)	6 (31.6%)	0.302
Yes	45 (57.7%)	32 (54.2%)	13 (6.4%)	
WBC	17.89±9.08	17.80±9.54	18.16±7.71	0.322
CRP	192.43±86.39	183.31±79.85	220.78±101.30	0.108
Lymphocyte	1.35±0.79	1.48±0.8	0.97±1.65	0.005
Albumin	33.15±6.61	34.20±6.42	29.89±6.25	0.017
Procalcitonin	5.25±20.4	3.39±11.77	11.01±35.93	0.033
Hemoglobin	11.1±2.41	11.18±2.41	11.06±2.46	0.967
FGSI	6 (2-10%)	6 (2-10%)	6 (3-9%)	
Sepsis				
No	60 (76.9%)	48 (81.4%)	12 (63.2%)	0.123
Yes	18 (23.1%)	11 (18.6%)	7 (36.8%)	
Septic shock				
No	73 (93.6%)	55 (93.2%)	18 (94.7%)	0.814
Yes	5 (6.4%)	4 (6.8%)	1 (5.3%)	

Table 3. Treatment methods and postoperative follow-up				
Number of debridements	**5 (1-17)**	**5 (1-17)**	**5 (1-17)**	**0.435**
VAC therapy				
No	72 (92.3%)	56 (94.9%)	16 (84.2%)	0.151
Yes	6 (7.7%)	3 (5.1%)	3 (15.8%)	
Hospital length of stay	24.41±16.68	22.57±16.06	30.10±17.69	0.051
ICU length of stay	5.66±12.72	4.86±13.25	8.15±10.88	0.004
Treatment method				
Open wound	30 (50%)	26 (55.3%)	4 (30.8%)	0.133
Primary closure	21 (35%)	16 (34%)	5 (38.5%)	
Skin graft	9 (15%)	5 (10.6%)	4 (30.8%)	
Mortality				
No	60 (76.9%)	47 (79.7%)	13 (68.4%)	0.354
Yes	18 (23.1%)	12 (20.3%)	6 (31.6%)	

[S-485]

Diagnostic value of platelet mass index (PMI) in predicting the necessity of bowel resection in incarcerated abdominal hernias

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Objective: Surgical planning and the requirement for bowel resection in incarcerated abdominal hernias (IAH) are pivotal determinants of postoperative morbidity and patient prognosis. In this context, the preoperative utilization of practical biomarkers capable of reflecting tissue ischemia and systemic inflammatory response has gained significant importance in clinical management. This study aims to evaluate the diagnostic accuracy and clinical potential of the platelet mass index (PMI)—a parameter reflecting platelet kinetics—in predicting intestinal necrosis among IAH cases within a rigorous scientific framework.

Material and Methods: A total of 340 patients who underwent emergency surgery for IAH between January 2022 and December 2025 were retrospectively evaluated. After applying inclusion and exclusion criteria, 209 patients with complete laboratory data were included in the final analysis. Patients were categorized into two groups based on intraoperative findings: the "Reduction" group (n=180) and the "Resection" group (n=29). PMI was calculated from preoperative complete blood count parameters using the formula (Platelet count × MPV/1000). Logistic regression analysis was employed to identify independent risk factors, and receiver operating characteristic (ROC) analysis was performed to assess the diagnostic performance of PMI.

Results: Bowel resection was required in 13.9% (n=29) of the 209 analyzed patients. While no statistical differences were observed regarding age or sex distribution, the prevalence of hypertension was significantly higher in the resection group (55.2% vs. 32.2%; p=0.016). Univariate analysis revealed that PMI (median 3.31 vs. 2.51; p<0.001), symptom duration (p<0.001), C-reactive protein (CRP) (p<0.001), and lactate levels (p=0.011) were significantly elevated in the resection group. ROC analysis for PMI yielded an area under the curve (AUC) of 0.719 (95% CI: 0.622-0.816; p<0.001), with an optimal cut-off value of >3.26. At this threshold, PMI demonstrated a specificity of 83.9% and a negative predictive value (NPV) of 92.1%. In multivariate analysis, increased symptom duration (OR: 1.011; p=0.020) and elevated CRP (OR: 1.007; p=0.046) were identified as independent risk factors, while PMI showed a strong trend toward being an independent predictor (OR: 1.475; p=0.090).

Conclusion: Platelet Mass Index serves as a clinically evaluable and accessible parameter for predicting bowel necrosis in incarcerated abdominal hernias. Due to its high negative predictive value, PMI can offer an objective contribution to clinical decision-making, aiding in the formulation of surgical strategies and the identification of low-risk patients. When evaluated alongside standard laboratory tests and symptom duration, PMI may be utilized as a guiding adjunctive marker in emergency surgical management.

Keywords: Incarcerated hernia, bowel resection, platelet mass index

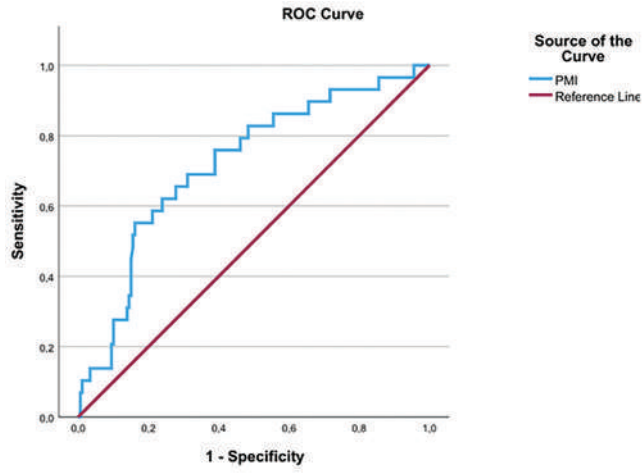


Figure 1. ROC curve.

[S-486]

Emergency splenectomy: A comparative analysis of traumatic and non-traumatic etiologies

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Objective: The spleen is an intraperitoneal organ that plays a pivotal role in immune regulation, particularly in protection against encapsulated bacteria. Splenectomy is performed for various indications, including traumatic injuries, hematologic disorders, infections, and benign or malignant pathologies. Blunt and penetrating abdominal trauma represent the most common causes of emergency splenectomy, whereas non-traumatic indications constitute a more heterogeneous patient population. Despite advances in non-operative management and spleen-preserving techniques, emergency splenectomy remains a critical surgical intervention in cases of hemodynamic instability, associated organ injury, or underlying pathological conditions. This study aimed to compare the demographic characteristics, clinical findings, perioperative course, and early outcomes of patients undergoing emergency splenectomy due to traumatic and non-traumatic etiologies at our center.

Material and Methods: Medical records of 140 patients who underwent emergency splenectomy between January 2019 and December 2025 were retrospectively reviewed. Patients were categorized into trauma and non-trauma groups. Since data were not normally distributed, continuous variables were analyzed using the Mann-Whitney U test, while categorical variables were compared using the chi-square test. A p-value <0.05 was considered statistically significant.

Results: Of the 140 patients, 117 (83.6%) underwent emergency splenectomy due to trauma, whereas 23 (16.4%) underwent surgery for non-traumatic causes. In the trauma group, 91 patients (77.8%) were male and 26 (22.2%) were female. In the non-trauma group, 13 patients (56.5%) were male and 10 (43.5%) were female. The mean age was 41 years in the trauma group and 60 years in the non-trauma group. The mean BMI was 24.53 kg/m² in the trauma group and 23.32 kg/m² in the non-trauma group. The average length of hospital stay was 10 days in the trauma group and 9 days in the non-trauma group. Comorbidity rates were significantly higher in the non-trauma group (p<0.001), whereas hemodynamic instability was significantly more common in the trauma group (p=0.004). Among trauma patients, 102 (87.2%) had blunt trauma and 15 (12.8%) had penetrating trauma. Preoperative computed tomography findings revealed splenic laceration grades of 3 in 26 patients (22.2%), grade 4 in 64 patients (54.7%), and grade 5 in 27 patients (23.1%). In the non-trauma group, the most common indication was splenic abscess (43.5%), followed by spontaneous splenic rupture (26.1%), splenic infarction (17.4%), iatrogenic splenic injury during pleurocan insertion (8.7%), and splenic artery aneurysm rupture (4.3%) (p<0.001).

Conclusion: Traumatic and non-traumatic etiologies in patients undergoing emergency splenectomy demonstrate significant differences in clinical presentation and perioperative characteristics. Separate evaluation of these two distinct patient populations may contribute to improved perioperative risk stratification and optimization of management strategies.

Keywords: Emergency surgery, trauma, splenectomy

Table 1. Comparison of demographic and laboratory parameters between trauma and non-trauma emergency splenectomy patients

Variable	Non-trauma (n=23), mean ± SD	Trauma (n=117), mean ± SD	p-value*
Age (years)	60.00±17.12	40.87±16.65	<0.001
BMI (kg/m²)	23.32±4.92	24.53±3.20	0.264
Hemoglobin	9.97±2.94	12.96±2.41	<0.001
Hematocrit	31.08±9.25	39.36±6.79	<0.001
WBC	15.09±8.40	15.74±6.34	0.556
Neutrophil	11.60±7.99	13.14±9.33	0.343
Lymphocyte	1.74±1.17	2.61±1.63	0.011
Platelet	316.83±171.89	259.28±80.76	0.088
Lactate	2.90±2.13	3.30±2.50	0.092
INR	1.47±0.46	1.30±0.82	<0.001
Albumin	3.12±0.74	4.16±2.67	<0.001
Luc	0.20±0.15	0.15±0.91	0.116
CRP	113.12±87.04	21.18±26.48	0.001
Length of hospital stay (days)	9.39±10.39	10.32±12.93	0.784

*: Mann-Whitney U test.

Table 2. Comparison of clinical and perioperative variables according to trauma status in emergency splenectomy				
Variable		**Non-trauma (n=23)***	**Trauma (n=117)***	**p-value****
Sex	Male	13 (56.5%)	91 (77.8%)	0.033
	Female	10 (43.5%)	26 (22.2%)	
Comorbidity	Yes	18 (78.3%)	21 (18.1%)	<0.001
	No	5 (21.7%)	95 (81.9%)	
Associated organ injury	Yes	3 (13.0%)	37 (31.9%)	0.068
	No	20 (87.0%)	79 (68.1%)	
Hemodynamic instability	Yes	19 (82.6%)	112 (95.7%)	0.004
	No	4 (17.4%)	5 (4.3%)	
Concomitant operation	Yes	5 (21.7%)	32 (28.6%)	0.503
	No	18 (78.3%)	80 (71.4%)	
Reoperation	Yes	3 (13.0%)	15 (12.8%)	0.977
	No	20 (87.0%)	102 (87.2%)	
ASA score	2	2 (22.2%)	15 (25.0%)	0.555
	3	4 (44.4%)	16 (26.7%)	
	4	3 (33.3%)	21 (35.0%)	
	5	0 (0.0%)	8 (13.3%)	
CT laceration grade (trauma group)	3		26 (22.2%)	
	4		64 (54.7%)	
	5		27 (23.1%)	
Indication	Hemorrhage	2 (8.7%)	6 (5.1%)	0.272
	Hemorrhage + hemodynamic instability	5 (21.7%)	9 (7.7%)	
	Hemorrhage + hemodynamic instability + associated organ injury	0 (0.0%)	4 (3.4%)	
	Hemodynamic instability	13 (56.5%)	81 (69.2%)	
	Hemodynamic instability + associated organ injury	2 (8.7%)	15 (12.8%)	
	Associated organ injury	1 (4.3%)	2 (1.7%)	
Clavien-Dindo classification	2	20 (87.0%)	94 (80.3%)	0.519
	4	0 (0.0%)	6 (5.1%)	
	5	3 (13.0%)	17 (14.5%)	

*: Column percentages, **: chi-square test.

[S-487]

The role of PNI and LRINEC scores in the preoperative differentiation of Fournier's gangrene in patients operated on for suspected perianal abscess

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Objective: Fournier's gangrene may be unexpectedly identified during surgery in patients initially diagnosed with perianal abscess. This study aimed to investigate the utility of the prognostic nutritional index (PNI) and the laboratory risk indicator for necrotizing fasciitis (LRINEC) scores, calculated at initial presentation, in the preoperative discrimination of patients subsequently diagnosed intraoperatively with Fournier's gangrene.

Material and Methods: This retrospective observational study included 294 patients who underwent surgical intervention with a preliminary diagnosis of perianal abscess. All patients were initially taken to surgery for suspected perianal abscess, and the definitive diagnosis was established intraoperatively as either perianal abscess or Fournier's gangrene. PNI and LRINEC scores were calculated using laboratory parameters obtained at initial admission. Comparative analyses between groups were performed, and independent predictors of Fournier's gangrene were identified using multivariate logistic regression analysis. The discriminative performance of the models was evaluated by receiver operating characteristic (ROC) curve analysis.

Results: Among the 294 patients, 179 (60.9%) were intraoperatively diagnosed with perianal abscess and 115 (39.1%) with Fournier's gangrene. Patients with Fournier's gangrene exhibited significantly lower PNI values (38.4 vs. 50.9; p<0.001) and significantly higher LRINEC scores (7.0 vs. 2.0; p<0.001). Multivariate logistic regression analysis demonstrated that PNI (OR: 0.93) served as an independent protective factor, whereas the LRINEC score (OR: 1.25) emerged as an independent risk factor for Fournier's gangrene. The overall discriminative capacity of the model was good, with an ROC-AUC of 0.80.

Conclusion: Low PNI and high LRINEC scores calculated at initial presentation are effective and readily available parameters for the preoperative identification of patients who are ultimately diagnosed intraoperatively with Fournier's gangrene among those operated on for suspected perianal abscess. The combined evaluation of PNI and LRINEC scores may facilitate timely optimization of preoperative antibiotic strategies, anticipation of intensive care unit requirements, and more objective intraoperative decision-making regarding early and adequate surgical debridement.

Keywords: Perianal abscess, Fournier's gangrene, prognostic nutritional index, LRINEC

[S-489]

Beyond the bones: The effect of osteoporosis on postoperative outcomes in elderly patients undergoing emergency abdominal surgery

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Objective: Although osteoporosis is generally associated with the risk of fractures, its prognostic significance in non-orthopedic emergency surgeries has not been sufficiently investigated. Osteoporosis screening is a recommended health service for women aged 65 and over in Türkiye. This study aims to evaluate the effect of osteoporosis on morbidity and mortality after emergency abdominal surgery in elderly patients.

Material and Methods: A total of 147 patients aged ≥65 years who underwent emergency abdominal surgery at our hospital between January 2020 and December 2024 were retrospectively reviewed. Osteoporosis diagnosis was determined using ICD codes, previous DEXA results, or a history of low-trauma fractures. Patients were divided into two groups: Osteoporotic (n=43) and non-osteoporotic (n=104). Primary endpoints were defined as 30-day mortality, intensive care unit (ICU) admission, and hospital stay duration.

Results: The following results were observed in osteoporotic patients:

- Need for intensive care: 60.5% (26/43) vs. 36.5% (38/104), p=0.013
- Non-surgical complications: 39.5% vs. 21.2%, p=0.038
- Length of hospital stay: 8.2±2.8 days vs. 6.3±2.4 days, p=0.024
- 30-day mortality: 13.9% vs. 5.8%, p=0.041

According to multivariate logistic regression analysis, osteoporosis was an independent risk factor for intensive care requirement (OR=2.2; 95% CI: 1.2-4.1; p=0.011) and prolonged hospital stay (OR=1.9; 95% CI: 1.1-3.4; p=0.019). Although it was associated with non-surgical complications and 30-day mortality, these associations were not statistically significant (p=0.073 and p=0.064).

Conclusion: In elderly patients undergoing emergency abdominal surgery, osteoporosis is an important parameter reflecting not only skeletal health but also general physiological reserve. In this study, it was demonstrated that the need for intensive care and prolonged hospital stay were significantly increased in osteoporotic patients. Non-surgical complications and 30-day mortality rates were also higher in osteoporotic patients; however, these associations did not reach statistical significance. Integrating the recommended osteoporosis screening programs in Türkiye into surgical patient management and risk classification has the potential to improve patient outcomes.

Keywords: Osteoporosis, emergency abdominal surgery, elderly patients, postoperative morbidity and mortality, intensive care requirement

Table 1. Comparison of postoperative outcomes in osteoporotic and non-osteoporotic patients

Parameter	Osteoporotic group (n=43)	Non-osteoporotic group (n=104)	p-value
Need for intensive care (%)	26 (60.5%)	38 (36.5%)	0.013
Non-surgical complications (%)	17 (39.5%)	22 (21.2%)	0.038
Hospital stay (days, mean ± SD)	8.2±2.8	6.3±2.4	0.024
30-day mortality (%)	6 (13.9%)	6 (5.8%)	0.041

Table 2. Effect of osteoporosis on postoperative outcomes: multivariate analysis

Dependent variable	Independent variable	Odds ratio (OR)	95% confidence interval (CI)	p-value
Need for intensive care	Osteoporosis	2.2	1.2-4.1	0.011
Non-surgical complications	Osteoporosis	1.6	0.9-2.9	0.073
Prolonged hospitalization	Osteoporosis	1.9	1.1-3.4	0.019
30-day mortality	Osteoporosis	2.1	0.9-4.2	0.064

[S-490]

The role of clinical and laboratory parameters in predicting postoperative complications in patients with peptic ulcer perforation

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Objective: Peptic ulcer perforation is a life-threatening condition requiring emergency surgery and is associated with high morbidity. Postoperative complications adversely affect outcomes and prolong hospital stay. Identifying preoperative clinical and laboratory markers that may predict postoperative complications is therefore essential. This study aimed to evaluate preoperative clinical and laboratory parameters associated with postoperative complications in patients undergoing surgery for peptic ulcer perforation.

Material and Methods: This retrospective observational study included patients who underwent surgery for peptic ulcer perforation at University of Health Sciences Türkiye, Gülhane Training and Research Hospital between January 2023 and January 2026. Demographic characteristics, comorbidities, preoperative findings, surgical techniques, and postoperative complications were recorded. Patients were grouped according to the presence of postoperative complications. Laboratory parameters and the HALP score were compared between groups. Continuous variables were analyzed using the Mann-Whitney U test and categorical variables using the chi-square test. The predictive performance of albumin levels and the HALP score was evaluated using receiver operating characteristic (ROC) analysis. Statistical significance was defined as $p<0.05$.

Results: A total of 72 patients were included. The median age was 48.5 years (range, 19-92), and 76.4% were male. At least one comorbidity was present in 50% of patients. Preoperative dyspeptic symptoms were reported in 75%, and 29.2% were regular proton pump inhibitor users. No in-hospital mortality occurred. The median hospital stay was 9 days (range, 5-26). Most perforations were gastric (86.1%), and modified Graham repair was the most frequently performed procedure (90.3%). Postoperative complications occurred in 21 patients (29.2%); 16.7% were minor (Clavien-Dindo grades 1-2) and 12.5% were major (grade ≥3). The most common complications were surgical site infection (11.1%), pleural effusion (6.9%), intra-abdominal abscess (5.6%), and anastomotic leakage (5.6%) (Table 1). Patients with complications were older (59 vs. 39 years, $p=0.019$), had higher comorbidity rates (44.4% vs. 13.9%, $p=0.004$), and longer hospital stays (12 vs. 8 days, $p=0.001$). Urea, LDH, CRP, and RDW-SD levels were significantly higher, while albumin and lymphocyte levels were lower in the complication group (all $p<0.05$). The HALP score was also lower in patients with complications (0.10 vs. 0.22, $p=0.021$) (Table 2). ROC analysis showed moderate predictive ability for albumin (AUC =0.692) and the HALP score (AUC =0.674) (Table 3, Figure 1).

Conclusion: In patients undergoing surgery for peptic ulcer perforation, advanced age and comorbidity are significantly associated with postoperative complications. Elevated urea, CRP, LDH, and RDW-SD levels, along with decreased albumin, lymphocyte count, and HALP score, may help predict postoperative complications in the preoperative period. These parameters may support risk stratification and individualized patient management.

Keywords: Peptic ulcer perforation, postoperative complications, HALP score

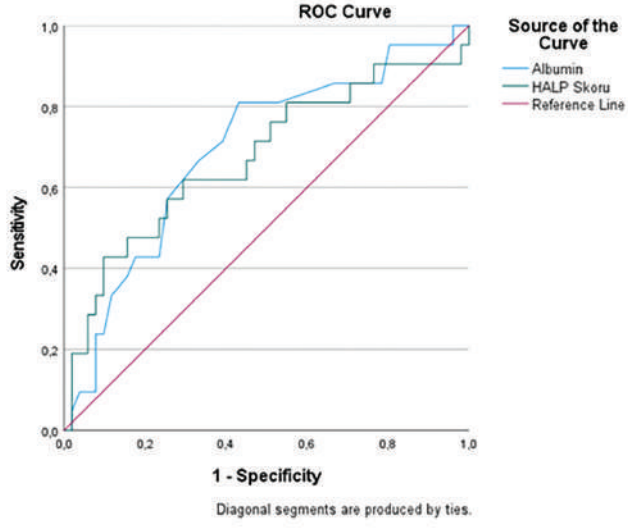


Figure 1. Receiver operating characteristic (ROC) curves of albumin level and HALP score for predicting postoperative complications in patients with peptic ulcer perforation.

Table 1. Demographic, clinical, surgical, and laboratory characteristics of patients operated on for peptic ulcer perforation

Parameters	Values
Age (years)	48.5 (19-92)
Sex	
Female	17 (23.6%)
Male	55 (76.4%)
Presence of comorbidity	
Absent	36 (50.0%)
Present	36 (50.0%)
Preoperative dyspeptic symptoms	
Absent	18 (25.0%)
Present	54 (75.0%)
Preoperative proton pump inhibitor use	
Absent	51 (70.8%)
Present	21 (29.2%)
In-hospital mortality	
No	72 (100%)
Length of hospital stay (days)	9 (5-26)
Perforation site	
Stomach	62 (86.1%)
Duodenum	9 (12.5%)
Stomach and duodenum	1 (1.4%)
Surgical procedure	
Modified Graham repair	65 (90.3%)
Graham repair	5 (6.9%)
Distal gastrectomy	1 (1.4%)
Laparoscopic repair	1 (1.4%)
Postoperative complications	
Absent	51 (70.8%)
Present	21 (29.2%)
Minor (Clavien-Dindo grades 1-2)	12 (16.7%)
Major (Clavien-Dindo grade ≥3)	9 (12.5%)
Type of complication	
None	51 (70.8%)
Surgical site infection	8 (11.1%)
Pleural effusion	5 (6.9%)
Intra-abdominal abscess	4 (5.6%)
Anastomotic leakage	4 (5.6%)
Urea (mg/dL)	37 (15-173)
Creatinine (mg/dL)	0.95 (0.46-3.49)
Albumin (g/dL)	3.4 (1.1-4.7)
LDH (U/L)	234.5 (135-598)
C-reactive protein (mg/L)	53 (1-395)
White blood cell count (×109/L)	11.6 (3.1-26.2)
Hemoglobin (g/dL)	14.65 (6.9-19.7)
Hematocrit (%)	43.5 (20.7-59.3)
Platelet count (×10^9/L)	278.5 (87-837)
Neutrophil count (×10^9/L)	9.45 (2.4-23.3)
Lymphocyte count (×10^9/L)	0.92 (0.2-9.1)
Monocyte count (×10^9/L)	0.6 (0-1.9)
Basophil count (×10^9/L)	0 (0-0.2)
RDW-SD (fL)	44 (38-76.8)
HALP score	0.19 (0.02-2.78)

Table 2. Comparison of demographic, clinical, and laboratory parameters between patients with and without postoperative complications

Parameters	No complications	Complications	p-value
Sex			
Female	11 (64.7%)	6 (35.3%)	*0.552
Male	40 (72.7%)	15 (27.3%)	
Presence of comorbidity			
Absent	31 (86.1%)	5 (13.9%)	*0.004
Present	20 (55.6%)	16 (44.4%)	
Preoperative dyspeptic symptoms			
Absent	13 (72.2%)	5 (27.8%)	*0.881
Present	38 (70.4%)	16 (29.6%)	
Preoperative PPI use			
Absent	37 (72.5%)	14 (27.5%)	*0.681
Present	14 (66.7%)	7 (33.3%)	
Age (years)	39 (19-92)	59 (22-84)	**0.019
Length of hospital stay (days)	8 (5-14)	12 (6-26)	**0.001
Urea (mg/dL)	34 (15-173)	49 (26-132)	**0.008
Creatinine (mg/dL)	0.96 (0.46-3.49)	0.95 (0.61-3.01)	**0.515
Albumin (g/dL)	3.5 (1.1-4.7)	3.1 (1.6-4.3)	**0.011
LDH (U/L)	225 (135-465)	264 (149-598)	**0.024
C-reactive protein (mg/L)	16 (1-352)	125 (2-395)	**0.004
White blood cell count ($\times 10^9$/L)	11.7 (3.69-25.3)	11.27 (3.1-26.2)	**0.406
Hemoglobin (g/dL)	14.8 (6.9-18.6)	14.2 (7.9-19.7)	**0.936
Hematocrit (%)	44 (20.7-56.0)	42.8 (23.8-59.3)	**0.647
Platelet count ($\times 10^9$/L)	289 (87-608)	267 (110-837)	**0.887
Neutrophil count ($\times 10^9$/L)	10.0 (2.65-23.3)	8.9 (2.4-22.5)	**0.642
Lymphocyte count ($\times 10^9$/L)	1.05 (0.2-9.1)	0.70 (0.3-8.8)	**0.036
Monocyte count ($\times 10^9$/L)	0.63 (0-1.9)	0.60 (0.21-1.7)	**0.651
Basophil count ($\times 10^9$/L)	0 (0-0.2)	0 (0-0.11)	**0.941
RDW-SD (fL)	43.3 (38.1-51.6)	45.0 (38-76.8)	**0.044
HALP score	0.22 (0.02-2.23)	0.10 (0.02-2.78)	**0.021

*: Chi-square test, **: Mann-Whitney U test.

Table 3. ROC analysis of albumin level and HALP score for predicting postoperative complications in patients with peptic ulcer perforation

Risk factor	AUC (95% CI)	Cut-off value	p-value	Sensitivity (%)	Specificity (%)
Albumin (g/dL)	0.692 (0.556-0.828)	3.25	0.011	66.7	66.7
HALP score	0.674 (0.526-0.822)	0.16	0.021	61.9	62.7

[S-491]

Predictive factors for the success of conservative treatment in uncomplicated acute appendicitis: A single-center prospective study

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Objective: Conservative antibiotic therapy is increasingly used as an alternative to surgery in selected patients with uncomplicated acute appendicitis. However, predictors of early surgical conversion remain unclear. This study aimed to identify clinical, laboratory, and radiological factors associated with the need for surgery during conservative management,

Material and Methods: In this single-center prospective non-randomized study conducted in 2024, patients with clinically and radiologically confirmed uncomplicated acute appendicitis were included. Exclusion criteria were perforation, presence of appendicolith, and refusal of antibiotic therapy. All patients received intravenous ceftriaxone plus metronidazole at admission. Septic or clinically unstable patients underwent immediate appendectomy. The remaining patients were reassessed after 48 hours with ultrasonography and laboratory tests. If clinical and laboratory improvement was observed, patients were discharged with oral amoxicillin–clavulanate therapy. The primary endpoint was appendectomy during index admission. The secondary endpoint was recurrence within one year.

Results: A total of 141 patients (median age 28 years, range 18-67) were included. Thirteen patients (9.2%) required surgery during index admission. Among the 128 discharged patients, 12 (9.3%) experienced recurrence within one year, resulting in an overall surgery rate of 17.7% (n=25). Comorbidity was present in 15.4% of surgical patients versus 8.6% of non-surgical patients (p=0.342). Mean symptom duration, white blood cell count, Alvarado score, and appendix diameter did not differ significantly between groups. However, median C-reactive protein (CRP) levels were significantly higher in patients requiring surgery (51.0 vs. 12.2 mg/L; p=0.002). ROC analysis demonstrated an AUC of 0.764 for CRP. A cut-off value of 14.9 mg/L yielded 92.3% sensitivity and 54.7% specificity for predicting surgical conversion.

Conclusion: Elevated CRP levels were associated with an increased likelihood of surgery during conservative management of uncomplicated acute appendicitis. Nevertheless, treatment decisions should integrate clinical findings, laboratory parameters, and imaging results. Conservative therapy may represent a safe and effective alternative in appropriately selected patients. Multicenter studies are warranted to validate these findings.

Keywords: Appendicitis, conservative treatment, predictive factors

[S-492]

Is the obesity paradox real in emergency surgery? The role of BMI in predicting morbidity and mortality in cases of bowel obstruction and perforation

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Objective: The obesity paradox suggests that in some clinical situations, a high body mass index (BMI) is associated with better survival. The aim of this study is to evaluate the effect of BMI on mortality and morbidity in patients operated on for acute intestinal obstruction and perforation, and to analyze it together with systemic inflammation (SIRS), albumin levels, and sarcopenia.

Material and Methods: Eight hundred forty-two patients who underwent emergency laparotomy between 2013 and 2023 were retrospectively evaluated. Patients were divided into three groups according to BMI: normal (18.5-24.9), overweight (25-29.9), and obese (≥30 kg/m²). The primary endpoint was 30-day mortality. Secondary endpoints were resection requirement, anastomotic leakage, intensive care unit requirement, and complication rates. Sarcopenia was assessed by measuring muscle area at the L3 level on preoperative CT. Independent predictors were analyzed using multivariate logistic regression.

Results: Thirty-two percent of patients were normal BMI, 41% were overweight, and 27% were obese. The 30-day mortality rate was 18% in the normal BMI group, 12% in the overweight group, and 10% in the obese group (p=0.003). Obese patients had a lower rate of SIRS (28% vs. 41%, p=0.01) and higher albumin levels (p<0.001). Sarcopenia was detected in 46% of the normal BMI group and 19% of the obese group (p<0.001). In multivariate analysis, low BMI (OR =2.1), sarcopenia (OR =2.8), and hypoalbuminemia (OR =3.4) were identified as independent risk factors for mortality. BMI ≥30 was found to be a protective factor against mortality (OR =0.58).

Conclusion: The obesity paradox in emergency surgery is supported. High BMI, especially when considered in conjunction with sarcopenia and hypoalbuminemia, may have a protective effect on mortality. The findings suggest that BMI should not be considered alone in emergency surgical risk assessment, but rather in conjunction with muscle mass and nutritional status.

Keywords: Emergency surgery, intestinal obstruction, obesity paradox, sarcopenia

[S-493]

Challenges in laparoscopic appendectomy

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Objective: The use of laparoscopic appendectomy (LA) has increased over the last decade compared with conventional appendectomy (CA), as it is considered a feasible and safe technique for both uncomplicated and complicated cases. In many studies, LA has become the preferred surgical approach due to improved postoperative outcomes when compared with CA. Moreover, several publications recommend LA as the gold standard technique. Although the global use of LA continues to rise, it has not yet been fully adopted into routine practice worldwide. Our hospital is a newly established tertiary university hospital with the highest patient volume in the region. In this study, we aimed to investigate the limitations preventing the widespread use of LA.

Material and Methods: All appendectomies performed during the first two years following the opening of our hospital were retrospectively evaluated. Patients were divided into two groups: those who underwent LA (Group I) and those who underwent CA (Group II). The groups were compared in terms of age, sex, ASA score, comorbidities, BMI, previous surgical history, surgeon's years of surgical experience, performance of advanced laparoscopic procedures by the surgeon, time of hospital admission, availability of laparoscopic equipment at the time of surgery, senior resident training year, and operative sequence number. Statistical analyses were performed using IBM SPSS version 25 software. A p-value <0.05 was considered statistically significant.

Results: A total of 201 patients were operated on; 62.2% underwent LA and 37.8% underwent CA. No significant differences were found between groups regarding age, gender, BMI, symptom duration, laboratory parameters (WBC, CRP), or the presence of complicated appendicitis ($p>0.05$). However, the LA rate was significantly lower in patients with ASA scores ≥3 ($p=0.015$).While operation time (within vs. outside working hours) showed no significant difference, LA was preferred in 94.4% of cases when laparoscopic equipment was available in the operating room. Multivariate analysis identified equipment availability (OR =46.6, $p<0.001$) and the surgeon's advanced laparoscopic experience (OR =80.6, $p=0.001$) as independent predictors for choosing LA. Furthermore, the feasibility of LA increased significantly after the 97th case ($p<0.05$).

Conclusion: This study demonstrates that the primary barriers to LA are systemic and organizational rather than patient-related. Uninterrupted 24/7 access to laparoscopic infrastructure and surgeon experience are the main determinants. LA rates can be increased through organizational improvements and targeted surgical training.

Keywords: Laparoscopy, experience, challenges

[S-497]

Clinical and functional outcomes of repair in acute anal sphincter injuries: A single-center experience

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Objective: Acute anal sphincter injuries pose a significant clinical problem due to the risk of fecal incontinence and reduced quality of life. Data on the safety and functional efficacy of anal sphincter repair in the acute period remain limited. This study evaluated clinical, surgical, and functional outcomes in patients undergoing anal sphincter repair under emergency conditions.

Material and Methods: Sixteen patients who underwent anal sphincter repair under emergency conditions within the last five years were retrospectively reviewed. Recorded variables included age, gender, body mass index (BMI), smoking status, comorbidities, injury etiology, obstetric history, preoperative symptoms, surgical technique, peri- and postoperative data, and functional Wexner scores at 6-12 months.

Results: Thirteen patients (81.3%) were female and 3 (18.7%) were male. Median age was 30.5 years (range: 21-64). Median BMI was 28.0 kg/m² (range: 27-34). Smoking was present in 6 patients (37.5%). Diabetes mellitus and hypertension occurred in 2 patients (12.5%), COPD in 1 (6.3%). No patients had congestive heart failure, chronic renal failure, neurological disease, or pelvic radiotherapy history. Etiology was obstetric in 13 (81.3%) and non-obstetric trauma in 3 (18.7%; two motor vehicle accidents, one assault). By OASIS classification, 10 injuries (62.5%) were grade 3A, 2 (12.5%) 3B, 2 (12.5%) 3C, and 2 (12.5%) grade 4. In females, median total births were 1.5 (0-4), vaginal births 1, cesarean sections 1 (0-2). Operative vaginal delivery occurred in 4 (25.0%). Preoperative symptoms included gas incontinence in 5 (31.3%), liquid incontinence in 3 (18.8%), solid incontinence in 1 (6.3%), urgent defecation in 1 (6.3%), pad use in 1 (6.3%), and obstructive defecation in 2 (12.5%). No dyspareunia was reported. Surgical techniques comprised overlapping repair in 13 (81.3%), end-to-end repair in 3 (18.7%), internal anal sphincter repair in 2 (12.5%), and levatoroplasty in 1 (6.3%). No protective stoma was created. Suture material was type 1 in 15 (93.8%) and type 4 in 1 (6.3%); thickness was 3/0 in 13 (81.3%), 2/0 in 2 (12.5%), and 1/0 in 1 (6.3%). Surgery occurred on the injury day. Median hospital stay was 3 days (range:1-7), median time to first defecation 3 days (IQR 2-3). Postoperative complications included surgical site infection in 1 (6.3%) and hematoma in 2 (12.5%). No wound dehiscence or reoperation occurred. At 6-and 12-month follow-up, continence was achieved in all patients with no pad use. Median satisfaction score was 5 (range 4-5). No significant association was found between surgical technique, OASIS grade, or comorbidities and complications or functional outcomes (Wexner scores).

Conclusion: Emergency anal sphincter repair is a reliable procedure with low complication rates and high functional success. Early surgical intervention achieves satisfactory continence without requiring protective stoma.

Keywords: Anal sphincter injury, anal sphincter repair, fecal incontinence

[S-498]

The role of preoperative hematological indices and CRP in predicting pathological severity in acute appendicitis

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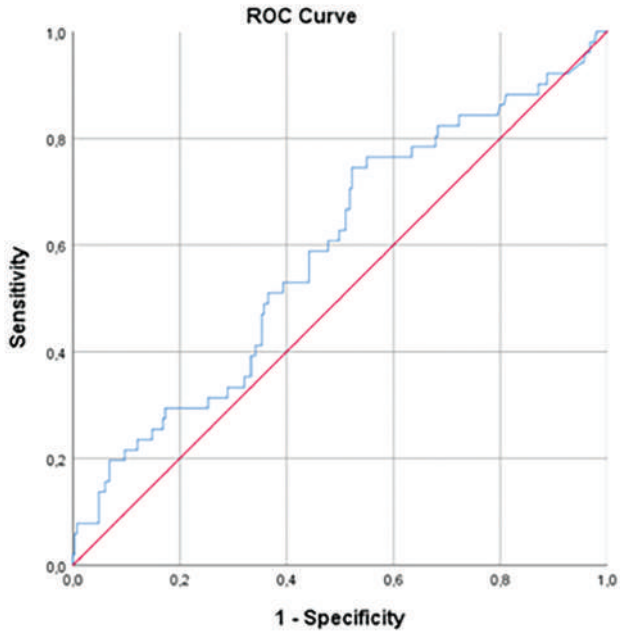
Objective: Acute appendicitis is one of the most common causes of emergency surgery. The preoperative prediction of complicated appendicitis is crucial for patient management and surgical decision-making. This study aimed to investigate the predictive value of readily available preoperative hemogram parameters, inflammatory indices, and C-reactive protein (CRP) levels for pathological severity in acute appendicitis.

Material and Methods: Between 2020 and 2025, 300 patients who underwent surgery for acute appendicitis at University of Health Sciences Türkiye, Fatih Sultan Mehmet Training and Research Hospital were retrospectively analyzed using random sampling. Patients were divided into two groups according to pathological findings: non-complicated appendicitis (n=249) and complicated appendicitis (n=51). Preoperative leukocyte, neutrophil, lymphocyte, monocyte, platelet, hemoglobin, CRP values, as well as NLR, PLR, MLR, SII, and SIRI indices were compared. Appropriate parametric and non-parametric tests were used for statistical analysis. Multivariate logistic regression analysis was performed for parameters found significant in univariate analysis. ROC analysis was conducted for CRP.

Results: No significant differences were observed between the groups in terms of age, sex, ASA score, or type of surgery (p>0.05). Leukocyte, neutrophil, and monocyte counts, as well as CRP, NLR, MLR, SII, and SIRI values were significantly higher in the complicated appendicitis group compared to the non-complicated group (p<0.05). In multivariate logistic regression analysis, only CRP was identified as an independent predictor of complicated appendicitis (p=0.025) (Table 1). ROC analysis for CRP revealed an AUC of 0.588 (p=0.047). A cut-off value of 8.1 mg/L demonstrated a sensitivity of 74.5% and specificity of 45.8% (Figure 1).

Conclusion: Preoperative CRP and certain inflammatory hematological indices may assist in predicting pathological severity in acute appendicitis. CRP, in particular, appears to be an independent marker for complicated appendicitis. However, combining these parameters with clinical and radiological findings may improve diagnostic accuracy.

Keywords: Acute appendicitis, C-reactive protein, inflammatory indices



AUCs	P value	95% CI	Cut-off	Sensitivity (%)	Specificity (%)
0,588	0,047	0,502-0,675	8,1	74,5	45,8

AUC: Area under the curve

Figure 1. ROC curve of CRP in predicting complicated appendicitis.

Table 1. Comparison of demographic, clinical, and laboratory findings and biomarkers between the groups

Variable	Non-complicated appendicitis (n=249)	Complicated appendicitis (n=51)	p-value†	p-value††
Age (years), mean ± SD	37.2±14.8	40.6±16.7	0.201[1]	
Sex, n (%)			0.670[2]	
Female	85 (34.1)	19 (37.3)		
Male	164 (65.9)	32 (62.7)		
ASA score			0.861[3]	
1	128 (51.6)	25 (49.0)		
2	91 (36.7)	19 (37.3)		
3	27 (10.9)	7 (13.7)		
4	2 (0.8)	0		
Type of surgery, n (%)			0.698[3]	
LA	238 (95.6)	50 (98.0)		
OA	11 (4.4)	1 (2.0)		
Leukocyte count (10^3/μL), mean ± SD	12.9±4.4	14.5±5.1	0.022[1]*	0.442
Neutrophil count (10^3/μL), mean ± SD	10.0±4.5	11.8±4.9	0.010[1]*	0.285
Lymphocyte count (10^3/μL), mean ± SD	2.0±1.1	1.7±0.7	0.057[1]	
Monocyte count (10^3/μL), mean ± SD	0.7±0.7	0.8±0.8	0.034[1]*	0.285
Platelet count (10^3/μL), mean ± SD	247.0±63.2	244.3±65.3	0.804[1]	
Hemoglobin (g/dL), mean ± SD	14.0±1.7	14.0±1.7	0.859[1]	
CRP (mg/L), mean ± SD	30.2±49.5	53.1±81.8	0.047[1]*	0.025*
NLR, mean ± SD	6.5±5.6	8.3±5.2	0.003[1]*	0.503
PLR, mean ± SD	151.3±104.4	167.3±86.6	0.061[1]	
MLR, mean ± SD	0.5±1.3	0.5±0.3	0.001[1]*	0.803
SII, mean ± SD	1590.1±1387.5	1980.0±1267.8	0.003[1]*	0.491
SIRI, mean ± SD	5.5±11.3	6.9±5.1	0.001[1]*	0.596

[1]: Mann-Whitney U test, [2]: Pearson chi-square test, [3]: Fisher's exact test †p-values from univariate analysis between groups, ††multivariate binary logistic regression analysis of variables with significant univariate p-values
LA: Laparoscopic appendectomy, OA: Open appendectomy, *p<0.05 considered statistically significant.

[S-499]

Development and prognostic performance of an admission-only mortality prediction model in Fournier's gangrene: The Kocaeli Fournier gangrene severity index (KFGSI)

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Objective: Fournier's gangrene (FG) remains a highly lethal necrotizing soft-tissue infection. Early identification of high-risk patients at presentation is essential for triage and timely management. We evaluated established prognostic indices [FG severity index (FGSI), Uludağ FGSI (UFGSI)] and developed an admission-only mortality prediction score, the Kocaeli Fournier gangrene severity index (KFGSI), using variables available at initial assessment.

Material and Methods: We retrospectively reviewed FG patients treated between January 2017 and January 2022. After excluding transferred cases and incomplete records, 69 patients constituted the study cohort. Admission demographic, clinical, laboratory, and radiologic data were collected. Disease severity was assessed using the FGSI, UFGSI, and ASA score. Predictors of in-hospital mortality were examined with univariate analyses and multivariable logistic regression restricted to admission-time variables. Discrimination was evaluated using ROC curve analysis; optimal cut-offs were defined by the Youden index. The admission-only KFGSI was constructed from admission variables to avoid time-dependent bias.

Results: Mean age was 58.6±13.5 years; 75.4% were male. In-hospital mortality was 40.6% (28/69). Admission parameters significantly associated with mortality included pulse rate, respiratory rate, body mass index (BMI), serum lactate, radiological extent grade, body temperature, and FGSI (all $p<0.05$). In ROC analysis, the strongest individual predictors were pulse rate (AUC 0.935, 95% CI 0.848-0.980) and radiological extent grade (AUC 0.898, 95% CI 0.797-0.966). UFGSI showed good discrimination (AUC 0.858, 95% CI 0.748-0.967); the Youden-derived cut-off ≥10 yielded sensitivity 96.4% and specificity 73.2%.The admission-only KFGSI, composed of five admission-time parameters (pulse rate, respiratory rate, BMI, serum lactate, radiological extent grade), demonstrated higher apparent discrimination than FGSI in this derivation cohort (AUC 0.943, 95% CI 0.860-0.985). A threshold KFGSI ≥4 yielded sensitivity 92.9% and specificity 85.4%. ICU stay duration was not included due to time dependency. In multivariable analysis, all five KFGSI components remained independently associated with mortality.

Conclusion: An admission-only composite score (KFGSI) using readily available physiological, metabolic, and radiologic parameters demonstrated excellent discrimination for in-hospital mortality in FG and showed higher apparent performance than FGSI/UFGSI in this single-center derivation cohort. External validation in larger multicenter datasets is required before routine clinical implementation.

Keywords: Fournier's gangrene, mortality, prognostic score, risk stratification

Table 1. Baseline demographic and clinical characteristics of the study cohort (n=69)

	Value
Age, years, mean ± SD (range)	58.6±13.5 (36-89)
Sex, male, n (%)	52 (75.4)
Sex, female, n (%)	17 (24.6)
ASA II, n (%)	20 (29.0)
ASA III, n (%)	43 (62.3)
ASA IV, n (%)	6 (8.7)
Length of hospital stay, days, mean ± SD (range)	24.4±21.4 (1-130)
Diabetes mellitus, n (%)	38 (55.1)
Hypertension, n (%)	20 (29.0)
Malignancy, n (%)	11 (15.9)
Chronic kidney disease, n (%)	10 (14.5)
Steroid use, n (%)	17 (24.6)
Bacterial infection, n (%)	29 (42.0)
Fungal infection, n (%)	3 (4.3)
Unknown etiology, n (%)	37 (53.6)
E. coli, n (%)	11 (15.9)
A. baumannii, n (%)	9 (13.0)
Radiological grade 1, n (%)	25 (36.2)
Radiological grade 2, n (%)	30 (43.5)
Radiological grade 3, n (%)	14 (20.3)
Scrotal extension, n (%)	35 (50.7)
Stoma required, n (%)	54 (78.3)
Debridement, mean ± SD (range)	3.8±3.4 (1-18)
ICU admission, n (%)	45 (65.2)
In-hospital mortality, n (%)	28 (40.6)

SD: Standard deviation, ICU: Intensive care unit.

Table 2. Univariate comparison of survivors and non-survivors

Parameter	Survivors (n=41)	Non-survivors (n=28)	p-value
Body temperature (°C)	37.3 (37.0-37.8)	38.2 (37.6-39.1)	0.021
Pulse rate (bpm)	100 (92-110)	122 (114-134)	<0.001
Respiratory rate (/min)	20 (18-22)	25 (22-28)	0.003
Body mass index (kg/m²)	27.1 (25.4-29.2)	30.0 (27.8-32.6)	0.007
FGSI score	6 (5-7)	9 (8-11)	<0.001
Serum lactate (mmol/L)	2.5 (2.0-3.1)	4.0 (3.3-4.9)	0.015
Radiological extent grade	2 (1-2)	3 (2-3)	0.001
ICU stay duration (days)†	3 (2-4)	10 (8-13)	0.003

ICU: Intensive care unit, FGSI: Fournier's gangrene severity index.

Table 3. Diagnostic performance of significant admission variables for in-hospital mortality (ROC analysis)

Parameter	AUC	95% CI	Sensitivity (%)	Specificity (%)	p-value
Pulse rate	0.935	0.848-0.980	82.1	97.6	<0.001
Respiratory rate	0.812	0.703-0.905	75.0	78.0	0.003
Body mass index	0.789	0.672-0.886	71.4	76.2	0.007
Serum lactate level	0.821	0.713-0.912	78.6	80.5	0.015
Radiological extent grade	0.898	0.797-0.966	89.3	82.9	0.001
Body temperature	0.742	0.621-0.852	67.9	71.4	0.021

CI: Confidence interval.

Table 4. Comparative prognostic performance of FGSI, UFGSI, and admission-only KFGSI for predicting in-hospital mortality

Severity index	AUC	95% CI	Cut-off	Sensitivity (%)	Specificity (%)
FGSI	0.860	0.755-0.932	≥7	82.1	78.1
UFGSI (Youden)	0.858	0.748-0.967	≥10	96.4	73.2
UFGSI (predefined*)	0.858	0.748-0.967	≥9	100.0	56.1
Admission-only KFGSI	0.943	0.860-0.985	≥4	92.9	85.4

CI: Confidence interval, FGSI: Fournier's gangrene severity index, UFGSI: Uludağ Fournier's gangrene severity index.

Table 5. Multivariable logistic regression analysis of admission-time predictors of in-hospital mortality (n=69)

Predictor (admission variables)	Adjusted OR	95% CI	p-value
Pulse rate (per 1 bpm increase)	1.08	1.03-1.13	<0.001
Respiratory rate (per 1/min increase)	1.29	1.10-1.53	0.002
Body mass index (per 1 kg/m² increase)	1.19	1.05-1.36	0.007
Serum lactate (per 1 mmol/L increase)	2.35	1.50-4.00	<0.001
Radiological extent grade (per 1 grade increase)	2.05	1.12-3.98	0.021

CI: Confidence interval, OR: Odds ratio.

[S-500]

Our single-center experience with abdominal firearm injuries

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Objective: Gunshot wounds are a significant cause of trauma due to their high morbidity and mortality rates. Abdominal gunshot wounds often require emergency surgery and are associated with a high mortality rate due to the frequent involvement of multiple organs and blood vessels. It is of great importance to identify the factors that determine prognosis in this patient group in order to improve surgical decision-making processes and optimise patient management. This study aimed to identify risk factors associated with mortality by evaluating the demographic, clinical and surgical characteristics of patients who underwent laparotomy due to abdominal firearm injuries at our clinic over the last 10 years.

Material and Methods: This retrospective study included a total of 147 patients who presented to the emergency department with gunshot wounds to the abdominal region over the past 10 years and underwent laparotomy. The patients' demographic data, bullet entry and exit characteristics, injury locations, intraoperative findings, injured organs, presence of vascular injury, transfusion requirements, intensive care and hospital stay durations were recorded. Patients with and without mortality were compared, and factors associated with mortality were analyzed. In the statistical evaluation, after univariate analyses, multivariate logistic regression analysis was used to determine independent risk factors for mortality. Statistical significance was set at $p<0.05$.

Results: Of the patients included in the study, 96% were male, with an average age of 35.56±10.75 years. Single bullet entry wounds were present in 69.4% of patients, multiple bullet entry wounds in 30.6%, and exit wounds in 20.4%. The organs most commonly injured were the colon (29%), the small intestine (27%), and the liver (15%). Single organ injury was present in 51% of patients and multiple organ injury in 49%. The vascular injury rate was 26.5%. Blood transfusions were administered to 77.6% of patients during the perioperative period. A total of 25 patients (17%) died. Patients who died were significantly more likely to have multiple organ injury, vascular injury, a single entry wound, and a high requirement for red blood cell suspension transfusion ($p<0.05$). Multivariate analysis identified multiple organ injury, vascular injury, receiving more than three red blood cell transfusions and age as independent risk factors for mortality.

Conclusion: The most important factors determining mortality in abdominal firearm injuries are the presence of multiple organ and vascular injuries and high transfusion requirements. In these patients, early and appropriate surgical intervention and effective hemodynamic management play a critical role in reducing mortality.

Keywords: Abdominal trauma, firearm injury, laparotomy, mortality, vascular injury

Table 1. Comparison of clinical and transfusion characteristics between patients with and without mortality

	Patients with mortality (n=25)	Patients without mortality (n=122)	p
Multiple organ injury	22 (88%)	52 (42.6%)	**<0.0001***
Vascular injury	19 (76%)	21 (17.2%)	**<0.0001***
Red blood cell transfusion >3 units	19 (76%)	15 (12.3%)	**<0.0001***
Multiple entry sites	3 (12%)	43 (35.2%)	**0.03***

Data are presented as n (%) *: Fisher's exact test.

Table 2. Multivariable logistic regression analysis of factors associated with mortality

	Multivariable logistic regression analysis	
	OR (95% CI)	p
Presence of multiple organ injury	14.29 (2.33-87.83)	**0.004**
Presence of vascular injury	7.14 (1.47-34.62)	**0.015**
High red blood cell transfusion requirement (>3 units)	5.55 (1.41-21.89)	**0.014**
Age (per year increase)	1.08 (1.02-1.15)	**0.014**
Presence of multiple entry sites	0.35 (0.08-1.46)	0.148

OR: Odds ratio, CI: Confidence interval.

[S-501]

The role of CT and laboratory parameters in predicting the clinical course of incarcerated hernias

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Objective: Incarcerated hernias may lead to significant morbidity and mortality. Resection requirement and postoperative complications determine clinical burden, yet the predictive value of CT findings and laboratory parameters at diagnosis remains unclear. This study evaluated the association between CT measurements, laboratory parameters, resection requirement, and postoperative complications in incarcerated hernias.

Material and Methods: A total of 351 patients who underwent surgery for incarcerated hernia were retrospectively reviewed. Laboratory parameters and CT measurements obtained at emergency admission were analyzed. Defect diameter, incarcerated bowel wall thickness, and segment length were measured on CT and compared with laboratory parameters regarding resection requirement and postoperative complication development.

Results: Mean age was 58.9±15.1 years; 170 patients (48.4%) were male and 181 (51.6%) were female. Mean body mass index was 28.1±4.8 kg/m². Hernia types were umbilical 38.7%, inguinal 45.6%, incisional 13.7%, and femoral 2.0%. Symptom duration was <24 h in 27.4%, 24-48 h in 40.2%, and >48 h in 32.5%, with no association with resection or postoperative complications (p>0.05). Mean CT measurements showed incarcerated segment diameter 37.4±10.0 mm, wall thickness 6.4±1.6 mm, and segment length 66.0±28.8 mm. Wall thickness and segment length were significantly higher in resected patients (p=0.006 and p=0.018), while segment diameter was similar (p>0.05). Resection was performed in 40 patients (11.4%); resected patients were older (p<0.01) and had lower glomerular filtration rates (p<0.001). Hernia type was associated with resection (p<0.001), with the highest rate in femoral hernias. CRP was higher in the resection group without statistical significance (p=0.10), and RDW-SD values were similar (p>0.05). Postoperative complications occurred in 20 patients (5.7%), most commonly wound infection. Patients with complications had lower glomerular filtration rates (p<0.001) and higher body mass index (p=0.006); CRP and RDW-SD were significantly higher at diagnosis (p=0.011 and p=0.027). ROC analysis showed an AUC of 0.69 for CRP (cut-off 90 mg/L, sensitivity 50%, specificity 90.9%) and an AUC of 0.65 for RDW-SD (cut-off 13.4, sensitivity 89.5%, specificity 35.6%).

Conclusion: Resection requirement in incarcerated hernias is mainly associated with CT findings and patient characteristics, whereas postoperative complications correlate more strongly with CRP and RDW values at diagnosis. Combined evaluation of CT measurements and laboratory parameters may improve early prediction of clinical course.

Keywords: Incarcerated hernia, C-reactive protein, RDW

[S-502]

A simple hematologic marker for surgical decision-making in intestinal obstruction: The predictive role of "neutrophil-to-lymphocyte ratio"

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Objective: Acute intestinal obstruction is a common surgical emergency, and timely identification of patients requiring operative management remains challenging. Clinical findings and imaging may be inconclusive during initial evaluation. Therefore, simple and readily available laboratory markers may aid early decision-making. This study aimed to evaluate the predictive value of the neutrophil-to-lymphocyte ratio (NLR) for determining the need for surgical intervention in patients presenting with intestinal obstruction.

Material and Methods: This retrospective cohort study included 744 consecutive patients diagnosed with intestinal obstruction at a tertiary referral center between 2021-2025. Demographic characteristics, laboratory parameters at admission, and clinical outcomes were recorded. Patients were categorized into two groups according to treatment strategy: conservative management and surgical intervention. Univariate comparisons were performed, followed by multivariate logistic regression analysis to identify independent predictors of surgery.

Results: Patients who underwent surgery had significantly higher admission NLR values compared with those managed conservatively. Multivariate logistic regression analysis demonstrated that NLR was an independent predictor of surgical intervention (OR: 1.034, 95% CI: 1.003-1.066, p=0.030). Age and sex were not independently associated with operative management. The model showed adequate calibration according to the Hosmer–Lemeshow goodness-of-fit test (p=0.138).

Conclusion: The NLR is a simple and readily available laboratory parameter that independently predicts the need for surgical treatment in patients with intestinal obstruction. NLR may serve as a useful adjunct in early clinical decision-making and patient risk stratification in the emergency setting.

Keywords: Intestinal obstruction, neutrophil-to-lymphocyte ratio (NLR)

[S-503]

Predictive value of certain biomarkers and immune indices in predicting mortality in acute mesenteric ischemia

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Objective: Acute mesenteric ischemia (AMI) is a life-threatening abdominal emergency characterized by high mortality rates and requiring early diagnosis and prompt surgical intervention. Reliable and readily accessible biochemical parameters that can predict mortality in the early phase are needed. In this study, the impact of preoperative biochemical parameters on survival was evaluated in patients who underwent surgery for AMI.

Material and Methods: A total of 81 patients diagnosed with AMI and managed at the General Surgery Department of Harran University Faculty of Medicine between January 1, 2020, and December 31, 2024, were retrospectively analyzed. Demographic characteristics, comorbidities, and preoperative hemogram and biochemical parameters were recorded. Preoperative hemogram parameters, serum lactate, lactate dehydrogenase (LDH), urea, creatinine, sodium, albumin levels, and inflammatory indices (NLR, PLR, SII) were analyzed. Binary logistic regression analysis was performed to identify independent factors affecting survival. Prognostic performance was evaluated using receiver operating characteristic (ROC) curve analysis.

Results: A total of 81 patients were included in the study, 47 females (58%) and 34 males (42%). The overall mortality rate was 66.6% (n=54). The mean age of the deceased patients was significantly higher than that of the survivors (68.57±12.90 vs. 56.81±14.81 years, p=0.001). No significant differences were observed between the groups in terms of hemoglobin, leukocyte count, CRP, platelet count, NLR, PLR, or SII (p>0.05 for all). In contrast, lactate (p<0.001), LDH (p=0.004), creatinine (p<0.001), and sodium (p=0.04) levels were significantly associated with mortality. In binary logistic regression analysis, only: lactate (p=0.013; OR =0.519; 95% CI: 0.310-0.870) LDH (p=0.043; OR =0.998; 95% CI: 0.995-1.000) were identified as independent predictors of mortality. ROC analysis demonstrated: lactate: AUC: 0.764 (p<0.001), cut-off 2.20 mmol/L LDH: AUC: 0.696 (p=0.004), cut-off 296.5 U/L lactate exhibited superior discriminative performance compared to LDH in predicting mortality.

Conclusion: In patients with AMI, preoperative lactate level is a strong and independent predictor of mortality. LDH has a more limited but still statistically significant prognostic value. Inflammatory hematologic indices were not found to contribute significantly to the prediction of survival. Consideration of lactate levels in clinical risk stratification may facilitate the early identification of high-risk patients.

Keywords: Ischemia, lactate, mesentery

[S-505]

Timing and predictors of recurrence in gastric cancer: A single-center experience

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Objective: Recurrence after gastric cancer surgery is one of the most important determinants of long-term prognosis. Knowledge of the timing of recurrence and the clinical factors associated with recurrence may contribute to the personalization of follow-up strategies. In this study, the time to recurrence and factors predicting recurrence were evaluated in patients who underwent surgery for gastric cancer. Aim to determine the postoperative recurrence rate, time to recurrence, and clinical and tumoral characteristics associated with recurrence.

Material and Methods: Patients who underwent surgery for gastric adenocarcinoma between 2015 and 2024 were retrospectively analyzed. Recurrence was recorded as present or absent based on clinical and imaging findings. In patients with recurrence, the interval between surgery and the date of recurrence detection was calculated in months. The following variables were included in the analysis: T and N stage, adjacent organ invasion, preoperative albumin level, ASA score, age, and surgical intent (curative/palliative). Factors predicting recurrence were evaluated using logistic regression analysis, and the distribution of time to recurrence was assessed descriptively. A p-value <0.05 was considered statistically significant.

Results: Among a total of 738 patients, recurrence was detected in 34 patients (4.6%). The median time to recurrence was 10.5 months (IQR: 3-18.8), and most recurrences occurred within the first two years after surgery. In the multivariable logistic regression analysis, advanced T stage (≥T3), high N stage (≥N2), adjacent organ invasion, low albumin level (<3.5 g/dL), palliative surgery, age, and ASA score were included. Due to the limited number of events, none of the variables reached statistical significance as an independent predictor of recurrence (all p>0.05). However, low albumin level, high nodal burden, and adjacent organ invasion showed a trend toward increased recurrence risk. No significant association was observed between histological grade (G1-G3) and recurrence (p=0.23).

Conclusion: Recurrence after gastric cancer surgery most commonly occurs within the first two years. Although no independent predictors of recurrence were identified in this study, nutritional status, nodal burden, and features of locally advanced disease demonstrated a tendency toward increased recurrence risk. These findings suggest that closer follow-up and individualized oncological strategies may be warranted for high-risk patients. Larger sample sizes and prospective data collection may allow for more robust identification of recurrence predictors.

Keywords: Gastric cancer, recurrens, stage

[S-506]

Retrospective study of short and long-term results of neoadjuvant therapy, surgical resection, and curative chemoradiation therapy in the treatment of esophageal cancer

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Objective: Approximately 500,000 new cases of esophageal cancer are diagnosed worldwide each year. In North America, its incidence has nearly doubled over the past 20 years, making it the 8th most common cancer globally. Squamous cell carcinoma and adenocarcinoma account for more than 95% of esophageal malignancies. Throughout much of the 20th century, SCC predominated. In the 1960s, SCC made up more than 90% of esophageal tumors in the United States, with adenocarcinomas being very rare. However, over time, the incidence of esophageal adenocarcinoma has dramatically increased in Western countries, to the point where adenocarcinoma now accounts for more than 60% of all esophageal cancers in the United States.

Material and Methods: This study aimed to compare the short- and long-term outcomes of different treatment strategies in patients diagnosed with esophageal cancer. Patients who underwent primary surgery were compared with those who received neoadjuvant therapy followed by surgery, and both surgical groups were also compared with patients treated with definitive chemoradiotherapy (CRT) without surgery.

Results: Patients were retrospectively categorized into three groups: Group 1–primary surgery, Group 2–surgery after neoadjuvant therapy, Group 3–definitive CRT without surgery. Demographic characteristics, tumor types, localization, surgical techniques, short-term morbidity (based on Clavien-Dindo classification), and long-term survival were analyzed. Kaplan-Meier survival analysis and Cox regression were applied. No significant survival difference was observed between patients undergoing primary surgery and those treated with neoadjuvant therapy followed by surgery. However, primary surgery may provide a survival benefit in early-stage disease. In the SCC subgroup, survival outcomes were comparable between surgical and CRT groups, while in the AdenoCa subgroup, surgery yielded better survival. Major complications (Clavien-Dindo ≥3) showed significant differences among groups. Statistically significant differences were observed in overall survival times according to sex among all cases. Overall survival was higher in females than in males, with mean overall survival durations of 79.04±10.87 months and 38.58±5.25 months, respectively (p=0.005). A statistically significant difference in overall survival was also detected based on the presence of metastatic lymph nodes at the time of diagnosis. Patients without metastatic lymph nodes had longer overall survival compared to those with metastatic lymph nodes, with mean survival times of 73.66±9.68 months and 39.73±6.52 months, respectively (p=0.006).

Conclusion: Surgery remains the mainstay of treatment in eligible patients with esophageal cancer. In adenocancer cases, surgery is associated with improved survival, whereas in SCC patients, definitive CRT can be a viable alternative. Although neoadjuvant therapy increases short-term morbidity, it may be balanced by favorable long-term outcomes.

Keywords: Esophageal carsinoma, squamous cell carcinoma, adenocarcinoma, neoadjuvant chemotherapy

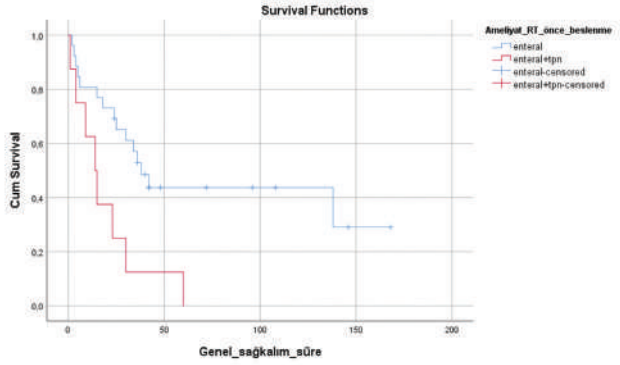


Figure 1. Comparison of overall survival (months) according to preoperative nutritional support in surgically treated patients.

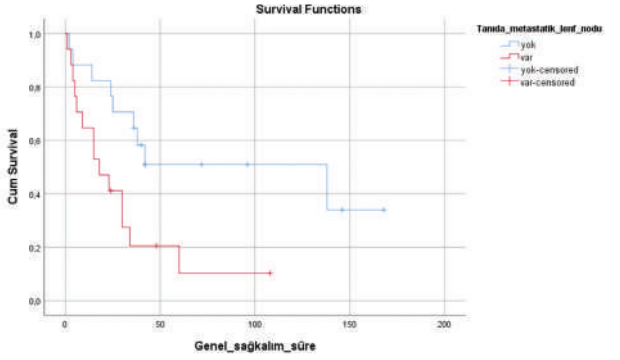


Figure 2. Comparison of overall survival according to the presence of metastatic lymph nodes at diagnosis in surgically treated patients.

Table 1. Comparison of overall survival in all cases

		n	Mean ± SD	p-value	
Surgery	Yes	68	53.02±6.90	0.560	
	No	34	64.17±12.01		
Sex	Female	39	79.04±10.87	**0.005**	
	Male	63	38.58±5.25		
Comorbid disease	Absent	66	58.05±7.75	0.799	
	Present	36	49.15±8.71		
Smoking	No	49	64.81±9.22	0.181	
	Yes	53	46.67±7.19		
Alcohol consumption	None	89	58.48±6.70	0.510	
	Social drinker	7	42.42±16.71		
	Regular drinker	6	31.50±12.85		
PET uptake at diagnosis	Absent	15	67.90±18.09	0.396	
	Present	87	51.92±5.79		
Metastatic lymph nodes at diagnosis	Absent	49	73.66±9.68	**0.006**	
	Present	53	39.73±6.52		
Nutritional support before surgery/ CRT	Absent	15	50.93±10.91	0.056	
	Enteral	79	60.82±7.36		
	Enteral + TPN	8	19.50±6.69		
Nutritional intervention (gastrostomy/jejunostomy)	Absent	80	56.15±6.65	0.726	
	Present	22	54.81±13.69		
Preoperative albumin (median: 3.2)	Normal	46	47.52±7.61	0.895	
	Low	56	56.04±10.21		
Tumor location	Upper thoracic	16	67.85±11.43	0.231	
	Middle thoracic	19	38.70±9.77		
	Lower thoracic	46	65.56±9.99		
	Gastroesophageal junction	21	40.13±11.62		
Histological type	SCC	85	61.51±6.94	**0.033**	
	Adenocarcinoma	17	27.49±7.44		
Clinical T stage	0	2	-	0.190	
	2	12	61.45±11.97		
	3	74	56.50±7.54		
	4	14	36.85±10.83		
Clinical N stage	0	50	74.75±9.30	**0.005**	0-1:**0.039** 0-2:**0.003** 0-3:**0.003** 1-2:0.444 1-3:0.297 2-3:0.529
	1	31	44.74±9.60		
	2	15	25.89±6.62		
	3	6	17.66±5.09		
Clinical (TNM) stage	2	41	84.56±10.85	**<0.001**	2-3:**0.002** 2-4:<**0.001** 3-4:0.480
	3	31	37.27±8.02		
	4	25	30.92±7.81		

Table 2. Comparison of overall survival in surgically treated patients (n=34)				
		n	**Mean ± SD**	**p-value**
Place of birth	Eastern and Southeastern Anatolia Region	12	60.83±22.01	0.083
	Other regions	22	75.23±13.17	
Surgical approach (direct/neoadjuvant)	Direct surgery	20	58.64±14.74	0.504
	Neoadjuvant	14	54.63±12.08	
Sex	Female	14	85.45±19.66	0.177
	Male	20	39.95±8.86	
Body mass index	18-25	25	59.62±14.04	0.702
	25-30	9	63.33±19.78	
Comorbid disease	Absent	20	49.49±13.72	0.087
	Present	14	73.70±18.34	
Smoking	Absent	17	70.70±16.79	0.563
	Present	17	53.80±14.42	
ASA score	1	14	38.39±9.76	0.628
	2	16	80.06±17.70	
	3	4	35.00±15.46	
Surgical technique	Transhiatal esophagectomy	6	60.17±19.18	0.701
	Ivor Lewis esophagectomy	12	40.60±8.02	
	McKeown esophagectomy	16	54.81±15.45	
Anastomosis technique	Hand-sewn	12	55.91±19.00	0.748
	Stapler (lineer)	5	46.00±22.71	
	Stapler (circular)	17	65.00±17.03	
Anastomosis level	Cervical	15	57.86±16.18	0.627
	Thoracic	19	53.27±10.63	
Anastomotic leak	Absent	30	64.54±12.62	0.745
	Present	4	47.75±29.54	
PET-CT uptake at diagnosis	Absent	6	88.66±31.50	0.284
	Present	28	54.15±11.24	
Reason for admission:	Dysphagia	19	68.20±14.41	0.625
	Dysphagia + weight loss	13	62.57±19.49	
Lymph node involvement at diagnosis	Absent	17	92.20±17.42	**0.013**
	Present	17	29.56±8.12	
Nutritional support before surgery/CRT	Enteral	26	80.77±14.37	**0.006**
	Enteral + TPN	8	19.50±6.69	
Nutritional intervention (gastrostomy/jejunostomy/PEG)	Absent	22	41.57±8.53	0.345
	Present	12	84.36±21.57	
Preoperative albumin level	Normal	16	46.64±13.17	0.588
	Low	18	50.66±18.32	
Tumor location	Middle and upper thoracic	6	51.66±18.46	0.624
	Lower thoracic	15	79.03±17.42	
	Gastroesophageal junction	13	52.53±17.84	
Histological type	SCC	22	81.01±15.39	**0.021**
	Adeno CA	12	26.27±9.52	
Perineural invasion	Absent	25	74.20±14.08	0.088
	Present	9	20.77±5.86	
Lymphovascular invasion	Absent	24	80.48±14.84	**0.034**

Table 2. Continued

		n	Mean ± SD	p-value
	Present	10	23.70±7.57	
Grade	1	4	41.25±19.33	0.264
	2	20	61.86±14.15	
	3	7	16.00±6.38	
Clinical N stage	0	17	92.20±17.42	0.075
	1	7	35.57±17.38	
	2	5	32.40±11.27	
	3	5	20.60±5.09	
Clinical TNM stage	2	11	107.63±20.86	**0.004**
	3	6	40.83±7.28	
	4	12	21.16±8.18	
Pathological T stage	2	4	46.00±8.61	0.453
	3	26	51.03±12.63	
Pathological N stage	0	18	78.89±16.63	**0.010**
	1	8	73.12±25.77	
	3	5	11.80±4.99	
Pathological TNM stage	2	14	56.42±15.51	**0.042**
	3	11	67.90±20.92	
	4	5	11.80±4.99	
Neoadjuvant RT	Absent	20	58.64±14.47	0.504
	Present	14	54.63±12.08	
Neoadjuvant CT	Absent	20	58.64±14.74	0.504
	Present	14	54.63±12.08	
Adjuvant RT	Absent	19	72.55±15.80	0.290
	Present	15	48.53±13.55	
Recurrence/metastasis	Absent	18	97.94±18.43	**0.027**
	Present	16	28.72±3.55	

[S-507]

Surgical decision-making in occult peptic ulcer perforations with no free air detected on computed tomography: Diagnostic power of inflammatory biomarkers (NLR and CRP)

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Objective: Peptic ulcer perforation is a serious clinical condition frequently encountered in emergency abdominal surgery practice, and despite effective treatment, it still has a mortality rate of 10-15%. Although the demonstration of free air on computed tomography (CT) is considered the gold standard for diagnosis, the literature reports that approximately 10-15% of perforations do not show radiologically detectable free air ("occult perforation"). The aim is to compare demographic and laboratory data in patients operated on with a diagnosis of PUP in our clinic, according to the presence of free air on CT, and to investigate the diagnostic power of inflammatory markers in predicting occult perforations that do not show radiological findings.

Material and Methods: A total of 48 patients who underwent emergency surgery for peptic ulcer perforation at our clinic between January 2023 and October 2025 (traumatic and iatrogenic injuries excluded) were retrospectively examined. Patients were divided into two groups: Group 1 (classic group): patients with free air detected on CT scan (n=35), Group 2 (occult group): Patients without free air detected on CT scan (n=13).

Results: The mean age of the 48 patients included in the study was 54.4±18.0 years, and 81.3% of the cases were male. Perforation localization was in the prepyloric/antral region in 93.8% of cases. Open omentopexy was performed in 93.8% of the patients. In 27% of the patients in our series (n=13), no free air was seen on CT scans despite the perforation being confirmed surgically. The most striking finding is that in patients whose CT scans were reported as "normal", white blood cell and NLR were paradoxically higher. Our data show that WBC >11.900 and NLR >10, combined with physical examination findings, provide sufficient evidence for surgical exploration despite a negative CT scan, thus preventing this delay.

Conclusion: In peptic ulcer perforation, the absence of free air on CT scans is not uncommon (27% in our series) and does not rule out surgery. In younger patients, especially those under 45, perforation may be self-limiting without releasing free air. In patients with clinically suggestive acute abdomen but no air visible on CT scans, a leukocyte count >12,000 and an NLR >10 are strong indicators for diagnosing "occult perforation." Using these simple biomarkers in cases of radiological negativity can prevent diagnostic delays and associated morbidity.

Keywords: Peptic ulcer perforation, occult perforation, negative free air

Table 1. Demographic data of patients

Parametre	Sayı (n=48)	Yüzde / Değer
Yaş (Yıl)		54,4 ± 18,0 (19 - 96)
Cinsiyet		
Erkek	39	%81,3
Kadın	9	%18,7
Perforasyon Yeri		
Gastrik / Prepilorik / Antrum	45	%93,8
Duodenum / Bulbus	3	%6,2
BTde Serbest Hava		
Serbest Hava Var (Pnömoperitoneum)	35	%72,9
Serbest Hava Yok (Okült Perforasyon)	13	%27,1
Mortalite (Exitus)	8	%16,7

BT;bilgisayarlı tomografi

Table 2. Comparison of groups based on the presence of free air in computed tomography (CT) scans

Parameter	Group 1 (n=35)	Group 2 (n=13)	p-value
Age (years) (mean ± SD)	58.3±16.6	44.0±17.9	0.021
WBC (leukocytes) (10^3/µL) (mean ± SD)	12.2±5.0	15.1±3.2	0.022
CRP (mg/L) median (IQR 25-75)	35.0 (7.0-120.0)	22.0 (5.0-184.0)	0.807
NLR (neutrophil/lymphocyte ratio) median (IQR 25-75)	8.9 (3.5-14.4)	9.9 (7.4-11.0)	0.634
NLR-CRP index (/100) median (IQR 25-75)	2.3 (0.3-9.5)	1.6 (0.4-16.7)	0.710

Table 3. ROC analysis in predicting "occult perforation" based on statistically differing parameters

Parameter	AUC	Cut-off (threshold value)	Sensitivity	Specificity	p-value
Age	0.722	<48 years	70.0%	71.4%	0.019
Leukocyte	0.688	>11.9 (10^3/µL)	92.3%	51.4%	0.048

[S-508]

Predicting stent success in esophageal anastomotic leaks: The clinical significance of the CT-based defect-to-lumen ratio

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Objective: Endoscopic stent placement is widely used for managing esophageal anastomotic leaks; however, reliable predictors of success remain poorly defined and often rely on absolute defect size. We hypothesised that relative defect geometry within the lumen might better predict mechanical sealing and clinical success.

Material and Methods: Patients with CT-confirmed esophageal anastomotic leakage after Ivor Lewis esophagectomy or total gastrectomy who underwent fully covered self-expandable metal stent placement were retrospectively analysed. Defect diameter and luminal diameter were measured on sagittal CT reconstructions to calculate the defect-to-lumen (D/L) ratio. Stent success was defined as complete clinical and radiological resolution without further intervention. ROC analysis was applied as a hypothesis-generating tool to explore the discriminatory performance of the D/L ratio within this cohort.

Results: Thirteen patients met inclusion criteria; stent therapy was successful in 7 (53.8%). Absolute defect size did not reliably discriminate outcomes. When patients were stratified according to the D/L ratio, a clear separation in clinical success was observed. No patient with a D/L ratio <0.21 achieved successful leak closure, whereas 7 of 9 patients (77.8%) with a ratio ≥0.21 were successfully treated (p=0.01). Failed cases presented significantly earlier (median 4 vs. 9 days, p=0.005) and were associated with higher mortality (50%). ROC analysis showed supportive discriminatory performance of the D/L ratio (AUC: 0.81), consistent with the observed clinical distribution.

Conclusion: Relative defect geometry, expressed by the CT-based D/L, may represent a clinically relevant parameter for predicting stent failure in esophageal anastomotic leaks.

Keywords: Anastomotic leakage, esophagogastric surgery, self-expandable metal stents

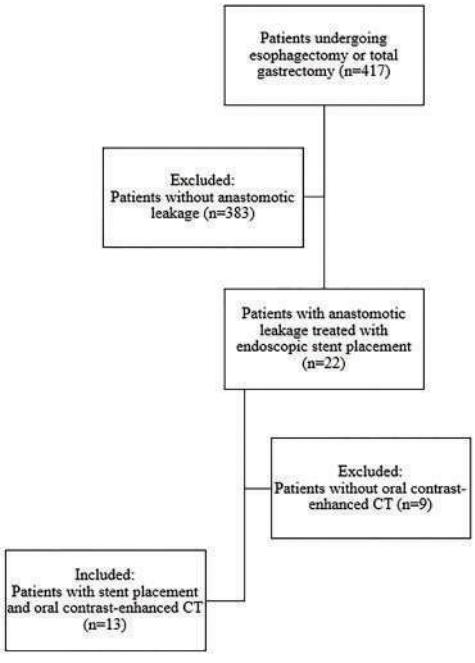


Figure 1. Flow diagram of patient inclusion and exclusion.

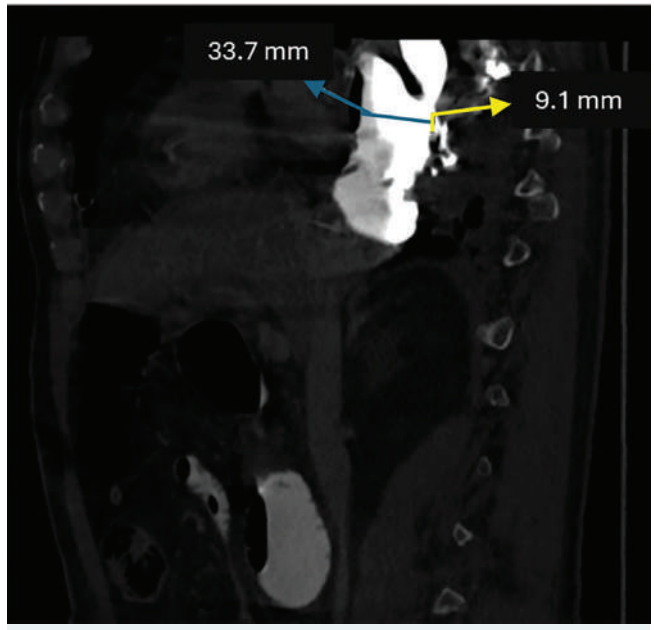


Figure 2. Computed tomography (CT)–based measurements used for calculation of the defect-to-lumen (D/L) ratio and assessment of contrast leakage in a patient who underwent Ivor Lewis esophagectomy. Sagittal CT image demonstrating the measurement technique at the esophagogastric anastomosis. The blue arrow indicates the luminal diameter measured perpendicular to the long axis of the defect, while the yellow arrow represents the maximum length of the anastomotic defect. The D/L ratio was calculated by dividing the defect length by the corresponding luminal diameter.

[S-509]

Diagnosis, treatment, and clinical outcomes in splenic infarction: A retrospective experience in a general surgery clinic

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Objective: Splenic infarction is a rare condition that may cause diagnostic and therapeutic uncertainty, particularly in elderly patients with multiple comorbidities. This study aimed to retrospectively evaluate the demographic characteristics, etiological factors, clinical presentation, treatment approaches, and clinical outcomes of patients admitted from the emergency department to the General Surgery Clinic of Etlik City Hospital with a diagnosis of splenic infarction.

Material and Methods: Twelve patients hospitalized and followed in the General Surgery Clinic with a diagnosis of splenic infarction were retrospectively analyzed. Demographic data, comorbidities, clinical presentation, laboratory findings, imaging results, extent of infarction, treatment strategies, and clinical course were recorded. Continuous variables were presented as mean ± standard deviation and median (interquartile range), and categorical variables as numbers and percentages.

Results: The mean age of the patients was 63.3±18.9 years,and 66.7%were male. Most patients had a high comorbidity burden; 83.3% had at least one comorbidity and 83.3% were classified as ASA III. Regarding a cardioembolic background, atrial fibrillation was present in 41.7% of patients, while 58.3% had a history of previous thromboembolic events and the same proportion had prior anticoagulant use. Diagnosis was established by computed tomography in all patients. In terms of infarct extent, 75% had subtotal, 16.7% segmental, and 8.3% total splenic infarction. Splenic artery thrombosis was observed in 25% of cases, whereas splenic vein thrombosis was less frequent. All patients received anticoagulation and antibiotic therapy. Surgical intervention was required in 33.3% of patients, all of whom underwent splenectomy. The intensive care unit admission rate was 25%. During follow-up, no cases of sepsis, major complications, 30-day mortality, or overall mortality were observed.

Conclusion: This study demonstrates that splenic infarction typically occurs in elderly patients with a high comorbidity burden, often in association with thromboembolic risk factors, and may progress to a severe clinical course if not properly managed early. Although the literature reports wide variability in complication, sepsis, and mortality rates depending on patient profile and risk factors, our series showed no 30-day or overall mortality and no major complications despite a high-risk population. Confirmation of diagnosis by computed tomography in all patients, prompt initiation of treatment, and standardized close clinical monitoring appear critical for improving outcomes. While conservative management was sufficient in most cases, timely splenectomy could be safely performed in selected patients requiring intervention, highlighting the importance of appropriate indication and timing. Overall, our experience indicates that early diagnosis, close follow-up, and individualized treatment can achieve safe and successful outcomes in splenic infarction, even in patients who require surgical management.

Keywords: Atrial fibrillation, computed tomography, emergency department, splenic infarction, thromboembolism

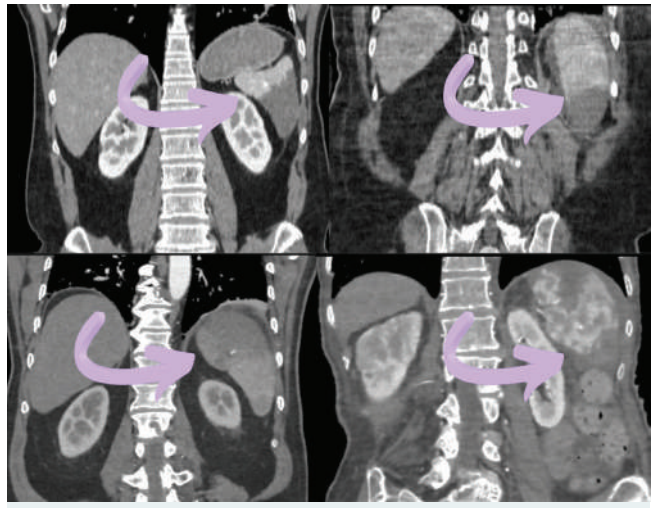


Figure 1. CT Imaging of splenic infarction cases.

Table 1A. Demografi/Başvuru/Laboratuvar

PARAMETRE	n	Ortalama ± SS	Medyan (ÇAA)	Min-Maks
Yaş (yıl), Numeric	12	63.33 ± 18.86	68.00 (53.75–77.25)	23.00–86.00
Vücut kitle indeksi (kg/m²)	12	31.42 ± 4.17	32.50 (28.00–35.00)	25.00–37.00
Başvuruda ağrı süresi (saat)	12	82.00 ± 52.39	72.00 (48.00–120.00)	12.00–168.00
WBC (Lökosit) (10³/µL)	12	13.56 ± 4.52	13.50 (11.80–17.25)	4.65–20.00
Hemoglobin (g/dL)	12	13.29 ± 2.44	14.30 (10.97–14.83)	9.30–16.40
Trombosit (10³/µL)	12	338.08 ± 177.62	305.50 (218.75–355.25)	95.00–686.00
CRP (mg/L)	12	86.27 ± 75.31	74.50 (12.22–149.75)	3.00–199.00
D-dimer (ng/mL)	3	3.09 ± 3.86	1.22 (0.87–4.37)	0.52–7.52
LDH (U/L)	12	274.92 ± 72.42	275.00 (226.50–321.50)	150.00–410.00

Table 1B. Demografi/Komorbidite/Başvuru Bulguları

PARAMETRE	KATEGORİ	n/N (%)
Cinsiyet	Erkek	8/12 (66.7%)
Cinsiyet	Kadın	4/12 (33.3%)
ASA skoru (1–4)	2	2/12 (16.7%)
ASA skoru (1–4)	3	10/12 (83.3%)
Ek hastalık varlığı	Yok	2/12 (16.7%)
Ek hastalık varlığı	Var	10/12 (83.3%)
Charlson komorbidite indeksi	1	5/12 (41.7%)
Charlson komorbidite indeksi	2	6/12 (50.0%)
Charlson komorbidite indeksi	3	1/12 (8.3%)
Atriyal fibrilasyon	Yok	7/12 (58.3%)
Atriyal fibrilasyon	Var	5/12 (41.7%)
Kapak hastalığı	Yok	10/12 (83.3%)
Kapak hastalığı	Var	2/12 (16.7%)
İskemik kalp hastalığı	Yok	12/12 (100.0%)
Önceki tromboembolik olay	Yok	5/12 (41.7%)
Önceki tromboembolik olay	Var	7/12 (58.3%)
Antikoagülan kullanımı (önceden)	Yok	5/12 (41.7%)
Antikoagülan kullanımı (önceden)	Var	7/12 (58.3%)
Aktif malignite	Yok	11/12 (91.7%)
Aktif malignite	Var	1/12 (8.3%)
Hematolojik hastalık (MPN, hemoglobinopati vb.)	Yok	12/12 (100.0%)
Eşlik eden enfeksiyon/endokardit	Yok	11/12 (91.7%)
Eşlik eden enfeksiyon/endokardit	Var	1/12 (8.3%)
COVID-19 öyküsü (son 3 ay)	Yok	12/12 (100.0%)
Sigara	Yok	10/12 (83.3%)
Sigara	Var	2/12 (16.7%)
Başvuru şekli	Acil	12/12 (100.0%)
Ağrı lokalizasyonu	Sol üst kadran	12/12 (100.0%)
Ateş (>38°C)	Yok	11/12 (91.7%)
Ateş (>38°C)	Var	1/12 (8.3%)
Bulantı/kusma	Yok	11/12 (91.7%)
Bulantı/kusma	Var	1/12 (8.3%)
Hipotansiyon (SBP <90 mmHg)	Hayır	11/12 (91.7%)
Hipotansiyon (SBP <90 mmHg)	Evet	1/12 (8.3%)

Table 2A. Görüntüleme/Enfarkt Özellikleri

PARAMETRE	n	Ortalama ± SS	Medyan (ÇAA)	Min–Maks
En büyük enfarkt alanı (mm)	12	69.83 ± 36.49	70.00 (50.00–92.50)	8.00–130.00
Ameliyat süresi (dakika)	4	60.00 ± 0.00	60.00 (60.00–60.00)	60.00–60.00

Table 2B. Görüntüleme/Enfarkt Yaygınlığı/Tromboz/Tedavi

PARAMETRE	KATEGORİ	n/N (%)
Görüntüleme	BT	12/12 (100.0%)
BT'de dalak enfarktı tanısı	Evet	12/12 (100.0%)
Enfarkt yaygınlığı	Segmental	2/12 (16.7%)
Enfarkt yaygınlığı	Subtotal	9/12 (75.0%)
Enfarkt yaygınlığı	Total	1/12 (8.3%)
Splenik arter trombozu	Yok	9/12 (75.0%)
Splenik arter trombozu	Var	3/12 (25.0%)
Splenik ven trombozu	Yok	11/12 (91.7%)
Splenik ven trombozu	Var	1/12 (8.3%)
Dalak absesi gelişimi	Yok	12/12 (100.0%)
Dalak rüptürü	Yok	12/12 (100.0%)
Preoperatif/ilk başvuruda tanı kondu	Hayır	2/12 (16.7%)
Preoperatif/ilk başvuruda tanı kondu	Evet	10/12 (83.3%)
Konservatif tedavi	Hayır	4/12 (33.3%)
Konservatif tedavi	Evet	8/12 (66.7%)
Antikoagülasyon başlandı	Evet	12/12 (100.0%)
Antibiyotik verildi	Evet	12/12 (100.0%)
Girişim gereksinimi	Yok	8/12 (66.7%)
Girişim gereksinimi	Var	4/12 (33.3%)
Girişim tipi	GİRŞİM YOK	8/12 (66.7%)
Girişim tipi	Splenektomi	4/12 (33.3%)
Acil cerrahi gereksinimi	Hayır	9/12 (75.0%)
Acil cerrahi gereksinimi	Evet	3/12 (25.0%)

Table 3A. Klinik Seyir/Yatış/Takip

PARAMETRE	n	Ortalama ± SS	Medyan (ÇAA)	Min–Maks
Yoğun bakım süresi (gün)	12	0.42 ± 0.79	0.00 (0.00–0.25)	0.00–2.00
Hastanede yatış süresi (gün)	12	4.50 ± 1.83	4.00 (3.75–5.25)	2.00–8.00
Takip süresi (ay)	12	2.00 ± 1.41	1.00 (1.00–3.00)	1.00–5.00

Table 3B. Komplikasyonlar ve Sonuçlar

PARAMETRE	KATEGORİ	n/N (%)
Komplikasyon	Yok	12/12 (100.0%)
Sepsis	Yok	12/12 (100.0%)
Yoğun bakım yatışı	Hayır	9/12 (75.0%)
Yoğun bakım yatışı	Evet	3/12 (25.0%)
30 gün mortalite	Hayır	12/12 (100.0%)
Toplam mortalite	Hayır	12/12 (100.0%)
Tekrarlayan trombotik olay	Yok	12/12 (100.0%)

[S-510]

Effect of neoadjuvant chemotherapy on lymph node burden and survival in pathological T4a gastric adenocarcinoma: A retrospective cohort study

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Objective: We aimed to evaluate the nodal downstaging effect and periodic survival rates of neoadjuvant chemotherapy (NACT) in gastric cancer patients who remain at pathological stage T4a (pT4a) after surgery.

Material and Methods: We retrospectively reviewed 250 patients with pT4a gastric adenocarcinoma. The cohort comprised an upfront surgery group (n=198) and a NACT group (n=52). Primary endpoints were metastatic lymph nodes and the lymph node ratio (LNR). Secondary endpoints included median overall survival (OS) and cumulative 1-, 3-, and 5-year survival rates. Mann-Whitney U, chi-square, and Kaplan-Meier (Log-rank) tests were utilized for analysis.

Results: Median follow-up times were comparable (23.0 months for upfront surgery vs. 19.0 months for NACT; p=0.065). Groups were balanced regarding age (p=0.407), gender (p=0.142), and the extent of resection (p=0.144). Median harvested lymph nodes did not differ significantly (27.0 vs. 31.0, p=0.427). Although NACT patients showed a numerically lower LNR (0.18 vs. 0.29, p=0.084), this trend lacked statistical significance. Median OS was identical in both groups at 23.0 months (p=0.687). The cumulative 1-, 3-, and 5-year survival rates for upfront surgery vs. NACT were 71.1% vs. 79.8%, 38.8% vs. 36.8%, and 29.4% vs. 24.5%, respectively.

Conclusion: In patients with a final pathological stage of T4a, NACT yields no statistically significant advantage in nodal response or survival rates over upfront surgery. These findings suggest that tumors failing to downstage despite neoadjuvant treatment possess high primary chemoresistance and aggressive biology.

Keywords: Gastric adenocarcinoma, metastatic lymph node, pT4a gastric cancer

Table 1.

Değişken	Doğrudan Cerrahi (n=198)	NAKT (n=52)	p-değeri
Yaş (yıl), Medyan [IQR]	63.5 [52.0 – 70.0]	58.5 [53.0 – 68.0]	0.407†
Cinsiyet , n (%)			0.142‡
Erkek	123 (%62.1)	38 (%73.1)	
Kadın	75 (%37.9)	14 (%26.9)	
Operasyon Tipi , n(%)			0.144‡
Total Gastrektomi	133 (%67.2)	41 (%78.8)	
Distal Subtotal Gastrektomi	65 (%32.8)	11 (%21.2)	

Kısaltmalar: IQR, Çeyrekler Arası Aralık . †Mann-Whitney U Testi. ‡Ki-kare Testi.

Table 2.

Değişken	Doğrudan Cerrahi (n=198)	Neoadjuvan Kemoterapi (n=51)*	p-değeri
Çıkarılan Toplam Lenf Nodu, Medyan [IQR]	27.0 [21.0 – 37.0]	31.0 [22.0 – 38.0]	0.427†
Metastatik Lenf Nodu, Medyan [IQR]	7.0 [2.0 – 15.0]	4.0 [2.0 – 13.0]	0.197†
Lenf Nodu Oranı (LNR), Medyan [IQR]	0.29 [0.09 – 0.56]	0.18 [0.06 – 0.36]	0.084†
Genel Sağkalım (Ay), Medyan [%95 GA]	23.0 [17.9 – 28.0]	23.0 [14.1 – 31.8]	0.687§

*Kısaltmalar: IQR, Çeyrekler Arası Aralık; GA, Güven Aralığı. *Neoadjuvan grubunda 1 hastanın lenf nodu verisi eksik olduğu için ilgili analizler N=51 üzerinden yapılmıştır. †Mann-Whitney U testi. §Kaplan-Meier yöntemi ve Log-rank testi.*

[S-513]

Factors affecting neoadjuvant therapy response in gastric cancer patients undergoing curative gastrectomy and D2 lymphadenectomy

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Objective: In this study, our aim was to examine the tumor regression degree (TRG) in the histopathology of the gastric cancer patients who received neoadjuvant chemotherapy (NAC) after curative surgical resection and to reveal the factors affecting this.

Material and Methods: Data of 97 patients who received NAC and curative surgery with the diagnosis of gastric malignant neoplasm at the General Surgery Department of University of Health Sciences Türkiye, Haydarpaşa Numune Training and Research Hospital between January 2012 and May 2024 were examined. According to the TRG response, 97 patients were divided into 2 groups as TRG 0, 1, 2 and TRG 3. Factors evaluated for TRG response; age, gender, tumor localization, tumor size, presence of signet ring cells, type according to Lauren classification, differentiation of the tumor, perineural invasion (PNI) and lymphovascular invasion (LVI), number of lymph nodes removed, number and rate of metastatic lymph nodes, TNM stage, NAC type, surgery type, tumor markers, HER2 status, preoperative neutrophil/lymphocyte ratio (NLR), platelet/lymphocyte ratio (PLR) and lymphocyte/monocyte ratio (LMR).The identified risk factors were evaluated with univariate and multivariate analysis. The study was conducted as a single-center and retrospective study. Demographic characteristics and basic clinical data of the patients were obtained from the hospital information system.

Results: Ninety-seven patients were included in the study. The mean age of the patients was 59.9±9, the number of male patients was 72 (74.2%), and the number of female patients was 25 (25.8%). Fifty-two (53.6%) patients were in the TRG 0-1-2 group, and 45 (46.4%) patients were in the TRG 3 group. In the univariate analysis, tumor size, presence of signet ring cells, differentiation, perineural invasion (PNI), N stage, metastatic lymph node number and rate were found to be significant. When the risk factors determined according to the univariate analysis were evaluated in the multivariate analysis, tumor size and PNI were evaluated as independent risk factors.

Conclusion: In our study, it was determined that PNI and tumor size were independent risk factors in TRG response in patients who received NAC treatment for gastric cancer and underwent curative surgery.

Keywords: Curative surgery, gastric cancer, neoadjuvant chemotherapy, tumor regression grade

Table 1. Results of multivariate analysis

	Univariate model					Multivariate model				
	OR	95% GA			p	OR	95% GA			p
Tumor size	1.184	1.036	-	1.353	**0.013**					
Tumor size <4.5/≥4.5	3.778	1.626	-	8.776	**0.002**	3.011	1.240	-	7.308	**0.015**
Ring cell	3.167	1.243	-	8.071	**0.016**					
Lauren	1.291	0.743	-	2.244	0.364					
Differentiation	2.526	1.329	-	4.802	**0.005**					
Lymphovascular invasion	1.722	0.736	-	4.032	0.210					
Perineural invasion	3.624	1.537	-	8.543	**0.003**	3.296	1.357	-	8.006	**0.008**
Total lymph nodes	1.018	0.988	-	1.049	0.235					
Number of metastatic lymph nodes	1.077	1.019	-	1.138	**0.008**					
Metastatic lymph node rate	28.716	2.871	-	>100	**0.004**					
Phase N	2.522	1.103	-	5.765	**0.028**					
Logistic Regression (Forward LR)										

[S-516]

Evaluation of the relationship between prognostic nutrition index and pathological stage in patients undergoing total gastrectomy due to gastric adenocarcinoma

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Objective: Gastric cancer is a major public health problem with high mortality, largely due to delayed diagnosis and presentation at advanced stages. Although TNM staging is fundamental for clinical decision-making, it does not fully reflect the biological heterogeneity of the disease. Therefore, the combined evaluation of CA 19-9, a marker of tumor burden, and the prognostic nutritional index (PNI), which reflects the patient's immuno-nutritional status, may allow more accurate preoperative risk stratification, particularly in candidates for total gastrectomy. This study investigates the relationship between the PNI, serum CA 19-9 levels, and pathological TNM stage in patients undergoing total gastrectomy for gastric adenocarcinoma. The association of low PNI and elevated CA 19-9 levels with advanced pathological stages suggests that these parameters may be useful in preoperative risk assessment and clinical decision-making.

Material and Methods: This retrospective, single-center study included 211 patients with gastric adenocarcinoma who underwent neoadjuvant chemotherapy followed by total gastrectomy with D2 lymph node dissection between 2020 and 2025 and had available laboratory data within 7-10 days after surgery. Demographic, clinical, and laboratory data were obtained from medical records. The PNI was calculated based on serum albumin and lymphocyte count; due to a right-skewed distribution, CA 19-9 values were log-transformed using log (1+CA 19-9). Pathological staging was performed according to the AJCC 8th edition. Statistical analyses were conducted using R software, including correlation, ordinal logistic regression, and receiver operating characteristic analyses, with $p<0.05$ considered statistically significant.

Results: This study investigated the association between the PNI, serum CA 19-9 levels, and pathological stage in gastric adenocarcinoma. PNI decreased significantly, while CA 19-9 levels increased with advancing pathological stage. Although PNI values were higher in patients with pathological complete response, this difference was not statistically significant. Correlation analyses showed a negative association between PNI and pathological stage and a positive association between log-transformed CA 19-9 and pathological stage. Ordinal logistic regression demonstrated that both PNI and CA 19-9 were independently associated with pathological stage and provided complementary predictive value. ROC analysis indicated that their combined use improved discrimination of stage III disease, suggesting clinical utility in predicting advanced disease.

Conclusion: PNI and CA 19-9 are independently associated with pathological stage in gastric adenocarcinoma. The combined assessment of these two parameters provides greater diagnostic value in predicting advanced-stage disease.

Keywords: Gastric adenocarcinoma, prognostic nutritional index, total gastrectomy, CA 19-9

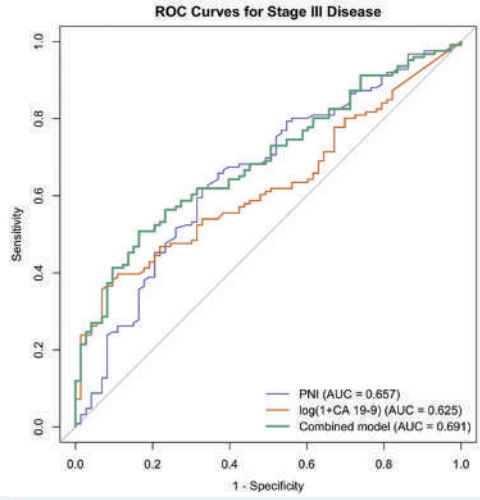


Figure 1. ROC curves for discrimination of stage III disease using PNI, log-transformed CA 19-9, and a combined model [PNI + log(1+CA 19-9)].

ROC: Receiver operating characteristic, PNI: Prognostic nutritional index.

Table 1.

Variable	Mean ± SD	Median (IQR)	Min-max
Age (years)	62.45±11.00	64.00 (54.00-71.00)	28-80
Body mass index (kg/m²)	4.23±4.73	23.90 (20.80-27.05)	13.2-38.5
Hemoglobin	11.20±2.40	11.10 (9.30-13.05)	4.9-16.5
Albumin (g/L)	39.62±4.86	40.00 (36.00-43.00)	24.00-51.00
Platelet count	276.16±105.28	262.00 (203.00-330.50)	44.00-616.00
Lymphocyte count (×10⁹/L)	2.08±0.70	2.02 (1.55-2.56)	0.61-4.21
Neutrophil count (×10⁹/L)	4.43±1.80	4.24 (3.31-5.29)	1.29-11.00
Monocyte count (×10⁹/L)	0.62±0.22	0.60 (0.45-0.73)	0.11-1.35
C-reactive protein (CRP)	12.16±21.93	3.50 (1.20-11.60)	0.20-142.60
Carcinoembryonic antigen (CEA)	7.88±26.26	2.53 (1.50-4.75)	0.30-298.00
Carbohydrate antigen 19-9 (CA 19-9)	93.23±388.16	13.70 (6.05-31.25)	2.00-4802.00

Demographic, clinical, and laboratory characteristics of the study population (n=211). SD: Standard deviation; IQR: Interquartile range; Min-max: Minimum-maximum.

Table 2.				
Variable	**β (SE)**	**OR**	**95% CI**	**p-value**
PNI (per 1-point increase)	-0.080 (0.024)	923	0.881-0.967	<0.001
log(1 + CA 19-9) (per 1-unit increase)	0.376 (0.121)	1456	1.149-1.846	0.002

Independent association of PNI and CA 19-9 with pathological stage (I-IIA-IIB-III): Ordinal logistic regression analysis (n=199). PNI: Prognostic nutritional index; CI: Confidence interval.

[S-517]

Laparoscopic duodenojejunostomy for the treatment of superior mesenteric artery syndrome: Analysis of 91 patients

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Objective: Superior mesenteric artery (SMA) syndrome (SMAS) is a rare condition caused by the compression of the third portion of the duodenum between the aorta and the SMA. Laparoscopic duodenojejunostomy has emerged as a safe and effective surgical treatment, particularly when conservative measures fail.

Material and Methods: We analyzed the clinical and surgical outcomes of 91 patients who underwent laparoscopic duodenojejunostomy for SMAS between February 2016 and July 2023. Our patients were diagnosed and treated according to an algorithm (Figure 1). Preoperative clinical characteristics, surgical data, postoperative symptom improvement rates, and weight regain were evaluated. Diagnosis was confirmed through computed tomographic angiography (CTA) demonstrating an aortomesenteric angle <20° and distance <10 mm. Conservative treatment was initially applied in all cases prior to surgical intervention. The following flowchart was followed in the study (Figure 2).

Results: Among the 91 patients, 58.2% were female, and the mean age was 29.2 SD 11 years. All surgeries were completed laparoscopically with no intraoperative complications. After an average follow-up of 42.5 SD 26.7 months, 93.4% of patients showed significant symptom improvement, with a mean postoperative weight gain of 4.5 SD 2.5 kg. Postoperative complications included delayed gastric emptying in 8 patients (resolved conservatively) and low-output chylous fistulas in 4 patients (resolved spontaneously). There was no mortality.

Conclusion: Laparoscopic duodenojejunostomy is a safe and effective treatment for SMAS, offering high success rates and minimal complications. While this study highlights the benefits of a multidisciplinary approach and standardized surgical techniques, further prospective studies are needed to optimize management protocols for this rare condition.

Keywords: Superior mesenteric artery syndrome, Wilkie's syndrome

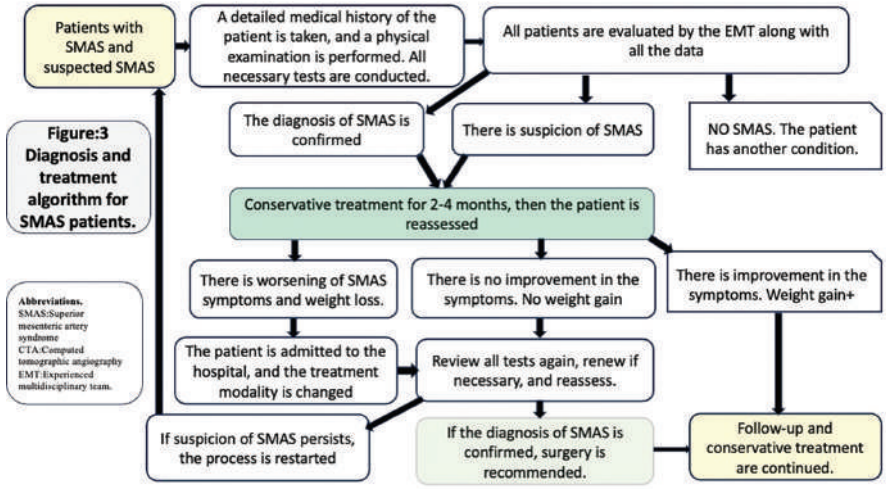


Figure 1. Diagnosis and treatment algorithm for SMAS.

SMAS: Superior mesenteric artery syndrome, EMT: Expert multidisciplinary team, CTA: Computed tomography angiography.

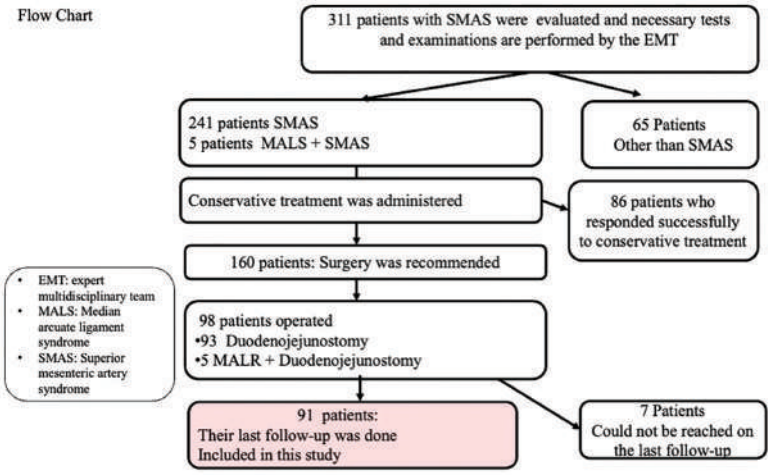


Figure 2. Flow chart of the study.

SMAS: Superior mesenteric artery syndrome, MALR: Median arcuate ligament release.

[S-518]

Superior mesenteric artery syndrome: Development and validation of a novel diagnostic and severity scoring system

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Objective: Superior mesenteric artery syndrome (SMAS) is a rare gastrointestinal disorder caused by compression of the third part of the duodenum due to a narrowed aortomesenteric angle (AMA) and aortomesenteric distance (AMD). Although AMD and AMA are essential diagnostic parameters, no standardized system exists to grade disease severity. This study introduces the SMAS-DAS (Superior mesenteric artery syndrome-diagnosing and severity scoring) system, which incorporates clinical and radiological parameters for both diagnosis and severity classification.

Material and and Methods: We retrospectively analyzed 37 patients diagnosed with SMAS between August 2023 and November 2024. The SMAS-DAS system integrates four parameters: vomiting frequency, involuntary weight loss percentage, AMD, and proximal duodenum diameter, scoring each from 0-3. Total scores range from 0-12, with classifications of mild (3-6), moderate (7-9), or severe (>9). Correlations between AMD, AMA, clinical symptoms, and radiological findings were assessed using Pearson's correlation coefficient.

Results: There was a significant correlation between AMD and key clinical parameters, including vomiting frequency ($p<0.001$) and weight loss percentage ($p<0.001$). Conversely, AMA showed weak and non-significant correlations, leading to its exclusion from the scoring system. Of the 37 patients, 8 had mild, 18 moderate, and 11 severe SMAS. The average AMD was 4.5 mm, and the proximal duodenum diameter was 28.5 mm.

Conclusion: The SMAS-DAS system provides a reliable framework for diagnosing SMAS and grading its severity, guiding tailored treatment strategies. While promising, further validation in larger, multicenter studies is necessary to confirm its clinical utility.

Keywords: Superior mesenteric artery syndrome, aortomesenteric distance, Wilkie's syndrome

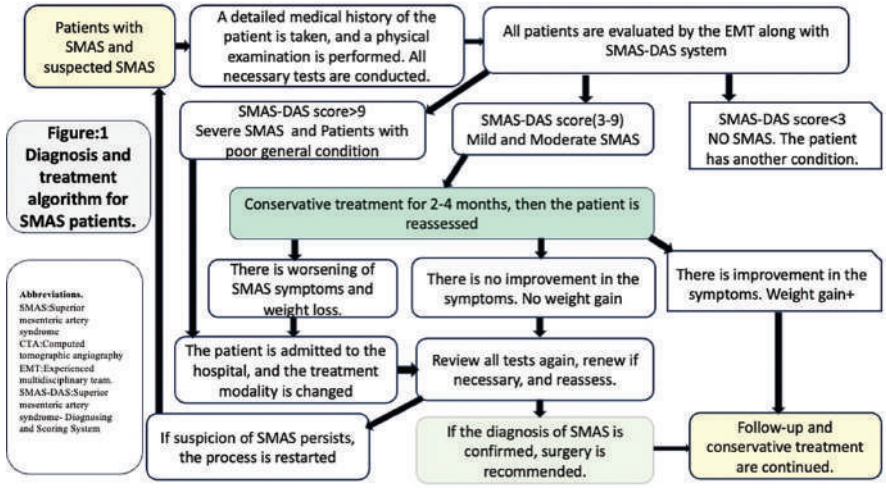


Figure 1. Superior mesenteric artery syndrome diagnosis and treatment algorithm.

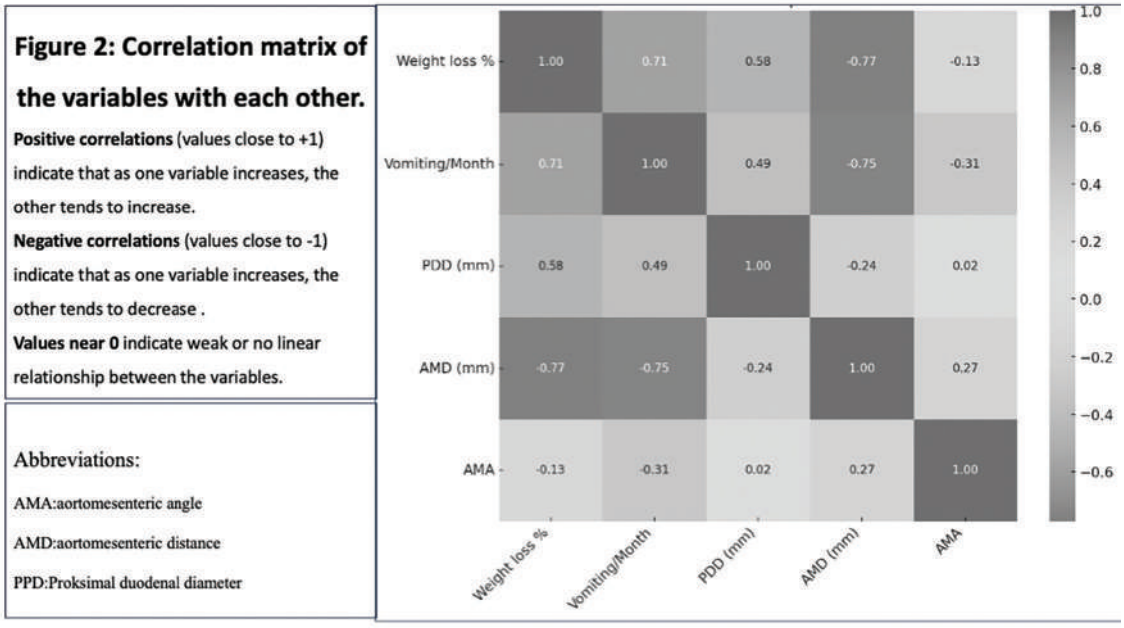


Figure 2. Correlation matrix of the variables (weight loss%, aortamesenteric angle, aortamesenteric distanse, proximal duodenal diameter, vomiting/month) with each other. Positive correlations (values close to +1) indicate that as one variable increases, the other tends to increase. Negative correlations (values close to -1) indicate that as one variable increases, the other tends to decrease .Values near 0 indicate weak or no linear relationship between the variables.

[S-519]

The value of advanced age and preoperative inflammatory markers in predicting mortality in perforated peptic ulcer

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Objective: Perforated peptic ulcer (PPU) is a serious clinical condition requiring emergency surgical intervention and is associated with high mortality. Mortality risk is known to increase significantly, particularly in elderly patients. This study aimed to evaluate the predictive value of advanced age and preoperative inflammatory markers on mortality in patients operated on for PPU.

Material and Methods: A total of 190 patients who underwent surgery for PPU between January 2014 and February 2025 were retrospectively analyzed. Preoperative neutrophil-to-lymphocyte ratio (NLR), C-reactive protein (CRP), lactate levels, and symptom duration were compared between patients who died (exitus) and those who survived.

Results: Mortality was observed in 27 patients (14.2%). Although NLR values were higher in the exitus group compared to survivors, the difference was not statistically significant (median 8.26 vs. 7.96, p=0.85). CRP levels were significantly elevated in the mortality group (median 39.35 vs. 10.7, p=0.006). Lactate was identified as the parameter most strongly associated with mortality (median 47.5 vs. 21.0, p=0.00001). Symptom duration was longer in the exitus group; however, the difference did not reach statistical significance (median 2 days vs. 1 day, p=0.086).When mortality rates were analyzed by age groups, the most striking finding was the marked increase in mortality among elderly patients. Mortality was 5.6% in patients younger than 70 years, whereas it was 39.6% in patients aged 70 years and older, indicating an approximately sevenfold higher mortality risk in the advanced age group.

Conclusion: Advanced age is one of the most important determinants of mortality in PPU surgery. The dramatic increase in mortality among patients over 70 years highlights this group as a high-risk population. Preoperative CRP and especially lactate levels were found to be significant biomarkers in predicting mortality. Although NLR values were higher in the mortality group, no significant difference was observed. Closer monitoring and aggressive perioperative management may help reduce mortality in elderly patients with elevated lactate and CRP levels.

Keywords: Perforated peptic ulcer, mortality

[S-520]

Prediction of complications and early mortality in gastric cancer surgery: A simple clinical score

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Objective: Gastric cancer surgery is associated with substantial morbidity and mortality, making accurate preoperative risk stratification essential. Postoperative complications and early mortality are influenced not only by tumor-related factors but also by the patient's physiological reserve, nutritional status, and comorbidity burden. Many existing prognostic models require postoperative or pathological variables, limiting their utility at the initial preoperative decision-making stage. Therefore, there is a need for simple, bedside-applicable tools based solely on preoperative parameters.

Material and Methods: Patients who underwent surgery for gastric adenocarcinoma between 2015 and 2024 were retrospectively analyzed. The composite outcome was defined as the occurrence of any postoperative complication or perioperative mortality. Candidate predictors included T stage, N stage, preoperative albumin level, ASA score, age, and surgical approach. Variables were evaluated using multivariable logistic regression analysis. A point-based prognostic score was developed using independently significant variables, with points assigned according to effect size and clinical relevance. Discriminative ability was assessed using receiver operating characteristic (ROC) analysis, and calibration was evaluated using the Hosmer-Lemeshow test.

Results: A total of 738 patients were included, and 127 patients (17.2%) experienced the composite outcome. In multivariable analysis, N stage ≥N2, low preoperative albumin (<3.5 g/dL), and ASA score ≥3 were independently associated with the composite outcome (all p<0.05). The resulting score ranged from 0 to 5 points: N stage ≥N2 (1 point), albumin <3.5 g/dL (2 points), and ASA ≥3 (2 points). Event rates increased stepwise with higher scores. The score demonstrated good discriminative performance, with an AUC of 0.81. An optimal cut-off value of ≥2 points provided high sensitivity for predicting adverse outcomes.

Conclusion: A simple prognostic score based on preoperative N stage, albumin level, and ASA score effectively predicts postoperative complications and early mortality following gastric cancer surgery. This easily applicable tool may assist in preoperative risk stratification, patient counseling, and identification of high-risk patients who may benefit from closer perioperative management.

Keywords: Gastric cancer, prognosis, mortality

Skor	Olay riski
0	%5,2
1	%16,7
2	%28,4
3	%32,1
4	%41,5
5	%58,3

Figure 1. Score-risk.

[S-521]

Comparison of oncological and perioperative outcomes of total radical and subtotal radical gastrectomy performed for gastric cancer over the last five years: A single-center retrospective cohort study

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Objective: Curative surgery for gastric cancer typically involves D2 lymph node dissection with either total gastrectomy (TG) or subtotal gastrectomy (STG). We aimed to compare perioperative and oncological outcomes of TG vs. STG in our institution.

Material and Methods: We retrospectively reviewed patients who underwent radical gastrectomy for gastric cancer between 2019 and 2025. Surgical approach was categorized as TG or STG. Perioperative outcomes (operative time, transfusion, length of stay, anastomotic leak, reoperation, 30-day mortality, Clavien–Dindo ≥3) and oncological surrogates (R0 resection, total retrieved lymph nodes, pT/pN and stage distribution, LN cut-offs ≥16 and ≥25) were compared between groups.

Results: A total of 147 patients were included (TG: 72; STG: 75). Operative time was longer in the TG group [286 (240-320) vs. 240 (209-280) minutes; p=0.0009]. The number of retrieved lymph nodes was comparable [23 (17-35) vs. 24 (15-33); p=0.543], and the proportion achieving ≥16 LNs did not differ (81.7% vs. 74.0%; p=0.361). R0 resection rates were similar (91.3% vs. 89.0%; p=0.865). There were no significant differences in anastomotic leak (5.6% vs. 8.2%; p=0.745), reoperation (16.9% vs. 13.7%; p=0.762), major complications (42.3% vs. 34.2%; p=0.414), or 30-day mortality (5.6% vs. 8.3%; p=0.745). Stage, pT, and pN distributions were comparable (all p>0.05).

Conclusion: In this single-center retrospective cohort, TG was associated with longer operative time, while perioperative morbidity/mortality and key oncological quality indicators (lymph node yield and R0 resection) were similar between TG and STG. Surgical strategy should be individualized based on tumor characteristics and patient factors.

Keywords: Gastric cancer, gastrectomy, perioperative outcomes, subtotal gastrectomy, survival, total gastrectomy

Table 1. Comparison of perioperative and oncological outcomes between total and subtotal radical gastrectomy

	Total	Subtotal	p
Sürekli değişkenler (medyan [IQR])			
Yaş	64.0 [57.0–71.0] (n=72)	67.0 [59.5–74.5] (n=75)	0.213
Cerrahi süre (dk)	286 [240–320] (n=71)	240 [209–280] (n=74)	0.0009
Kan transfüzyonu	1 [0–2] (n=71)	1 [0–4] (n=73)	0.507
Çıkarılan LN toplam	23 [17–35] (n=71)	24 [15–33] (n=73)	0.543
Pozitif LN	1 [0–7] (n=71)	2 [0–7] (n=73)	0.562
Yatış süresi (gün)	13 [11–19] (n=71)	13 [10–19.2] (n=74)	0.219
İkili sonuçlar (n/N, %)			
Neoadjuvan tedavi	19/71 (26.8%)	9/74 (12.2%)	0.044
Adjuvan tedavi	49/71 (69.0%)	47/74 (63.5%)	0.600
Anastomoz kaçağı	4/71 (5.6%)	6/73 (8.2%)	0.745
Reoperasyon	12/71 (16.9%)	10/73 (13.7%)	0.762
Tekrar yatış	13/71 (18.3%)	12/73 (16.4%)	0.939
30 gün mortalite	4/71 (5.6%)	6/72 (8.3%)	0.745
Nüks	10/71 (14.1%)	5/72 (6.9%)	0.263
Uzak metastaz	15/71 (21.1%)	15/72 (20.8%)	1.000
Majör komplikasyon (Clavien ≥3)	30/71 (42.3%)	25/73 (34.2%)	0.414
R0 rezeksiyon	63/69 (91.3%)	65/73 (89.0%)	0.865
LN cut-off kalite göstergeleri (n/N, %)			
LN ≥16	58/71 (81.7%)	54/73 (74.0%)	0.361
LN ≥25	34/71 (47.9%)	35/73 (47.9%)	1.000

[S-522]

Prognostic impact of pathological risk factors, molecular biomarkers, and selective HIPEC application in resected gastric adenocarcinoma

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Objective: Gastric cancer remains a major cause of cancer-related mortality worldwide. Prognosis is shaped by classical pathological features, molecular biomarkers, and locoregional interventions such as hyperthermic intraperitoneal chemotherapy (HIPEC) in selected cases. The aim of this study was to evaluate the combined prognostic impact of pathological risk factors, biomarker status (MSI, HER2, PD-L1), and the selective application of HIPEC on survival outcomes in patients undergoing gastrectomy with D2 lymphadenectomy.

Material and Methods: A retrospective cohort of 50 patients with gastric adenocarcinoma who underwent gastrectomy with standardized D2 lymph node dissection between 2005 and 2019 was analyzed. Disease-free survival (DFS) and overall survival (OS) were estimated using Kaplan-Meier methods, and independent predictors of DFS were identified using Cox proportional hazards regression. Peritoneal cytology-positive patients were selectively offered HIPEC according to institutional criteria.

Results: The median DFS was 14 months, and the median OS was 19.5 months. Stage I-II patients had significantly longer DFS compared with stage III-IV ($p<0.001$). Adverse pathological determinants included vascular invasion, perineural invasion, and an elevated lymph node ratio (LNR). MSI-positive tumors demonstrated prolonged DFS, whereas strong PD-L1 expression predicted markedly poorer outcomes. HER2 status did not significantly influence DFS. Peritoneal cytology was positive in 28% of patients; 13 of these received HIPEC, which was associated with improved DFS within this subgroup. Multivariate analysis identified MSI positivity and HIPEC as protective factors, while high LNR, vascular invasion, perineural invasion, and strong PD-L1 expression were independent predictors of poor DFS.

Conclusion: Integrating pathological risk factors, biomarker profiles, and selective HIPEC use provides a comprehensive prognostic framework for gastric cancer. These findings support biomarker-driven risk stratification and selective HIPEC application in cytology-positive patients.

Keywords: Gastric adenocarcinoma, microsatellite instability, PD-L1 expression, hyperthermic intraperitoneal chemotherapy, pathological prognostic factors

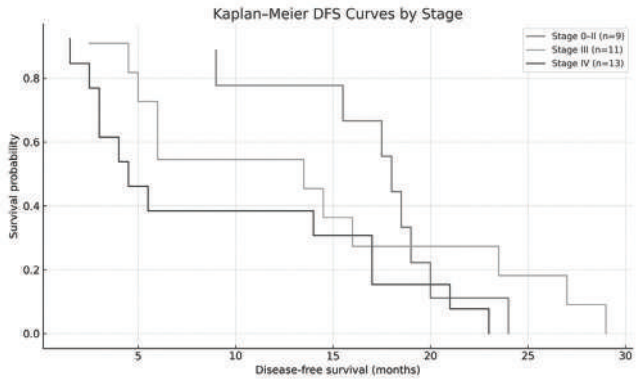


Figure 1. Kaplan-Meier DFS curves by stage. DFS stratified by AJCC stage (0-II, III, IV). DFS decreases with advancing stage.

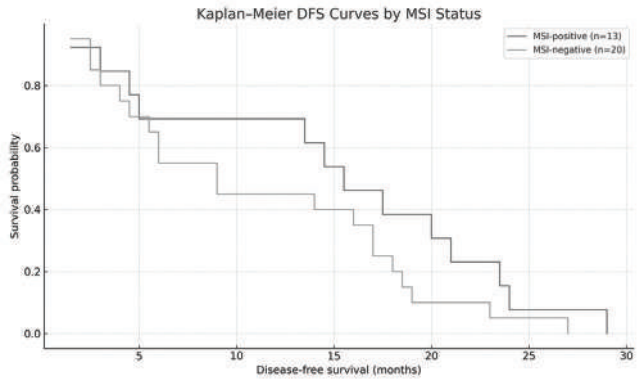


Figure 2. Kaplan-Meier DFS curves by MSI status. MSI-positive tumors show longer DFS compared with MSI-negative tumors.

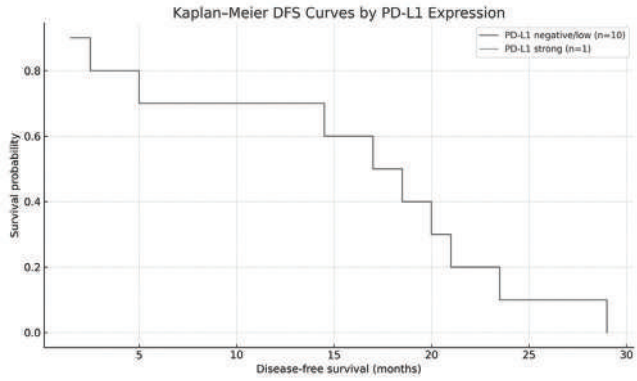


Figure 3. Kaplan-Meier DFS curves by PD-L1 expression. Strong PD-L1 expression (score 3) correlates with shorter DFS.

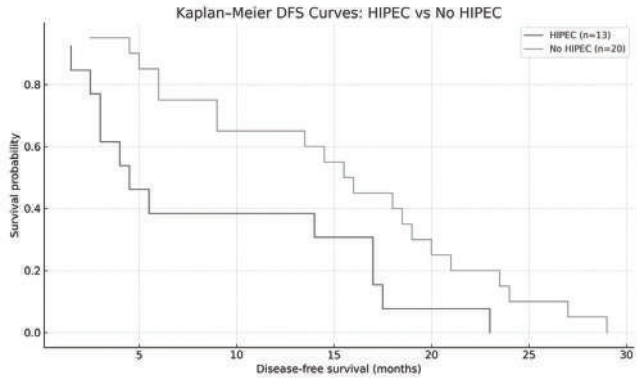


Figure 4. Kaplan-Meier DFS curves. HIPEC vs. No HIPEC: DFS comparison of HIPEC vs. non-HIPEC patients; small sample size noted.

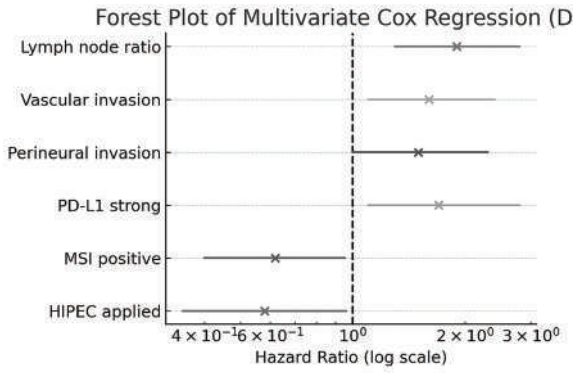


Figure 5. Forest plot of multivariate Cox regression analysis for DFS. Independent predictors of shorter DFS included higher LN ratio, vascular invasion, perineural invasion, and strong PD L1 expression. Protective factors were MSI positivity and HIPEC application.

Table 1. Patient demographics and surgical characteristics

	n	%
Total patients	50	100
Male	33	66
Female	17	34
Total gastrectomy	29	58
Subtotal gastrectomy	21	42

Baseline demographic and surgical characteristics.

Table 2. Tumor type classification

Tumor type	n	%
High-grade dysplasia	1	2
Intestinal-type adenocarcinoma	26	52
Diffuse-type adenocarcinoma	10	20
Mucinous gastric adenocarcinoma	3	6
Signet-ring cell carcinoma	7	14
Siewert type 2/3 GEJ tumor	3	6

Tumors stratified according to the updated 6-category system.

Table 3. Biomarker distribution and testing availability timeline

Biomarker	Category	n	%	Testing availability
MSI	Positive	18	36	Available since 2007
	Negative	32	64	
HER2	Negative (1+)	11	45.8*	Available since 2013
	Positive (2+)	7	29.2*	
	Strong positive (3+)	8	33.3*	
	Not assessed	26	52	(pre-2013 cases)
PD-L1	Negative (0)	12	63.2*	Available since 2013
	Weak (1)	1	5.3*	
	Moderate (2)	4	21.1*	
	Strong (3)	2	10.5*	
	Not assessed	31	62	(pre-2013 cases)

Percentages for HER2 and PD-L1 refer to subgroups with available testing. Percentages are calculated based on subgroups where PD-L1 and HER2 testing was actually performed. MSI: Microsatellite instability, PD L-1: Programmed death-ligand.

[S-523]

Etiology, surgical strategies, and clinical course of esophageal perforations: A single-center case series

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Objective: Esophageal perforation is a critical surgical emergency with high mortality, closely related to delays in diagnosis and treatment and requiring experienced decision-making. Heterogeneous clinical presentation and subtle early imaging findings may complicate diagnosis. This study aimed to evaluate the demographic characteristics, etiological and anatomical distribution, time to diagnosis, surgical strategies, and early clinical outcomes of patients operated on for esophageal perforation in a single center, and to assess the impact of diagnostic delay and surgical approach on clinical course.

Material and Methods: This retrospective single-center case series included four patients who underwent surgical treatment for esophageal perforation at the General Surgery Clinic of University of Health Science Türkiye, Ankara Etlik City Hospital. Demographic and clinical data (age, sex, ASA score, comorbidities), etiology and localization of perforation, time from symptom onset to diagnosis, laboratory parameters, and radiological findings were reviewed. Diagnosis was confirmed by computed tomography in all patients. Surgical technique, postoperative intensive care requirement, complications, reintervention, and mortality were recorded. Continuous variables were presented as mean ± standard deviation or median (IQR), and categorical variables as numbers and percentages.

Results: All patients were male, with a mean age of 36±22 years (18-68). Etiology was iatrogenic in three patients (75%) and foreign-body related in one (25%). Seventy-five percent of perforations were located in the distal esophagus. Diagnosis was established within 24 hours in three patients, while one had delayed diagnosis. All patients were diagnosed by computed tomography and underwent primary surgical management. Two patients underwent primary repair, one flap-reinforced repair, and one esophagectomy because of extensive contamination and tissue damage. All patients were monitored in the intensive care unit postoperatively. One patient developed persistent leakage requiring reintervention. The 30-day and overall mortality rates were both 50%; all deaths were associated with severe sepsis and multiorgan failure.

Conclusion: Esophageal perforation remains a difficult emergency with high mortality despite early diagnosis and appropriate surgery. Consistent with the literature, diagnostic delay and anatomical location were the main determinants of outcome. Primary repair was safe and effective in early-diagnosed cases with limited contamination, whereas delayed and complicated cases required more aggressive surgical approaches. This single-center experience highlights the importance of rapid diagnostic evaluation, early intervention, and individualized surgical strategy in improving clinical outcomes.

Keywords: Emergency surgery, esophageal perforation, iatrogenic perforation, primary repair, sepsis

Table 1. Olgu Bazlı Klinik ve Cerrahi Özellikler

Değişken	Olgu 1	Olgu 2	Olgu 3	Olgu 4
Yaş (yıl)	18	68	38	20
Etiyoloji	İyatrojenik	İyatrojenik	İyatrojenik	Yabancı cisim
Perforasyon yeri	Distal	Distal	Distal	Torasik
Tanı süresi	<24 saat	<24 saat	<24 saat	≥24 saat
Tanı yöntemi	BT	BT	BT	BT
Cerrahi yaklaşım	Açık/Lap*	Açık/Lap*	Açık/Lap*	Açık/Lap*
Cerrahi yöntem	Primer onarım	Primer onarım	Onarım + flep	Özofajektomi
YBÜ yatışı	Var	Var	Var	Var
YBÜ süresi (gün)	2	2	4	2
Hastane yatışı (gün)	2	10	7	7
Postop komplikasyon	Yok	Yok	Var	Var
Persistan kaçak	Yok	Yok	Var	Yok
Yeniden girişim	Hayır	Hayır	Evet	Hayır
30 gün mortalite	Hayır	Hayır	Evet	Evet
Son durum	Sağ	Sağ	Ex	Ex

Table 2. Karşılaştırmalı Literatür Tablosu

PARAMETRE	Bizim serimiz (Etlik, n=4)	Literatür / kıyas noktası
Çalışma tipi	Tek merkez, retrospektif olgu serisi	Kılavuz + sistematik derleme + çok merkezli/tek merkezli seriler
Cinsiyet	%100 erkek	EP etiyolojiye göre değişir; Boerhaave'da erkek baskın raporlanır
Yaş	**36±22** (18–68)	Serilerde geniş yaş aralığı; tek merkez serilerinde benzer heterojenlik
Etiyoloji	**%75 iyatrojenik**, %25 yabancı cisim	Endoskopi yaygınlaştıkça iyatrojenik perforasyonların arttığı vurgulanır
Lokalizasyon	**%75 distal**, %25 torasik	EP yönetimi lokalizasyona göre şekillenir (servikal/torasik/abdominal ayrımı)
Tanıda BT kullanımı	**%100 BT**	Şüpheli perforasyonda BT'nin önerildiği (tanı + komplikasyon/planlama) belirtilir
"İlk 24 saat"te tanı	**%75 <24 saat**, %25 ≥24 saat	"Altın 24 saat" gecikmesinde mortalite artışı; klasik veri (gecikmişte ~%40 vs erken ~%6)
Ana yaklaşım	**%100 cerrahi**	Kılavuzlarda olgu seçimine göre konservatif / endoskopik / cerrahi seçeneklerin yeri tanımlanır; ancak instabilite, yaygın kontaminasyon, sepsis gibi durumlarda cerrahi öne çıkar
Cerrahi teknik dağılımı	Primer onarım **%50**, onarım+flep **%25**, özofajektomi/diversiyon **%25**	Kılavuzlar; debridman + kapatma + (gerekirse) buttress/flep + drenaj prensipleri; uygun olguda primer onarım yaygın
Yoğun bakım yatışı	**%100**	EP'de sepsis/mediastinit riski nedeniyle kritik bakım ihtiyacı serilerde sık raporlanır
Persistan kaçak	**%25**	Kaçak/leak EP'nin temel komplikasyonlarından; güncel endoskopik yaklaşımlar bu hedefe yönelik (stent/EVT) çalışılmıştır
Yeniden girişim	**%25**	Komplike olgularda tekrar girişim gereksinimi serilerde raporlanır; erken uygun modalite seçimi vurgulanır
Hastane yatışı	Ortalama **6.5 gün** (2–10)	Serilerde yatış süresi geniş aralıkta; yöntem, gecikme ve komplikasyonlarla uzar.
30 gün mortalite	**%50**	Genel EP mortalitesi literatürde yüksek ve değişken; zamanında tanı/tedavi ile azalma eğilimi bildiriliyor (tarihsel ~%30'dan ~%15'lere)



Figure 1. Esophageal perforation.

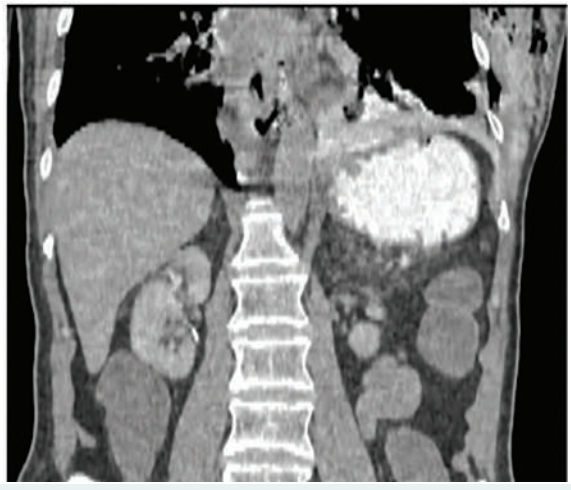


Figure 2. Esophageal perforation.

[S-525]

Retrospective analysis of the association between preoperative PET/CT findings and aggressive tumor behavior and recurrence risk in gastric GISTs

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Objective: This study aimed to evaluate, in gastric gastrointestinal stromal tumors (GISTs), the relationship between preoperative PET/CT FDG uptake and tumor size, mitotic index, risk stratification, and recurrence.

Material and Methods: Twenty-six patients who underwent surgery for gastric GIST between January 2010 and September 2024 were retrospectively reviewed. PET/CT findings, tumor size, mitotic index, NIH risk classification, and recurrence data were analyzed.

Results: In the group with intense FDG uptake, the proportion of tumors ≥5 cm was 75%, the proportion with a high mitotic index was 50%, and the proportion classified as high-risk was 50%. Recurrence was observed in 50% of patients with intense FDG uptake. Among cases who underwent PET/CT, 44.4% had large tumors and 44.4% showed radiologic invasion.

Conclusion: Intense FDG uptake on preoperative PET/CT is associated with aggressive pathological features and a higher risk of recurrence in gastric GISTs. These findings suggest that PET/CT may serve as a prognostic marker.

Keywords: FDG uptake, gastrointestinal stromal tumor (GIST), PET/CT

Table 1.	
Demographic and clinical characteristics	
Age (mean ± SD)	61.7±10.2
Sex, n (%)	Female 15 (57.7)/male 11 (42.3)
Young patient (<40 years), n (%)	1 (3.8)
Comorbidity, n (%)	17 (65.4)
Presenting symptoms, n (%)	Asymptomatic 5 (19.2); bleeding 2 (7.7); obstructive symptoms 2 (7.7); pain/dyspepsia 17 (65.4)
Tumor size, n (%)	≤2 cm: 10 (38.5); 2-5 cm: 10 (38.5); ≥5 cm: 6 (23.1)
Diagnosis and preoperative assessment	
Preoperative diagnostic method, n (%)	Endoscopy only 4 (15.4); endoscopy + CT/MRI 16 (61.5); EUS + FNB 6 (23.1)
PET/CT FDG uptake, n (%)	Not performed 17 (65.4); mild 5 (19.2); high 4 (15.4)
Elevated NLR/CRP-albumin ratio, n (%)	12 (46.2)
Neoadjuvant imatinib, n (%)	3 (11.5)
Surgical and pathological characteristics	
Surgical approach, n (%)	Laparoscopic 13 (50.0); laparotomy 9 (34.6); endoscopic + laparoscopic 1 (3.8); ESD 3 (11.5)
Type of surgery, n (%)	Wedge resection 16 (61.5); subtotal gastrectomy 3 (11.5); total gastrectomy 5 (19.2); proximal gastrectomy 1 (3.8); ESD 1 (3.8)
Resection margin, n (%)	R0 23 (88.5); R1/close 3 (11.5)
Mitotic index ≥5, n (%)	Mitotic index ≥5, n (%)
Risk classification (NIH), n (%)	Very low 5 (19.2); low 10 (38.5); intermediate 6 (23.1); high 5 (19.2)
Postoperative outcomes and follow-up	
Surgical complications (Clavien-Dindo ≥2), n (%)	2 (7.7)
Length of hospital stay (days, mean ± SD)	6.2±3.5
Postoperative motility problems, n (%)	4 (15.4)
Adjuvant imatinib/TKI, n (%)	4 (15.4)
Follow-up duration (months, mean ± SD)	35.6±48.2
Recurrence, n (%)	4 (15.4)
Time to recurrence (months, mean ± SD)	38.5±55.1

Patient characteristics, diagnostic/preoperative assessment, surgical/pathological findings, and follow-up outcomes (n=26).

Table 2. Association between PET/CT uptake and clinicopathological features			
Feature	**PET/CT not performed (n=17)**	**Mild FDG uptake (n=5)**	**High FDG uptake (n=5)**
Large tumor (≥5 cm), %	17.6%	20.0%	75.0%
High recurrens risk	17.6%	20.0%	50.0%
High mitotic index (≥5)	17.6%	20.0%	50.0%
Radiologic invasion	23.5%	20.0%	75.0%
Recurrence	11.8%	0.0%	50.0%
Elevated NLR/CRP-albumin ratio	41.2%	40.0%	75.0%

[S-526]

Psychotropic drug use in patients undergoing surgery for gastroesophageal reflux disease and/or hiatal Hernia: A retrospective cross-sectional study

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Objective: An association between gastroesophageal reflux disease (GERD), psychiatric disorders, and psychotropic drug use has been demonstrated in the literature. However, data regarding this relationship in surgically treated patient populations remain limited. Furthermore, studies evaluating the prevalence of psychiatric disorders and psychotropic medication use in patients with hiatal hernia (HH) are scarce. This study aimed to determine the frequency of psychotropic drug use in patients undergoing surgery for GERD and/or HH and to evaluate whether differences exist among clinical subgroups.

Material and Methods: Patients who underwent surgery for GERD and/or HH between 2015 and 2025 at the Department of General Surgery, Marmara University Pendik Training and Research Hospital, were retrospectively reviewed. Patients with a history of bariatric surgery or gastrectomy that could predispose them to GERD or HH were excluded. Patients were categorized into three clinical groups: GERD only (Group A), GERD+HH (Group B), and HH only (Group C). Psychotropic drug use was determined based on the patient's medication status on the date of surgery.

Results: A total of 124 patients were included. The mean age was 55.2±15 years, and 71.8% were female. The mean body mass index was 28.5±4.8 kg/m2. Laparoscopic surgery was performed in 79.8% of cases. The most common procedure was Nissen fundoplication (66.1%), followed by hiatal hernia repair without fundoplication (21.8%) and Toupet fundoplication (7.3%). The ASA distribution was as follows: ASA I 27.4%, ASA II 58.1%, and ASA III 12.9%. Group distribution was as follows: Group A, n=7 (5.6%); Group B, n=86 (69.4%); and Group C, n=31 (25%). HH accompanied GERD in 92.4% of patients who underwent surgery for GERD. Overall, 32 patients (25.8%) were using psychotropic medication. Psychotropic drug use rates were 0% in Group A, 26.7% in Group B, and 29% in Group C. No statistically significant difference was found among the groups regarding psychotropic drug use (Fisher's exact test, p=0.306). Among medication users, selective serotonin reuptake inhibitors (SSRIs) were the most common (62.5%), followed by serotonin–norepinephrine reuptake inhibitors (18.8%) and antipsychotics (18.8%).

Conclusion: Approximately one-quarter of patients undergoing surgery for GERD and/or HH were receiving psychotropic medication. Although no statistically significant difference was observed among the clinical groups, the highest rate was detected in the HH-only group. These findings suggest that the relationship between HH and psychotropic medication use warrants further investigation.

Keywords: Hiatal hernia, psychotropic drug, reflux

[S-527]

Prognostic value of aspartate aminotransferase lymphocyte ratio (AALR) in stage I-III gastric cancer

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Objective: Systemic inflammation is increasingly recognized as a key determinant of tumor progression and survival in gastric cancer. The aspartate aminotransferase-to-lymphocyte ratio (AALR) is a novel inflammation-based biomarker; however, its clinical and prognostic significance in gastric cancer has not been sufficiently elucidated. This study aimed to investigate the association between AALR and clinicopathological characteristics and to evaluate its impact on prognosis and overall survival in patients with gastric cancer.

Material and Methods: This retrospective study included patients who underwent surgical treatment for gastric cancer. Preoperative AALR was calculated using routine biochemical and hematological laboratory parameters. Patients were divided into low (<9.09) and high (≥9.09) AALR groups according to the optimal cut-off value of 9.09.Associations between AALR and clinicopathological variables were analyzed using the chi-square test and independent samples t-test. Overall survival was assessed using the Kaplan-Meier method and compared with the log-rank test. Prognostic factors were evaluated using univariate and multivariate Cox proportional hazards regression analyses.

Results: High AALR levels were significantly associated with adverse clinicopathological features. Kaplan–Meier survival analysis demonstrated that patients with AALR ≥9.09 had significantly worse overall survival compared to those with AALR <9.09 (median survival: 15 vs. 42 months, respectively). The difference in survival between the two groups was statistically significant (log-rank χ^2=8.14, p=0.004). In univariate Cox analysis, AALR was significantly associated with survival. Multivariate analysis identified high AALR (HR: 1.08; 95% CI: 1.01-1.15; p=0.033) and perineural invasion as independent prognostic factors.

Conclusion: AALR is an inexpensive, easily accessible, and independent prognostic biomarker in gastric cancer. Elevated AALR is associated with aggressive tumor characteristics and significantly poorer survival outcomes. Incorporating AALR into routine clinical assessment may improve risk stratification and prognostic evaluation in patients with gastric cancer. As a parameter readily obtainable from routine laboratory tests, AALR may serve as a practical and cost-effective tool for preoperative risk assessment in gastric cancer patients.

Keywords: Gastric cancer, aspartate aminotransferase-lymphocyte ratio, inflammation

[S-528]

Frequency of HER2 positivity and clinical prognostic significance in patients with gastric cancer

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Objective: Gastric cancer is one of the leading causes of death worldwide. The general characteristics of the disease show geographical, ethnic, environmental differences. This makes follow-up, treatment policies of this advanced-stage disease important. There are many genetic, molecular factors affecting the prognosis. HER2 positivity's one of these factors. The aim of this study was to determine the frequency of HER2-positive gastric cancer in our region and to identify the clinicopathological features associated with overexpression, as well as to understand prognostic significance.

Material and Methods: The study was conducted on 351 patients who were pathologically diagnosed with gastric malignancy and had HER2 analysis performed after admission to the General Surgery Clinic of Ankara City Hospital between July 2019 and January 2024. Evaluations were performed between tumor characteristics, prognosis, survival, laboratory parameters.

Results: A total of 351 patients were included, 71.51% were male. The mean age of the patients was calculated as 65.73±11.87 years. Approximately half of the patients were stage IV. A statistically significant relationship was found between HER2 positivity and differentiation. In HER2-positive patients, the rate of poor differentiation was significantly lower compared to HER2-negative patients. The rate of moderate differentiation was significantly higher in HER2-positive patients compared to HER2-negative patients. The mortality rate was found to be significantly higher in HER2-positive patients. MMR, MLH mutations weren't observed in HER2-positive patients. In HER2-positive patients, urea, ALT, neutrophil-to-lymphocyte ratio, CEA, and CA 15.3 levels were significantly higher compared to HER2-negative patients, while eosinophil count, lipase levels were significantly lower. Junctional tumor location increased HER2 positivity by 2.5 times compared to antral location.

Conclusion: In this study, the rate of HER2-positive patients among gastric cancer patients was found 27.07%. The significantly lower rate of poor differentiation, higher rate of moderate differentiation in HER2-positive patients indicate that HER2 plays role in determining the histopathological structure of the tumor. Statistical analyses of laboratory tests showed that tumor characteristics with more aggressive biology are expected in HER2-positive patients. The absence of MMR, MLH1 expression in the HER2-positive subgroup indicates that these tumors follow different pathogenic mechanisms at the molecular level, that factors affecting immune response, such as MSI, show variability. The more frequent detection of positivity in junctional tumors suggests that HER2 positivity may be effective also on tumor localization. All results provide that will contribute to determining the regional frequency of HER2 positivity as well as to the evaluation of HER2-related tumor physiology, clinical features and pathogenesis.

Keywords: Gastric cancer, HER2 positivity, prognostic factors

[S-529]

Prognostic nutritional index is an independent predictor of survival in gastric cancer: A comparative analysis with the CALLY index

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Objective: Inflammation and nutritional status are increasingly recognized as key determinants of oncologic outcomes in gastric cancer. Among several proposed biomarkers, inflammation- and nutrition-based indices have attracted interest; however, their comparative prognostic performance remains unclear. This study sought to assess the prognostic relevance of the prognostic nutritional index (PNI score) in comparison with the C-reactive protein-albumin-lymphocyte (CALLY) index in patients undergoing surgery for gastric cancer.

Material and Methods: This retrospective study included 144 patients who underwent curative-intent gastrectomy for gastric cancer. Demographic characteristics, pathological findings, laboratory parameters, and survival outcomes were reviewed. The PNI score was calculated using serum albumin and peripheral lymphocyte count, whereas the CALLY index incorporated albumin, lymphocyte count, and C-reactive protein levels. Overall survival (OS) and disease-free survival (DFS) were estimated using the Kaplan-Meier method. Optimal cut-off values were identified using maximally selected log-rank statistics. Multivariable Cox proportional hazards regression analyses were performed with adjustment for age, sex, T stage, N stage, histologic grade, lymphovascular invasion, and perineural invasion.

Results: Over the follow-up period, death occurred in 88 patients (61.1%), and disease recurrence was observed in 103 patients (71.5%). Patients with a higher PNI score demonstrated significantly longer OS and DFS. After adjustment for pathological tumor burden and other clinicopathological variables, the PNI score remained independently associated with OS (HR: 0.71, 95% CI: 0.43-0.98; p=0.041) and DFS (HR: 0.60, 95% CI: 0.42-0.86; p=0.005). Although higher CALLY values were associated with favorable outcomes in unadjusted analyses, this association did not persist in multivariable models. When both indices were evaluated simultaneously, only the PNI score retained independent prognostic significance.

Conclusion: The PNI provides meaningful and independent prognostic information for both overall and disease-free survival in gastric cancer. Compared with the CALLY index, the PNI score appears to more accurately reflect the impact of nutritional and immune status on long-term outcomes, supporting its use as a practical tool for risk stratification in clinical practice.

Keywords: Gastric cancer, prognostic nutritional index, CALLY index, overall survival, disease-free survival

Table 1. Demographic and clinicopathological characteristics

Variables	n=144
Age	61 (54-70)
Sex (M/F)	92/52
Albumin (g/dL)	3.82 (3.37-4.20)
CRP (mg/L)	5.86 (2.28-22.32)
CEA*	2.57 (1.52-4.12)
CA 19-9*	11.83 (6.59-34.98)
Number of examined lymph nodes	31 (25-39)
Number of metastatic lymph nodes	5 (1-13.25)
Lymphovascular invasion (present/absent)	120/24
Perineural invasion (present/absent)	113/31

Table 1. Continued

Variables	n=144
Tumor location	
Distal	58 (40.3%)
Corpus	33 (22.9%)
Siewert II-III	46 (31.9%)
Linitis plastica	7 (4.9%)
T stage	
T1a	10 (6.9%)
T1b	6 (4.2%)
T2	7 (4.9%)
T3	31 (21.5%)
T4a	83 (57.6%)
T4b	7 (4.9%)
N stage	
N0	28 (19.4%)
N1	24 (16.7%)
N2	28 (19.4%)
N3a	29 (20.1%)
N3b	35 (24.3%)
Histological grade	
Grade 1	7 (4.9%)
Grade 2	57 (39.6%)
Grade 3	80 (55.6%)
TNM stage	
I (1A-1B)	15 (10.4%)
II (2A-2B)	30 (20.8%)
III (3A-3C)	99 (68.8%)
IV	0 (0.0%)

Table 2. Clinicopathological characteristics stratified by PNI score and CALLY index

Variable	PNI ≤49.6 (n=86)	PNI >49.6 (n=58)	p	CALLY ≤4.25 (n=117)	CALLY >4.25 (n=27)	p
Age, years (median, IQR)	63 (56-71)	58 (51-66)	0.041	62 (55-70)	59 (52-66)	0.19
Sex, n (%)			0.48			0.77
Female	33 (38.4)	19 (32.8)		43 (36.8)	9 (33.3)	
Male	53 (61.6)	39 (67.2)		74 (63.2)	18 (66.7)	
Albumin, g/dL (median, IQR)	3.42 (3.09-3.78)	4.26 (4.01-4.56)	<0.001	3.71 (3.33-4.02)	4.39 (4.18-4.61)	<0.001
CRP, mg/L (median, IQR)	11.8 (4.9-28.6)	2.6 (1.4-6.2)	<0.001	8.6 (3.5-22.9)	1.9 (0.9-3.8)	<0.001
T stage, n (%)			0.032			0.21
T1-2	8 (9.3)	15 (25.9)		19 (16.2)	4 (14.8)	
T3-4	78 (90.7)	43 (74.1)		98 (83.8)	23 (85.2)	
N stage, n (%)			0.018			0.34
N0-1	28 (32.6)	31 (53.4)		47 (40.2)	12 (44.4)	
N2-3	58 (67.4)	27 (46.6)		70 (59.8)	15 (55.6)	
TNM stage, n (%)			0.021			0.29
Stage I-II	17 (19.8)	28 (48.3)		40 (34.2)	5 (18.5)	
Stage III	69 (80.2)	30 (51.7)		77 (65.8)	22 (81.5)	

[S-531]

A bedside score for predicting 1-year major adverse limb events in peripheral artery disease

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Objective: Patients with peripheral artery disease (PAD) face a substantial risk of major adverse limb events (MALE) within the first year, yet clinically usable tools that rely on routine data and meaningfully stratify this risk remain limited. We aimed to develop and externally validate a simple, bedside-applicable risk score for predicting 1-year MALE using routinely available clinical, procedural, and ankle–brachial index (ABI) data.

Material and Methods: In this retrospective cohort study, PAD patients with baseline clinical assessment, ankle–brachial index (ABI), and routine laboratory data were included. The primary outcome was 1-year MALE (major/minor amputation, reamputation, or severe ischemic limb complications). Patients were randomly split into a derivation cohort (n=501) and an independent validation cohort (n=166). Logistic regression was performed in the derivation cohort, and a simplified beta-based point score was constructed and tested unchanged in the validation cohort.

Results: MALE occurred in 245 patients (49%) in the derivation cohort and 86 patients (52%) in the validation cohort. In univariate analyses, baseline clinical and ischemic variables associated with MALE included rest pain, tissue loss, severe ischemia, ABI no-flow patterns, and repeated revascularization (all p<0.001). In multivariable analysis performed in the derivation cohort for score development, tissue loss (2 points; OR: 0.34, 95% CI: 0.22-0.52), ABI no-flow (1 point; OR: 2.12, 95% CI: 1.33-3.37), repeated revascularization (1 point; OR: 1.89, 95% CI: 1.26-2.84), and inflamed tissue (1 point; OR: 2.12, 95% CI: 1.12-4) were retained in the final model. MALE rates increased stepwise from 0% at score 0 to 28.2%, 45.3%, 54.0%, 69.9%, and 88.5% across scores 1 through 5. In validation cohort, score demonstrated discrimination with an area under the receiver operating characteristic curve of 0.88 (95% CI: 0.83-0.93) and calibration with a Brier score of 0.15. Sensitivity was 73.3%, specificity was 88.8%, positive predictive value was 87.5%, and negative predictive value was 75.5%.

Conclusion: Bedside point summation allows rapid risk categorization, with higher scores serving as a practical cut-off to trigger closer follow-up, expedited vascular evaluation, or early limb-preservation pathways whereas patients with low scores may be managed with standard follow-up.

Keywords: Peripheral artery disease, major adverse limb events, risk assessment, ankle-brachial index, extremity ischemia

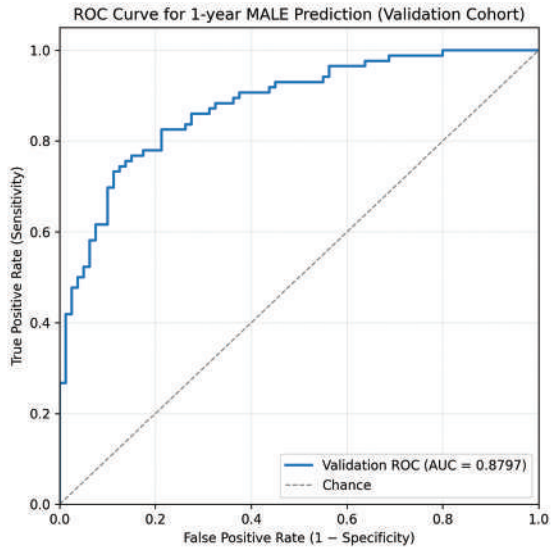


Figure 1. External validation curve. In the validation cohort (n=166), model performance remained robust (AUC=0.88; bootstrap mean=0.88, 95% CI: 0.83-0.93), with good calibration (Brier score=0.15) and a MALE incidence of 51.8%. (sensitivity 73.3%, specificity 88.8%, PPV 87.5%, NPV 75.5%).

Table 1. Components of the bedside risk score for predicting 1-year major adverse limb events

Variable	Beta	z	p	Points
Tissue loss	-1.09221	-4.95279	<0.001	2
ABI; no flow	0.749147	3.147591	0.001	1
Repeated revascularization	0.635158	3.054546	0.002	1
Inflamed tissue	0.75114	2.314942	0.02	1

This table presents the variables included in the risk score developed to predict 1-year major adverse limb events (MALE), along with their multivariable logistic regression beta coefficients and the corresponding beta-based point assignments.

[S-532]

Laparoscopic median arcuate ligament release: Outcomes of 59 cases

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Objective: Median arcuate ligament syndrome (MALS), also termed celiac artery compression syndrome, is an uncommon entity caused by extrinsic compression of the celiac artery (CA) and/or celiac plexus by the median arcuate ligament (MAL). Patients typically present with symptoms mimicking chronic mesenteric ischemia, including postprandial epigastric pain, nausea, weight loss, and food avoidance. Laparoscopic median arcuate ligament release (LMALR) has become the preferred treatment because of reduced morbidity and faster recovery compared with open surgery. However, challenging vascular anatomy may limit exposure with the conventional dissection route.To evaluate perioperative and mid-term outcomes of LMALR in a single-center cohort and to describe the feasibility of an alternative left-sided dissection approach in anatomically complex cases.

Material and Methods: This retrospective study included patients diagnosed with MALS who underwent LMALR between February 2017 and March 2023. A multidisciplinary team (general surgeon, gastroenterologist, interventional radiologist) systematically excluded alternative causes of chronic abdominal pain. Diagnosis required symptoms persisting >3 months plus computed tomography angiography (CTA) evidence of CA compression (Figure 1). All operations were performed under general anesthesia using a five-port laparoscopic technique. The standard approach dissected from the right side of the left gastric artery (9-12 o'clock). In selected patients with marked rightward and anterior CA angulation limiting conventional access, dissection was performed from the left side of the left gastric artery (1-3 o'clock) to improve visualization and facilitate the plane between the stomach and the left gastric artery (Figure 2). Outcomes included operative metrics, complications, symptom improvement, and weight change.

Results: Among 228 patients evaluated, 120 met diagnostic criteria, 64 underwent LMALR, and 59 had complete follow-up for analysis. Mean age was 31.5 years; 64.4% were female. Mean BMI was 19.35±4.18, with preoperative weight loss of 8.0±3.7 kg. CTA demonstrated mean CA compression of 71.8%±8.6%. Mean operative time was 153.8±42.5 minutes and mean length of stay was 2.38±1.4 days. One patient (1.7%) required reoperation for internal herniation; two (3.4%) developed chylous fistula that resolved spontaneously. No mortality or major intraoperative complications occurred. After 30.8±19.5 months of follow-up, mean symptom improvement was 85.1%±15.3% with mean weight gain of 3.44±2.23 kg.

Conclusion: LMALR is safe and effective for symptomatic MALS, providing high rates of symptom relief and postoperative weight gain. A left-sided dissection approach is a practical alternative when CA angulation limits exposure via the standard right-sided route. Prospective multicenter studies are warranted to validate long-term outcomes and refine patient selection and surgical strategy.

Keywords: Median arcuate ligament syndrome (MALS), laparoscopic median arcuate ligament release, celiac artery compression

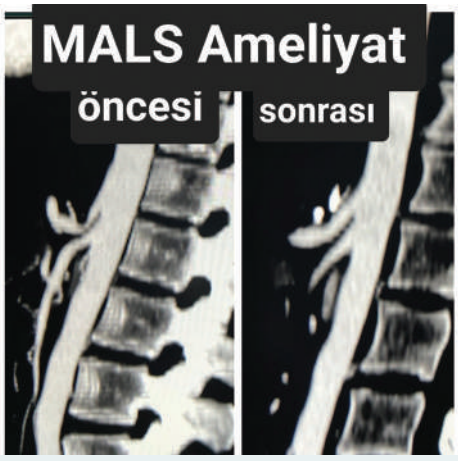


Figure 1. Preoperative and postoperative abdominal computed tomography images of a patient diagnosed with Median Arcuate Ligament Syndrome (MALS). A) The preoperative image demonstrates focal narrowing of the celiac artery secondary to external compression by the median arcuate ligament. B) The postoperative image shows complete division of the median arcuate ligament with subsequent decompression and restoration of the normal caliber of the celiac artery.

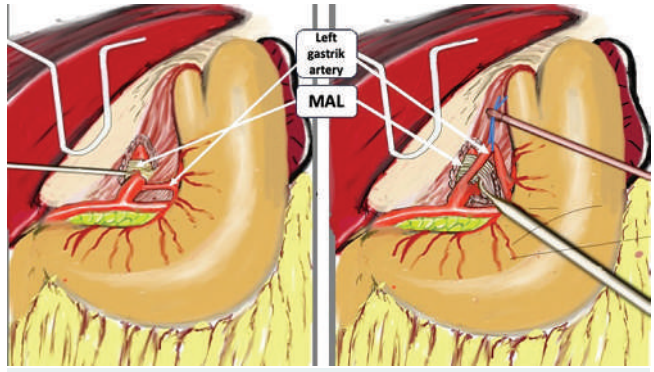


Figure 2. Illustration of the surgical technique. a) The technique we usually prefer involves approaching from the right side of the left gastric artery at the 11 o'clock position to excise the MAL. b) The method where we approach from the right side of the left gastric artery to cut the arcuate ligament.

[S-533]

Determinants of shunt patency after proximal splenorenal shunt: Analysis of early and late outcomes

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Objective: Portal hypertension is a serious condition that can lead to life-threatening complications such as gastrointestinal bleeding. Although endoscopic interventions are the first-line treatment for bleeding due to extrahepatic portal vein obstruction, they do not reverse established damage. In refractory cases, proximal splenorenal shunt (PSS) is performed to reduce portal pressure. Our aim is to evaluate early and late shunt patency rates after PSS and analyze potential risk factors for shunt thrombosis.

Material and Methods: Sixty-two patients who underwent PSS surgery in our clinic between 2018 and 2023 were retrospectively included in this study. Patient's demographic data,preoperative laboratory values, ASA scores, portal flow direction, surgical details, and postoperative outcomes were collected from hospital records. Shunt patency was assessed using Doppler ultrasonography on postoperative day 1 (early period) and at 1 year (late period). Statistical analysis was performed using the chi-square test for categorical variables and the Student's t-test for continuous variables. A p-value of <0.05 was considered statistically significant.

Results: The mean age of the 62 patients was 19.6±17.1 years, and most were pediatric (<18 years, n=43, 69.4%). Overall, 75.8% (n=47) were male. Preoperatively, 59.7% (n=37) had thrombocytopenia (<100,000/µL) and 14.5% (n=9) had hypoalbuminemia (<3.5 g/dL). Most patients were classified as ASA 2 (40.3%) or ASA 3 (46.8%). The early shunt patency rate (postoperative day 1) was 92.3% (n=36/39), decreasing to 79.3% (n=23/29) at 1 year. Shunt thrombosis occurred in 3 patients early and in 6 late. No significant differences were found between patients with and without thrombosis regarding age, sex, preoperative platelet count, or albumin level (p>0.05). The most common postoperative complication was bleeding (n=5). One patient died within 30 days.

Conclusion: Proximal splenorenal shunt is an effective treatment for portal hypertension; however, shunt thrombosis remains a significant cause of morbidity. The early (92.3%) and late (79.3%) patency rates in our study are consistent with the literature. Early thrombosis is likely related to technical or hemodynamic factors, whereas late thrombosis may be associated with fibrosis and prothrombotic conditions. No significant association was found between the evaluated preoperative factors and thrombosis, possibly due to the small sample size or the influence of unexamined variables such as vein diameter, flow velocity, and coagulation parameters. The predominance of pediatric patients may also contribute, as smaller vessel size can increase technical difficulty and thrombosis risk. Larger prospective studies are needed to better define predictors of shunt thrombosis.

Keywords: Splenorenal shunt, vascular surgery, portal hypertension

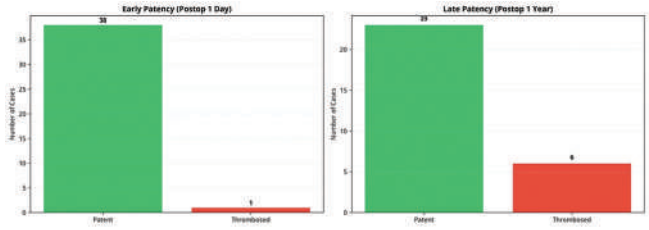


Figure 1. Patency.

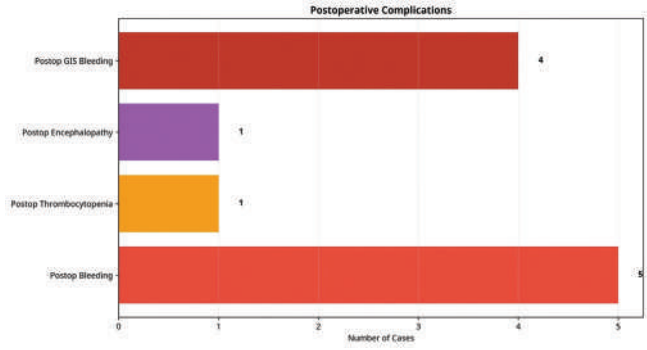


Figure 2. Postoperative complications.

[S-534]

Attitudes, experiences, and future projections regarding artificial intelligence in general surgery: A national survey of 136 surgeons

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Objective: Surgeons view artificial intelligence (AI) as a complementary "second opinion" tool rather than a replacement, retaining final decision-making authority. Major adoption barriers are technical reliability, data security, and legal liability. Successful integration requires high-level clinical validation, AI literacy training for physicians, and clear legal guidelines.

Material and Methods: This cross-sectional and descriptive study was conducted via an online survey. The questionnaire consisted of 16 closed- and open-ended questions evaluating demographics, overview of AI integration, current clinical use, preferred and future application areas, perceived benefits/risks, attitudes toward decision-making conflicts, and educational needs. Responses from 136 general surgery specialists, residents, and academicians practicing in various hospitals (university, training and research, state, and private) across Türkiye were analyzed using descriptive statistics (frequency, percentage).

Results: Participants (75% male) were largely positive toward AI (65%). Although 55% reported no clinical use, 80% of users utilized Large Language Models for risk scoring, literature review, and documentation. Concerns about role displacement were low (50% unconcerned). In conflicts, 70% would reconsider but retain final authority. Major risks included technical errors (55%) and privacy breaches (40%). Future impact is expected in early diagnosis (75%) and planning (70%). Key adoption needs are clinical evidence (30%) and transparency (25%). 92% deemed AI training beneficial.

Conclusion: Surgeons perceive AI as a "second opinion" or a "data synthesis tool", while retaining final decision-making authority. The primary barriers to adoption are technical reliability, data security, and unclear legal liability. Participants believe that AI will assume a complementary role supporting clinical decisions rather than replacing surgical skills. Consequently, for the ethical and safe integration of AI into surgical practice, there is an urgent need for: 1) High-level evidence-based clinical validation studies, 2) Practical AI literacy training programs for physicians, and 3) The development of national guidelines clarifying legal and ethical responsibilities.

Keywords: Artificial intelligence, surgery, large language models, clinical decision making, medical ethics

[S-535]

Clinicopathology-based machine learning for prediction of pathologic complete response to neoadjuvant chemotherapy in breast cancer

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Objective: Pathologic complete response (pCR) following neoadjuvant chemotherapy is a surrogate for long-term survival in breast cancer. While pCR status informs surgical and therapeutic decisions, accurate patient-level prediction is hindered by tumor heterogeneity and skewed outcomes. Standard parameters (T/N stage, molecular subtype, HER2 status, Ki-67) are routinely documented but rarely integrated into robust decision-support tools. We developed an interpretable machine learning (ML) framework to provide calibrated, data-driven predictions of pCR using routine clinicopathological data.

Material and Methods: This retrospective study analyzed a Turkish cohort of 298 breast cancer cases (n=84 pCR vs. n=214 non-pCR) using 20 expert-curated variables. To ensure a leakage-proof methodology, the dataset was partitioned into training and independent hold-out test sets, with all preprocessing and feature selection parameters were fitted strictly on training data. Model performance was evaluated using nested cross-validation. We screened 12 ML algorithms, comprising linear models [Logistic regression (LR), support vector machine], distance-based (k-nearest neighbors) and tree-based ensembles (XGBoost, CatBoost, Random Forest), along with meta-ensemble architectures (voting and stacking). Optimal model selection was guided by a composite score integrating Matthews correlation coefficient, precision-recall area under the curve (AUC), F1-score and Brier score. Models were benchmarked against a 100-iteration Monte Carlo simulation. Class imbalance was addressed through balanced weighting, and outputs were calibrated using Platt scaling. Decision thresholds were tailored using a weighted Youden's index to prioritize sensitivity. Interpretability was established through permutation importance and SHAP analysis.

Results: Calibrated LR emerged as the optimal model, achieving a receiver operating characteristic-AUC of 0.803. In the test set (n=60), LR correctly identifies 15 out of 17 pCR cases, yielding 88% sensitivity and 93.1% NPV (63% specificity, 48.4% PPV). These outcomes significantly outperformed random baseline estimates (NPV: 71%, PPV: 26.9%), confirming a substantial predictive gain. Feature analysis identified HER2 expression (0.60) as the primary positive predictor of pCR, whereas ER status (-0.56) and AJCC stage (-0.31) were the strongest negative predictors. Other contributors included nodal status (0.11) and Ki-67 (0.11).

Conclusion: We present the first clinicopathology-based ML framework for a Turkish breast cancer cohort. This calibrated LR model provides clinically meaningful pCR discrimination, potentially aiding clinical decision-making in the neoadjuvant settings.

Keywords: Machine learning, neoadjuvan chemotherapy, pathological complete response

[S-536]

Can artificial intelligence be used as clinical decision support for Parkland scoring in cholecystectomy?

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Objective: During laparoscopic cholecystectomy, the severity of gallbladder inflammation and anatomical characteristics play a critical role in determining surgical difficulty and complication risk. The Parkland scoring system is a practical and widely used classification that predicts surgical difficulty based on the macroscopic appearance of the gallbladder during the initial phase of the operation. In parallel with advances in medical imaging analysis, artificial intelligence (AI)-based systems have increasingly been explored as clinical decision support tools. This study aimed to evaluate the feasibility of performing Parkland scoring using AI by uploading intraoperative gallbladder images and to assess its potential contribution to clinical practice.

Material and Methods: This study included intraoperative initial exploration images of the gallbladder from 165 patients who underwent laparoscopic cholecystectomy. All images reflected the first macroscopic view of the gallbladder at the beginning of the operation. Parkland scores were assigned by surgeons as part of routine clinical assessment. The same images were independently uploaded to ChatGPT (Version 5.2), an AI-based language and image interpretation model, without any prior guidance, to obtain Parkland scores and qualitative interpretations regarding surgical difficulty. AI-generated assessments were compared with surgeons' evaluations, and qualitative agreement analysis was performed. Discriminatory performance of AI scoring across Parkland subgroups was evaluated using receiver operating characteristic analysis.

Results: AI-generated Parkland scores were generally successful in identifying key features related to gallbladder inflammation, adhesion to surrounding tissues, and dissection difficulty. AI interpretations showed a high level of agreement with surgeons' assessments, particularly in patients with moderate and high Parkland scores. Overall, a moderate correlation was observed between AI-derived scores and surgeon-assigned Parkland scores. Subgroup analysis revealed limited discriminatory power of AI in the low Parkland group (AUC: 0.16). However, discriminatory performance improved substantially in the moderate difficulty group (AUC: 0.75) and was high in the high Parkland group (AUC: 0.82). Due to the relatively small number of high Parkland cases, these findings should be interpreted with caution. Combined ROC curves showing the discriminatory performance of the AI score across Parkland subgroups. The AI score showed significant discrimination in the medium and high Parkland groups, while exhibiting limited performance in the low difficulty group.

Conclusion: This study demonstrates that intraoperative gallbladder images can be evaluated using artificial intelligence for Parkland scoring during laparoscopic cholecystectomy. AI-assisted image interpretation may serve as a complementary clinical decision support tool, particularly in predicting surgical difficulty in moderate and high-risk cases. Such applications may contribute to surgical training, experience sharing, and intraoperative decision-making. Further prospective and structured studies are needed to validate and standardize AI-based approaches in this field.

Keywords: Artificial intelligence, cholecystectomy, Parkland score

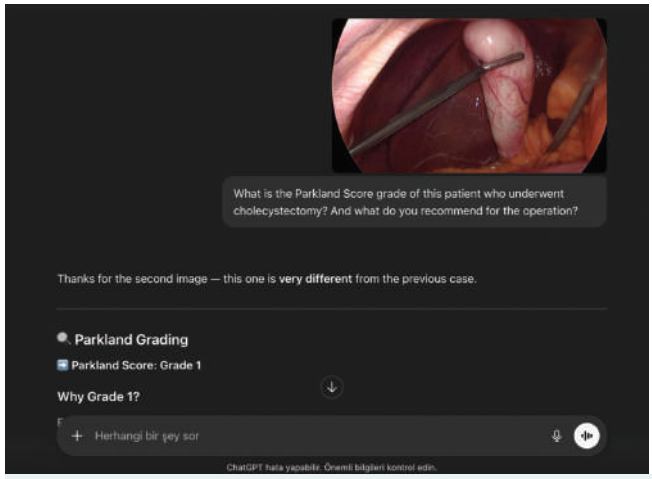


Figure 1. Here's an example of a Parkland scoring system asked to ChatGPT.

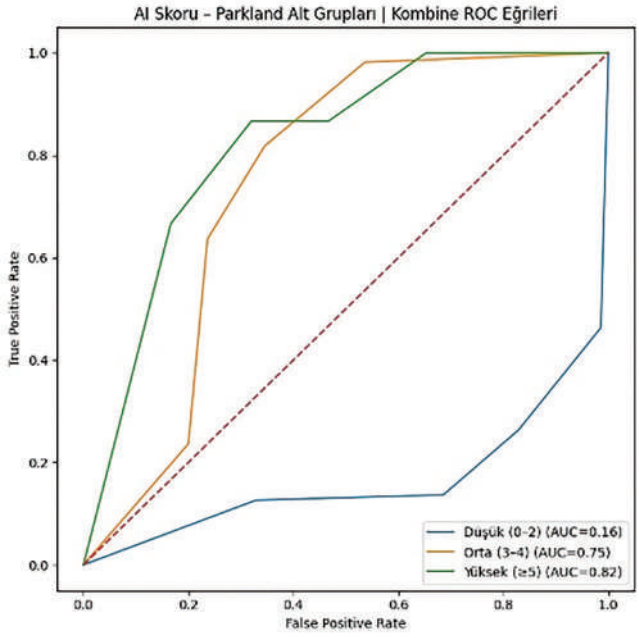


Figure 2.

[S-537]

AI-powered surgical copilot in minimally invasive adrenal surgery: Integrated recognition of anatomy, tools, and surgical phases

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Objective: This study aimed to develop an artificial intelligence–powered surgical assistant model capable of recognizing key anatomical structures, tools, and surgical phases during minimally invasive adrenal surgery, and to assess its clinical feasibility. The system has potential to enhance procedural safety and support training for adrenal operations, which are performed relatively infrequently.

Material and Methods: Video recordings from 20 laparoscopic transabdominal adrenalectomies (10 from each side; 2011-2025) were retrospectively analyzed. Surgical frames were annotated for tools, actions, anatomy, and surgical phases to build the dataset. A ResNet-50-based multi-head cross-attention network with dedicated heads for tools, actions, targets, and phases was developed. Laterality was incorporated through feature-wise linear modulation, and class imbalance was handled using weighted loss. Performance was assessed on a balanced test set using top-accuracy and mean average precision with 5-fold cross-validation.

Labeling Images

Results: A total of 10,747 frames were labeled with 53,152 annotations across 9 tool categories, 7 surgical actions, 13 anatomical targets, and 6 phases. The model achieved top-1 accuracies of 67.6% for tools, 86.2% for actions, 70.0% for targets, and 60.3% for phases. Top-3 accuracies increased to 93.8%, 94.2%, 90.9%, and 95.3%, respectively. Mean average precision values were 64.2% for tools, 62.4% for actions, 46.8% for targets, and 66.4% for phases.

Conclusion: The developed model can successfully recognize tools, actions, and key anatomical structures in adrenal surgery. It has the potential to provide comprehensive analysis of surgical scenes in minimally invasive adrenalectomy, which may help improve safety, reduce complications, and support surgeon training through objective, automated feedback.

Keywords: Adrenal surgery, artificial intelligence, computer vision

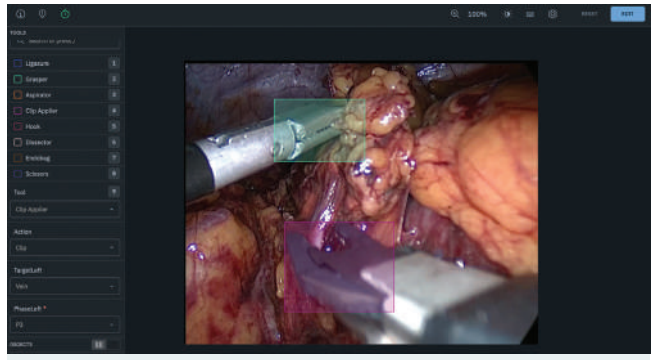


Figure 1. Distribution of phases in the right-sided labeled images.

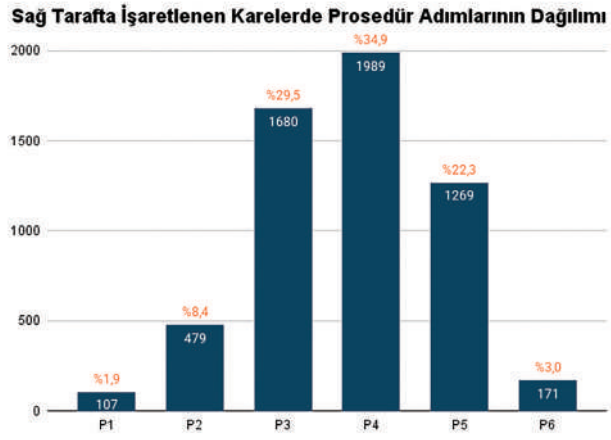


Figure 2.

[S-539]

Prediction of therapeutic endoscopy requirement in upper gastrointestinal hemorrhage using machine learning models

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Objective: Upper gastrointestinal bleeding (UGIB) is a common emergency with potentially life-threatening consequences. A major clinical challenge is that, at presentation, it remains controversial which patients will require urgent therapeutic endoscopy for hemostasis. Inaccurate selection can lead to unnecessary procedures in low-risk patients or dangerous delays in high-risk patients. Existing clinical scoring systems, such as the Glasgow-Blatchford score (GBS), have limited accuracy in predicting the necessity for therapeutic endoscopy. This study aimed to evaluate and develop machine learning (ML) models using routinely available admission data to improve the accuracy of patient selection for urgent therapeutic endoscopy.

Material and Methods: We retrospectively analyzed 376 adult patients presenting with UGIB who had emergency upper gastrointestinal endoscopy between January 2021 and June 2025 in University of Health Sciences Türkiye, Başakşehir Çam and Sakura City Hospital. Totally 26 clinical and laboratory parameters with demographics, comorbidities, vital signs, laboratory results, and GBS were recorded. The primary outcome was urgent therapeutic endoscopy (hemostatic injection, hemoclip, thermal coagulation, or variceal band ligation). Five ML algorithms—Decision Tree, Random Forest, LightGBM, CatBoost, and XGBoost—were trained with 80% of patients data and tested with 20% of patients. Model discrimination was assessed with the area under the ROC curve (AUC) and threshold-based performance metrics.

Results: Among 376 endoscopies, urgent therapeutic interventions were required in 70 (18.6%). The XGBoost model achieved strong discriminatory performance with an AUC of 0.774 on the test set. At the optimal threshold determined by the Youden index (0.14), the model yielded a sensitivity of 78.6%, specificity of 71.0%, overall accuracy of 72.4%, and a high negative predictive value (NPV) of 93.6%. This high NPV indicates that patients predicted to be low-risk had a very low probability of active bleeding, enabling safe clinical management without urgent intervention. In comparison, the GBS achieved an AUC of 0.591 on the same test set, confirming the superior predictive capacity of our multiparametric ML model over a widely used standard scoring system. Confusion matrix showing the positive and negative rates of the XGBoost model.

Conclusion: Our ML model provides a reliable and effective decision support tool for predicting active bleeding risk in emergency UGIB. Its high negative predictive value supports the safe identification of low-risk patients, helping to avoid unnecessary urgent interventions and optimize resource utilization. This innovative approach has the potential to assist clinicians in making more accurate decisions in patient triage and treatment planning.

Keywords: Emergency therapeutic endoscopy, machine learning, upper gastrointestinal bleeding

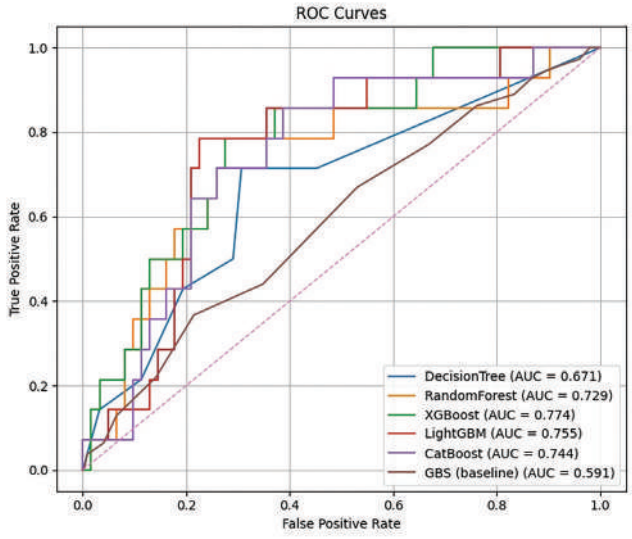


Figure 1. This curve shows a comparative representation of the performance of the machine learning and artificial intelligence models used.

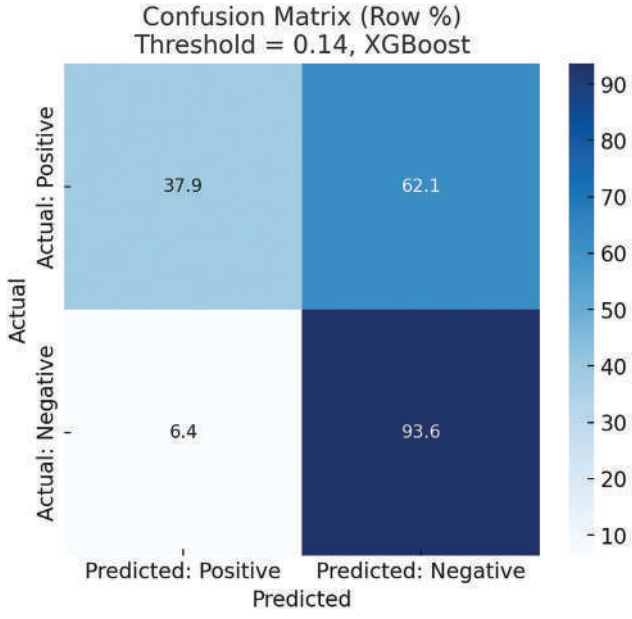


Figure 2. This diagram shows the false positive and false negative rates of the XGBoost model, which is the artificial intelligence model with the best performance.

[S-540]

AI-based prediction of anastomotic leak after colorectal surgery: A pilot study

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Objective: Anastomotic leak remains one of the most serious complications following colorectal surgery and is associated with substantial morbidity, mortality, and healthcare burden. Traditional risk scores show limited accuracy, highlighting the need for improved predictive approaches. Artificial intelligence (AI)-based models may enable individualized risk estimation by integrating complex perioperative data.

Material and Methods: This retrospective pilot study included 122 patients who underwent colorectal resection with primary anastomosis. Demographic characteristics, comorbidities, laboratory parameters, intraoperative variables, and early postoperative indicators were used as candidate predictors. Machine learning algorithms were trained using repeated cross-validation. Model performance was evaluated using area under the receiver operating characteristic curve (AUC), calibration analysis, and decision curve analysis. Model interpretability was assessed using SHapley Additive exPlanations (SHAP).

Results: Anastomotic leak occurred in 18 patients (14.8%). The best-performing model achieved an AUC of 0.86 (95% CI: 0.78-0.93), outperforming conventional clinical scoring approaches (AUC 0.68). Calibration analysis demonstrated good agreement between predicted and observed risk (Brier score: 0.12; calibration slope: 0.94). Decision curve analysis indicated a positive net clinical benefit across a wide range of threshold probabilities. SHAP analysis identified intraoperative hypotension duration, CRP levels, operative time, albumin levels, and ASA score as the most influential predictors.

Conclusion: AI-based prediction of anastomotic leak after colorectal surgery is feasible and shows promising discriminatory and calibration performance. Explainable machine learning approaches may support individualized perioperative risk stratification. Larger multicenter studies are required for external validation and clinical implementation.

Keywords: Anastomotic leak, colorectal surgery, artificial intelligence, machine learning, risk prediction, SHAP

[S-543]

The Gateway to the future of surgery in Türkiye: The use of artificial intelligence in medical specialty theses and its implications for general surgery

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Objective: AI technologies have increasingly been utilized in healthcare in recent years to improve diagnostic accuracy, develop clinical decision support systems, and predict patient outcomes. The nature of surgical practice requires the integrated evaluation of imaging, pathology, laboratory, and clinical parameters, thereby providing a suitable research framework for AI-based models. This study aimed to determine the general characteristics of AI-related medical specialty theses registered in the Turkish National Thesis Center database and to comprehensively evaluate studies conducted in the field of general surgery.

Material and Methods: The Turkish National Thesis Center database was searched using the keyword “artificial intelligence”. Among the retrieved records, medical specialty theses were analyzed. The distribution of theses by year and by specialty was evaluated. Theses in the field of General Surgery were further examined in detail using content analysis. Within this scope, study topics, applied methods, type of data used, and intended clinical application were analyzed.

Results: A total of 6,357 AI-related theses were identified in database, of which 224 were medical specialty theses. This rise was considered parallel to the growing adoption of AI applications in healthcare in recent years. Evaluation of specialty distribution revealed that a substantial proportion of studies were concentrated in radiology and imaging-based disciplines. A total of 6 theses were identified in the field of general surgery, all of which were conducted in recent years. Analysis of study topics demonstrated a focus on computed tomography-based diagnosis of acute appendicitis, detection of pancreatic and gastric tumors, assessment of axillary lymph node metastasis in breast cancer, prediction of response to neoadjuvant therapy, and estimation of surgical site infection risk following colorectal surgery. The methods used were predominantly machine learning and deep learning-based models, and most studies relied on imaging data. The primary aim of these studies was to improve diagnostic accuracy and to develop clinical decision support systems.

Conclusion: The use of AI in medical specialty theses in Türkiye has markedly increased in recent years, with studies predominantly concentrated in imaging-based disciplines. Although the number of studies in the field of General Surgery remains limited, they mainly focus on clinical decision processes such as improving diagnostic accuracy and predicting complications. This indicates that the integration of AI into surgical practice is still at an early stage but holds significant developmental potential. Increasing larger datasets, multicenter collaborations, and prospective studies in surgical research will accelerate the integration of AI-based systems into clinical practice.

Keywords: Medical specialty theses, artificial intelligence, general surgery

[S-545]

Comparative performance of large language models and general surgery specialists in liver laceration treatment decision-making

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Objective: Liver laceration is a critical condition in trauma surgery that requires rapid and accurate determination of whether surgical intervention is necessary. While decisions are traditionally based on clinical expertise, large language models (LLMs) may offer additional consistency in evaluating clinical data. However, their real-world comparative performance against practicing clinicians remains limited. This study compared two LLMs with general surgery specialists in determining surgical indications for liver laceration.

Material and Methods: Thirty-five liver laceration cases were analyzed. Two LLMs (Google Gemini 3 Pro Preview and OpenAI GPT-5.2) were evaluated. Key predictive variables were identified using a Random Forest algorithm with feature importance analysis. Three independent general surgery specialists reviewed each case separately and decided whether surgery was required. For each patient, structured clinical data (age, systolic blood pressure, INR, pH, lactate level) were provided to the models, and they were asked directly whether surgical intervention was indicated. The models were blinded to ground truth labels and to each other's outputs. Each model evaluated every patient five times, resulting in 350 total LLM outputs (10 per patient, 5 per model) and 105 specialist decisions (1 per patient per rater).Agreement with ground truth was assessed using Cohen's Kappa (κ), accuracy, F1-score, sensitivity, specificity, and AUC. A two-tailed p-value <0.05 was considered statistically significant. The dataset was imbalanced, with non-operative management constituting 82.9% of cases, meaning most patients were treated conservatively rather than surgically.

Results: In determining surgical indication (operative vs. non-operative management), GPT-5.2 demonstrated the highest performance, with almost perfect agreement [κ=0.89 (0.80-0.99)], accuracy 97.1% (94.7-99.6%), and F1-score 0.983. Gemini 3 Pro Preview showed substantial agreement [κ=0.77 (0.63-0.91)], accuracy 94.3% (90.8-97.7%), and F1-score 0.967.The mean performance of general surgery specialists showed substantial agreement [κ=0.62 (0.22-1.0)], accuracy 91.4% (82.2-100.0%), and F1-score 0.951. AI models were numerically more accurate than specialists in correctly identifying both operative and conservative cases, outperforming them by 3.3% in accuracy and 0.15 in Kappa agreement; however, these differences were not statistically significant (p>0.05). Discriminative ability was highest for GPT-5.2 (AUC: 0.93), followed by Surg_1 (AUC: 0.90).

Conclusion: LLMs, particularly GPT-5.2, achieved high accuracy and agreement in determining surgical indications for liver laceration, performing at least comparably to general surgery specialists in this cohort. The marked class imbalance—where 82.9% of cases were managed non-operatively—highlights the importance of evaluating sensitivity and specificity alongside overall accuracy. These findings support the potential integration of AI as a decision-support tool in trauma surgery. Future studies should focus on improving model performance in larger cohorts.

Keywords: Liver laceration, artificial intelligence, clinical decision system

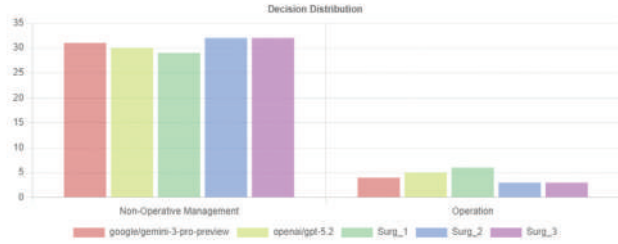
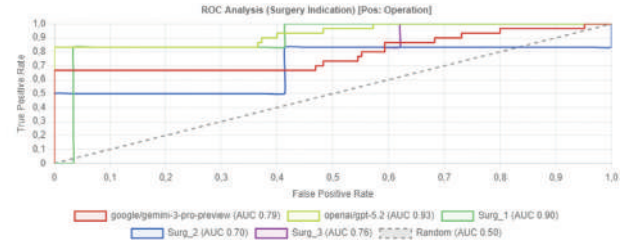


Figure 1. ROC analysis surgical indication.

ROC: Receiver operating characteristic.



Note. ROC = Receiver Operating Characteristic; AUC = Area Under the Curve

Figure 2. Decision distribution.

[S-547]

Digital imaging in general surgery practice: PACS competency, educational gaps, and perspectives on artificial intelligence versus teleradiology

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Objective: The aim of our study is to evaluate the PACS usage habits, competencies, and educational needs of general surgery residents, as well as the impact of infrastructure issues on clinical workflow, trust in teleradiology reports, and attitudes toward artificial intelligence applications.

Material and Methods: A survey study was conducted between September 2025 and January 2026 among general surgery residents working in clinics across Türkiye. The survey investigated PACS usage habits, proficiency levels in utilizing PACS tools, impact on workflow, training methods,and perspectives on teleradiology (outsourcing) and artificial intelligence integration.

Results: A total of 126 participants were included in the study. In-hospital desktop computers (95%) were the primary tools used to access PACS. Remote access and access via smartphones were reported at 43% and 39%, respectively. Notably, 52% of participants stated that they could not easily access PACS at the bedside during clinical rounds. PACS was most frequently utilized in the management of trauma and emergency surgical pathologies (86%), preoperative/postoperative staging (84%), and evaluation of organ anatomy (79%). Regarding emergency (STAT) imaging, 65% of participants reported accessing results within the first 15 minutes, while 19% stated this duration exceeded 30 minutes. Additionally, 92% of residents found PACS extremely beneficial during multidisciplinary boards. Although 87% of participants reported proficiency in basic functions such as measuring the distance between two points, the predominant response for more advanced features including area (53%),volume (75%), Hounsfield unit measurement (59%), and 3D reconstruction (73%) was "no knowledge at all". Most participants indicated that they learned to use PACS either from senior colleagues (74%) or through self-directed trial and error (73%). Only 54% stated that they were able to use PACS independently and effectively, and this proportion increased significantly with advancing year of residency (>4th year: 88% vs.<2nd year: 46%). Furthermore, concordance between residents' independent radiologic assessments and the expert radiologist's report was 70% among senior residents (>4th year), compared with 33% among junior residents (<2nd year). Radiology service procurement (outsourcing/teleradiology) was present in 49% of the institutions. 70% of participants reported low or no trust in teleradiology reports, 62% were unable to reach the reporting radiologist, and 55% believed that critical findings were frequently missed in outsourced reports. Regarding artificial intelligence (AI) usage, 40% of participants did not use AI, and 36% stated that AI was not available in their institution, while 22% reported active AI usage. Among those who use AI, 82% stated that their findings overlapped with AI, and 86% believed AI was helpful in detecting missed findings. Finally, 71% of participants stated that AI should serve as a reliable "second opinion" in radiology.

Conclusion: PACS usage among general surgery residents is considered vital for diagnostic accuracy and the efficiency of multidisciplinary boards. The lack of trust in teleradiology reports compels surgeons to improve their own radiological evaluation skills and necessitates positioning artificial intelligence algorithms as a reliable "second opinion".

Keywords: PACS competency, teleradiology, artificial intelligence

[S-548]

Can machine learning models predict pathological response to neoadjuvant chemotherapy in breast cancer patients?

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Objective: Neoadjuvant chemotherapy is a standard approach in the treatment of locally advanced breast cancer, and early prediction of pathological complete response (pCR) and axillary lymph node status is of critical importance for surgical planning and prognostic assessment. The aim of this study is to develop and compare the performance of machine learning (ML) models that predict pCR and sentinel lymph node (SLNB) status by integrating clinical, histopathological, and radiological data in breast cancer patients receiving neoadjuvant chemotherapy.

Material and Methods: The study included 214 female patients who underwent surgical treatment following neoadjuvant chemotherapy at the General Surgery Clinic of University of Health Sciences Türkiye, İzmir Tepecik Education and Research Hospital between January 2014 and December 2024. Demographic data, pre- and post-treatment ultrasonographic measurements, and histopathological characteristics were analyzed retrospectively. The dataset was split into 80% training and 20% testing sets. Seven different ML algorithms (random forest, Gaussian Naive Bayes, SVM, logistic regression, kNN, decision tree, AdaBoost) were trained to predict pCR and SLNB outcomes, and performance was evaluated using Accuracy, Specificity, F1 Score, and ROC-AUC values.

Results: In predicting post-neoadjuvant SLNB results (positive/negative), the random forest algorithm demonstrated the highest performance with an F1 score of 97.8%, 98% Accuracy, 100% specificity, and an AUC value of 0.973. In predicting pathological complete response (pCR), the Gaussian Naive Bayes model achieved the highest discriminative power with an AUC value of 0.936, whereas the random forest model provided the most clinically balanced results with an 87% F1 score, 84% accuracy, and a 92.9% negative predictive value. The integration of ultrasonographic response data into the models significantly increased prediction success compared to models trained with clinical data alone. pCR using machine learning algorithms. Prediction of SLNB status using machine learning algorithms.

Conclusion: This study offers a robust and applicable AI-supported solution to the dilemma of predicting treatment response in surgical planning after neoadjuvant chemotherapy. The Random Forest model predicted axillary status with 98% accuracy and 100% specificity, proving to be a highly reliable tool for distinguishing positive and negative cases in patients scheduled for SLNB. This finding provides strong evidence regarding the clinical feasibility of "safe observation without SLNB" in breast cancer surgery. Furthermore, the high success in predicting pCR (AUC: 0.936) allows for early detection of non-responders and modification of chemotherapy regimens without losing time. Conversely, high-accuracy identification of pCR achievement provides a solid foundation for "watch-and-wai" strategies and non-operative management protocols. Integration of ultrasonographic response data opens the doors to "personalized surgery" with existing clinical resources, without the need for expensive genomic tests.

Keywords: Machine learning, pathological complete response

Table 1.

Model	Accuracy	F1-score	ROC-AUC	TP	FN	TN	FP	Sensitivity	Specificity	PPV	NPV
Gaussian Naive Bayes	0.72	0.74	0.936	5	2	11	4	0.714	0.733	0.556	0.846
Logistic regression	0.81	0.85	0.877	6	1	12	3	0.857	0.800	0.667	0.923
SVM-RBF	0.81	0.85	0.874	6	1	12	3	0.857	0.800	0.667	0.923
Random forest	0.84	0.87	0.847	6	1	13	2	0.857	0.867	0.750	0.929
Decision tree	0.81	0.85	0.824	6	1	12	3	0.857	0.800	0.667	0.923
Ada boost	0.79	0.82	0.869	5	2	12	3	0.714	0.800	0.625	0.857
kNN	0.74	0.83	0.818	6	1	10	5	0.857	0.667	0.545	0.909

Table 2.

Model	Accuracy	F1-Score	ROC-AUC	TP	FN	TN	FP	Sensitivity	Specificity	PPV	NPV
Logistic regression	0.816	0.808	0.811	15	4	25	5	0.789	0.833	0.750	0.862
SVM-RBF	0.898	0.889	0.878	15	4	29	1	0.789	0.967	0.938	0.879
Random forest	0.980	0.978	0.973	18	1	30	0	0.947	1.000	1.000	0.968
Gaussin Naive Bayes	0.939	0.933	0.921	16	3	30	0	0.842	1.000	1.000	0.909
kNN	0.878	0.868	0.861	15	4	28	2	0.789	0.933	0.882	0.875
Decision tree	0.918	0.917	0.934	19	0	26	4	1.000	0.867	0.826	1.000
Ada boost	0.918	0.914	0.914	17	2	28	2	0.895	0.933	0.895	0.933

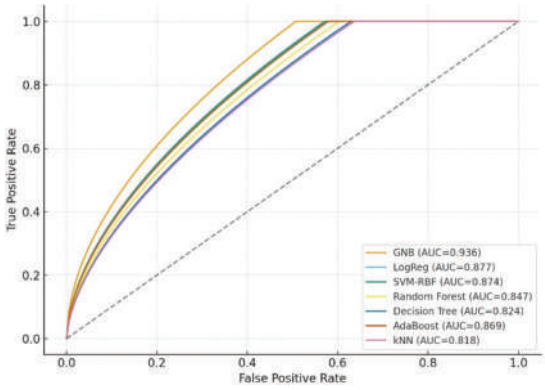


Figure 1. Receiver operating characteristic curve analysis for the prediction of pathological complete response status.

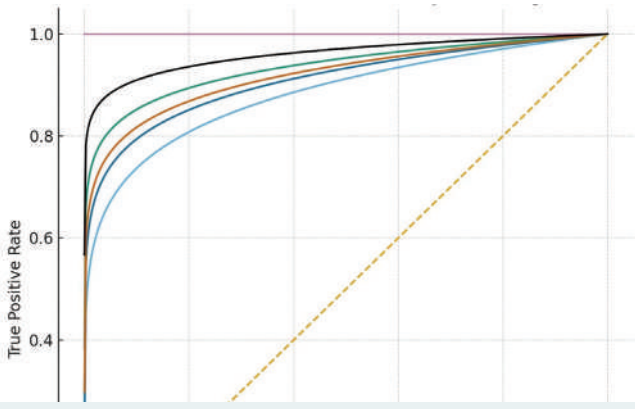


Figure 2. Receiver operating characteristic curve analysis for the prediction of sentinel lymph node biopsy status.

[S-549]

A national analysis supported by artificial intelligence: A 15-year panorama of general surgery specialty theses in Türkiye (2010-2025)

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Objective: Specialty theses in medicine prepared in the field of general surgery are the basic scientific outputs that reflect the research priorities and future trends of academic surgery. In this study, it is aimed to evaluate the temporal change of general surgery specialty theses completed in Türkiye in the last 15 years (2010-2025) in terms of study type, clinical area, research purpose and types of termination with a holistic perspective and analytical methods supported by artificial intelligence.

Material and Methods: In this retrospective and descriptive bibliometric study, a total of 2,004 general surgery specialty dissertations indexed in the Council of Higher Education (YÖK) National Thesis Center database with full-text access were analyzed. Dissertations were classified into four main categories—"Study Type", "Clinical Area", "Research Objective", and "Outcome Type"—based on a predetermined coding scheme. Natural Language Processing (NLP)-based AI algorithms were utilized as primary screening and decision support tools in data mining and classification processes. To ensure data reliability, AI outputs were systematically supervised by researchers at every stage (human-in-the-loop). "Grey area" data or those with low confidence scores were manually verified. Validated data were divided into three periods (2010-2014, 2015-2019, 2020-2025) and evaluated using trend analysis (Cochran-Armitage trend test/chi-square). Distribution of general surgery specialty theses by year according to study types, research objectives and termination types

Results: During the analyzed period, the rate of experimental animal studies decreased from 53.5% to 46.9% ($p<0.05$), while clinical retrospective studies significantly increased from 31.0% to 41.6% ($p<0.001$). Conversely, clinical prospective studies dropped from 11.1% to 7.4%. Regarding clinical areas, obesity and metabolic surgery dissertations increased more than threefold (from 2.1% to 7.2%), while a proportional decrease was observed in hepatobiliary surgery. Research focus shifted from biochemical outcomes at the tissue level (decreasing from 68.4% to 62.2%) toward patient-centered outcomes such as quality of life and survival. Distribution of general surgery specialty theses by clinical areas according to years.

Conclusion: General surgery dissertations in Türkiye have undergone a significant paradigm shift over the last 15 years, moving from experimental/laboratory-oriented research toward database-driven clinical retrospective research. Rising clinical trends like obesity surgery are rapidly reflected in dissertation topics; however, the rate of prospective clinical studies has not yet reached desired levels. This AI-assisted analysis highlights the need to re-plan surgical education curricula and research funding according to this evolving academic ecosystem.

Keywords: General surgery, medical specialty training, artificial intelligence

Table 1.

	2010-2014 (%)	2015-2019 (%)	2020-2025 (%)	Trend
Type of work				
Experimental (animal)	332 (53.5%)	224 (46.7%)	424 (46.9%)	↓
Clinical retrospective	192 (31.0%)	184 (38.3%)	376 (41.6%)	↑
Clinical prospective	69 (11.1%)	47 (9.8%)	67 (7.4%)	↓
Technical/methodological	27 (4.4%)	25 (5.2%)	37 (4.1%)	→
The purpose of the research				
Diagnostic accuracy/method evaluation	65 (10.5%)	49 (10.2%)	129 (14.3%)	↑
Prognostic/risk determinant	95 (15.3%)	92 (19.2%)	196 (21.7%)	↑
Therapeutic efficacy/treatment comparison	438 (70.6%)	323 (67.3%)	557 (61.6%)	↓
Physiopathological/mechanistic	18 (2.9%)	15 (3.1%)	19 (2.1%)	→
Technical/method development	4 (0.6%)	1 (0.2%)	3 (0.3%)	→
Type of termination				
Biochemical/histopathological	424 (68.4%)	291 (60.6%)	562 (62.2%)	↓
Morbidity/mortality	145 (23.4%)	139 (29.0%)	249 (27.5%)	↑
Functional results	6 (1.0%)	5 (1.0%)	6 (0.7%)	→
Quality of life	12 (1.9%)	21 (4.4%)	30 (3.3%)	↑
Survival (OS/DFS etc.)	25 (4.0%)	17 (3.5%)	49 (5.4%)	↑
Other	8 (1.3%)	7 (1.5%)	8 (0.9%)	→
Total number of theses	620 (100%)	480 (100%)	904 (100%)	—

Table 2.

Clinical area	2010-2014 (%)	2015-2019 (%)	2020-2025 (%)	Trend
Colorectal surgery	143 (23.1%)	107 (22.3%)	211 (23.3%)	→
Hepatobiliary-pancreatic surgery	142 (22.9%)	93 (19.4%)	182 (20.1%)	↓
Breast surgery	76 (12.3%)	59 (12.3%)	140 (15.5%)	↑
Thyroid-parathyroid surgery	69 (11.1%)	63 (13.1%)	105 (11.6%)	→
Obesity-bariatric surgery	13 (2.1%)	37 (7.7%)	65 (7.2%)	↑
Upper GIS surgery	33 (5.3%)	32 (6.7%)	65 (7.2%)	↑
Hernia surgery	38 (6.1%)	12 (2.5%)	31 (3.4%)	↓
Gastrointestinal emergencies	22 (3.5%)	14 (2.9%)	24 (2.7%)	→
Chronic wound/burn	10 (1.6%)	10 (2.1%)	12 (1.3%)	→
Endoscopy-colonoscopy	4 (0.6%)	6 (1.2%)	14 (1.5%)	→
Emergency surgery-trauma (non-GIS)	7 (1.1%)	3 (0.6%)	8 (0.9%)	→
Other	63 (10.2%)	44 (9.2%)	47 (5.2%)	↓
Total number of theses	620	480	904	—

[S-550]

Surgery 4.0: the AI revolution in operative note documentation - a 160-case prospective analysis returning the resident from "desk work" to the operating room

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Objective: Operative notes are cornerstone components of surgical practice, patient safety, and medico-legal processes. However, the heavy clinical and administrative workload on surgical residents turns manual documentation into a significant time burden and leads to variability in quality standards. This study aims to analyze the extent to which a KVKK-compliant, end-to-end encrypted, multimodal artificial intelligence (AI) architecture can optimize operative notes according to international BUPA surgical complexity scores and Royal College of Surgeons (RCS) standards. AI was designed as an indispensable assistant to liberate residents from administrative tasks, allowing them to focus on clinical training, surgical practice, and patient care.

Material and Methods: A total of 160 operations, categorized according to the BUPA classification as Group A (minor/intermediate; n=52, 32.5%), Group B (major; n=57, 35.7%), and Group C (complex major; n=51, 31.8%), were prospectively examined in this study. The system architecture was designed with a "Zero-Knowledge" principle, utilizing AES-256 end-to-end encryption on the client side. Surgeons' vocal findings were converted into dynamic operative notes using Scalpely v1.0.0, which is integrated with the multimodal Gemini 2.5 Flash API capable of direct semantic extraction from voice. All generated notes were blindly scored by three independent expert surgeons based on RCS criteria. Finally, a cost-efficiency analysis was conducted based on time efficiency and resident unit labor rates.

Results: The AI-supported system provided statistically significant improvements across all documentation parameters p<0.001):

• Standardization Support: The median AI score was 16.0,while the median resident score was 13.5 (p<0.001).This demonstrates AI's efficacy in standardizing quality.

• Time Management: Manual documentation took a median of 14.0 minutes for residents,whereas the AI process was completed in just 1.4 minutes, achieving a 90% time saving (p<0.001).

• Cost-Effectiveness: The median labor cost per operation was 124.46 TL for residents,which dropped to 14.12 TL with AI integration (p<0.001).

• BUPA Complexity Impact: The median success difference provided by AI was 23.6% in Group A, 22.2% in Group B, and 13.89% in Group C.Differences between groups B-C and A-C were statistically significant (p<0.05).

Conclusion: This study demonstrates that the AI-powered Scalpely v1.0.0 platform yields results 10 times faster and 9 times more economically compared to residents.The obtained data reveals that AI is not a competitor to the resident,but rather a technological necessity that alleviates their burden.The secure infrastructure, featuring AES-256 encryption,provides a robust foundation for the system's integration into clinical practice.AI serves as an education and efficiency tool that liberates the surgeon from "desk work" and returns them to where they belong:the operating room and the patient's bedside.

Keywords: Artificial intelligence, operative note, workload and efficiency

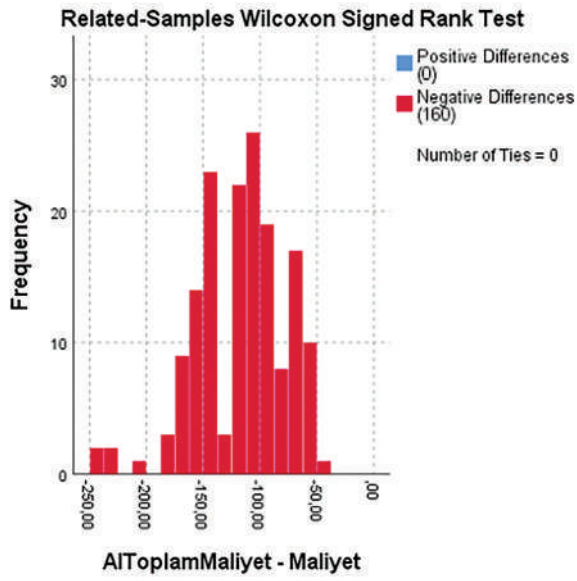


Figure 1. Resident cost and total AI cost.

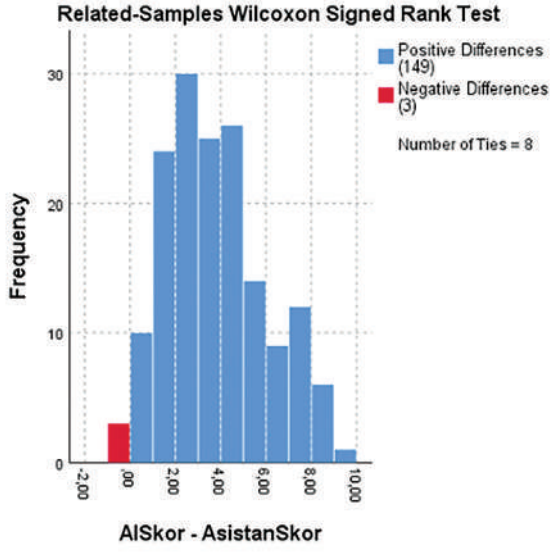


Figure 2. Resident score and total AI score.

[S-551]

Clinical decision variability in large language models: A delphi-like multiphase simulation using Chatgpt 5.2

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Objective: Large language models (LLMs) are increasingly used in clinical practice for generating text related to diagnosis,staging,and treatment planning. Their persuasive language raises patient safety concerns due to the risk of clinician over-reliance. However,the extent to which identical clinical data produce variable decisions under different contextual and normative frameworks has not been systematically evaluated. This study aimed to assess how usage variations affect clinical decision outputs and to highlight the risk of over-reliance.

Material and Methods: The study was a non-interventional, retrospective, simulation-based methodological investigation using OpenAI's ChatGPT-5.2. To standardize output language and format, 200 anonymized tumor board decisions without patient data were submitted to the model. NCCN and ESMO breast cancer guidelines were defined as normative frameworks. For each patient, raw and context-enriched data were created and evaluated without guidance and under NCCN and ESMO frameworks. A 2×3 factorial design generated six outputs per case, yielding 600 simulations. Outputs were structured into four domains: clinical staging, biological features, treatment approach, and qualitative risk assessment, producing 2,400 standardized texts. Cases with corresponding reference content were identified, and clinical equivalence was assessed semantically rather than textually. Classifications were performed by two independent clinicians and compared. Analyses were matched by patient and simulation condition across domains. I. Output Standardization (Phase 0): To standardize output language and format, 200 multidisciplinary tumor board decision texts containing no patient data were submitted to the large language model ChatGPT 5.2. II. Definition of Normative Frameworks: The NCCN and ESMO breast cancer clinical practice guidelines were defined as the normative clinical frameworks. III. Construction of Data Structures: For each patient, two different input structures were created: Raw clinical data Contextually enriched clinical data IV. Execution of Multi-Phase Simulations (2×3 Design): Each patient's data were evaluated under six simulation conditions, both without guideline direction and under NCCN and ESMO normative frameworks, resulting in six separate outputs: PHASE 1 (raw data) PHASE 2 (contextual data) PHASE 1_ESMO PHASE 2_ESMO PHASE 1_NCCN PHASE 2_NCCN V. Decomposition of Simulation Outputs into Decision Domains: The outputs generated under the six conditions were textually structured and decomposed into four predefined clinical decision domains: (a) Clinical staging (b) Biological characteristics (c) Overall treatment approach (d) Qualitative risk assessment VI. Identification of Cases with Available Reference Content and Domain-Based Enumeration: For each decision domain, the number of patients in whom the corresponding information was present in the reference tumor board decision was determined. Semantic equivalence classification was performed for these cases, and agreement rates were calculated. VII. Domain-Specific Agreement Comparisons (Reference vs. Alternative Simulations): Among cases in which the reference decision domain was available, agreement rates between the reference tumor board decision and alternative simulation outputs (PHASE 1, PHASE 2, and NCCN/ESMO repetitions) were compared for each clinical decision domain.

I. Selection of a single representative case and preparation of anonymized clinical data.

II. Implementation of six simulation conditions (raw, contextual, and ESMO/NCCN repetitions).

III. Decomposition of simulation outputs into four clinical decision domains.

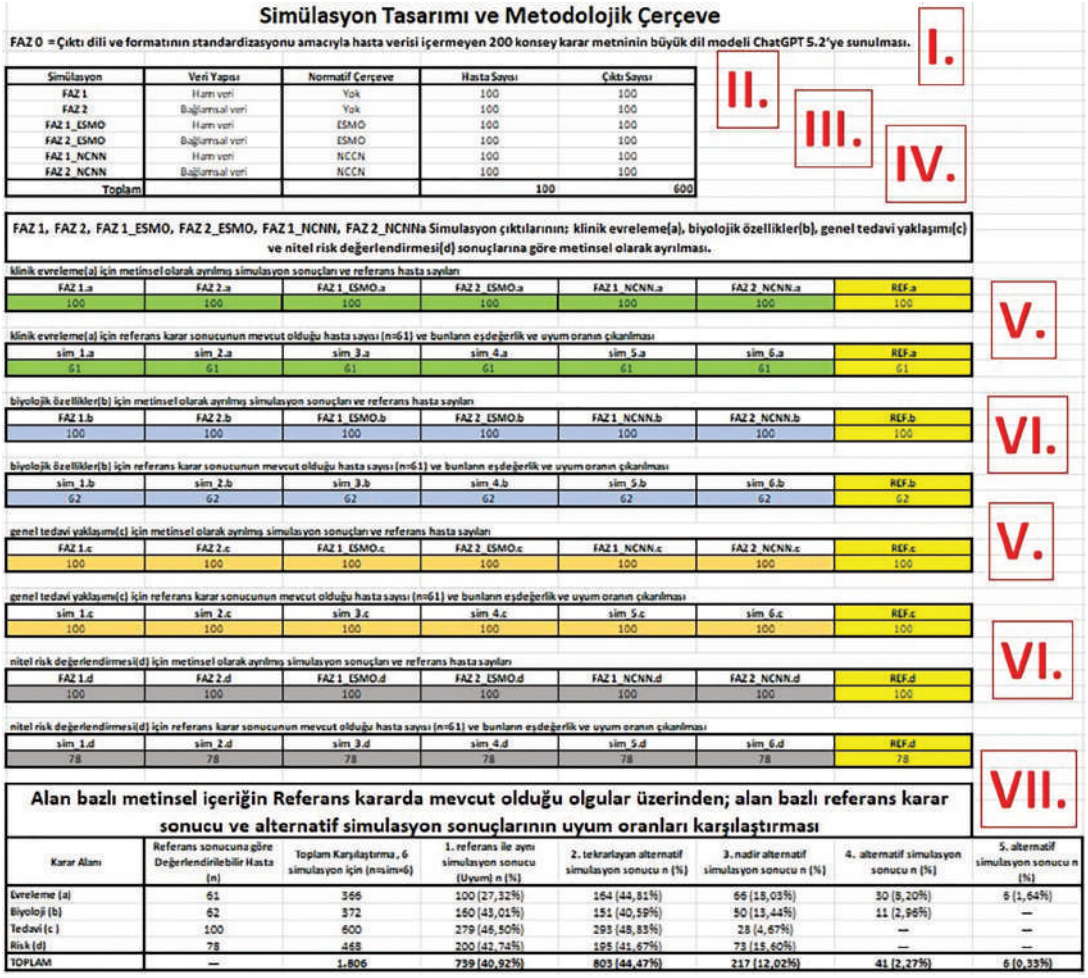
IV. Categorization of textual content based on clinical equivalence and coding of the reference decision.

V. Classification of alternative decision clusters and structuring for quantitative analysis.

Results: Evaluable reference data varied by decision domain. Analyses included 61 patients for staging (n=366 comparisons), 62 for biological features (n=372), 100 for treatment approach (n=600), and 78 for risk assessment (n=468). Of 2,400 outputs generated across six simulation contexts, n=1,806 were eligible for reference comparison. Full agreement rates were 27.3% (100/366) for staging, 43.0% (160/372) for biological classification, 46.5% (279/600) for treatment, and 42.7% (200/468) for risk, with an overall agreement of 40.92% (739/1806). In non-reference simulations, contextual variation altered decision distributions, expanding to up to five categories in some domains.

Conclusion: This study demonstrated that presenting identical clinical data under different contextual and normative frameworks leads to significant differences and domain-specific variability in LLM-generated clinical decisions. The findings indicate that LLM outputs are sensitive to presentation format and guideline framing, and that reliable use depends on appropriate contextual structuring, proper framework definition, and complete data input. Furthermore, standardized output formats are needed to ensure comparability between routine human clinical decisions and LLM outputs; however, consistently maintaining these conditions in clinical practice may pose methodological and operational challenges.

Keywords: Large language model, clinical decision variability, context sensitivity, simulation-based study, over-reliance



Simülasyon	Veri Yapısı	Normatif Çerçeve	Hasta Sayısı	Çıktı Sayısı
FAZ 1	Ham veri	Yok	100	100
FAZ 2	Bağlamsal veri	Yok	100	100
FAZ 1_ESMO	Ham veri	ESMO	100	100
FAZ 2_ESMO	Bağlamsal veri	ESMO	100	100
FAZ 1_NCNN	Ham veri	NCCN	100	100
FAZ 2_NCNN	Bağlamsal veri	NCCN	100	100
Toplam			100	600

klinik evreleme(a) için metinsel olarak ayrılmış simulasyon sonuçları ve referans hasta sayıları

FAZ 1.a	FAZ 2.a	FAZ 1_ESMO.a	FAZ 2_ESMO.a	FAZ 1_NCNN.a	FAZ 2_NCNN.a	REF.a
100	100	100	100	100	100	100

klinik evreleme(a) için referans karar sonucunun mevcut olduğu hasta sayısı (n=61) ve bunların eşdeğerlik ve uyum oranın çıkarılması

sim_1.a	sim_2.a	sim_3.a	sim_4.a	sim_5.a	sim_6.a	REF.a
61	61	61	61	61	61	61

biyolojik özellikler(b) için metinsel olarak ayrılmış simulasyon sonuçları ve referans hasta sayıları

FAZ 1.b	FAZ 2.b	FAZ 1_ESMO.b	FAZ 2_ESMO.b	FAZ 1_NCNN.b	FAZ 2_NCNN.b	REF.b
100	100	100	100	100	100	100

biyolojik özellikler(b) için referans karar sonucunun mevcut olduğu hasta sayısı (n=61) ve bunların eşdeğerlik ve uyum oranın çıkarılması

sim_1.b	sim_2.b	sim_3.b	sim_4.b	sim_5.b	sim_6.b	REF.b
62	62	62	62	62	62	62

genel tedavi yaklaşımı(c) için metinsel olarak ayrılmış simulasyon sonuçları ve referans hasta sayıları

FAZ 1.c	FAZ 2.c	FAZ 1_ESMO.c	FAZ 2_ESMO.c	FAZ 1_NCNN.c	FAZ 2_NCNN.c	REF.c
100	100	100	100	100	100	100

genel tedavi yaklaşımı(c) için referans karar sonucunun mevcut olduğu hasta sayısı (n=61) ve bunların eşdeğerlik ve uyum oranın çıkarılması

sim_1.c	sim_2.c	sim_3.c	sim_4.c	sim_5.c	sim_6.c	REF.c
100	100	100	100	100	100	100

nitel risk değerlendirmesi(d) için metinsel olarak ayrılmış simulasyon sonuçları ve referans hasta sayıları

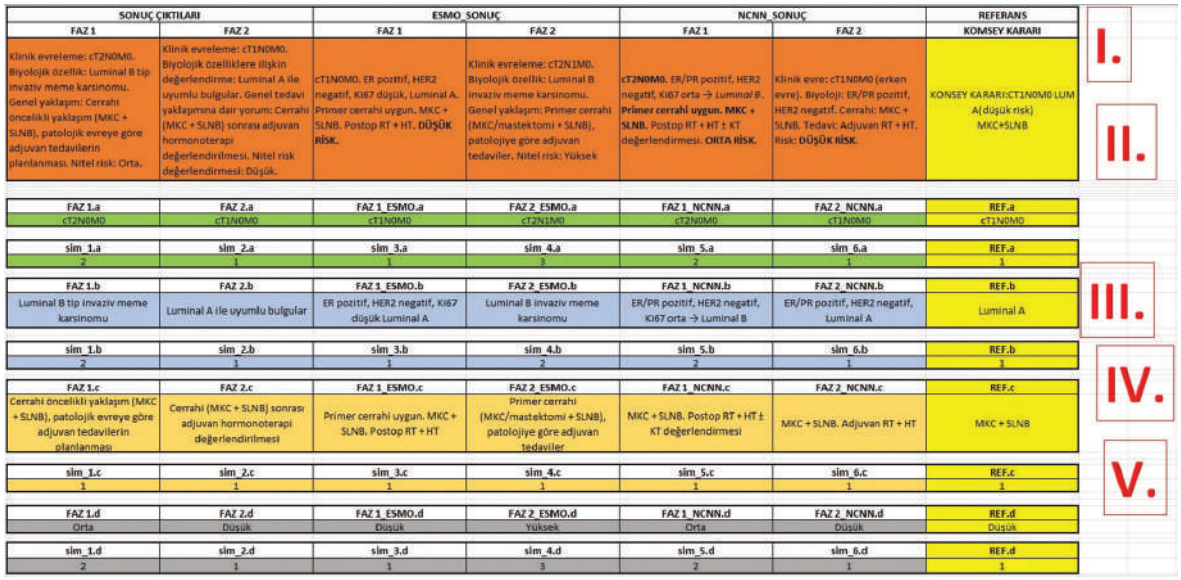
FAZ 1.d	FAZ 2.d	FAZ 1_ESMO.d	FAZ 2_ESMO.d	FAZ 1_NCNN.d	FAZ 2_NCNN.d	REF.d
100	100	100	100	100	100	100

nitel risk değerlendirmesi(d) için referans karar sonucunun mevcut olduğu hasta sayısı (n=61) ve bunların eşdeğerlik ve uyum oranın çıkarılması

sim_1.d	sim_2.d	sim_3.d	sim_4.d	sim_5.d	sim_6.d	REF.d
78	78	78	78	78	78	78

Karar Alanı	Referans sonucuna göre Değerlendirilebilir Hasta (n)	Toplam Karşılaştırma, 6 simulasyon için (n=sim×6)	1. referans ile aynı simulasyon sonucu (Uyum) n (%)	2. tekrarlayan alternatif simulasyon sonucu n (%)	3. nadir alternatif simulasyon sonucu n (%)	4. alternatif simulasyon sonucu n (%)	5. alternatif simulasyon sonucu n (%)
Evreleme (a)	61	366	100 (27,32%)	164 (44,81%)	66 (18,03%)	30 (8,20%)	6 (1,64%)
Biyoloji (b)	62	372	160 (43,01%)	151 (40,59%)	50 (13,44%)	11 (2,96%)	—
Tedavi (c)	100	600	279 (46,50%)	293 (48,83%)	28 (4,67%)	—	—
Risk (d)	78	468	200 (42,74%)	195 (41,67%)	73 (15,60%)	—	—
TOPLAM	—	1.806	739 (40,92%)	803 (44,47%)	217 (12,02%)	41 (2,27%)	6 (0,33%)

Figure 1. Schematic representation of the multiphase simulation design, analytical decomposition process, and domain-based concordance analyses.



SONUÇ ÇIKTILARI		ESMO_SONUÇ		NCNN_SONUÇ		REFERANS	
FAZ 1	FAZ 2	FAZ 1	FAZ 2	FAZ 1	FAZ 2	KONSEY KARARI	I.
Klinik evreleme: cT2N0M0. Biyolojik özellik: Luminal B tip invaziv meme karsinomu. Genel yaklaşım: Cerrahi öncelikli yaklaşım (MKC + SLNB), patolojik evreye göre adjuvan tedavilerin planlanması. Nitel risk: Orta.	Klinik evreleme: cT1N0M0. Biyolojik özelliklere ilişkin değerlendirme: Luminal A ile uyumlu bulgular. Genel tedavi yaklaşımına dair yorum: Cerrahi (MKC + SLNB) sonrası adjuvan hormonoterapi değerlendirilmesi. Nitel risk değerlendirmesi: Düşük.	cT1N0M0. ER pozitif, HER2 negatif, Ki67 düşük, Luminal A. Primer cerrahi uygun. MKC + SLNB. Postop RT + HT. **DÜŞÜK RİSK.**	Klinik evreleme: cT2N1M0. Biyolojik özellik: Luminal B invaziv meme karsinomu. Genel yaklaşım: Primer cerrahi (MKC/mastektomi + SLNB), patolojiye göre adjuvan tedaviler. Nitel risk: Yüksek	**cT2N0M0.** ER/PR pozitif, HER2 negatif, Ki67 orta → *Luminal B*. **Primer cerrahi uygun. MKC + SLNB.** Postop RT + HT ± KT değerlendirmesi. **ORTA RİSK.**	Klinik evre: cT1N0M0 (erken evre). Biyoloji: ER/PR pozitif, HER2 negatif. Cerrahi: MKC + SLNB. Tedavi: Adjuvan RT + HT. Risk: **DÜŞÜK RİSK.**	KONSEY KARARI:CT1N0M0 LUMA(düşük risk) MKC+SLNB	II.
FAZ 1.a	FAZ 2.a	FAZ 1_ESMO.a	FAZ 2_ESMO.a	FAZ 1_NCNN.a	FAZ 2_NCNN.a	REF.a	
cT2N0M0	cT1N0M0	cT1N0M0	cT2N1M0	cT2N0M0	cT1N0M0	cT1N0M0	
sim_1.a	sim_2.a	sim_3.a	sim_4.a	sim_5.a	sim_6.a	REF.a	
2	1	1	3	2	1	1	
FAZ 1.b	FAZ 2.b	FAZ 1_ESMO.b	FAZ 2_ESMO.b	FAZ 1_NCNN.b	FAZ 2_NCNN.b	REF.b	III.
Luminal B tip invaziv meme karsinomu	Luminal A ile uyumlu bulgular	ER pozitif, HER2 negatif, Ki67 düşük Luminal A	Luminal B invaziv meme karsinomu	ER/PR pozitif, HER2 negatif, Ki67 orta → Luminal B	ER/PR pozitif, HER2 negatif, Luminal A	Luminal A	
sim_1.b	sim_2.b	sim_3.b	sim_4.b	sim_5.b	sim_6.b	REF.b	
2	1	1	2	2	1	1	IV.
FAZ 1.c	FAZ 2.c	FAZ 1_ESMO.c	FAZ 2_ESMO.c	FAZ 1_NCNN.c	FAZ 2_NCNN.c	REF.c	
Cerrahi öncelikli yaklaşım (MKC + SLNB), patolojik evreye göre adjuvan tedavilerin planlanması	Cerrahi (MKC + SLNB) sonrası adjuvan hormonoterapi değerlendirilmesi	Primer cerrahi uygun. MKC + SLNB. Postop RT + HT	Primer cerrahi (MKC/mastektomi + SLNB), patolojiye göre adjuvan tedaviler	MKC + SLNB. Postop RT + HT ± KT değerlendirmesi	MKC + SLNB. Adjuvan RT + HT	MKC + SLNB	
sim_1.c	sim_2.c	sim_3.c	sim_4.c	sim_5.c	sim_6.c	REF.c	V.
1	1	1	1	1	1	1	
FAZ 1.d	FAZ 2.d	FAZ 1_ESMO.d	FAZ 2_ESMO.d	FAZ 1_NCNN.d	FAZ 2_NCNN.d	REF.d	
Orta	Düşük	Düşük	Yüksek	Orta	Düşük	Düşük	
sim_1.d	sim_2.d	sim_3.d	sim_4.d	sim_5.d	sim_6.d	REF.d	
2	1	1	3	2	1	1	

Figure 2. Schematic representation of the multiphase simulation design and domain-based decomposition process using a single patient example.

[S-552]

Development and prospective validation of a machine learning-based diagnostic model in acute appendicitis

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Objective: Early and accurate diagnosis of acute appendicitis (AA), the most common emergency surgical abdominal condition, is critically important to prevent the morbidity and mortality it can cause. Despite advances in diagnostic methods, the misdiagnosis rate, which remains around 20% worldwide, continues to highlight the need for new and supportive methods. The aim of this study is to prospectively validate the diagnostic accuracy of a machine learning (ML) model trained with local data from a training and research hospital in AA.

Material and Methods: This study was designed in two phases on patients who underwent appendectomy at our hospital. In the first phase (retrospective), clinical, laboratory, radiological, and histopathological data of 908 patients (median age: 32 years, range: 17-93) who underwent surgery between January 2020 and December 2021 were analyzed, and models were trained using seven different ML algorithms (logistic regression, random forest, neural network, CN2 rule induction, KNN, naive bayes, gradient boosting). Since clinical history and physical examination findings were not adequately represented in the retrospective data, a structured data collection form including these variables was prepared in the second phase (prospective). The models were re-evaluated using data obtained from this form, which was administered by physicians to 107 patients consecutively admitted with a preliminary diagnosis of atrial appendectomy in 2023. Statistical analyses were performed using the R program; a p-value <0.05 was considered statistically significant.

Results: Among the algorithms tested on the retrospective dataset, the logistic regression model exhibited the highest performance in predicting histopathological diagnosis (AUC: 0.745). The accuracy rate of the model trained solely with retrospective data was found to be 76%. Prospectively including detailed clinical data such as patient history, system query, and physician's clinical impressions increased diagnostic accuracy statistically significantly to 84.6% (p<0.05). The model showed high sensitivity (84.6%), while specificity was found to be 32.9%.

Conclusion: Transferring experience gained from local and central-based data to machine learning models significantly improves AA diagnosis performanc e clinically. Our study demonstrates that even in digital diagnostic support systems, physician-patient interaction (history and physical examination) can play a more decisive role than objective examinations. In the future, testing these models in larger and more heterogeneous populations during the triage phase and improving them with additional parameters to increase specificity will enhance their clinical applicability.

Keywords: Acute appendicitis, machine learning, early diagnosis

[S-553]

Evaluation of colonic distension severity on abdominal radiographs with a machine learning-based score and its correlation with surgical outcomes

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Objective: This study aims to quantitatively predict segmental colon diameter on abdominal radiographs using machine learning methods and to evaluate the performance of the developed models.

Material and Methods: In this retrospective study, images from 330 patients were analyzed. The training set consisted of 130 patients with dilated colons and 130 patients with normal colons, while the test set comprised 70 patients. Patient age, sex, and malignancy status were recorded. A total of 68 radiographic features were extracted from each image. Five different machine learning models (Random Forest, Gradient Boosting, SVR, XGBoost, LightGBM) were trained using five-fold cross-validation. Performance was evaluated for each colon segment using the coefficient of determination (R^2) and the mean absolute error (MAE) in centimeters. The association between demographic variables and dilatation was examined using logistic regression analysis.

Results: The highest prediction accuracy was achieved for the ascending colon (XGBoost, CV R^2=0.496±0.129) and the transverse colon (random forest, CV R^2=0.377±0.155). Moderate performance was observed for the descending colon (R^2=0.197±0.105), while prediction accuracy for the sigmoid colon was limited (best R^2=0.059±0.067). MAE values across segments ranged from 0.18 to 0.48 cm.In the demographic analysis, age was found to be significantly associated with dilatation [odds ratios (OR): 1.03; 95% CI: 1.02-1.05; p<0.001]. Sex (OR: 0.81; 95% CI: 0.49-1.33; p=0.396) and the presence of malignancy (p=0.997) showed no significant association. Cross-validated determination coefficients (R^2) of machine learning models for segmental colon diameter estimation are presented. The highest predictive performance was observed in the ascending colon, followed by the transverse colon. Moderate performance was detected in the descending colon, while predictive accuracy was limited in the sigmoid colon. These findings indicate superior model performance in proximal colon segments. Mean absolute error (MAE) values in centimeters for segmental colon diameter prediction are shown. The lowest error was observed in the ascending colon, whereas higher error rates were detected in the sigmoid colon. Overall low centimeter-level error supports the potential clinical applicability of the model. The best-performing model for each colon segment is presented along with cross-validated R^2 values and MAE in centimeters.

Conclusion: Machine learning models demonstrated promising performance in predicting colon diameter, particularly in proximal colon segments. Quantitative prediction of ascending and transverse colon distension may aid the surgical decision-making process in patients with suspected obstruction. Further large-scale validation studies are required before clinical implementation.

Keywords: Abdominal radiography, colon dilatation, machine learning

Table 1. Best model performance by colon segment

Colon segment	Best model	CV R^2 (±SD)	MAE (cm)
Ascending	XGBoost	0.496±0.129	0.18
Transverse	Random forest	0.377±0.155	0.37
Descending	Random forest	0.197±0.105	0.35
Sigmoid	SVR	0.059±0.067	0.48

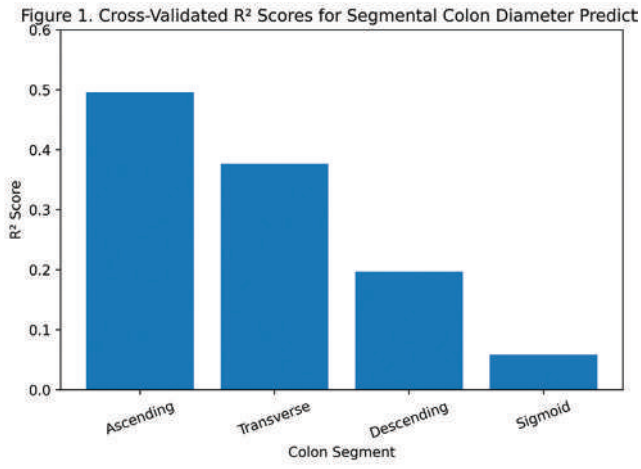


Figure 1. Cross-validated R^2 scores for segmental colon diameter prediction.

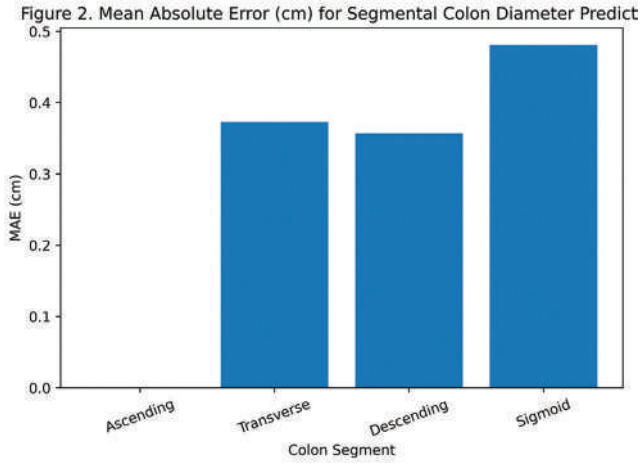


Figure 2. Mean absolute error (cm) for segmental colon diameter prediction.

[S-554]

Clinical decision superiority in colorectal cancer: Can it pass the 33-person human panel?

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Objective: Colorectal cancer (CRC) is the third most common malignancy worldwide and requires complex multidisciplinary decision-making. Multidisciplinary tumor boards (MDTs) integrate surgical, oncological, and radiological expertise to individualize treatment. Large language models (LLMs) have emerged as potential clinical decision-support tools; however, their real-world performance in consensus-driven oncology environments remains unclear. This study compared treatment recommendations generated by 33 contemporary LLMs with decisions made by a human gastrointestinal tumor board.

Material and Methods: This retrospective study included 116 CRC patients discussed at a tertiary MDT between 2023 and 2024. Human treatment decisions were extracted from official tumor board records. Thirty-three state-of-the-art LLMs were evaluated using structured clinical summaries. Each model selected one of five predefined categories: surgery, follow-up, neoadjuvant therapy, medical oncology, or radiotherapy. Each model was queried five times per patient to assess robustness. A total of 166 decisions per patient (1 human, 165 AI) were analyzed. Agreement was assessed using Cohen's Kappa, distribution differences with chi-square tests, and inter-model reliability with Fleiss' Kappa. Statistical significance was defined as $p<0.05$.

Results: Overall pooled agreement between LLMs and human MDT decisions was 66.3%, with moderate concordance (Cohen's $\kappa=0.457$; 95% CI: 0.321-0.593). The highest individual model agreement was observed with GPT-OSS-20B (accuracy 69.8%, $\kappa=0.498$), while the lowest κ was 0.256. Decision distributions differed significantly between AI and human experts (χ^2 $p<0.05$). LLMs more frequently recommended neoadjuvant therapy and medical oncology, whereas MDT decisions favored surgery in a higher proportion of cases. Performance for surgery showed moderate discrimination (F1=0.72), while follow-up and radiotherapy categories demonstrated poor sensitivity (F1=0.00). Inter-LLM reliability was high (Fleiss' $\kappa=0.815$), indicating strong internal consistency among models. The details of the patient characteristics and all patient cohort as well as details of the tumor grades are given The results of the tumor boards and responses of the artificial intelligence systems have been compared.

Conclusion: LLMs demonstrate moderate agreement with human tumor boards but generate statistically distinct treatment patterns. Although internally consistent, they do not replicate the nuanced, consensus-based reasoning of multidisciplinary oncology teams. Current evidence supports their use as assistive decision-support tools under physician supervision rather than autonomous clinical decision-makers. Further research should prioritize interpretability, bias mitigation, domain-specific fine-tuning, and prospective multicenter validation.

Keywords: Tumor boards, artificial intelligence, colorectal cancer

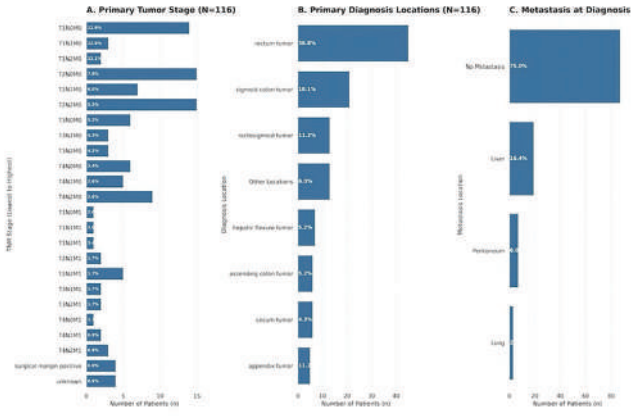


Figure 1. Patient charactheristics and cohort.

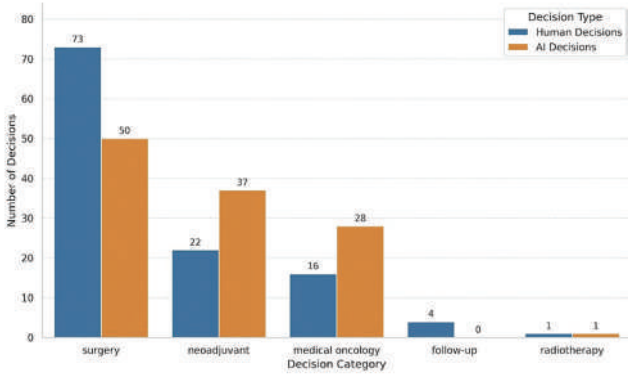


Figure 2. Decision distribution comparison.

[S-555]

AI-assisted triage in emergency general surgery: A pilot feasibility study comparing GPT and Gemini

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Objective: Timely triage in emergency general surgery is critical for reducing morbidity and optimizing resource utilization. Large language models (LLMs) such as GPT and Gemini have shown potential in clinical decision support; however, their reliability in surgical triage remains unclear. This pilot study aimed to evaluate the feasibility and accuracy of LLM-assisted triage in emergency general surgery by comparing GPT and Gemini against expert surgeon prioritization.

Material and Methods: In this cross-sectional pilot study, 60 real-world emergency general surgery scenarios (including acute appendicitis, bowel obstruction, perforation, cholecystitis, and gastrointestinal bleeding) were presented to GPT and Gemini using standardized prompts. Both models assigned triage categories (immediate, urgent, early, delayed). Three board-certified general surgeons established the reference standard. Primary outcomes included triage accuracy, weighted agreement (κ), sensitivity for high-priority cases, and safety errors defined as under-triage of critical conditions.

Results: Overall triage accuracy was 78% for GPT and 71% for Gemini. Agreement with expert consensus was moderate for GPT (weighted κ=0.62) and fair-to-moderate for Gemini (κ=0.54). Sensitivity for identifying high-priority cases was higher with GPT (86%) compared with Gemini (79%). Safety-critical under-triage occurred in 8% of GPT assessments and 14% of Gemini assessments. Both models demonstrated stronger performance in common presentations but variability in complex multi-morbid scenarios.

Conclusion: LLM-assisted triage in emergency general surgery is feasible and shows promising accuracy, with GPT demonstrating slightly superior performance compared with Gemini. Despite encouraging results, safety concerns related to under-triage highlight the need for clinician oversight. Larger prospective studies are required before implementation in real-time triage workflows.

Keywords: Artificial intelligence, clinical decision support, feasibility, emergency surgery, triage, large language models

24th NATIONAL CONGRESS OF SURGERY ABSTRACTS

VIDEO PRESENTATIONS

[V-002]

Technical details of laparoscopic cystostomy, unroofing and omentopexy in a giant hepatic hydatid cyst

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Objective: Hydatid disease is a parasitic infection frequently encountered in endemic regions. It most commonly involves the liver, and its management varies according to cyst type, anatomical location, size, associated complications and surgical expertise. In this video presentation, we aimed to present our laparoscopic surgical approach in a case of a giant hepatic hydatid cyst.

Material and Methods: A 69-year-old male patient was evaluated due to elevated liver function tests and hyperbilirubinemia. Intravenous contrast-enhanced abdominal computed tomography (CT) and liver magnetic resonance imaging (MRI) revealed a 95×50 mm giant hydatid cyst located in segment VI of the liver, along with concomitant cholelithiasis. The patient underwent laparoscopic cystostomy, unroofing, cholecystectomy and omentopexy.

Results: A 69-year-old male with elevated liver enzymes (ALT 541 U/L, AST 354 U/L, GGT 624 U/L, ALP 121 U/L, total bilirubin 3.38 mg/dL) and a history of hypertension, diabetes mellitus, congestive heart failure, and vertigo was evaluated. Imaging revealed a 95×50 mm hydatid cyst in liver segment VI, not clearly classifiable by Gharbi criteria. IHA was positive (1/640). After three cycles of albendazole and unsuccessful PAIR, elective laparoscopic surgery was performed. Using one 10 mm umbilical and two 5 mm trocars, a 10 cm cyst adherent to the omentum and adjacent to the duodenum and transverse colon was identified. After careful adhesiolysis and placement of saline-soaked pads, the cyst was punctured, injected with hypertonic saline, and aspirated in three cycles. Cystostomy and unroofing were performed, and daughter vesicles, germinative membrane, and purulent material were removed. The cyst wall near the duodenum was preserved. No biliary communication was observed; a pedicled omental flap was placed and sutured (omentopexy). A subhepatic Jackson-Pratt drain was inserted. The postoperative course was uneventful, with drain removal on day 3 and discharge without complications.

Conclusion: In cases of giant hepatic hydatid cysts, the laparoscopic approach offers the well-established advantages of minimally invasive surgery and can be safely and effectively performed in experienced centers. Our video presentation demonstrates the feasibility and efficacy of laparoscopic cystostomy, unroofing and omentopexy in the management of hepatic hydatid cyst disease.

Keywords: Hydatid cyst, omentopexy, unroofing

[V-003]

Demonstration of an aberrant bile duct: Benefit of consistency in surgical technique

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Objective: Anatomical variations of the extrahepatic biliary tree, particularly aberrant right hepatic or right segmental hepatic ducts, pose a significant risk for bile duct injury during laparoscopic cholecystectomy. Low insertion of an aberrant duct into the cystic duct is a rare but critical finding, as it can be inadvertently transected during the standard approach to Calot's triangle if not identified.

Material and Methods: Our patient underwent laparoscopic cholecystectomy for symptomatic cholelithiasis. During dissection to obtain the critical view of safety, the operating surgeon identified an additional tubular structure lying deep to the presumed cystic duct, partially obscured by fatty tissue. Initial appearance suggested an aberrant duct coursing toward the cystic duct at a low level. Careful and deliberate dissection of Calot's triangle was undertaken to delineate the anatomy. Further exposure confirmed that the additional structure was an aberrant right segmental hepatic duct joining the cystic duct at a low insertion point. The normal cystic duct and cystic artery were subsequently identified and skeletonized. No evidence of biliary injury occurred, and the aberrant duct was preserved intact.

Results: The procedure was completed without complication. The patient's postoperative recovery was uneventful, with no evidence of bile leak or other morbidity. Aberrant right hepatic or right segmental ducts with low insertion into the cystic duct are rare but surgically significant. Unrecognized, they are a major cause of bile duct injury, particularly during laparoscopic cholecystectomy.

Conclusion: This case highlights the importance of careful dissection within Calot's triangle, strict adherence to the critical view of safety, and maintaining a high index of suspicion for variant anatomy. Intraoperative cholangiography or near-infrared fluorescent cholangiography should be considered when ductal anatomy is uncertain.

Keywords: Critical view of safety, aberrant right bile duct, cholecystectomy

[V-004]

A giant progressive hepatic cyst mimicking biliary cystadenoma: Diagnostic challenges and laparoscopic management

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Objective: Hepatic cystic lesions are usually benign; however, progressive enlargement and atypical imaging features may raise suspicion for premalignant entities such as biliary cystadenoma. This case report aims to present the diagnostic course and laparoscopic management of a giant hepatic cyst that demonstrated progressive growth over time and radiological features mimicking biliary cystadenoma.

Material and Methods: Clinical data, serial imaging findings, and surgical outcomes of a 77-year-old female patient were retrospectively reviewed. Ultrasonography examinations performed between 2023 and 2025 and a non-contrast computed tomography (CT) scan obtained in 2026 were analyzed to assess changes in lesion size, localization, and internal characteristics. Due to progressive enlargement, symptomatic presentation, and inability to establish a definitive radiological diagnosis, laparoscopic cyst unroofing was performed. Intraoperative findings, histopathological results, and postoperative follow-up data were evaluated. Preoperative CT images and intraoperative video recordings were prepared for oral presentation.

Results: In 2023, a thin-walled cystic lesion measuring 96×90 mm was detected in hepatic segments IVa-IVb-VII-VIII. Follow-up ultrasonography in 2025 demonstrated significant enlargement to 172×127 mm, with imaging features insufficient to differentiate between a simple hepatic cyst and biliary cystadenoma. In 2026, non-contrast CT revealed a giant cystic lesion measuring 200×170×133 mm, extending into both hepatic lobes and causing marked mass effect. The patient reported intermittent early satiety, nausea, and vomiting. Laparoscopic cyst unroofing was performed. Intraoperatively, bile crystals were observed within the cyst cavity; however, no active bile leakage was detected. Postoperative drain output showed no bile, and the drain was safely removed on postoperative day 10. Cytological analysis of the cyst fluid and histopathological examination of the resected cyst wall were consistent with a simple hepatic cyst.

Conclusion: Progressively enlarging hepatic cysts with atypical imaging features may present significant diagnostic challenges. In symptomatic patients with radiological uncertainty, laparoscopic cyst unroofing is a safe, effective, and minimally invasive approach that provides both therapeutic benefit and definitive diagnos.

Keywords: Diagnostic challenge, giant liver cyst, hepatic cyst, laparoskopic surgery

[V-005]

Laparoscopic spleen-preserving distal pancreatectomy: Technical notes

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Objective: With the DIPLOMA study, minimally invasive distal pancreatectomy has been shown to provide long-term survival comparable to open surgery in patients with upfront resectable pancreatic cancer. When these findings are considered together with the general advantages of minimally invasive techniques—namely reduced postoperative pain, shorter hospital stay, and lower rates of complications such as incisional hernia—they suggest that this approach is progressing toward becoming the gold standard. Accordingly, the standardization of spleen-preserving techniques, particularly preferred for benign lesions and low-grade neuroendocrine tumors, has regained importance in the current era with the increasing adoption of minimally invasive surgery.

Material and Methods: A 29-year-old female patient undergoing examination by the endocrinology department due to hypoglycemic attacks was found to have a suspicious lesion measuring 11 mm in diameter in the tail of the pancreas, consistent with a neuroendocrine tumor. Considering her symptoms, the patient was evaluated in a multidisciplinary conference with a preliminary diagnosis of insulinoma, and it was decided to perform a spleen-preserving distal pancreatectomy.

Results: A laparoscopic spleen-preserving pancreatic tail resection was planned. The surgical procedure was performed using one 12 mm and three 5 mm trocars (Figure 1). The gastrocolic ligament was opened, and gastric retraction was performed by passing a 2/0 silk suture posteriorly. The pancreas was scanned with intraoperative ultrasound, and the lesion area was identified, revealing its relationship with the splenic vein. The inferior pancreas was freed using an ultrasonic energy device (MEDISONIC). Dissection continued posteriorly. The splenic artery was identified superiorly. The venous branches between the splenic vein and the pancreas were clipped and cut, and the splenic vein was dissected from the pancreatic tissue using hooks and an ultrasonic energy device, starting from the splenic hilum and running medially. After the splenic vein and artery were dissected from the pancreatic tissue up to the pancreatic transection line determined by intraoperative ultrasound, laparoscopic bulldog clamps were placed on the transection line and waited for 7 minutes to prepare the pancreatic tissue for transection. The pancreas was closed and cut using an EndoGia (Medtronic) stapler. The specimen was removed through the Pfannenstiel incision inside the endobag. Hemopatch was applied to the pancreatic transection line and covered with Tisseel.

Conclusion: Minimally invasive techniques are strong candidates to become the standard treatment approach for left-sided pancreatic resections; detailed description and sharing of these techniques without compromising oncological principles will significantly contribute to increasing their safe and effective applicability by broader surgical communities.

Keywords: Laparoscopy, pancreatic surgery

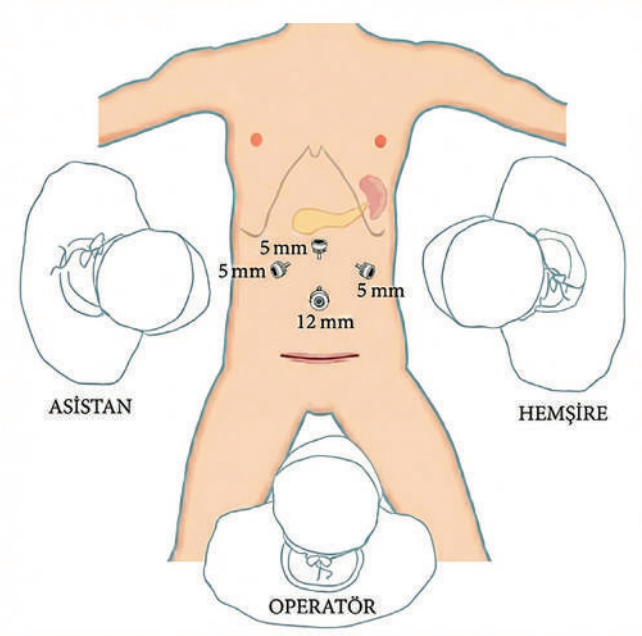


Figure 1. Trochar placement.

[V-006]

Liver surgery experience at University of Health Sciences Türkiye, Gaziantep City Hospital: Etiology, type of surgery, and survival outcomes

Vakkas Avcı, Kerem Özgü, Yücel Yüksel, Ercan Korkut

Clinic of General Surgery, University of Health Sciences Türkiye, Gaziantep City Hospital, Gaziantep

Objective: Liver surgery carries high technical complexity and morbidity risk. Both benign and malignant liver diseases may require surgical intervention. This study aimed to analyze etiology, surgical procedures, and survival outcomes of patients who underwent liver surgery at University of Health Sciences Türkiye, Gaziantep City Hospital between 2023 and 2025.

Material and Methods: Thirty-five patients were retrospectively evaluated. Etiology was classified as benign or malignant; malignant cases were further divided into colorectal metastases, cholangiocarcinoma, and hepatocellular carcinoma (HCC). Surgical procedures included major and minor hepatectomies, combined hepatopancreatic surgery, biliary/hilar surgery, and other interventions. Some patients underwent additional procedures such as Whipple, low anterior resection (LAR), or right hemicolectomy. Survival was analyzed using Kaplan-Meier curves, and comparisons were performed with the log-rank test.

Results: A total of 35 patients were included, with the majority having malignant lesions. Colorectal metastases were the most frequent malignancy, followed by cholangiocarcinoma and HCC. Regarding surgical procedures, seven patients underwent right hepatectomy and six underwent left hepatectomy, while three patients each underwent left lateral segmentectomy, single segmentectomy, and atypical resections. Segment VII segmentectomy was performed in two patients, and laparoscopic segmentectomy in two. Two patients underwent simultaneous Whipple procedure, one underwent LAR, and another underwent right hemicolectomy. Major and minor hepatectomies were the most common surgeries. Kaplan-Meier analysis showed no significant differences in survival between benign and malignant cases (log-rank p=0.56), between malignant subgroups (HCC vs. cholangiocarcinoma, p=0.42; colorectal metastases vs. other malignancies, p=0.75), or between surgical types (major vs. minor hepatectomy, p=0.99; major hepatectomy vs other procedures, p=0.87).

Conclusion: Liver surgery at our institution encompassed a wide spectrum of procedures, including major and minor hepatectomies, combined hepatopancreatic and biliary/hilar surgeries, and laparoscopic resections. Despite the complexity of these interventions, survival outcomes were similar across etiological and surgical subgroups. These findings suggest that, with appropriate patient selection and surgical expertise, liver surgery can be performed safely with comparable long-term outcomes, even in technically challenging cases.

Keyword: Liver rezection

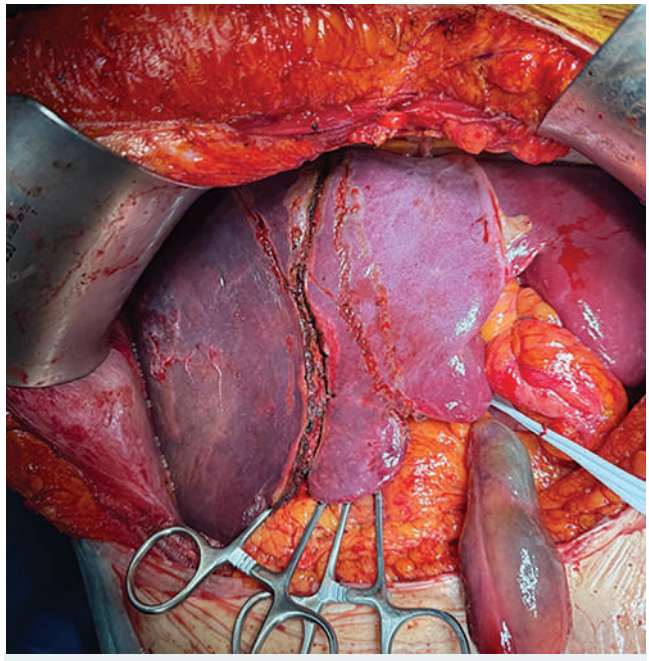


Figure 1. Line of demarcation.

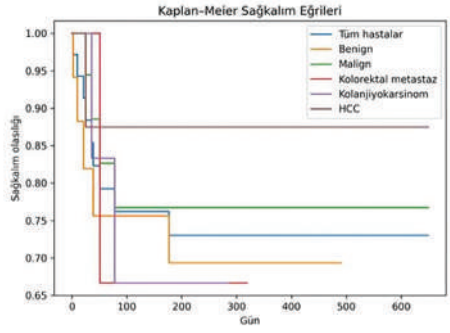


Figure 2. Kaplan-Meier survival curve.

[V-008]

Complex ventral hernia repair using botulinum toxin with combination of Fasciotens® after colorectal surgery: A video vignette

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Objective: Large incisional hernias following colorectal surgery remain a significant reconstructive challenge, particularly in elderly patients with marked fascial retraction and loss of abdominal domain. Achieving tension-free midline closure without extensive myofascial dissection is often difficult and associated with considerable morbidity.

Material and Methods: We present a video vignette demonstrating a combined approach using preoperative botulinum toxin A (BTA) injections and intraoperative dynamic fascial traction with the Fasciotens® device in a 75-year-old male with a giant midline incisional hernia following anterior resection for colorectal cancer. Four weeks prior to surgery, ultrasound-guided BTA was administered into the lateral abdominal wall muscles to induce chemical component relaxation, as previously described in complex hernia repair strategies. During surgery, controlled and symmetrical traction applied to both fascial edges using the Fasciotens® device enabled progressive medialization and primary midline closure without the need for anterior or posterior component separation. The procedure was completed safely, followed by mesh reinforcement.

Results: No intraoperative complications occurred, and the patient's early recovery was uneventful. Oral intake and mobilization were initiated on postoperative day one, and he was discharged with intact repair and no signs of respiratory compromise or abdominal hypertension on postoperative day five. The patient is currently in the second postoperative month; therefore, the follow-up period is not yet sufficient to fully evaluate outcomes.

Conclusion: This case highlights the feasibility of combining chemical and mechanical fascial elongation techniques to facilitate primary closure in selected patients with complex ventral hernias after colorectal surgery, potentially reducing the need for component separation.

Keywords: Botulinum toxin A, Fasciotens®, complex ventral hernia, abdominal wall reconstruction, colorectal surgery

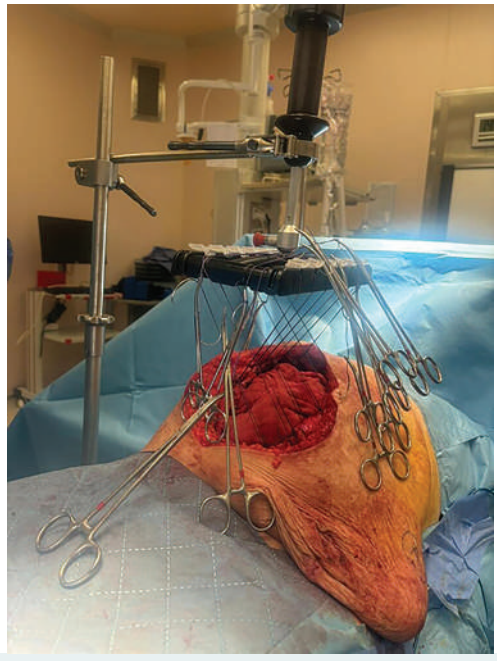


Figure 1. Fascial traction using the Fasciotens® device.

[V-010]

Laparoscopic (TAPP) approach in recurrent inguinal hernia after conventional and total extraperitoneal techniques

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Objective: Abdominal wall hernia repair methods can be performed using anterior or posterior approaches.

Material and Methods: Especially in cases of recurrence after surgery, choosing the correct method based on the initial surgery can be beneficial in terms of complications and physician-patient comfort.

Results: In almost all repair methods, the mesh used must cover all herniated disc areas in the myopectineal orifice.

Conclusion: In this case, we will share our experience with a laparoscopic (TAPP) approach in a patient who previously underwent open and total extraperitoneal repair but experienced recurrence in the right femoral region.

Keywords: Inguinal hernia, TAPP, TEP

[V-011]

Transabdominal preperitoneal (TAPP) repair of obturator hernia in an elderly patient: A case report

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Objective: Obturator hernia is a rare but clinically significant entity, predominantly affecting frail, elderly women. Due to its deep pelvic location and non-specific clinical presentation, diagnosis is often delayed, frequently resulting in bowel obstruction and the need for emergency laparotomy. With advances in minimally invasive surgery, laparoscopic approaches—particularly the transabdominal preperitoneal (TAPP) technique—offer both diagnostic and therapeutic advantages. We present a case of obturator hernia successfully managed using a laparoscopic TAPP approach.

Material and Methods: An 88-year-old female presented with pain originating from the medial aspect of the left thigh and radiating to the leg and lower back. Her medical history included an exploratory laparotomy for perforation in 2016, Alzheimer's disease, vertigo, and hypertension. On physical examination, the abdomen was soft without tenderness or signs of peritoneal irritation. Pain increased with flexion of the left lower extremity. Laboratory parameters were within normal limits. Abdominopelvic computed tomography revealed a narrow-necked hernia sac at the level of the left obturator canal, extending between the pectineus and obturator externus muscles and containing an ileal loop. Proximal small bowel dilation with distal collapse was observed, consistent with partial obstruction. The patient was taken to emergency surgery. Under general anesthesia, a TAPP approach was performed. During laparoscopic exploration, the incarcerated bowel loop was found to have spontaneously reduced. Pelvic fluid was aspirated and the operative field irrigated. The peritoneum overlying the defect was incised, the hernia sac was dissected, and a 10×10 cm polypropylene mesh was placed in the preperitoneal space and secured with tackers. The peritoneum was closed, and the procedure was completed. The postoperative course was uneventful. The patient was discharged on postoperative day three. No complications or recurrence were observed at the one-week follow-up. A narrow-necked hernia sac was identified at the level of the left obturator foramen, extending between the pectineus and obturator externus muscles and containing a segment of ileum (obturator hernia). Minimal free fluid densities suggestive of edema were observed within the hernia sac. This level constituted a transition zone; the small bowel loops proximal to the herniation (jejunum and proximal ileum) demonstrated dilatation up to 25 mm in maximal diameter with intermittent air-fluid levels, whereas the bowel loops distal to the hernia site were collapsed.

Results: No intraoperative complications occurred. Bowel viability was preserved, and no resection was required. Oral intake was initiated on postoperative day 1 and advanced gradually. The patient was discharged on postoperative day 3 without complications. At one-week follow-up, no postoperative morbidity or recurrence was observed.

Conclusion: Obturator hernia should be considered in elderly female patients presenting with medial thigh pain and non-specific abdominal findings. Early CT imaging enables timely diagnosis. In selected patients, laparoscopic TAPP repair provides safe intra-abdominal exploration, allows assessment of bowel viability, and facilitates secure preperitoneal mesh placement with minimal morbidity. TAPP may represent an effective minimally invasive alternative to open surgery in obturator hernia management.

Keywords: Laparoscopic surgery, obturator hernia, transabdominal preperitoneal repair (TAPP)

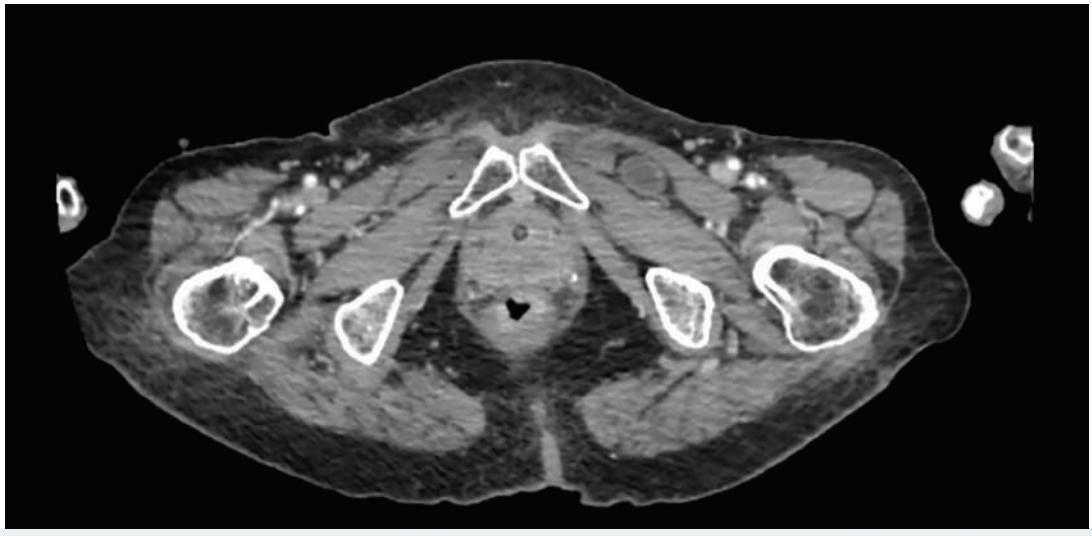


Figure 1. Abdominopelvic CT showing left obturator hernia with proximal small bowel dilatation.

[V-013]

eTEP repair of incisional herni, case presentation

Ahmet Furkan Bulut, Fahrettin Acar, Fatih Kocalar

Selçuk University Faculty of Medicine, Konya

Objective: Incisional hernia is a common complication following abdominal surgery and may significantly impair quality of life. With advances in minimally invasive surgery, the extended totally extraperitoneal (eTEP) approach has emerged as a novel technique that enables laparoscopic retromuscular hernia repair. The aim of this study is to present the surgical technique and early clinical outcomes of an incisional hernia case repaired using the eTEP approach.

Material and Methods: A 38-year-old female patient presented to our clinic with a symptomatic incisional hernia that developed at the site of a previous abdominal surgery. The diagnosis of incisional hernia was confirmed by physical examination and imaging studies. Laparoscopic eTEP incisional hernia repair was planned. During the procedure, the retromuscular space was accessed, the posterior rectus sheath was dissected, and the hernia sac was reduced. The right and left retromuscular spaces were connected. After primary closure of the posterior fascia, a mesh with adequate overlap was placed in the retromuscular space. The intraperitoneal cavity was not entered during the operation.

Results: The surgical procedure was completed successfully without any intraoperative complications. Operative time and blood loss were within acceptable limits. In the postoperative period, the patient was mobilized early, and oral intake was resumed shortly after surgery. Postoperative pain was mild and adequately controlled with minimal analgesic requirements. No early postoperative complications such as seroma, hematoma, surgical site infection, or recurrence were observed. The patient was discharged after a short hospital stay and remained clinically stable during early follow-up.

Conclusion: The eTEP approach is a safe, effective, and anatomically sound minimally invasive technique for the repair of incisional hernias. By avoiding intraperitoneal mesh placement, this method may reduce the risk of bowel injury, adhesion formation, and chronic postoperative pain. With appropriate patient selection and sufficient surgical expertise, the eTEP technique represents a strong and promising alternative in the management of incisional hernias.

Keywords: eTEP, extended totally extraperitoneal, laparoscopic incisionel hernia, minimal invasive surgery

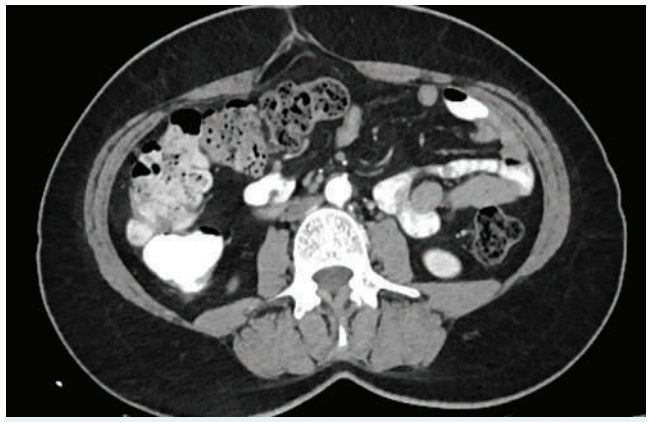


Figure 1. CT scan of incisionel hernia wide incisionel hernia.



Figure 2. CT scan of incisionel hernia wide incisionel hernia.



Figure 3. CT scan of incisionel hernia wide incisionel hernia.

[V-014]

Abdominal wall reconstruction with robotic e-TEP-TAR and concomitant inguinal hernia repair in a post-transplant complex incisional hernia

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Objective: Complex incisional hernias, particularly those involving multiple defects along a wide incision line, represents significant surgical challenges. In these patients, adhesions, alterations in tissue quality, and the presence of concomitant hernias complicate operative planning. The robotic enhanced-view totally extraperitoneal (eTEP) approach combined with transversus abdominis release (TAR) enables extensive dissection within the retromuscular plane and secure mesh placement. In this video, we present the robotic eTEP-TAR repair of complex incisional hernia with concomitant inguinal hernia in a post-transplant patient.

Material and Methods: An 84-year-old male presented with abdominal and left groin swelling. His medical history included prior umbilical hernia repair and liver transplantation. Multiple fascial defects along a previous Mercedes incision and a left direct inguinal hernia were identified. Due to the complexity of the abdominal wall defects, robotic extended totally extraperitoneal transversus abdominis release (e-TEP-TAR) repair was planned.

Results: The patient was positioned supine. Three 8-mm robotic trocars were placed under direct vision into the preperitoneal retromuscular plane lateral to the right rectus sheath along the midclavicular line. Dissection began in the right lower quadrant, preserving the posterior sheath, and the retromuscular plane was developed across the linea alba to the contralateral side. The left rectus sheath was incised, and dissection was advanced toward the inguinal region. A left direct inguinal hernia and additional lower quadrant defects were identified and reduced. After completing bilateral retromuscular and preperitoneal dissection, a transversus abdominis release (TAR) was performed to achieve adequate medialization, extending the dissection laterally into the retroperitoneal space. For right upper quadrant access, three additional 8-mm trocars were placed lateral to the left rectus sheath, and the robot was redocked. Incisional hernia defects related to the previous Mercedes incision were reduced bilaterally and along the midline, with the hernia sac dissected up to the xiphoid process.The left inguinal hernia was repaired using a 12×17 cm mesh. Fascial defects in the lower quadrant and epigastric region were primarily closed with 3/0 V-Loc, and peritoneal defects were closed with 3/0 Vicryl. A 30×30 cm polypropylene mesh was placed to retromuscular plane and secured with 3/0 Vicryl. An additional 12×17 cm mesh was positioned to reinforce the right lower quadrant.

Conclusion: The robotic eTEP-TAR approach provides an effective method for abdominal wall reconstruction by allowing wide retromuscular workspace in complex incisional hernias. While preserving the advantages of minimally invasive surgery, this technique represents an alternative in the management of complex abdominal wall defects.

Keywords: Robotic surgery, incisional hernia

[V-015]

Robotic-assisted surgical treatment of achalasia

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Objective: Achalasia is a rare primary esophageal motility disorder characterized by insufficient relaxation of the lower esophageal sphincter (LES) during swallowing and the loss of peristalsis in the esophageal body. Patients typically present with symptoms such as dysphagia, regurgitation, chest pain, and weight loss. Currently, Heller myotomy, which is the gold standard in surgical treatment, is successfully performed using minimally invasive techniques. Robotic surgical systems offer significant advantages to the surgeon, particularly in areas requiring narrow and deep dissection such as the esophagus, by providing three-dimensional high-resolution imaging and superior maneuverability. In this presentation, the clinical course and outcomes of an achalasia case treated with a robotic approach are discussed.

Material and Methods: A 27-year-old male patient presented to our clinic with complaints of dysphagia during meals and nocturnal regurgitation that woke him from sleep, which had been ongoing for approximately 6 months. No additional systemic diseases were identified in the patient's medical history. Diagnostic gastroscopy revealed a dilated esophageal lumen and the presence of tertiary contractions. It was observed that the lower esophageal sphincter could only be passed with difficulty. In radiological evaluations, thoracic computed tomography (CT) showed significant esophageal dilatation starting from the level of the thoracic inlet, reaching a transverse diameter of 4 cm in the middle segment. The same imaging identified diffuse thickening of the lower esophageal sphincter (LES) and a "pencil-tip" narrowing in the distal esophagus. A contrast esophagram confirmed the typical "bird's beak" appearance, which is pathognomonic for achalasia.

Results: Robotic Heller myotomy was planned for the patient whose diagnosis of achalasia was confirmed based on clinical and radiological findings. During the procedure, the patient was placed in the supine position. The robotic system was docked via four 8-mm trocars placed transversally atthelevel of the umbilicus. The esophagogastric junction was mobilized with the precision provided by robotic dissection, and the myotomy was performed. Mucosal integrity was meticulously preserved during the procedure. No complications occurred during the postoperative follow-up period. A swallow study performed on the first postoperative dayrevealed that the contrast medium passed freely into the stomach without stasis in the esophagus, and the passage was fully patent. The patient, whose symptoms had completely resolved, was discharged in good health.

Conclusion: The robotic approach in achalasia surgery offers lower risks of mucosal perforation and provides a more ergonomic working environment for the surgeon compared to conventional laparoscopy. In particular, the "wristed" maneuverability of robotic instruments enhances depth control during the precise myotomy of the lower esophageal sphincter (LES). This case demonstrates that robotic Hellermyotomy is a reliable and effective method for achievingsymptomatic improvement in young patients.

Keywords: Achalasia, dysphagia, heller myotomy, robotic surgery

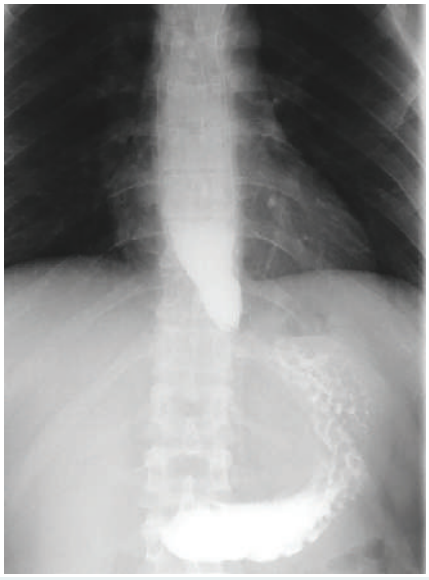


Figure 1. Preoperative barium esophagram.

[V-016]

Robotic pylorus-preserving pancreaticoduodenectomy

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Objective: Pancreaticoduodenectomy (PD) has been accepted as the gold standard in the surgical treatment of periampullary tumors since its description by Allen Whipple in 1935. Over the past two decades, advances in minimally invasive surgical techniques have begun to be applied to pancreatic surgery as well. Robotic pancreaticoduodenectomy (RPD) was first described in 2003 and has since been increasingly performed worldwide. Potential advantages of robotic pancreaticoduodenectomy include reduced blood loss, shorter hospital stay, and faster postoperative recovery. However, prolonged operative times, high costs, and a steep learning curve stand out as disadvantages of the robotic approach. In this presentation, we aimed to evaluate the technical feasibility of RPD performed on a patient with a pancreatic head mass who presented to our clinic.

Material and Methods: Robotic pylorus-preserving pancreaticoduodenectomy was performed on a patient with a pancreatic head mass; the surgical technique and anastomosis stages are demonstrated step-by-step in this video.

Results: The operative time was 340 minutes, and blood loss was 150 mL; the patient was discharged without complications on postoperative day 6. and surgical margins were negative (R0).

Conclusion: Robotic pancreaticoduodenectomy is a technically feasible method that can be safely performed in selected cases without compromising oncological principles, offering the distinct advantages of minimally invasive surgery.

Keywords: Robotic, pancreas, whipple

[V-017]

Hepaticojejunostomy anastomosis technique in robotic pancreaticoduodenectomy

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Objective: Biliary reconstruction remains a technically demanding and complex step in minimally invasive hepatopancreatobiliary surgery. To date, no optimal hepaticojejunostomy (HJ) technique has been definitively established as superior in preventing biliary complications. In this presentation, we aim to describe our hepaticojejunostomy technique in robotic surgery, consisting of a continuous 4/0 V-Loc suture for the posterior wall and interrupted 4/0-5/0 PDS sutures for the anterior wall.

Material and Methods: Between April 2022 and February 2026, a total of 25 patients underwent fully robotic pancreatic surgery using the described hepaticojejunostomy technique at the Department of General Surgery, İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine. Patients were retrospectively analyzed in terms of treatment modalities, postoperative follow-up, and complications.

Results: The cohort consisted of 14 male and 11 female patients with a mean age of 62 years. Among them, 22 underwent pylorus-preserving pancreaticoduodenectomy, 1 underwent conventional pancreaticoduodenectomy, and 2 underwent total pancreaticoduodenectomy. The mean operative time was 430 minutes (range: 340-660), and the mean HJ anastomosis time was 28 minutes (range: 24-35). The average bile duct diameter was 7 mm. During a mean follow-up period of 15 months, no cases of biliary leakage or anastomotic stricture were observed.

Conclusion: The posterior continuous 4/0 V-Loc and anterior interrupted PDS hepaticojejunostomy technique used in robotic surgery appears to be a safe, effective, time-efficient, and cost-effective method, with complication rates comparable to those reported in the literature.

Keywords: Hepaticojejunostomy, pancreas, robotic surgery

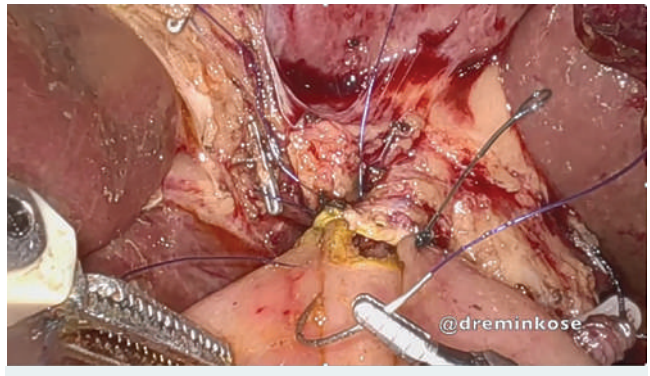


Figure 1. Posterior wall hepaticojejunostomy anastomosis.

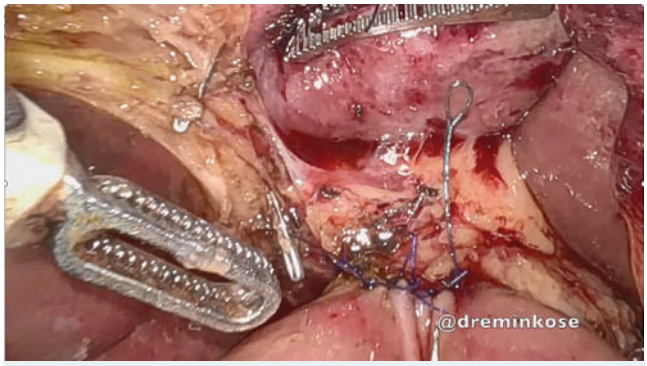


Figure 2. Anterior wall hepaticojejunostomy anastomosis.

Table 1. Descriptive characteristics of patients undergoing robotic hepaticojejunostomy

Parameters (mean/count)	Value
Age (mean)	62 (11-78)
Sex	
-Male	14
-Female	11
Bile duct diameter	
- <10 mm	15
- >10 mm	10
Pathology	
-Pancreatic head adenocarcinoma	8
-Ampulla of vater adenocarcinoma	4
- Neuroendocrine tumor	5
- IPMN	5
- Serous cystadenoma	2
- Acinar cystic neoplasia	1
Neoadjuvant therapy	0
Surgical technique	
-Pylorus-preserving	22
-Conventional	1
-Total pancreaticoduodenectomy	2

Table 2. Perioperative and postoperative outcomes of patients undergoing robotic hepaticojejunostomy

Outcome (mean or %)	Value
Operative time (min)	430 (340-660)
Hepaticojejunostomy anastomosis time (min)	28 (24-35)
Blood loss (mL)	180
Conversion to open surgery	8% (2/25)
Hospital stay (days)	9
POPF	20% (5/25)
Intensive care unit (ICU) stay (days)	1.67
Morbidity	16% (4/25)
Mortality	0
Biliary leakage	0
Biliary stricture	0

[V-018]

Robotic whipple procedure

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Objective: A 72-year-old male patient presented with a two-month history of abdominal pain radiating to the back. Total abdominal ultrasonography (USG) revealed a distended gallbladder (diameter: 42 mm) with an increased wall thickness of 6.5 mm. Biliary sludge was observed within the lumen (cholecystitis). Both intrahepatic and extrahepatic bile ducts (diameter: 12.5 mm) were dilated. Further investigation was initiated after a 32 mm hypoechoic heterogeneous area was detected at the level of the pancreatic head. Laboratory results: AFP: 3.62 ng/mL, CA 19.9: 103 U/mL, CEA: 1.42 ng/mL. WBC: 4.72 K/uL, HGB: 11.5 g/dL, ALT: 197 U/L, AST: 136 U/L, LDH: 143 U/L, GGT: 777 U/L, ALP: 363 U/L.373 U/L, lipase: 837 U/L, direct bilirubin: 4.61 mg/dL, total bilirubin: 4.68 mg/dL.

Material and Methods: Abdominal computed tomography (CT) demonstrated a dilated pancreatic duct, measuring 4.5 mm at the pancreatic head and 4 mm at the neck. Distal to this area, the common bile duct (CBD) showed blunt termination in the pancreatic head-periampullary region. At this level, a hypodense lesion measuring 20x13 mm in the coronal plane was identified. Upper abdominal MRI confirmed that there was no vascular invasion of the portal vein, superior mesenteric artery (SMA), or superior mesenteric vein (SMV). Following the consensus of the multidisciplinary surgical oncology council, the patient underwent a robotic-assisted Whipple procedure via a five-port technique. Four main robotic ports were placed in the upper abdomen, maintaining an 8-10 cm distance between each other in a slightly convex or linear alignment. An assistant trocar was positioned at the extreme right lateral aspect to facilitate suctioning, clip application, and suture passage.

Results: During follow-up in the intensive care unit (ICU), a bilious drainage of 150 cc was recorded on postoperative day 1 (POD 1). On the same day, the patient was transferred to the general surgery ward. By POD 3, the drain output transitioned to a serous character. Oral intake (diet 1) was initiated on POD 4. As the patient tolerated the diet well, he was advanced to diet 2 on POD 5. During postoperative monitoring, a significant regression was observed in liver function tests (ALT, AST, ALP, GGT) and bilirubin levels. The image displays the en-bloc resection specimen from a robotic-assisted pancreatoduodenectomy (Whipple procedure). The specimen includes a distended gallbladder, the duodenum, and the pancreatic head. The surgical stapler is seen on the left for scale and orientation. The resection was performed with clear margins, targeting the hypodense mass previously identified in the pancreatic head/periampullary region.

Conclusion: The drain was removed on POD 6, and the patient was discharged in stable condition.

Keywords: Obstructive jaundice, pancreatic head cancer, robotic whipple procedure

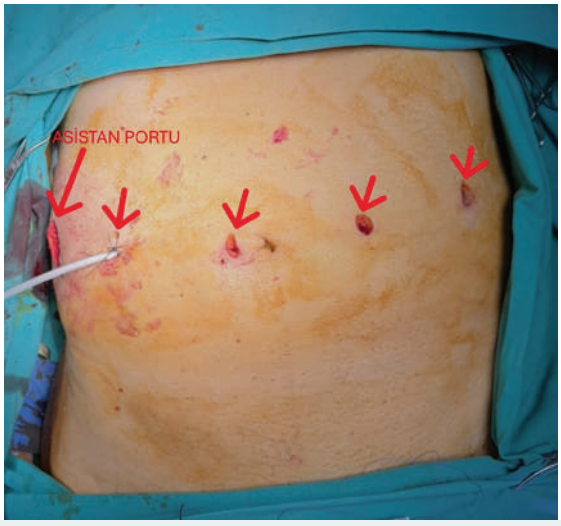


Figure 1. Five-port technique.



Figure 2. Specimen.

[V-020]

Our retroperitoneoscopic donor nephrectomy experience

Yücel Yüksel, Kerem Özgü

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Objective: Donor safety is the foremost priority in living-donor nephrectomy. Minimally invasive approaches are increasingly preferred to reduce donor morbidity, postoperative pain, and length of hospital stay. Retroperitoneoscopic donor nephrectomy (RPDN) is a valuable alternative because it minimizes intraperitoneal organ manipulation and may facilitate faster recovery. We present our single-surgeon experience with RPDN and early outcomes.

Material and Methods: We retrospectively reviewed 26 living-donor nephrectomies performed using a standardized retroperitoneoscopic technique by the same surgeon between November 2023 and May 2024. Demographics, operative time, number of renal arteries, peritoneal opening, postoperative pain scores (VAS), time to first flatus and bowel movement, discharge day, and complications were analyzed. Cases converted to open nephrectomy due to bleeding were excluded; additionally, three conversion cases were not included in the analysis.

Results: Mean donor age was 39.1±10.7 years, and 69.2% were male. Mean operative time was 54.9±13.5 minutes. Double renal arteries were present in 34.6% of donors. Peritoneal opening occurred in a small subset without additional morbidity. Mean length of stay/discharge time was 3.6±0.9 days. Time to first flatus and first bowel movement was 9.5±4.0 hours and 20.9±5.4 hours, respectively. Early postoperative VAS scores were low and did not increase during follow-up. One donor developed a lymphocele; no major complication requiring additional surgery was observed.

Conclusion: Living-donor nephrectomy is among the most ethically sensitive procedures in modern surgery, directly reflecting the principle of primum non-nocere ("first, do no harm"), as a healthy organ is removed from a healthy volunteer. Therefore, donor safety and preservation of postoperative comfort and quality of life are paramount. Compared with transabdominal donor nephrectomy, which may carry bowel-related risks due to colon mobilization, RPDN avoids intraperitoneal entry and targets a retroperitoneal organ through its natural anatomical planes. Although RPDN is technically demanding—owing to the limited working space, the different/reversed anatomical perspective, and close trocar positioning—our early outcomes demonstrate that it can be performed safely with favorable recovery parameters in appropriately selected donors. While commonly adopted by urologists, we believe RPDN should also be within the armamentarium of experienced general surgeons.

Keywords: Kidney transplantation, donor safety, retropertonoscopic donor nephrectomy



Figure 1. Trocar entries: Trocar placement in RPND. Ureter and retroperitoneum dissection.

RPND: Retroperitoneoscopic donor nephrectomy.

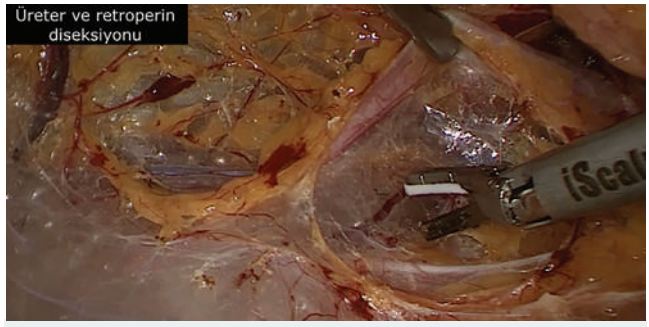


Figure 2. Dissection of the ureter in the retroperitoneum after trocar entry. Dissection of the left lumbar vein.

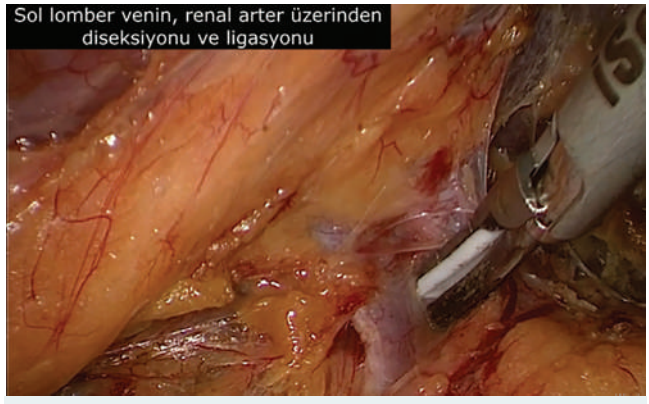


Figure 3. One of the key points in kidney donor surgery. The left lumbar vein passes over the left renal artery and flows into the left renal vein. It is difficult to reach the renal artery without dissecting the lumbar vein. Possible bleeding during dissection can sometimes be serious.

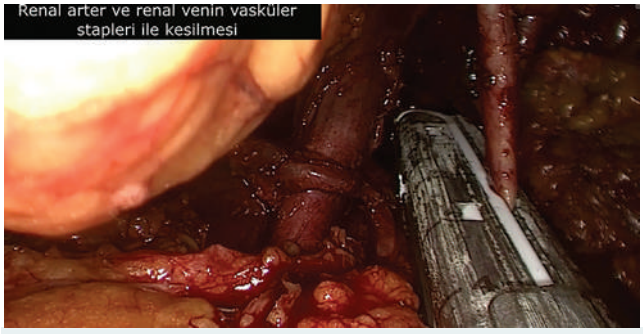


Figure 4. Cutting the renal artery with a vascular stapler.



Figure 5. Appearance of the lodge after nephrectomy.

[V-021]

Kidney transplantation performed using an ectopic pelvic kidney in laparoscopic donor nephrectomy

Yaşar Özdenkaya, Kubilay Sabuncu, Sıla Duru, Tunahan Yıldırım, Aydın Ünal, Hüseyin Çağatay Aydın

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Objective: Living donor kidney transplantation is the most effective treatment method for patients with end-stage renal failure. Compared to conventionally located kidneys, ectopic pelvic kidneys are traditionally considered a relative contraindication for living donor transplantation due to variable vascular anatomy, short ureter, and surgical difficulties. This case report aims to present an ectopic pelvic kidney that was removed laparoscopically.

Material and Methods: A 26-year-old female patient diagnosed with chronic renal failure was scheduled for a living-donor kidney transplant. Preoperative examination of the 45-year-old mother, considered as a potential donor, revealed an ectopic kidney located at the pelvic inlet level, to the left of the midline. The donor's serum creatinine level was 0.58 mg/dL, and eGFR was 117.32 mL/min/1.73 m². A 24-hour urine test showed a creatinine clearance of 134.04 mL/min. Computed tomography angiography revealed the ectopic kidney to have a single renal artery, a single renal vein, and a single ureter. 99mTc-DMSA scintigraphy showed the ectopic kidney's contribution to total renal function to be 40%. Due to the lack of an alternative donor and the donor's high functional reserve, the use of the ectopic kidney was planned. Laparoscopic donor nephrectomy was performed through four ports and an 8-cm infraumbilical midline incision. The graft was anastomosed end-to-side to the external iliac artery and vein.

Results: The operation was completed without complications, and the warm ischemia time was recorded as two minutes. The donor was monitored without complications in the postoperative period, and on the 3rd postoperative day, the creatinine level was 0.73 mg/dL, and the patient was discharged. Graft function started early in the recipient. The serum creatinine level, which was 6.34 mg/dL preoperatively, decreased to 1.24 mg/dL on the 7th postoperative day. At four months of follow-up, the recipient's creatinine level was observed to be 1.09 mg/dL. No major or minor surgical complications occurred in either the donor or the recipient.

Conclusion: Ectopic pelvic kidneys can be safely used in living donor kidney transplantation in selected cases in experienced centers and with appropriate preoperative evaluation. A minimally invasive surgical approach is advantageous in such cases. This case demonstrates that ectopic pelvic kidneys may be suitable candidates to expand the living donor pool.

Keywords: Ectopic pelvic kidney, laparoscopic donor nephrectomy, living donor kidney transplantation, minimally invasive surgery

[V-022]

Intraoperative crisis in sleeve gastrectomy: Intracorporal repair of an opened staple line

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Objective: Sleeve gastrectomy is a widely performed and effective bariatric procedure for the treatment of morbid obesity. The most common early complications are staple-line bleeding and leak. Tissue thickness, compression time, and technical factors during stapler firing directly influence staple-line integrity. Although uncommon, difficult stapler firing may result in significant intraoperative staple-line problems requiring advanced laparoscopic management. In this video presentation, we aim to demonstrate the operative management of a case complicated by severe bleeding after difficult stapler firing and subsequent staple-line disruption during reinforcement suturing.

Material and Methods: A patient with morbid obesity underwent laparoscopic sleeve gastrectomy using standard port placement and complete greater curvature mobilization. Gastric transection was initiated over a calibration bougie. During the third stapler firing, marked resistance was encountered in the cutting phase. After opening the device, significant staple-line bleeding was observed. Hemostasis was achieved with compression and targeted hemostatic measures. Gastric transection was then completed. A methylene blue leak test showed no extravasation. The suspicious segment appeared macroscopically comparable to the remaining staple line. Staple-line reinforcement was initiated proximally using continuous imbrication sutures combined with omentopexy. Upon reaching the problematic segment, staple-line separation occurred during suture passage. The defect was repaired intracorporeally with primary suturing and further reinforced. A repeat leak test was performed after repair.

Results: The repeat leak test demonstrated no leakage and complete hemostasis was confirmed. The postoperative course was uneventful, with no evidence of bleeding, leak, or stenosis. Oral intake progressed according to protocol, and the patient was discharged without complications. This case illustrates that difficult stapler firing may compromise staple-line strength even when gross appearance is normal, and that disruption can occur during reinforcement suturing.

Conclusion: Difficult stapler firing during sleeve gastrectomy may lead to occult staple-line weakness and unexpected disruption despite normal macroscopic appearance. In segments with challenging firing, surgeons should consider a low threshold for reinforcement, meticulous suturing technique, and repeat leak testing. Advanced intracorporeal repair skills and systematic intraoperative assessment are critical for safe management of such complications and can lead to favorable patient outcomes.

Keywords: Staple line, dehisans, bleeding, sleeve gastrectomy

[V-023]

An economic alternative to barbed sutures: The modified "loop-and-clip" PDS method

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Objective: Barbed sutures (e.g., V-Loc-type) reduce the need for intracorporeal knot tying and may shorten laparoscopic suturing time; however, they are not always readily available. In this study, we aimed to assess the feasibility of a practical V-Loc-inspired modification using 2/0 PDS based on a "posterior loop" concept to facilitate knotless suturing.

Material and Methods: In cases requiring laparoscopic intracorporeal suturing, a 2/0 PDS suture was prepared by cutting it to a 15 cm length and creating a loop knot at the posterior end. At the start of suturing, the needle was passed through this loop after the first tissue bite, eliminating the need for an initial intracorporeal knot. Since a barbed/fishbone-like structure could not be reproduced, there was no active anti-backsliding mechanism; therefore, tension and tissue approximation were visually monitored throughout the suture line. Finally, the suture was tensioned and terminated by applying a metallic clip at the base of the suture.

Results: The posterior loop modification eliminated the need for intracorporeal knot tying throughout the procedure. This simplified suturing, particularly in confined working spaces, and resulted in a marked reduction in suturing/operative time. Tissue approximation appeared satisfactory; however, due to the absence of barbs, line stability depended on the operator's tension control and clip-based termination.

Conclusion: A posterior loop modification of a 2/0 PDS suture appears to be a feasible and practical knotless alternative for laparoscopic intracorporeal suturing, with the potential to significantly reduce operative time by avoiding knot tying. Nevertheless, because it lacks an intrinsic anti-backsliding mechanism, security relies on proper tension management and clip termination. Larger comparative studies with standardized outcomes and follow-up are needed to better define efficacy and safety versus commercially available barbed sutures.

Keywords: PDS loop suture, laparoscopic sleeve gastrectomy, staple line reinforcement, laparoscopic suturing

[V-024]

Bariatric surgery in obese patients with a history of nissen fundoplication: Video presentation of different approaches

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Objective: Bariatric surgery in obese patients with a history of Nissen fundoplication presents technical challenges due to altered upper gastrointestinal anatomy, adhesions, and the need for adequate reflux control. Evidence regarding the optimal surgical strategy in this patient population remains limited. This video presentation aims to demonstrate two different surgical approaches applied in such cases.

Material and Methods: Two obese patients with a previous history of Nissen fundoplication who were indicated for bariatric surgery were retrospectively evaluated. All procedures were performed laparoscopically. In the first case, a disrupted fundoplication associated with a hiatal hernia was identified. In the second case, the Nissen wrap was intact and gastroesophageal reflux symptoms were well controlled. Surgical procedures were analyzed using video recordings.

Results: In the first case, detachment of the existing fundoplication and a significant hiatal hernia were observed. Roux-en-Y gastric bypass was successfully performed concomitantly with hiatal hernia repair. In the second case, sleeve gastrectomy was carried out while preserving the fundoplication. No intraoperative complications were observed in either patient. No major complications occurred in the early postoperative period, and reflux symptoms were well controlled.

Conclusion: In obese patients with prior Nissen fundoplication, the choice of bariatric procedure should be individualized based on the integrity of the fundoplication and clinical symptoms. With appropriate patient selection and meticulous surgical technique, both Roux-en-Y gastric bypass and sleeve gastrectomy with wrap preservation can be safely performed. This video presentation aims to provide practical guidance for surgical decision-making in this complex patient group.

Keywords: Nissen fundoplication, bariatric surgery, obesity, Roux-en-Y gastric bypass, sleeve gastrectomy

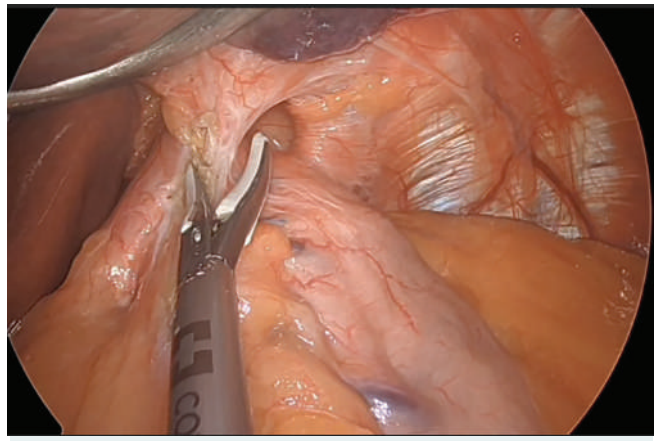


Figure 1. Hiatal hernia.

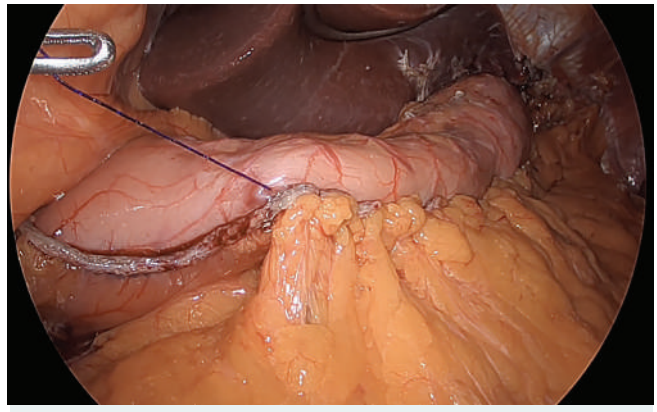


Figure 2. Staple line omentopexy in sleeve gastrectomy.

Table 1. **Bariatric surgery outcomes in two obese patients with previous nissen fundoplication**

Characteristics	Patient 1	Patient 2
Age/sex	50/female	45/female
Previous surgery	Nissen fundoplication	Nissen fundoplication
Bariatric procedure performed	Roux-en-Y gastric bypass + hiatal hernia repair	Sleeve gastrectomy (Nissen preserved)
Preoperative BMI (kg/m²)	40	42
Postoperative 6-month BMI (kg/m²)	29	28
Total weight loss (6 months)	27 kg	35 kg
Preoperative GERD-HRQL score	32 (severe symptoms)	5 (no/minimal symptoms)
Postoperative GERD-HRQL score (6 months)	5 (no/minimal symptoms)	4 (no/minimal symptoms)
Reflux symptoms	Marked improvement after surgery	No change
Comorbidities	None	None
Chronic medications	None	None

GERD-HRQL: Gastroesophageal reflux disease-health-related quality of life, BMI: Body mass index.

[V-026]

Laparoscopic retrocolic jejunal transposition technique in HPB and upper gastrointestinal surgery

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Objective: The reconstructive phase in hepatopancreatobiliary (HPB) and upper gastrointestinal (UGI) surgery represents a technically demanding step, particularly in minimally invasive procedures. Safe transposition of the jejunal limb with preserved vascularity and without tension is crucial for anastomotic success. This video presentation aims to demonstrate the standardized steps of the laparoscopic retrocolic transposition technique applicable to various HPB and UGI reconstructions.

Material and Methods: The technique is utilized in gastroenterostomy, esophagojejunostomy, pancreaticojejunostomy, and hepaticojejunostomy. The gastrocolic ligament is divided to enter the lesser sac, and the ligament of Treitz is identified. A controlled window is created through an avascular area of the transverse mesocolon, allowing retrocolic transposition of the jejunal limb to the target field. Particular attention is paid to mesenteric orientation, prevention of torsion, vascular integrity, and ensuring a tension-free anastomosis. In cases of gastroenterostomy, a Braun enteroenterostomy is performed between the afferent and efferent limbs to reduce bile reflux and the risk of afferent loop syndrome. The video highlights key anatomical landmarks, technical nuances, and critical safety steps for secure transposition.

Results: The retrocolic approach provides a shorter and more direct jejunal route, facilitating a tension-free and well-perfused anastomosis. Proper mesocolic window creation and meticulous orientation help prevent mesenteric torsion and vascular compromise. The addition of Braun anastomosis may improve postoperative functional outcomes in gastroenterostomy cases.

Conclusion: The laparoscopic retrocolic transposition technique is a safe, reproducible, and teachable method applicable to multiple reconstructive procedures in HPB and UGI surgery. Standardization of this approach may enhance anastomotic quality and contribute to improved surgical outcomes in minimally invasive surgery.

Keywords: Laparoscopic surgery, retrocolic transposition, jejunal reconstruction

[V-028]

Laparoscopic endoscopic cooperative surgery (LECS) for gastric gastrointestinal stromal tumors: A case report

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Objective: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal neoplasms of the gastrointestinal tract. GISTs are staged according to tumor size, mitotic index, lymph node involvement, and the presence of distant metastases. Surgical resection is the standard treatment for localized GISTs. Various surgical techniques have been described in the literature. Since its introduction in 2008, laparoscopic endoscopic cooperative surgery (LECS) has been proposed as a safe and effective alternative surgical approach.

Material and Methods: A 71-year-old female patient was asymptomatic and was found to have a gastric mass during routine screening endoscopy. Subsequent endoscopic ultrasonography (EUS) revealed a lesion measuring 40-45 mm in diameter, located on the lesser curvature of the mid-gastric corpus. The lesion showed a central depression with ulceration, while the surrounding mucosa appeared normal. EUS demonstrated a hypoechoic, heterogeneous mass originating from the muscularis propria layer with predominant endoluminal growth, measuring up to 40-mm in its greatest dimension. Contrast-enhanced abdominal computed tomography revealed no evidence of local invasion or distant metastasis. The patient underwent laparoscopic endoscopic cooperative surgery (LECS). Histopathological examination revealed a tumor measuring 4.2×4.1×2.8 cm, classified as histological grade G1, with a mitotic count of 1 per 50 high-power fields. No necrosis or cytological atypia was identified, and the surgical margins were negative. According to the Miettinen-Lasota risk classification, the risk of progressive disease was very low.

Results: GISTs are the most frequently encountered mesenchymal tumors of the gastrointestinal system and are most commonly located in the stomach. The majority of patients are asymptomatic, and tumors are often detected incidentally. Surgical resection remains the standard treatment for localized gastric GISTs, and routine lymph node dissection is not recommended. Various surgical techniques have been described to achieve these objectives. Since 2008, LECS has gained increasing acceptance due to its ability to achieve oncologically safe margins while minimizing gastric resection and reducing postoperative complications. Although full-thickness gastric wall opening during LECS raises concerns regarding potential tumor seeding, sufficient evidence demonstrating increased oncological risk has not been reported in the literature.

Conclusion: LECS is a safe and effective surgical technique for the treatment of gastric GISTs. It allows preservation of gastric function, ensures oncologically safe resection margins, and is associated with reduced postoperative complication rates. LECS should be considered a valuable minimally invasive option in appropriately selected patients with gastric GISTs.

Keywords: Gastrointestinal stromal tumor, laparoscopic endoscopic cooperative surgery

[V-029]

Video presentation of a case undergoing laparoscopic sigmoid colon resection due to recurrent diverticulitis

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Objective: Diverticulitis has become more common in recent years, particularly in Western societies, in parallel with changes in diet and lifestyle. It is a gastrointestinal disease frequently seen especially in the elderly population. While patients with diverticula may remain asymptomatic for long periods, diverticulitis attacks of varying severity can occur and may lead to intra-abdominal abscess, peritonitis, sepsis, and fistula formation. In patients experiencing recurrent attacks and those who develop complications, surgical treatment may become unavoidable. In this video, the laparoscopic sigmoid colon resection performed in a male patient with diabetes and hypertension is presented in all stages.

Material and Methods: Our patient had been hospitalized four times within the last year due to recurrent diverticulitis attacks and received medical treatment. Abdominal computed tomography revealed a contained perforation related to a diverticulitis attack in the sigmoid colon and thickening of the colonic wall. Colonoscopy showed widespread diverticula in the sigmoid colon. An elective surgery was recommended by the gastroenterology and general surgery board.

Results: After completing a full systemic evaluation, laparoscopic sigmoid colon resection was planned. The patient underwent laparoscopic sigmoid colon resection and an end-to-side colorectal anastomosis. No intraoperative complications occurred. In the postoperative period, the patient was mobilized early, oral intake was initiated without problems, and he was discharged in good condition on postoperative day 4.

Conclusion: No complications were observed during follow-up visits on day 10, and at 1 and 6 months. Laparoscopic sigmoid colon resection is a minimally invasive, safe, and effective treatment option for patients who require surgery due to recurrent diverticulitis attacks. This case highlights the advantages of laparoscopic surgery and demonstrates the importance of the surgical approach in the treatment of diverticulitis.

Keywords: Recurrent diverticulitis, laparoscopic sigmoid colectomy, colorectal anastomosis

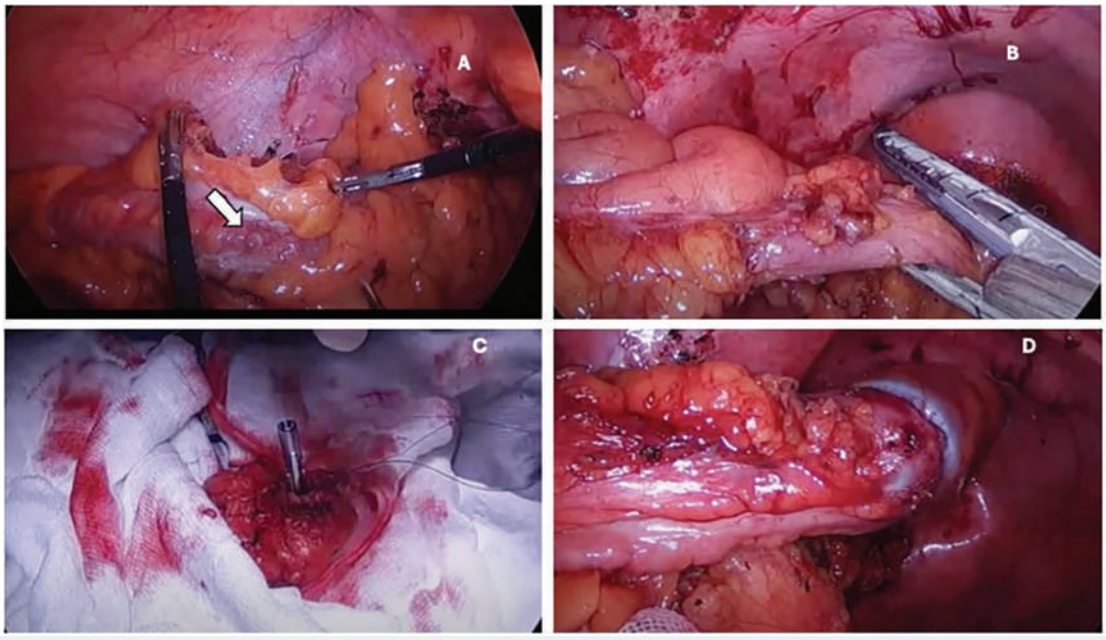


Figure 1. A) Exposure of the sigmoid colon with numerous diverticula of varying sizes (the arrow indicates a diverticulum). B) Resection of the diverticular sigmoid colon proximally and distally using a tri-stapler. C) Placement of a 31-mm intraluminal circular stapler anvil into the proximal colon end. D) Construction of an end-to-side colorectal anastomosis.

[V-030]

Altemeier procedure in complete rectal prolapse: Video technical presentation

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Objective: Surgical methods for treating external rectal prolapse are divided into two main categories: perineal and abdominal approaches. Perineal methods are generally preferred in elderly individuals with comorbidities due to their higher recurrence rates. Abdominal methods, while having lower recurrence rates, carry higher risks of comorbidity, impotence, and infertility. The integration of levatoroplasty into perineal approaches provides superior functional outcomes. The combination of these factors brings about a re-evaluation of perineal surgical techniques, which are rarely seen in clinical practice. This video presentation demonstrates the technical steps of the Altemeier Procedure combined with posterior levatoroplasty and examines perineal approaches in detail through a case study.

Material and Methods: A 67-year-old female patient presented to our clinic with prolapse-related symptoms persisting for five years. She reported spontaneous prolapse upon standing, incontinence, and difficulty with defecation. Her medical history included chronic conditions such as hypertension, diabetes, hyperlipidemia, and hypothyroidism. She had previously undergone suture rectopexy operations at various centers in 2021, 2022, and 2023. The patient was operated on under spinal anesthesia in the lithotomy position. A circumferential incision, involving all layers of the rectum, was made 1 cm proximal to the dentate line. The redundant rectum was mobilized extraperitoneally. The rectovaginal septum was preserved, the peritoneal pouch was opened, and the pouch of Douglas was accessed. After mobilizing the prolapsed rectum and sigmoid colon, mesocolon dissection was performed. Posterior levatoroplasty was applied to prevent mesorectum prolapse and enhance continence. Following perineal rectosigmoidectomy, a colo-anal anastomosis was performed using full-thickness, interrupted suture technique.

Results: Proctologic examination revealed approximately 10 cm of complete rectal prolapse. No additional pathological findings were observed during colonoscopic examination. The patient's preoperative Wexner continence score (WCS) was determined to be 18. Postoperatively, WCS was recorded as 8 at week 1 and 5 at month 1. The patient had no analgesic requirement in the postoperative period.

Conclusion: The Altemeier procedure for rectal prolapse treatment has proven to be an effective and reliable option, not requiring postoperative pain management. Combining this procedure with levatoroplasty significantly contributes to improving functional outcomes.

Keywords: Altemeier procedure, rectal prolapse

[V-031]

Delorme prodecure combined with levatoroplasty in the surgical treatment of complete rectal prolapse

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Objective: Rectal prolapse is a benign condition typically affecting elderly patients. Constipation is associated with prolapse in 15-65% of cases. Common symptoms include tenesmus, a sensation of tissue protruding from the anus (reducible or not), and incomplete bowel evacuation. Surgical intervention is the primary treatment for rectal prolapse, utilizing two main approaches: Abdominal and perineal. When perineal procedures are combined with levatoroplasty, this therapeutic strategy offers low recurrence, minimal morbidity, and virtually zero mortality.

Material and Methods: A 72-year-old female patient presented with prolapse-related symptoms for 12 years. She described spontaneous prolapse upon standing, wetness, and difficulty with fecal continence. Her medical history was unremarkable for chronic diseases. Seven years prior, she underwent suture rectopexy at a different center. The patient was operated on under spinal anesthesia in the lithotomy position. A circumferential incision was made 1 cm proximal to the dentate line, involving all layers of the rectum. This incision was carefully advanced to separate the rectal mucosa and submucosa from the muscular layer. The mucosal flap was bluntly and sharply dissected proximally from the rectal muscle layer up to the superior border of the prolapse. During this stage, care was taken to preserve the integrity of the mucosa. The prolapsed rectal muscle layer was thickened by longitudinal plication, thereby narrowing the rectal lumen. This plication was performed using absorbable sutures. The excess mucosal flap overlying the plicated muscle layer was carefully resected. The remaining mucosal edges were joined at a level close to the dentate line using full-thickness, interrupted absorbable sutures in a colo-anal anastomosis fashion. Posterior levatoroplasty was performed to enhance continence and augment posterior rectal support.

Results: Preoperative Wexner score was 15 for the patient, with no additional pathological findings on colonoscopic examination. Postoperatively, on day 10, the score was measured as 6.

Conclusion: Perineal approaches can be primarily considered for elderly rectal prolapse patients with comorbidities.

Keywords: Delorme procedure, rectal prolapse

[V-032]

Variant SMA anatomy: Surgical relevance in right hemicolectomy

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Objective: The superior mesenteric artery (SMA) arises from the aorta just below the celiac trunk at the level of the first lumbar vertebra. It supplies midgut derivatives from the distal duodenum to the mid-transverse colon. During its course, the SMA lies adjacent to the superior mesenteric vein (SMV) and, in normal vascular anatomy, is positioned left of the SMV. This relationship is critically important in pancreatic and colonic surgery. Complete mesocolic excision (CME) is currently regarded as the gold standard radical technique in colon cancer surgery. The procedure involves central ligation of vascular structures without violating visceral fascia, thereby ensuring maximal lymph node dissection. CME has demonstrated benefits in reducing local recurrence and improving survival. Successful application of this technique requires precise knowledge of the SMA and its branches, which may present with anatomical variations. In this context, we report a rare SMA variation encountered during surgery.

Material and Methods: A 56-year-old female patient was referred to our department following colonoscopy that revealed an ulcerovegetative mass in the ascending colon. She presented with fatigue, severe anemia, and blood in stool. Biopsy confirmed moderately differentiated adenocarcinoma. Contrast-enhanced thoracoabdominopelvic CT demonstrated a cT2N1M0 lesion on the medial wall of the ascending colon. A laparoscopic right hemicolectomy using the CME technique was planned.

Results: During surgery, dissection toward the ileocolic pedicle origin revealed that the ileocolic artery entered the mesentery with a short trunk, arising from a vascular structure extending longitudinally to the right of the SMV. As dissection advanced medially over the SMV, this vessel was identified as the SMA, running along the right lateral aspect of the SMV. The mesentery was freed along the SMV from the pancreas. Proximally, the right colic artery was observed to arise directly from the SMA with a short trunk. The ileocolic artery, right colic artery, and right branch of the middle colic artery were ligated, and central vascular ligation was completed while preserving the SMA.

Conclusion: In CME surgery for ascending colon tumors, awareness of SMA and branch variations is essential to avoid catastrophic vascular injuries. The variation described, in which the SMA runs along the right side of the SMV,has been reported mainly in association with intestinal rotation anomalies but is rarely seen in isolation. In such cases, the distal SMA may be mistaken for the ileocolic artery and inadvertently ligated. Strict adherence to CME principles, particularly completing dissection to the left border of the SMV, clarifies the anatomy and may prevent serious complications.

Keywords: Superior mesenteric artery, right hemicolectomy, anatomy

[V-033]

Colonic pouch reconstruction in robotic ultra-low anterior resection

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Objective: To demonstrate the technique of colonic pouch reconstruction in a female patient undergoing robotic ultra-low anterior resection for rectal cancer and to discuss its potential functional benefits.

Material and Methods: A female patient diagnosed with low rectal adenocarcinoma underwent robotic ultra-low anterior resection with total mesorectal excision. Following resection, a colonic pouch was constructed and colorectal anastomosis was performed using a circular stapler. The video presentation illustrates key technical steps, pouch formation, and intraoperative tips.

Results: The procedure was completed successfully without intraoperative complications. Colonic pouch reconstruction increased neorectal reservoir capacity after low colorectal anastomosis. No early postoperative anastomotic leakage or major complications were observed. The colonic pouch was considered beneficial in reducing the risk of low anterior resection syndrome.

Conclusion: Colonic pouch reconstruction during robotic ultra-low anterior resection is a safe and feasible technique. It may improve postoperative functional outcomes, particularly in patients undergoing very low colorectal anastomosis. This video aims to contribute to the standardization of colonic pouch formation in minimally invasive rectal cancer surgery.

Keywords: Colonic pouch, rectal cancer, surgical technique

[V-034]

Tailgut cyst excision: A rare case

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Objective: Retrorectal tumors are rare entities, and a significant proportion of these lesions consist of congenital tailgut cysts. These lesions are usually asymptomatic; however, they may cause clinical symptoms due to pelvic compression. They are approximately three times more common in women than in men.In this presentation, we report the surgical management and outcome of a patient with a retrorectal tailgut cyst.

Material and Methods: The patient was placed in the jack-knife position under general anesthesia. After bladder catheterization and rectal irrigation, sterile preparation of the surgical field was performed. Following preoperative planning, a concave incision was made to initiate the procedure. After dissecting through the skin and subcutaneous tissue, the coccyx was excised to provide adequate exposure. Dissection was continued until the cyst located on the left side of the rectum was identified. During this step, intraoperative rupture of the cyst was observed. Although rupture is undesirable, complete en bloc excision remains the primary surgical objective in tailgut cysts. Intermittent bimanual examination was performed throughout the procedure to prevent rectal injury. After en bloc excision, an air-water test was conducted to confirm rectal integrity. Following hemostasis, the operative field was irrigated with normal saline. Two Jackson-Pratt drains were placed in the surgical bed. The subcutaneous tissues were closed using absorbable polyglactin multifilament sutures, and the procedure was completed.

Results: The lesion was successfully excised en bloc. Rectal integrity was preserved, and no leakage was detected during the air-water test. No early postoperative complications were observed. The patient was discharged uneventfully after appropriate drain management. Histopathological examination confirmed the diagnosis of a tailgut cyst, with no evidence of malignancy.

Conclusion: Tailgut cysts are rare congenital lesions located in the retrorectal space and are usually asymptomatic. However, they may present with symptoms such as constipation, urinary retention, and incomplete evacuation. Various surgical approaches have been described, including transabdominal, transsacral, intersphincteric, transsphincteric, parasacrococcygeal, and transanal techniques. Regardless of the chosen method, complete en bloc excision remains the gold standard for preventing recurrence. Studies from the Mayo Clinic emphasize that complete resection is essential for long-term success. Surgery should be performed by experienced surgeons to minimize morbidity. Preoperative biopsy is generally discouraged due to the risk of infection and tumor seeding. Although most tailgut cysts are benign, malignant transformation occurs in approximately 2-13% of cases, most commonly adenocarcinoma. In conclusion, appropriate surgical planning and complete excision are fundamental for achieving optimal outcomes in patients with retrorectal tailgut cysts.

Keywords: Retrorectal mass, tailgut cyst, complete excision

[V-035]

Robotic portal vein wedge resection during whipple procedure for pancreatic cancer

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Objective: Vascular involvement of the portal vein is frequently encountered in patients with pancreatic head adenocarcinoma undergoing pancreatoduodenectomy (Whipple procedure). In selected cases with limited venous wall infiltration, tangential portal vein wedge resection with primary closure allows oncologically adequate resection while avoiding segmental venous reconstruction. Robotic surgery provides enhanced dexterity, three-dimensional visualization, and improved suturing precision, facilitating safe vascular techniques.

Material and Methods: This surgical video demonstrates a fully robotic pancreatoduodenectomy with portal vein wedge resection and primary venous repair. After standard Kocher maneuver and uncinate dissection, limited tumor adherence to the portal vein is identified. Vascular control is achieved using atraumatic bulldog clamps by tangential clamping of the portal vein. A wedge resection of the infiltrated venous wall is performed. The venous defect is subsequently closed primarily using fine non-absorbable monofilament sutures under robotic magnified vision. The clamp was released allowing for inspection for bleeding or stenosis, confirming adequate portal flow.

Results: The robotic platform enables precise vascular dissection and suturing, minimizing manipulation of the portal vein. Tangential clamping maintains partial portal flow and reduces bowel congestion and hepatic ischemia time. Primary closure avoids prosthetic or autologous graft reconstruction and may shorten operative time while maintaining oncologic radicality.

Conclusion: Robotic portal vein wedge resection with primary closure during pancreatoduodenectomy is a safe and feasible technique in carefully selected pancreatic cancer patients with limited venous involvement. The approach combines oncologic adequacy with technical efficiency and represents a valuable addition to advanced minimally invasive pancreatic surgery.

Keywords: Pancreatic cancer, portal vein resection, robotic

[V-036]

Pushing the boundaries of robotic surgery: Experience from four cases

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Objective: Robotic surgery has evolved from a novel minimally invasive tool into a versatile surgical platform capable of addressing complex anatomical, revisional, and inflammatory conditions. Advances in three-dimensional visualization, wristed instrumentation, and ergonomic precision have broadened the scope of procedures that can be performed safely and effectively using a minimally invasive approach.

Material and Methods: This video presentation demonstrates four distinct robotic procedures performed in different surgical domains: left lateral liver segmentoctomy and ozofaghectomy,robotic release for median arcuate ligament syndrome (MALS), robotic distalization of a Roux-en-Y gastric bypass as a revisional bariatric procedure, and robotic repair of a colovesical fistula. Each case was selected to illustrate a unique challenge—vascular-adjacent dissection, revisional metabolic surgery, and complex pelvic inflammatory disease—and to highlight the technical advantages offered by robotic assistance.

Results: In the MALS case, robotic magnification and precise dissection enabled safe decompression of the celiac axis while minimizing vascular and neural injury. Robotic gastric bypass distalization allowed controlled adhesiolysis, accurate bowel measurement, and secure reconstruction in a high-risk revisional setting. In the colovesical fistula repair, enhanced visualization within the narrow pelvis facilitated meticulous fistula takedown and reconstruction while preserving surrounding organs. Across all cases, robotic surgery enabled effective management of complexity that would traditionally require open surgery or carry increased morbidity.

Conclusion: These cases collectively demonstrate that robotic surgery has expanded the borders of modern surgery by enabling minimally invasive solutions for procedures involving critical vascular structures, altered anatomy, and hostile operative fields. Robotic platforms are not limited to specific procedures but serve as a concept-driven extension of surgical capability, enhancing precision, safety, and reproducibility across diverse and challenging clinical scenarios.

Keywords: Robotic surgery, minimally invasive, complex cases

[V-037]

Robotic splenectomy for complex splenic artery aneurysms using a clip by clip technique

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Objective: Splenic artery aneurysms (SAAs) are the most common type of visceral arterial aneurysms and require intervention when symptomatic, larger than 2-cm, or diagnosed in women of childbearing age due to their high-risk of rupture. Although endovascular repair is generally preferred, it may be unfeasible in cases of severe arterial tortuosity or hilar involvement, where catheter navigation and reliable aneurysm exclusion are limited. Open surgery remains a traditional alternative but carries increased morbidity, especially in young and otherwise healthy patients.

Material and Methods: We report a case of a patient with two complex SAAs, one located near the celiac origin and the other deeply at the splenic hilum. Owing to severe arterial tortuosity and limited endovascular access, robotic splenectomy was performed. A sequential clip-by-clip technique was used to achieve vascular control, starting from the mid-segment of the splenic artery and progressing proximally toward the aneurysmal origin. The procedure was completed using robotic instrumentation without conversion

Results: The clip-by-clip approach enabled secure vascular control and safe excision of both aneurysms. No intraoperative complications occurred. The patient had an uneventful postoperative course and was discharged on postoperative day four.

Conclusion: Robotic splenectomy using a clip-by-clip technique represents a feasible and effective alternative for the management of anatomically complex SAAs when endovascular and open approaches are limited. The enhanced precision and articulation of robotic systems facilitate safe dissection and vascular control in confined operative fields. This case highlights the technical feasibility and potential clinical benefits of robotic management in challenging aneurysm locations.

Keywords: Robotic surgery, splenic artery aneurysm, robotic splenectomy

[V-038]

Surgery in the hands of the robot: Safe resection and lymph node dissection in gastric cancer

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Objective: Throughout history, gastric cancer has been one of the major health problems affecting humanity. The earliest information regarding this disease can be found in papyri dating back to ancient Egypt. Today, gastric cancer remains an important global health issue and is currently the fifth most common cancer worldwide. It continues to represent a significant global health burden as one of the leading causes of cancer-related mortality worldwide.

Material and Methods: Although the epidemiological characteristics and surgical treatment approaches for gastric cancer vary across different geographical regions, resection of the primary tumor and the associated lymph nodes remains the cornerstone of oncological treatment. In parallel with technological advances in medicine, significant progress has also been achieved in surgical equipment. With the introduction of minimally invasive surgical techniques into general surgery practice, these methods have been increasingly adopted in cancer surgery. The ability of minimally invasive surgery to provide oncological outcomes comparable to conventional surgery, while improving patient comfort and attracting growing interest among surgeons, has contributed to the wider adoption of robotic surgery in clinical practice.

Results: Interest in robotic surgery for gastric cancer has been steadily increasing. It has been demonstrated that, with sufficient experience, robotic surgery allows for safe resections as well as effective and comprehensive lymph node dissections. Robotic gastrectomy has been reported to overcome the inherent limitations of conventional laparoscopic surgery by offering advantages such as complete tremor filtration, magnified three-dimensional high-definition stereoscopic vision, and enhanced instrument articulation

Conclusion: In this video presentation, we aimed to demonstrate the surgical procedure of a patient who underwent total gastrectomy for gastric cancer. Using a robotic surgical approach, the anatomical structures encountered during gastric cancer surgery and the lymph node dissection technique applied are planned to be shown in detail in the video.

Keywords: Robotic surgery, gastric cancer, total gastrectomy, lymph node dissection

[V-039]

A case of achalasia treated with robotic surgery: Video case presentation

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Objective: Achalasia is a rare but severely impactful primary motor disorder requiring surgical treatment among esophageal motility disorders. While minimally invasive approaches have become standard practice, they present technical challenges due to the complexity of the esophageal-gastric junction anatomy. Robotic surgery has the potential to overcome these challenges with its advantages of three-dimensional vision, superior ergonomics, and precise dissection. This video presentation demonstrates in detail the robotic Heller myotomy technique, surgical steps, and critical points performed on a patient diagnosed with achalasia.

Material and Methods: This video presentation describes a patient diagnosed with achalasia who underwent robotic Heller esophageal myotomy and Dor fundoplication.

Results: A 44-year-old female patient with a known diagnosis of achalasia presented to our outpatient clinic with weight loss and dysphagia. Her history revealed that she had undergone balloon dilation approximately one year prior, but her symptoms persisted. Further investigations confirmed the diagnosis of achalasia. After completing preoperative preparations, robotic Heller esophageal myotomy and dorsal fundoplication were planned. After ensuring appropriate port placement and docking, exploration commenced. Following adequate retraction, the stomach was freed from posterior and omental adhesions. The hypertrophic muscle layer observed in the distal esophagus was dissected, exposing the mucosa. Dorsal fundoplication was performed, and endoscopic examination revealed complete mucosal integrity and adequate luminal patency. The operation was then completed after bleeding control and drain placement. The patient had no complications during postoperative follow-up and tolerated the prescribed diet, and was discharged without complications on the 4th postoperative day.

Conclusion: In the treatment of achalasia, surgery maintains its importance within different treatment plans. Heller myotomy, while the application of anti-reflux procedures is controversial, is considered the gold standard method. Among different surgical approaches, robotic surgery stands out compared to laparoscopy due to its advantages such as increased patient comfort in the postoperative period, stabilization in the use of surgical instruments, improved surgical field utilization, and the provision of three-dimensional vision. Robotic surgery can be safely applied in the treatment of achalasia.

Keywords: Robotic surgery, achalasia, minimally invasive

[V-041]

Robotic partial splenectomy

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Objective: Partial splenectomy is increasingly preferred over total splenectomy for benign or indeterminate splenic lesions in order to preserve immunological function and reduce the risk of overwhelming post-splenectomy infection. However, the procedure remains technically demanding because of the risk of significant intraoperative bleeding. Robotic surgery offers enhanced dexterity, three-dimensional visualization, and precise vascular control, potentially facilitating parenchyma-sparing splenic surgery.

Material and Methods: We report a robotic partial splenectomy performed for a solitary, radiologically suspicious lesion located in the upper pole of the spleen. After patient positioning in a slightly right lateral decubitus position, a four-arm robotic approach was used. Selective dissection and ligation of the upper polar splenic arterial branches and short gastric vessels were performed to achieve segmental devascularization. To minimize blood loss aditional clamping of the splenic artery and vein was performed using a bulldog clamp. The ischemic demarcation line was identified and confirmed intraoperatively. Parenchymal transection was carried out using the Synchroseal energy devices combined with bipolar coagulation, followed by application of topical hemostatic agents. The resection specimen was extracted through a limited pfannenstihl incision. A blake drain was left in place.

Results: The procedure was completed without conversion. Blood loss was minimal and no postoperative complications occurred. The patient was discharged on postoperative day 3. Final histopathology confirmed a benign lesion with negative margins.

Conclusion: Robotic partial splenectomy is a safe and feasible spleen-preserving approach for selected splenic lesions, providing precise vascular control and excellent postoperative recovery.

Keywords: Robotic, splenectomy, partial

[V-042]

Minimally invasive enucleation of a giant esophageal leiomyoma: Surgical technique video presentation

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Objective: Esophageal leiomyomas are the most common benign mesenchymal tumors of the esophagus and are usually small and asymptomatic. Giant esophageal leiomyomas are rare and may present significant technical challenges during surgical management. In this video presentation, we demonstrate the minimally invasive enucleation technique of a giant esophageal leiomyoma encircling the esophagus in a horseshoe configuration.

Material and Methods: A 40-year-old male patient with a giant esophageal mass originating from the distal esophagus was treated using a minimally invasive surgical approach. Under general anesthesia, the patient was positioned appropriately, and thoracoscopic access was obtained via right lateral ports. Dissection was initiated from the posterior aspect of the esophagus. Sharp and blunt dissection techniques were combined using energy devices and hook instruments. Particular attention was paid to preserving the integrity of the esophageal mucosa. The tumor was completely enucleated and retrieved using an endobag through an enlarged trocar site.

Results: Intraoperative findings revealed a solid mass approximately 10 cm in size encircling the esophagus in a horseshoe configuration. Complete enucleation was achieved without mucosal injury. The submucosal defect was closed with interrupted sutures, and thoracic drainage was performed. No intraoperative or postoperative complications were observed. The video highlights key steps of the procedure, including exposure, dissection planes, mucosal preservation, and safe tumor removal.

Conclusion: Minimally invasive enucleation of giant esophageal leiomyomas is a safe and effective surgical option when meticulous technique and mucosal preservation principles are applied. This surgical video aims to provide practical guidance for surgeons managing large and complex esophageal leiomyomas.

Keywords: Esophagus, leiomyoma, minimally invasive enucleation

[V-043]

EndoVAC therapy in delayed esophageal perforations associated with food impaction: Is it a valid option for all esophageal perforations?

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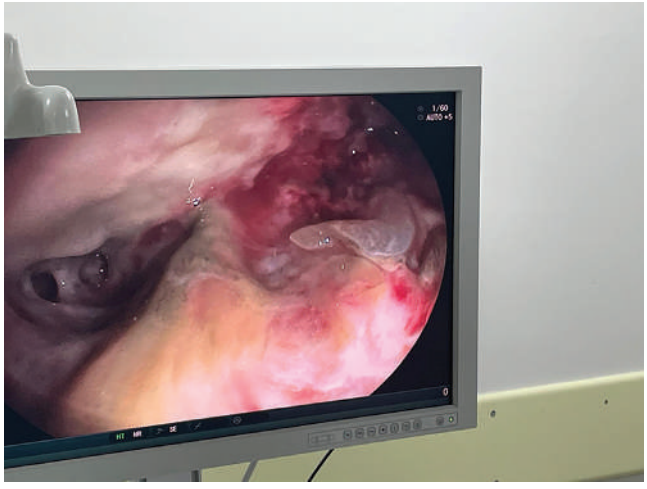


Figure 1. Mid-esophageal perforation.

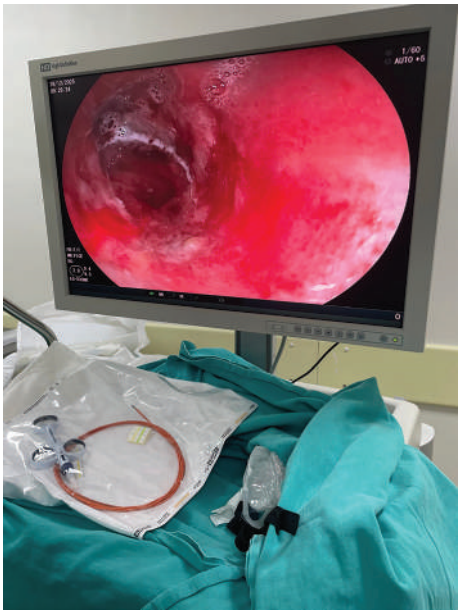


Figure 2. Pre-discharge checkup.

[V-044]

Distal splenorenal (Warren) shunt in portal hypertension

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Objective: Portal hypertension is one of the leading causes of variceal bleeding worldwide. Albeit more rarely performed, the distal splenorenal shunt (Warren's shunt) has proven to be effective in selectively decompressing the collateral circulation. DSRS (Warren shunt) is a critical surgical intervention for managing recurrent complications of PH especially in patients with in left sided PH with adequate hepatic function.

Material and Methods: Here, we review a case of non-cirrhotic portal hypertension manifesting with ascites and variceal hemorrhage treated with distal splenorenal (Warren) shunt.

Results: Sixty three years old male, body mass index: 20.4 kg/m². Medical history: Crohn disease, 6 years portal hypertension and 1.5 years ago gastroesophageal variceal bleeding and band ligation. Meld score: 9. Child score: 5/A. In January 2026, Warren procedure was performed.

Conclusion: Postoperative course: Unremarkable; discharged POD 4. Warren shunt procedure is an effective surgical procedure in non-chirrotic portal hypertension patients with variceal bleeding history and ascites. This procedure should be reserved for appropriately selected patients and performed exclusively by practitioners with substantial expertise.

Keywords: Portal hypertension, splenorenal Warren shunt

[V-045]

Endoscopic submucosal dissection for large colorectal lesions: A safe and effective approach

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Objective: Colorectal cancer is one of the most common malignancies worldwide, and screening programs are widely implemented to reduce its incidence. As a result of these programs, detection rates of precancerous adenomas and early-stage carcinomas have increased. Excision of these lesions has been shown to significantly decrease the incidence of colorectal cancer. Therefore, the success of screening programs depends not only on lesion detection but also on the completeness and curative nature of endoscopic resection.

Material and Methods: Endoscopic submucosal dissection (ESD) is an advanced endoscopic technique that enables en-bloc resection of gastrointestinal lesions. Although it is a minimally invasive procedure, it has certain disadvantages, including the requirement for high technical expertise, relatively longer procedure times, and an increased risk of perforation. ESD is particularly recommended for colorectal lesions larger than 20 mm. Appropriate indications include lesions with suspected high-grade intraepithelial neoplasia or early cancer (such as non-granular type laterally spreading tumors, pseudodepressed or depressed morphology, and irregular surface patterns suggestive of early submucosal invasion), fibrotic lesions (e.g., sporadic adenomas arising in the setting of chronic inflammation such as ulcerative colitis), and residual neoplasia following previous endoscopic treatment.

Results: A 67-year-old male patient was referred to our center after a rectal mass was detected during evaluation for anemia. His medical history was notable for HBsAg positivity. Colonoscopy revealed a polypoid lesion approximately 5 cm in diameter located in the distal rectum, about 15 mm proximal to the dentate line. Based on the size and morphological characteristics of the lesion, ESD was planned. The lesion was elevated by submucosal injection of saline solution containing epinephrine. After marking the circumferential margins, a mucosal incision was performed, and the lesion was separated from the surrounding normal mucosa. Submucosal dissection was completed with repeated submucosal injections, and the lesion was resected en bloc. No intraoperative or postoperative complications were observed. Histopathological examination revealed a traditional serrated adenoma with foci of high-grade dysplasia. No adenomatous epithelium was identified at the resection margins.

Conclusion: ESD is an effective endoscopic treatment modality for large sessile or flat adenomas and for colorectal cancers with superficial or limited submucosal invasion, providing high en-bloc and curative resection rates with low recurrence rates. Despite its technical complexity and longer procedure times, favorable and safe outcomes can be achieved in appropriately selected patients when performed in experienced centers.

Keywords: Endoscopic submucosal dissection, rectal polyp, colonoscopy

[V-046]

ERCP in altered gastrointestinal anatomy: Balloon dilation without sphincterotomy in a patient with Billroth II gastrojejunostomy and Brown anastomosis

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Objective: Choledocholithiasis is a common complication of gallstone disease, and endoscopic retrograde cholangiopancreatography (ERCP) currently represents the cornerstone of minimally invasive treatment. In patients with normal anatomy, stone extraction is typically performed using balloon or basket catheters following sphincterotomy. However, in patients with surgically altered anatomy, this standard approach may not always be feasible due to technical challenges. The presence of Billroth II gastrojejunostomy, particularly when combined with a Brown anastomosis, may reduce ERCP success rates by making identification of the afferent limb and access to the papilla more difficult.

Material and Methods: In patients with Billroth II gastrojejunostomy and Brown anastomosis following distal gastrectomy, ERCP becomes technically challenging due to anatomical alterations, sharp angulations, and adhesions. In cases where conventional sphincterotomy cannot be performed because of the reversed endoscopic view, endoscopic papillary large balloon dilation may be used as an alternative technique.

Results: A 65-year-old male patient with a history of hypertension and prior surgery for gastric cancer in 2020 was diagnosed with choledocholithiasis during outpatient evaluation. Gastroscopy revealed distal gastrectomy with Billroth II gastrojejunostomy and a Brown anastomosis. After identification of the afferent limb, the papilla was cannulated using a duodenoscope. Cholangioscopy confirmed the presence of two stones within the common bile duct. Due to the reversed orientation, sphincterotomy could not be performed; therefore, endoscopic papillary large balloon dilation was applied, and the stones were successfully extracted using a balloon catheter. A biliary stent was placed at the end of the procedure. Early postoperative laboratory findings remained within normal limits, and the stent was removed uneventfully at the eighth week.

Conclusion: ERCP can be successfully performed in experienced centers in patients with Billroth II gastrojejunostomy and Brown anastomosis. In cases where sphincterotomy is not feasible, endoscopic papillary large balloon dilation may be considered a safe and effective alternative technique.

Keywords: Endoscopic retrograde cholangiopancreatography, Billroth II gastrojejunostomy, Brown anastomosis

[V-047]

Synchronous gastric and jejunal phytobezoar: Endoscopic and surgical management

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Objective: Bezoars are foreign bodies formed by the accumulation of indigestible materials within the lumen of the gastrointestinal tract. They are most commonly located in the stomach. Gastric bezoars develop due to the accumulation of various foods or medications in the stomach; they are indigestible and often fail to pass through the pylorus. Bezoars are classified into four main types according to their composition: Phytobezoars, trichobezoars, pharmacobezoars, and lactobezoars. Phytobezoars, the most common type, consist of indigestible plant fibers, fruit residues, peels, and seeds. They are typically observed in adults with a history of gastric surgery, decreased gastric acidity, or impaired gastric motility. Clinically, they may present with epigastric pain, nausea, vomiting, and symptoms of obstruction.

Material and Methods: Currently accepted treatment options for bezoars include observation, chemical dissolution, mechanical fragmentation, and surgical intervention such as laparotomy with gastrotomy. In addition, gastroscopic fragmentation, nasogastric lavage or suction, and enzymatic therapy using agents such as cellulase and papain have been employed. Endoscopy has both diagnostic and therapeutic potential in the management of bezoars. However, endoscopic intervention may be technically challenging, and complications such as esophageal perforation have been reported in the literature.

Results: A 68-year-old female patient presented to the emergency department with a three-day history of nausea, vomiting, and abdominal pain. Her medical history was significant for appendectomy and prior abdominal surgery due to gastric ulcer (type of surgery unknown). Abdominal computed tomography revealed a 6×5 cm bezoar in the stomach and a second 3×3 cm bezoar causing proximal dilatation of a jejunal loop. A nasogastric tube was inserted, and medical management was initiated, followed by planned gastroscopy. Gastroscopy demonstrated a 6×5 cm phytobezoar impacted at the pylorus. After mobilization of the bezoar from the pylorus, deformation of the pyloric canal was observed. The bezoar was fragmented endoscopically using a snare. Control gastroscopy performed the following day showed a clear gastric lumen. However, as the ileus did not resolve during follow-up, the patient underwent surgery, and the jejunal bezoar was removed. The postoperative course was uneventful, and the patient was discharged in good condition.

Conclusion: Although gastric bezoars can often be successfully managed endoscopically, synchronous small bowel involvement may lead to persistent obstruction requiring surgical intervention. In patients with a history of gastric surgery, the possibility of multiple bezoars should be considered, and the entire gastrointestinal tract should be carefully evaluated.

Keywords: Gastric bezoar, jejunal bezoar, gastroscopy

[V-048]

Anatomical localization of parathyroid glands in parathyroidectomy: A video presentation

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Objective: A successful parathyroidectomy is fundamentally based on the accurate and safe localization of the parathyroid glands. Although preoperative imaging modalities such as ultrasonography and Tc-99m sestamibi scintigraphy play an important role in surgical planning, definitive localization is achieved through intraoperative anatomical knowledge and surgical experience. The embryological migration and anatomical variations of the parathyroid glands may complicate surgical exploration. In this video presentation, we aim to demonstrate the systematic intraoperative localization of the parathyroid glands according to their anatomical positions, guided by key surgical landmarks.

Material and Methods: In the video presentation, the step-by-step surgical exploration performed in patients undergoing parathyroidectomy for hyperparathyroidism is demonstrated. The locations of the superior and inferior parathyroid glands are presented in relation to key anatomical landmarks such as the recurrent laryngeal nerve, inferior thyroid artery, thyrothymic ligament, and the superior and inferior poles of the thyroid lobes. In addition to typical locations, potential ectopic sites are also highlighted. The surgical approach details the principles of capsular dissection, preservation of neurovascular structures, and the morphological features used to differentiate parathyroid glands from lymph nodes or adipose tissue.

Results: In the video presentation, the anatomical localization of the parathyroid glands was systematically evaluated using an eight-zone surgical classification system. Superior parathyroid glands were generally categorized within Zones I, II, III, and IV, whereas inferior parathyroid glands were classified within Zones V, VI, VII, and VIII. Among ectopic locations, intrathyroidal positioning (Zone IV) and the area between the carotid sheath and the esophagus inferior to the lower pole of the thyroid gland (Zone VIII) were demonstrated. It was emphasized that knowledge of the embryological descent pathway facilitates surgical exploration, particularly in regions such as Zones VII and VIII. The zone-based systematic exploration approach was observed to contribute to faster identification of the glands and to reduce the need for unnecessary extensive dissection. This approach was also considered to enhance preservation of the recurrent laryngeal nerve and improve overall surgical safety.

Conclusion: A thorough understanding of surgical anatomy is fundamental to safe and effective parathyroidectomy. Although imaging modalities provide valuable guidance, definitive localization is achieved through intraoperative anatomical expertise. This video presentation aims to provide surgeons with a practical and systematic, landmark-based approach to the anatomical localization of the parathyroid glands, serving as a surgical roadmap. It represents an educational resource particularly for surgeons in training and may contribute to improving the success of surgical exploration.

Keywords: Anatomical localization, parathyroid glands, parathyroidectomy

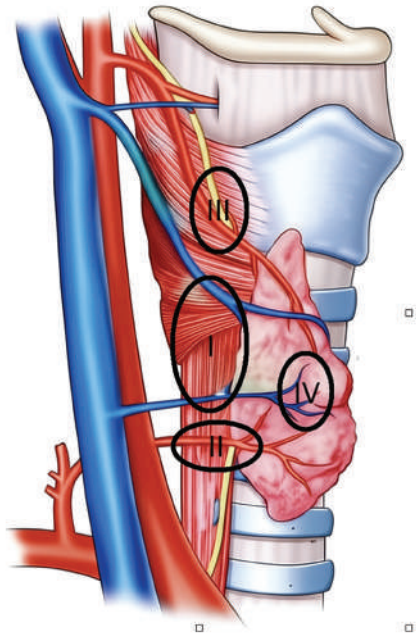


Figure 1. Anatomical sites of superior parathyroid glands.

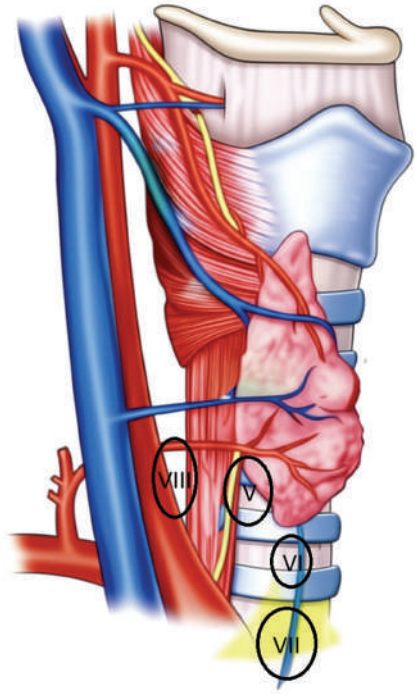


Figure 2. Anatomical sites of inferior parathyroid.

[V-049]

A rare tumor of the adrenal gland: Anastomosing hemangioma

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Objective: The adrenal gland, composed of the cortex and medulla, can give rise to a variety of benign and malignant lesions. While adrenal adenoma is the most common, other pathologies such as cystic lesions, hemangiomas, sarcomas, lymphomas, and adrenocortical carcinoma have been reported. Among these, anastomosing hemangioma, a rare vascular tumor, has been described in several locations, including the abdominal and paraspinal regions, the genitourinary system, and the mediastinum.

Material and Methods: We report a 34-year-old female who presented with right lumbar pain. Contrast-enhanced computed tomography revealed a 47×57 mm heterogeneous lesion at the right adrenal gland. The lesion showed heterogeneous enhancement in the arterial and portal venous phases, with mild washout on delayed imaging and an absolute washout index of 13, raising suspicion for a clinically significant adrenal mass.

Results: The patient was normoglycemic and normotensive, with normal electrolytes. Hormonal evaluation confirmed a non-functioning lesion. Due to its size and associated pain, surgical excision was performed. The mass was removed laparoscopically along with the right adrenal gland, and the patient was discharged uneventfully on postoperative day 1. No recurrence was observed during follow-up, and histopathology confirmed anastomosing hemangioma.

Conclusion: First described by Montgomery and Epstein in 2009, anastomosing hemangioma is a benign tumor with histopathological features resembling angiosarcoma. Tao et al. reported its occurrence in the kidneys, perinephric fat, liver, ovaries, small intestine, and adrenal gland. Most tumors arise in the retroperitoneum, and patients are frequently asymptomatic, with lesions detected incidentally. Clinical features may include hematuria, back or abdominal pain, hematoma, and lower urinary tract symptoms, whereas extra-renal lesions may present with a palpable mass, localized pain, neurological deficits, or pleural effusion. Due to its rarity, specific radiologic characteristics are not well established. Although it may mimic angiosarcoma, anastomosing hemangioma generally exhibits minimal irregular growth without the diffuse infiltrative pattern of angiosarcoma. Histologic features supporting its benign nature include lobular architecture, association with medium-sized vessels, hobnail endothelial cells, and absence of significant cytologic atypia. In summary, adrenal anastomosing hemangioma is a rare benign vascular tumor. Because imaging and biochemical studies cannot reliably distinguish it from malignancy, surgical excision is often necessary. This case emphasizes the importance of considering anastomosing hemangioma in the differential diagnosis of adrenal masses to guide appropriate management.

Keywords: Adrenal gland, anastomosing hemangioma

[V-050]

Treatment of a patient with pheochromocytoma in MEN 2A syndrome with cortex-sparing surgery

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Objective: Multiple endocrine neoplasia type 2A (MEN 2A) syndrome is a rare endocrine neoplasia syndrome with autosomal dominant inheritance and associated with mutations in the RET proto-oncogene. MEN 2A-related pheochromocytomas are mostly benign. Clinically, they carry a high risk of morbidity and mortality due to hypertensive crises, arrhythmias, and cardiovascular complications caused by excessive catecholamine release. Surgical treatment is the fundamental and curative approach in the management of pheochromocytoma. While traditional adrenalectomy leads to adrenal insufficiency, cortex-sparing surgery is an alternative approach aimed at preserving adrenal function.

Material and Methods: In this study, a cortex-sparing adrenal surgical approach was evaluated in a patient with MEN 2A and pheochromocytoma. The diagnosis was confirmed by clinical findings, biochemical tests, and radiological imaging. Tumor localization, size, and adrenal involvement were assessed by CT, MRI, and DOTA-PET, revealing a functional right-sided lesion measuring 19×17 mm, while the left adrenal gland was normal. Preoperatively, alpha-adrenergic blockade was administered according to standard protocols, beta-blockers were added, fluid-electrolyte balance was optimized, and perioperative planning was performed with the anesthesia team. Complete tumor excision was achieved with maximal preservation of adrenal cortical tissue. Postoperatively, hemodynamic parameters, electrolytes, and serum cortisol levels were closely monitored. Adrenal function was assessed using combined clinical and laboratory evaluations, and the need for steroid replacement therapy was observed during follow-up.

Results: The surgical procedure was completed without complications. The patient did not experience a hypertensive crisis or significant hemodynamic instability in the postoperative period. Postoperative serum cortisol levels were found to be adequate, and routine glucocorticoid or mineralocorticoid replacement therapy was not required. Thanks to the preserved adrenal cortex, the patient did not develop clinical or biochemical signs of adrenal insufficiency and did not require steroid replacement therapy.

Conclusion: In this case, cortex-sparing adrenal surgery preserved sufficient adrenal cortical tissue, allowing continued endogenous steroid hormone production and preventing the development of adrenal insufficiency. Early clinical and biochemical outcomes suggest that this approach can be a safe and effective option in appropriately selected patients. Its main advantage is the reduction of complications related to lifelong hormone replacement therapy and the risk of adrenal crisis. When performed with careful patient selection, by experienced surgeons, and with regular long-term follow-up, cortex-sparing adrenal surgery in patients with MEN 2A-associated pheochromocytoma may be considered an important surgical alternative that improves quality of life within a multidisciplinary and individualized treatment framework.

Keywords: MEN 2A syndrome, pheochromocytoma, cortex-sparing adrenalectomy, partial adrenalectomy, laparoscopic adrenalectomy

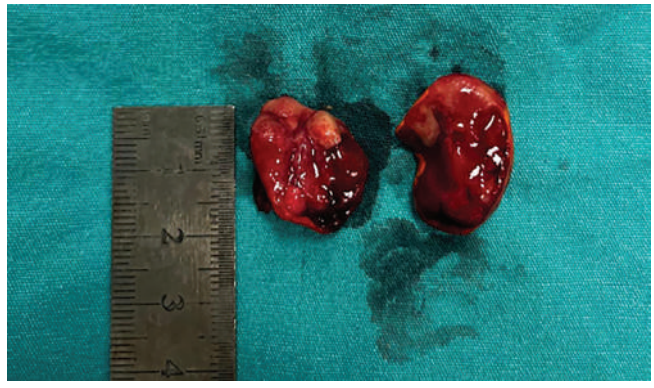


Figure 1. Size and cut surface of the excised specimen.

Table 1. Laboratory parameters preoperative-postoperative values

	Preop value	Postop value	Normal value
ACTH	10.9 pg/mL	11.1	7.2-63.3 pg/mL
Cortisol (a.m)	9.7 µg/dL	10.5 µg/dL	6.2-18.4 µg/dL
DHEAS	122 ug/dL	118 ug/L	98.8-340 ug/dL
(24-hour urine test)			
Metanephrine	471 µg/day		24-96 µg/day
Normetanefrin	457 µg/day		75-375 µg/day
Homovalinic acid	11.7 mg/24 h		1.5-8.0 mg/24 h
VMA	7.8 mg/24 h		0.4-6.5 mg/24 h

[V-051]

A simplified and secure specimen retrieval technique in laparoscopic liver surgery

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Objective: Laparoscopic liver resections are being performed with increasing frequency. Beyond the safety of the operation itself, the laparoscopic placement of the resected liver segment into an endobag and its extraction from the abdomen are technically significant steps. In specimens with bulky or fragile parenchyma, this stage can lead to time loss, parenchymal damage, or endobag rupture. We present our technical approach for the easy and controlled retrieval of the resection material into the endobag in a case of laparoscopic left lateral segmentectomy for a lesion located in segments 2-3.

Material and Methods: A 27-year-old female presented with a 2-year history of postprandial nausea, vomiting, and epigastric pain. Laboratory tests, including liver function and tumor markers, were normal. Ultrasonography revealed a 48 mm hypoechoic lesion in the left lobe. Dynamic liver MRI showed a solid lesion in segments 2-3 with arterial phase enhancement and no washout in the late phase, which was atypical for hemangioma or HCC. Following a general surgery multidisciplinary meeting, a laparoscopic left lateral segmentectomy was planned. After port placement, the falciform ligament was mobilized. The left lateral segment was divided up to the junction of the left triangular and coronary ligaments using Ligasure. Parenchymal transection was completed flush with the falciform ligament using thermal energy devices and endostaplers. The specimen was left suspended by a 2 cm attachment. The following retrieval technique was applied: After transection, the specimen remained suspended by the coronary ligament, preventing it from falling into the abdominal cavity. The endobag was fully opened and positioned directly beneath the specimen. Utilizing the advantage of suspension, the specimen was guided into the bag with minimal atraumatic manipulation, avoiding direct parenchymal grasping. Once the specimen was inside the bag, the coronary ligament was divided, and the bag was extracted via a 4-5 cm incision in the left upper quadrant.

Results: Histopathology revealed focal nodular hyperplasia. Specimen retrieval is often overlooked in the literature but significantly impacts practice. In bulky resections like the left lateral segment, uncontrolled manipulation may cause parenchymal fragmentation. Our technique of utilizing gravity and suspension shortens retrieval time and enhances safety. A similar method was applied by Cakir et al. (2013) in laparoscopic splenectomy.

Conclusion: During this technique, the resected liver segment can be safely and easily placed into the endobag through manipulation. The technique presented can be considered a method that facilitates the surgical flow, shortens the duration of surgery, and reduces the risk of complications.

Keywords: Laparoscopic, left lateral segmentectomy, endobag

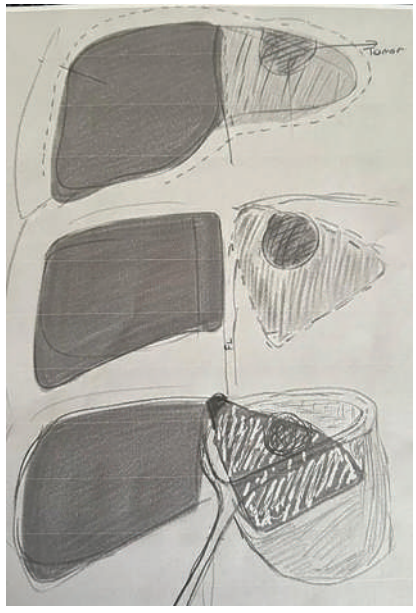


Figure 1. Technical drawing.

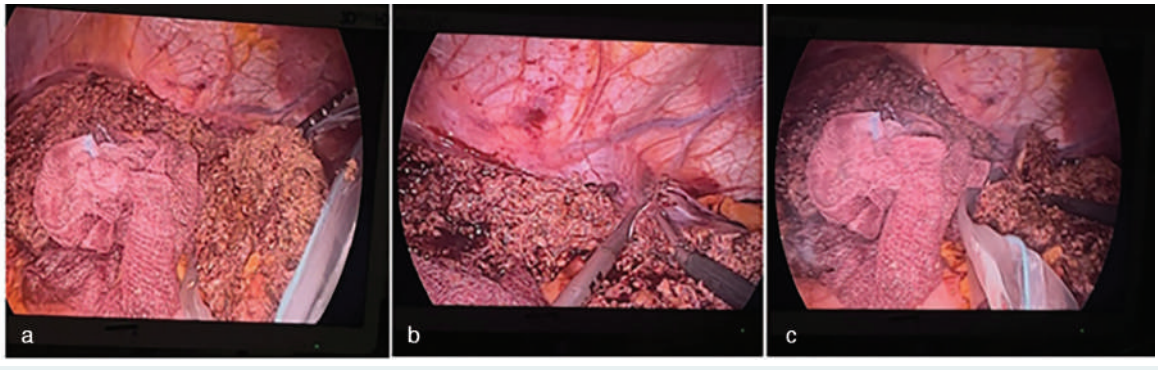


Figure 2. a) Placement of the specimen into the endobag, b) Cutting of the coronary ligament, c) Complete placement of the specimen into the endobag and closure of the endobag.

[V-052]

A safe strategy for difficult gallbladder surgeries: Laparoscopic subtotal cholecystectomy

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Objective: Laparoscopic subtotal cholecystectomy (LSC) is an important alternative strategy to avoid serious complications in situations when the "critical view of safety" principles cannot be met. In this study, we evaluated the outcomes of LSC in severe cholecystitis cases where dissection of the gallbladder duct and bile artery is dangerous.

Material and Methods: In our clinic, out of a total of 313 cholecystectomy surgeries performed between January 2022 and January 2026, 27 were treated using the LSC technique. We aim to present videos of four of these cases.

Results: Of the four patients we will present, three had undergone ERCP and one had percutaneous cholecystostomy. One patient with ERCP also had common bile duct stones. Intraoperative cholangiography was performed on three patients. In two patients, the gallbladder stump was closed with staples, while in the others it was closed with sutures. No bile leakage occurred in any case. All patients were discharged without complications.

Conclusion: LSC is an effective technique that can be applied in cases where cholecystohepatic dissection cannot be performed, clear visualization cannot be achieved, or the cystic duct cannot be clearly visualized. Avoiding bile duct injury and not having to switch to open surgery are important advantages.

Keywords: Acute cholecystitis, critical view of safety, laparoscopic subtotal cholecystectomy, tough cholecystectomy

[V-053]

Laparoscopic organ-preserving resection for pancreatic surface-located duodenal GIST

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Objective: Duodenal gastrointestinal stromal tumors are rare lesions with incompletely defined prognostic features and recurrence patterns. Complete surgical resection with negative margins remains the main curative treatment; however, the optimal surgical approach has not been clearly established. Surgical strategy is determined by tumor size and anatomical location, particularly in relation to critical structures such as the pancreatic head, common bile duct, ampulla, and mesenteric root. Minimally invasive surgical techniques are increasingly used in current clinical practice. In this report, we present a laparoscopic excision of a GIST located in the second portion of the duodenum.

Material and Methods: A 34-year-old male patient presenting with dyspeptic symptoms underwent upper gastrointestinal endoscopy at the referring center. Endoscopy revealed a subepithelial lesion approximately 3 cm in diameter with central ulceration, located in the second portion of the duodenum about 1 cm proximal to the major papilla, and biopsy samples were obtained. Histopathological evaluation showed inactive, moderately chronic duodenitis without evidence of a submucosal lesion. Subsequently EUS demonstrated a hypervascular mass measuring approximately 35 mm, presumed to originate from the deep muscular layer of the duodenum and extending toward the pancreatic head. Fine-needle aspiration biopsy confirmed the diagnosis of gastrointestinal stromal tumor with a mitotic count of 1/10 high-power fields. Upper abdominal magnetic resonance imaging revealed a homogeneously enhancing solid mass measuring 2.5×3.5×2.5 cm. Neoadjuvant imatinib therapy (400 mg/day) was initiated. Follow-up imaging demonstrated tumor regression to 12×21 mm with reduced compression of adjacent structures. Positron emission tomography showed resolution of previously observed low-level FDG uptake. The patient was referred for surgical management.

Results: Duodenoscopy under general anesthesia demonstrated that the lesion was located approximately 2 cm from the papilla and was not suitable for endoscopic resection. The lesion was marked with metal clip and the peripapillary region was stained. Laparoscopic duodenotomy was performed and the tumor was excised with clear surgical margins. Postoperatively, transient fever attributed to atelectasis and temporary elevations in bilirubin and amylase/lipase levels were observed, which resolved with medical management. The patient was discharged on postoperative day 6. Final pathological examination revealed a well-circumscribed gastrointestinal stromal tumor involving the submucosa and muscularis propria, with moderate cellularity and no significant atypia. The mitotic index was 0/5 mm² and Ki-67 was <1%, indicating low malignant risk. Due to microscopic involvement at the basal resection margin, adjuvant imatinib therapy was initiated.

Conclusion: Minimally invasive resection provides favorable outcomes in selected duodenal GISTs.

Keywords: Duodenal GIST, laparoscopic excision, duodenotomy

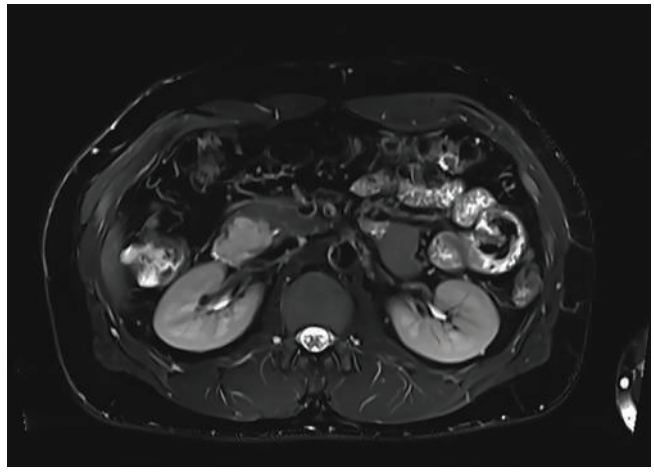


Figure 1. Baseline MRI image.

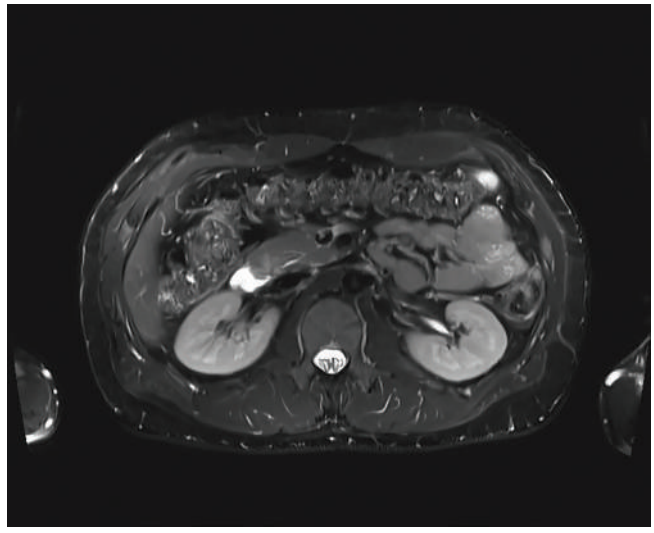


Figure 2. Post-neoadjuvant MRI.

[V-054]

Transanal minimal invasive surgery (TAMIS) in early-stage rectal adenocarcinoma: Technical details

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Objective: Transanal minimally invasive surgery (TAMIS) is a modern surgical technique developed for the local excision of rectal pathologies. TAMIS was developed to overcome the limitations of traditional methods such as transanal endoscopic microsurgery (TEM) and is performed using standard laparoscopic instruments through a single port or SILS port. The technique was first described in 2010. The most common indications for TAMIS are: •Benign adenomatous lesions: adenoma, villous/tubulovillous polyp, etc. •Early-stage rectal cancers: T1 (especially low-risk) - in selected cases. •Other rare pathologies: neuroendocrine tumors, gastrointestinal stromal tumor, etc. •Lesion size and spread: traditionally <3 cm and <30% circumferential, but larger or circumferential lesions have also been successfully removed with increasing experience.

Material and Methods: The records of patients who underwent TAMIS at the General Surgery Clinic of Sakarya Training and Research Hospital between 2023 and 2026 were retrospectively evaluated.

Results: Eleven patient files were evaluated within the scope of the study. Three (27.27%) of the patients were female and eight (72.72%) were male. In this video presentation, our latest case reflecting our experience will be shared in detail. Case 49-year-old female patient presented with rectal bleeding. Colonoscopy revealed a 3 cm lesion at 5 cm in the rectum, with a depressed center and a Paris 0-2a+c pattern. The image was evaluated as suggestive of possible malignancy. A biopsy was planned. Histopathological examination showed well-differentiated adenocarcinoma developed on a villous adenoma base with negative margins. The patient's postoperative course was uneventful. She was referred to oncology.

Conclusion: TAMIS is a safe, effective, and minimally invasive excision for selected benign and early-stage malignant rectal lesions. Clinical outcomes demonstrate low morbidity, R0 resection, and low local recurrence in well-selected cases. The technique is an effective method in current colorectal surgical practice with proper patient selection and appropriate preoperative evaluation.

Keywords: Minimally invasive surgery, early-stage rectal cancer



Figure 1.

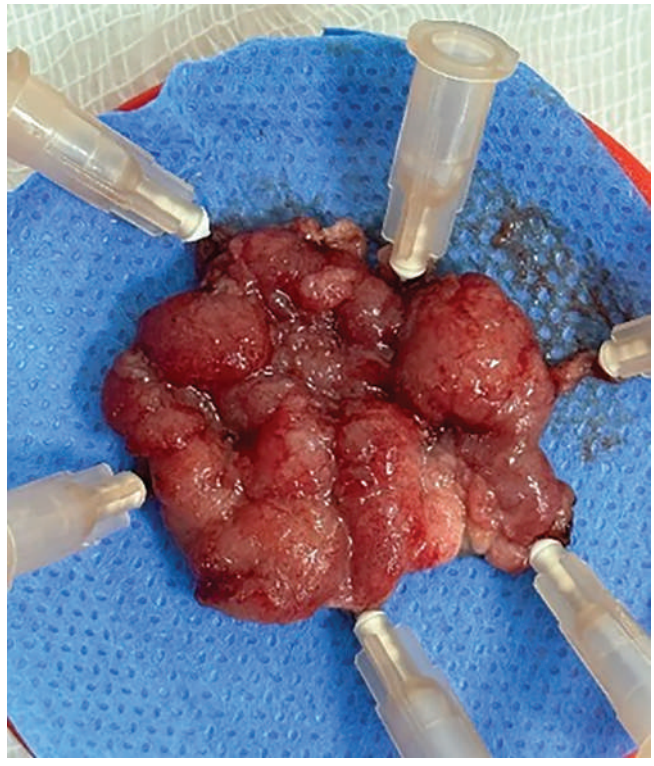


Figure 2.

[V-055]

Our experience with laparoscopic approach in rectus diastasis: Video presentation

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Objective: Rectus diastasis is an abdominal wall deformity characterized by the pathological separation of the rectus abdominis muscles along the midline linea alba. While not a true hernia, it can lead to significant bulging of the anterior abdominal wall, cosmetic problems, and functional complaints in some patients. It is most common in post-pregnancy women, but can also be associated with obesity, rapid weight changes, advanced age, and increased intra-abdominal pressure. The clinical approach varies depending on the patient's symptoms, the presence of a concomitant ventral hernia, and cosmetic expectations. Conservative treatment options include exercise and physiotherapy, while surgical repair may be performed in symptomatic or advanced cases. In recent years, various surgical approaches, including open, laparoscopic, and robotic techniques, have been described, and the optimal treatment choice should be evaluated on a case-by-case basis.

Material and Methods: A 49-year-old male patient, who had been complaining of abdominal swelling for approximately two years, was diagnosed with an umbilical hernia and accompanying rectus diastasis upon examination. Your video presentation shows the laparoscopic surgical procedure performed on the patient.

Results: A 63-year-old male patient with no known underlying medical conditions presented to our outpatient clinic with complaints of swelling and pain. Examination revealed an umbilical hernia and rectus diastasis. Laparoscopic repair was planned. Following preoperative staining and skin measurements, the camera and working ports were inserted through the left quadrant. The anterior abdominal wall was prepared for plication in the midline. Then, starting superior to the diastasis area, the diastasis area was plied with V-lock sutures, and the umbilical hernia defect was repaired. Dual mesh was adjusted to the appropriate size based on the skin contours. The intra-abdominal projections of the contours were checked. Suspension sutures were placed at designated points on the mesh, and it was then advanced into the abdominal cavity. The suspension sutures were brought out and tied using an Endoclose needle, and the mesh was secured to the abdominal wall. The mesh was secured with Tuckers, and after bleeding control, the procedure was completed. The patient was followed up without complications in the postoperative period and was scheduled for discharge on the second postoperative day.

Conclusion: This case report shows the laparoscopic surgery planned for a patient with umbilical hernia and rectus diastasis. With appropriate patient selection and surgical planning, it has been observed that both functional complaints decrease and effective cosmetic results are achieved.

Keywords: Rectus diastasis, laparoscopy, hernia

[V-056]

Laparoscopic ladd procedure for organoaxial partial rotation anomaly: A video presentation

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Objective: Intestinal rotational anomalies represent a broad spectrum of developmental disorders resulting from varying degrees of incomplete rotation and fixation of the midgut during embryologic development. Partial rotation anomalies and abnormal positioning of the duodenojejunal junction rarely become symptomatic in adulthood and often mimic functional gastrointestinal diseases. Because clinical findings are typically chronic and non-specific, diagnosis may be delayed. This video presentation aims to demonstrate the laparoscopic surgical management of an adult patient diagnosed with organoaxial partial rotation anomaly and duodenojejunal junction malposition.

Material and Methods: A 23-year-old female presented with intermittent abdominal pain, nausea, vomiting, and dyspeptic symptoms that began after riding a roller coaster. She had experienced an unintended weight loss of approximately 21 kg over the preceding year. Upper gastrointestinal endoscopy revealed torsion at the third portion of the duodenum with inability to advance distally. Computed tomography demonstrated an abnormal course of the duodenum, malposition of the duodenojejunal junction, and proximal duodenal dilatation. These findings were considered consistent with an organoaxial partial rotation anomaly. The case was discussed in a multidisciplinary meeting, and surgical treatment was recommended. The procedure was performed laparoscopically using one 10-mm optical trocar and two 5-mm working trocars. The right colon was mobilized, and careful dissection along the mesenteric root was carried out to broaden the mesenteric base. The duodenum was mobilized using a Kocher maneuver, releasing the structures affecting the duodenojejunal junction. The bowel was placed in a tension-free functional position, and a prophylactic appendectomy was performed.

Results: No acute midgut volvulus was identified intraoperatively. The clinical presentation was attributed to the abnormal positioning of the duodenojejunal junction. The postoperative course was uneventful. The patient resumed oral intake and was discharged without complications on postoperative day 3. During follow-up, gastrointestinal symptoms markedly improved, and a 9-kg weight gain was observed at postoperative month 8.

Conclusion: Organoaxial partial rotation anomaly with duodenojejunal junction malposition is a rare but important cause of chronic upper gastrointestinal obstruction in adults. Clinical awareness is essential to prevent diagnostic delay. The laparoscopic Ladd procedure provides a safe and effective treatment by relieving duodenal compression and broadening the mesenteric base.

Keywords: Intestinal malrotation, Ladd procedure, laparoscopic surgery

[V-057]

Emergency laparoscopic collis gastroplasty in a geriatric patient with giant hiatal hernia: A video case report

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Objective: To present the experience of laparoscopic Collis gastroplasty performed under emergency conditions in an elderly patient with a giant hiatal hernia who presented with acute symptoms, having previously refused elective surgery due to advanced age and additional risks.

Material and Methods: An 84-year-old female patient presented to the emergency department with complaints of abdominal pain and nausea. The patient denied vomiting, and passage of gas and stool was present. Her medical history was unremarkable except for hypertension. It was learned that she had a diagnosis of giant hiatal hernia and elective surgery had been recommended, but she had refused the operation due to advanced age and associated risks. Physical examination revealed tenderness in the epigastric region; however, signs of acute abdomen (guarding, rebound tenderness) were not detected. Laboratory findings showed WBC: 4.95 K/uL, Hgb: 13.4 g/dL, and CRP: 1.43 mg/L. Blood gas analysis revealed pH: 7.24, PCO_2: 40.4 mmHg, lactate: 1.7 mmol/L, and HCO_3: 26 mmol/L. Computed tomography demonstrated a giant hiatal hernia.

Results: Gastroscopy was performed on the admitted patient to rule out gastric ischemia, and no ischemic areas were visualized. Due to the persistence of symptoms, the decision was made to proceed with surgery. The patient underwent laparoscopic Collis gastroplasty. She was admitted to the intensive care unit for postoperative monitoring. On the first postoperative day, as her condition remained stable, she was transferred to the ward. The patient, who tolerated oral intake and showed no acute pathology during follow-up, was discharged with recommendations on the fifth postoperative day.

Conclusion: Even if elective surgery has been refused in cases of giant hiatal hernia, laparoscopic Collis gastroplasty should be considered a safe treatment option for geriatric patients presenting with acute symptoms and risk of incarceration, as it provides anatomical correction and shortens the duration of intensive care and hospital stay.

Keywords: Giant hiatal hernia, collis gastroplasty, laparoscopy, minimally invasive surgery

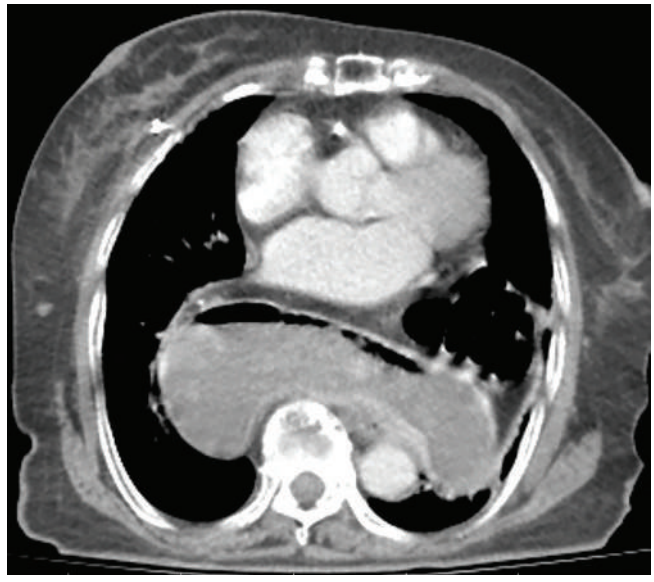


Figure 1. Appearance of giant hiatal hernia on CT, coronal section.



Figure 2. Appearance of giant hiatal hernia on CT, axial section.

[V-058]

House flap anoplasty in the treatment of chronic anal fissure

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Objective: Chronic anal fissure is one of the most common benign diseases of the anal canal and is usually associated with internal anal sphincter hypertonia. However, in some patients, internal anal sphincter tone may be decreased, which can influence the choice of surgical treatment. Although lateral internal sphincterotomy has high healing rates in the treatment of chronic anal fissure, it may be limited by the risk of anal incontinence, particularly in female patients and those with an obstetric history. Therefore, sphincter-preserving surgical techniques have emerged as an important alternative in selected patient groups. The aim of this study is to present the house flap anoplasty technique performed in a patient with chronic anal fissure resistant to medical treatment and botulinum toxin injections.

Material and Methods: A 50-year-old female patient with a history of four vaginal deliveries, who did not respond to medical treatment and repeated botulinum toxin injections, was included in the study. Preoperative physical examination revealed a posterior chronic anal fissure with a sentinel pile and a chronic ulcer extending to the internal anal sphincter fibers. Digital rectal examination demonstrated decreased internal anal sphincter tone.The patient was operated on in the lithotomy position. Following fissurectomy, the defect was closed using a house advancement flap. In order to achieve adequate mobilization of the flap, a portion of the superficial external anal sphincter fibers was carefully released. No incision was made to the internal anal sphincter. The flap was closed using absorbable sutures.

Results: No intraoperative or early postoperative complications were observed. Flap perfusion was assessed as adequate. During postoperative follow-up, wound healing was uneventful and a significant improvement in fissure-related symptoms was achieved. No signs of anal incontinence were observed. The patient remained clinically stable during follow-up.

Conclusion: In chronic anal fissure cases resistant to medical treatment and botulinum toxin injections, particularly in patients with hypotonic internal anal sphincter and an obstetric history, house flap anoplasty may be considered an effective sphincter-preserving surgical option. Closure of the fissurectomy defect with a well-vascularized flap provides a reconstructive approach that supports healing while preserving anal continence.

Keywords: Chronic anal fissure, fissurectomy, house flep anoplasty, sphincter-preserving surgery, hypotonic internal anal sphincter

[V-059]

Anal stenosis following hemorrhoidectomy: Is there a way out?

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Objective: Anal stenosis following hemorrhoid surgery represents one of the most disabling iatrogenic complications in benign colorectal disease. Although uncommon, its impact on bowel function, quality of life, and subsequent surgical complexity is profound. The condition is largely preventable, yet once established, management requires a nuanced understanding of anorectal anatomy, wound healing, and reconstructive principles. This video vignette critically examines the pathophysiology, prevention, and contemporary surgical management of post-hemorrhoidectomy anal stenosis, challenging the misconception that it constitutes a therapeutic dead end.

Material and Methods: This structured video-based presentation integrates surgical anatomy, mechanism-based classification, and real-world operative decision-making derived from complex clinical cases of post-hemorrhoidectomy and post-stapled hemorrhoidopexy anal stenosis. Preventive strategies during primary hemorrhoidal surgery, diagnostic work-up including endoscopic assessment, and a stepwise treatment algorithm are demonstrated. Surgical techniques include dilation protocols, mucosal and cutaneous advancement flaps, island flaps, and rotational reconstructions (house, diamond, and S-plasty), with emphasis on indications, technical nuances, and reconstructive principles rather than procedural dogma.

Results: Conservative measures may provide symptom relief in mild stenosis but may contribute to further anodermal injury when overused. Definitive management of moderate to severe stenosis requires surgical reconstruction aimed at restoring a compliant anal canal with well-vascularized tissue. Local advancement flaps are effective for focal disease, whereas extensive, circumferential, or recurrent stenosis necessitates rotational flap techniques. Among these, the house flap demonstrates broad applicability across stenosis types, technical reliability, and favorable functional outcomes when principles of adequate mobilization, preservation of perfusion, and tension-free closure are strictly respected. Failure patterns were consistently associated with excessive primary excision, loss of skin bridges, and surgery performed in the acute inflammatory phase.

Conclusion: Post-hemorrhoidectomy anal stenosis is not an inevitable complication nor an unsolvable problem. Its occurrence reflects technical and conceptual errors in the treatment of a benign disease. Prevention through limited excision and respect for anodermal integrity remains paramount. When reconstruction is required, successful outcomes depend less on flap selection than on adherence to fundamental reconstructive principles and surgeon familiarity with the chosen technique. Ultimately, hemorrhoidal disease should never be managed with oncologic aggressiveness—doing so transforms a benign condition into a lifelong surgical burden.

Keywords: Anal stenosis, hemorrhoidectomy, reconstructive surgical procedures

[V-061]

Anatomical variation of the middle colic artery in robotic right hemicolectomy

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Objective: Complete mesocolic excision (CME) with central vascular ligation (CVL) is essential for optimal oncologic outcomes in right-sided colon cancer. Variations of the middle colic artery (MCA) may significantly influence the surgical strategy, particularly in tumors involving the hepatic flexure and proximal transverse colon. The robotic platform, with its enhanced three-dimensional visualization and articulating instruments, may facilitate safe management of complex vascular anatomy. In this video, we present a robotic right hemicolectomy performed in a patient with a MCA variation.

Material and Methods: A standard medial-to-lateral approach was employed, and the ileocolic vessels were centrally ligated. Careful dissection was performed along the anterior aspect of the superior mesenteric artery and superior mesenteric vein. The variation of the MCA was identified using indocyanine green fluorescence imaging, and the anatomical course of the vascular structures was confirmed. CME and CVL were accomplished in accordance with oncologic principles. An intracorporeal anastomosis was subsequently performed.

Results: The variant branching pattern of the MCA was clearly identified intraoperatively, allowing safe vascular control. The robotic system enabled precise dissection without major vascular complications. Adequate surgical margins and appropriate lymph node harvest were achieved.

Conclusion: MCA variations are important anatomical considerations that may alter the surgical strategy during robotic right hemicolectomy. The robotic platform facilitates safe and oncologically sound management of such vascular variations. Careful preoperative vascular assessment and meticulous medial dissection are crucial to minimize intraoperative complications.

Keywords: Anatomical variation of the middle colic artery, robotic right hemicolectomy, ICG

[V-062]

Robotic low anterior resection in locally advanced upper rectal cancer following neoadjuvant chemotherapy: Technical details

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Objective: Robotic surgery has become an important approach in rectal cancer surgery, offering enhanced visualization and precision, particularly in confined spaces such as the pelvis. This video demonstrates the key steps and technical details of a robotic low anterior resection in a patient with locally advanced upper rectal cancer after neoadjuvant chemotherapy on the da Vinci Xi robotic platform.

Material and Methods: A 61-year-old male presented with changes in bowel habits. Colonoscopy revealed a circumferential mass causing luminal narrowing extending from 10 to 17 cm from the anal verge. Biopsy confirmed adenocarcinoma. Pelvic MRI demonstrated a rectosigmoid junction tumor located in the upper rectum, with limited perirectal extension. Ten locoregional lymph nodes were identified, the largest measuring 8 mm. Presacral fascial planes were preserved. Following six cycles of neoadjuvant FOLFIRINOX, imaging revealed a complete metabolic response in the perirectal lymph nodes and a partial response in the rectosigmoid tumor. Robotic low anterior resection was planned.

Results: Surgery was initiated with incision at the sacral promontory. Rectal mobilization was performed along the embryological "holy plane" using sharp dissection. Both right and left hypogastric nerves were identified and preserved during medial-to-lateral dissection. Intermesenteric anastomosis was detected and clipped. The inferior mesenteric artery was clipped approximately 1 cm distal to its origin from the aorta, with preservation of the inferior mesenteric plexus. The inferior mesenteric vein was divided below the pancreas, and dissection proceeded along the superior border of the pancreas to enter the lesser sac. Complete mobilization of the splenic flexure was achieved. Anterior pelvic dissection was initiated by incising the anterior peritoneal reflection. After completion of the anterior dissection, the posterior plane was entered and posterior pelvic dissection was completed. Following complete mobilization, rectal transection was performed using a robotic stapler. An end-to-end colorectal anastomosis was completed using a circular stapler. Anastomotic integrity was confirmed with an air leak test.

Conclusion: This video highlights that a fully robotic low anterior resection enables controlled and precise dissection in the narrow pelvic cavity, improves surgical ergonomics, and provides a safe approach to upper rectal cancer surgery after neoadjuvant chemotherapy.

Keywords: Robotic surgery, rectum tumor, neoadjuvant chemotherapy

[V-063]

Robotic resection of recurrent colorectal cancer metastasis to the seminal vesicle

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Objective: Robotic surgery is one of the most advanced surgical techniques in which modern medicine meets technology. The robotic system precisely replicates the surgeon's hand movements, eliminates tremor, and provides superior maneuverability in confined spaces. In this video presentation, we will demonstrate the robotic resection performed due to luxation of the seminal vesicle in a 38-year-old male patient who had previously undergone surgery for colon cancer.

Material and Methods: Robotic surgery was chosen as the surgical approach, and the recorded operative video was subsequently processed using professional editing software and prepared for presentation.

Results: Following the surgery, negative surgical margins were achieved, and no mortality or morbidity was observed. The patient remains under postoperative follow-up.

Conclusion: Compared to conventional open surgery and laparoscopic (minimally invasive) surgery, robotic surgery offers several advantages, including three-dimensional high-definition visualization, an enhanced field of view, and improved instrument dexterity. As a result, operations can be performed through smaller incisions, blood loss may be reduced, and patients generally experience a more comfortable and faster recovery process. Performing the procedure using the robotic approach provided a significant advantage to the surgeon in the pelvis, a technically challenging anatomical region, and enabled the achievement of negative surgical margins.

Keywords: Robotic surgery, recurrent metastatic colon cancer, minimally invasive surgery

[V-064]

Robotic surgery in left colon cancer: The evolution of the minimally invasive era

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Objective: Advances in minimally invasive surgery have increasingly promoted the use of robotic systems in colon cancer surgery. Robotic surgery offers technological advantages such as three-dimensional high-definition imaging, tremor filtration, and wristed instruments, which are designed to overcome the technical limitations of laparoscopy. These features allow for more precise dissection and better adherence to oncological surgical principles in left colon cancer surgery.

Material and Methods: Left colon anatomy involves technically challenging steps such as mobilization of the splenic flexure and dissection of the inferior mesenteric vessels. Robotic systems enhance maneuverability in deep and narrow anatomical spaces, facilitating dissection along proper mesocolic planes. This contributes particularly to safer high vascular ligation and lymph node dissection.

Results: In the current literature, oncological outcomes of robotic left colon resections have been compared with those of open and laparoscopic surgery. No significant differences have been reported between laparoscopic and robotic surgery in terms of adequacy of resection margins or the number of lymph nodes retrieved. Despite these advantages, longer operative times and higher costs remain the main limitations associated with this approach.

Conclusion: Robotic surgery stands out as a safe and effective minimally invasive option in the treatment of left colon cancer. In this context, the aim of this video, which presents a patient operated on with a robotic approach for left colon cancer, is to demonstrate the anatomical structures and anatomical dissections involved in left colon surgery.

Keywords: Robotic surgery, colon cancer, colectomy, lymph node dissection

[V-065]

Robotic low anterior resection and pelvic nerve preservation

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Objective: Total mesocolic excision is considered the gold standard in rectal cancer. Preserving the hypogastric nerves and pelvic plexuses within the narrow pelvic anatomy improves postoperative functional outcomes. This video presentation describes a case in which pelvic nerves were identified using the Da Vinci Xi robotic surgical system.

Material and Methods: A 76-year-old male patient diagnosed with upper rectal adenocarcinoma and who had completed neonatal and juvenile treatment was scheduled for robotic low anterior resection. A medial-to-lateral approach was preferred during the operation. As the mesorectal dissection progressed, the bilateral hypogastric nerves and plexuses were visualized and preserved in the pelvic lateral walls.

Results: The operation was successfully completed using nerve-sparing principles. The articulation capability of the robotic arms also helped preserve the integrity of the neurovascular structures. The operation lasted 200 minutes. The patient was discharged on the 5th day after the operation. No urinary dysfunction was observed during the patient's stay in the ward.

Conclusion: Robotic surgery has high potential for identifying and preserving important functional structures due to its articulation ability in the narrow pelvic space. Clear visualization and precise dissection of pelvic autonomic nerves also minimize postoperative functional morbidity.

Keywords: Nerve-sparing surgery, rectum cancer, robotic surgery

[V-066]

Postoperative functional outcomes of transanal transection and single-stapled anastomosis technique after low anterior resection in rectal cancer

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Objective: Anal stenosis (stricture) and functional disorders (incontinence, obstructive defecation) observed after low anterior resection (LAR), one of the sphincter-preserving methods in rectal cancer surgery, are significant factors affecting patients' quality of life. The aim of this study is to evaluate early postoperative anal stenosis and functional outcomes in five patients who underwent LAR using the transanal transection and single-stapled (TTSS) anastomosis technique for rectal cancer at our clinic.

Material and Methods: In this study, the data of five patients who underwent the LAR + TTSS procedure with a diagnosis of rectal cancer were retrospectively reviewed. Patients were evaluated in terms of postoperative anal stricture severity (none, mild, moderate, severe), obstructive defecation score (Altomare-ODS), St. Mark's (Vaizey) incontinence score, and LAR syndrome (LARS) score. Patients with a functioning protective ileostomy were excluded from functional scoring and were analyzed only for the presence of stricture.

Results: In the postoperative evaluation of the five patients included in the study; anal stricture: no anal stricture "none" was detected in 80% (n=4) of the patients, while "moderate" stricture was observed in 20% (n=1). Ileostomy status: protective ileostomies were present in two patients (40%), whereas three patients (60%) were without a stoma. Functional outcomes (n=3): In the functional assessment of the three patients without a stoma; obstructive defecation: a "low score" (<10) was identified in two patients, and a "moderate score" (10-15) was found in one patient (mean score: 9.3). Incontinence: St. Mark's (Vaizey) scores were recorded as 12, 8, and 13, respectively. LARS distribution: minor LARS was detected in one patient, and "major LARS" was identified in two patients.

Conclusion: Based on the preliminary results of our limited case series, it was observed that postoperative anal stricture rates in patients undergoing the TTSS technique were within acceptable levels. Regarding functional outcomes, obstructive defecation symptoms in patients without a stoma were found to be at mild-to-moderate levels; however, monitoring of incontinence scores and LARS remains of clinical significance. Larger patient cohorts and long-term follow-up are necessary to further clarify the functional outcomes of this technique.

Keywords: Rectal cancer, TTSS

[V-068]

Recurrent rectal prolapse, rectocele, and cystocele: Laparoscopic mesh rectopexy with sigmoid colectomy

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Objective: In this case presentation, we aimed to evaluate the role of the anatomic characteristics of the sigmoid colon in the treatment of our patient with recurrent rectal prolapse and rectocele causing obstructed defecation, and to assess the contribution of sigmoid colon resection to surgical success in recurrent prolapse cases.

Material and Methods: A 43-year-old female patient presented with the main complaints of difficulty in defecation, the need for manual assistance during defecation, and a protrusion from the bowel approximately the size of an orange during defecation. She also reported frequent urination and urinary incontinence. She stated that her symptoms started after a traffic accident. Investigations performed due to these complaints led to the diagnoses of rectal prolapse, rectocele, and cystocele. With these diagnoses, approximately one year earlier, the patient had undergone a laparoscopic anterior mesh rectopexy. However, from the third postoperative month onward, her symptoms increased again and she was re-evaluated. Clinical assessment and imaging studies revealed recurrent rectal prolapse and an advanced rectocele. Based on these findings, surgical intervention was planned for the recurrent prolapse.

Results: During the operation, the sigmoid colon was found to be redundant and folded onto itself in a "W-shaped" configuration. Considering that this condition may have contributed to the recurrence of prolapse, rectopexy was performed together with sigmoid colon resection. During the surgical procedure, the bowel was positioned appropriately in its anatomical location, and to prevent recurrence of the prolapse, the rectum was fixed to the sacral promontory using mesh material. In the postoperative period, the patient remained clinically stable, and a marked decrease in her previous complaints was noted. At the sixth-month postoperative follow-up, her symptoms had significantly improved; no rectal prolapse was observed, and normal defecation function was documented.

Conclusion: This case highlights the importance of the structural characteristics of the sigmoid colon in recurrent rectal prolapse. Rectopexy combined with sigmoid colon resection may be an effective approach in the treatment of prolapse. However, in such complex cases, appropriate patient selection and correct application of surgical techniques are critical to increasing success rates.

Keywords: Rectal prolapse, rectopexy

[V-069]

Inguinal hernia repair with single-port total extraperitoneal (STEP) approach: Our experience

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Objective: Laparoscopic total extraperitoneal (TEP) approach is a widely used minimally invasive method in inguinal hernia surgery. In recent years, with the development of single-incision laparoscopic surgical techniques, single-port total extraperitoneal (STEP) applications have come to the forefront; however, this technique is applied in a limited number of centers, and there are a limited number of reports in the literature, particularly from our country. This video presentation aims to present the surgical stages and technical details of inguinal hernia repair performed using the STEP technique.

Material and Methods: A 46-year-old male patient diagnosed with unilateral (right) indirect inguinal hernia was prepared under general anesthesia in the supine, 30-degree, Trendelenburg position. Following injection of a local anesthetic (bupivacaine) at the incision site, a 2.5 cm infraumbilical incision was made to access the anterior fascia of the rectus muscle. A 2 cm incision was then made to cut the anterior fascia. The rectus muscle was then pulled laterally. A single-port GelPOINT® mini advanced access platform (applied medical, USA) was inserted, and a partial extraperitoneal space was created through blunt dissection via the port. Three trocars were used through the single-port. CO_2 was insufflated into the created space at a pressure of 12 mmHg. Sufficient extraperitoneal space was obtained through blunt dissection. Dissection was performed according to standard TEP surgery principles. A 16*12 cm, right anatomical, 3D, propylene mesh was placed in the preperitoneal space. The implanted mesh was securely fixed to the preperitoneal space at three points using an absorbable fixation system.

Results: The operation was completed without complications. There was no need for intraoperative conversion or additional ports. The operation time was recorded as 35 minutes. No early postoperative complications were observed. The patient was mobilized early and discharged without problems on the first postoperative day. A single-incision was observed to offer advantages in terms of both cosmetic results and postoperative pain.

Conclusion: The STEP approach is a safe and feasible alternative method in selected patients undergoing inguinal hernia surgery. Using a single-incision can reduce potential complications associated with additional ports and offer cosmetic advantages. Sharing the surgical stages of the technique via video presentation is expected to contribute to the learning process of this method.

Keywords: Laparoscopic inguinal hernia repair, minimally invasive surgery, single-incision surgery, single-port total extraperitoneal approach, STEP

[V-070]

Incarcerated Amyand's hernia: Preoperative diagnosis and surgical approach

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Objective: Amyand's hernia is a rare condition defined as the presence of the vermiform appendix within the inguinal hernia sac. Although generally diagnosed intraoperatively, preoperative diagnosis is currently possible with advanced imaging modalities. The aim of this video presentation is to present a case who applied with a painful swelling in the right groin, was diagnosed preoperatively by computed tomography (CT), and was treated via a laparoscopic approach.

Material and Methods: The diagnostic, treatment, and surgical processes of a 69-year-old male patient who presented to our clinic with a complaint of painful swelling in the right groin were recorded. The patient's demographic data, physical examination findings, laboratory parameters, and radiological images were evaluated, and the surgical procedure was prepared in a video presentation format.

Results: A 69-year-old male patient presented with a 4-day history of painful swelling in the right groin. Physical examination of the patient, who had a history of left inguinal hernia repair, revealed a non-reducible incarcerated inguinal hernia on the right side. Laboratory results showed a WBC of 6.18 10^3/µL (normal) and a CRP of 65 mg/L (high). Due to the discrepancy between clinical and laboratory findings, an abdominal CT was performed, which revealed the vermiform appendix within the hernia sac in the right inguinal canal (Amyand's hernia). During laparoscopic exploration, the presence of the appendix and mesoappendix in the right inguinal canal was confirmed, and they were reduced into the abdominal cavity. The mesoappendix was dissected, and an appendectomy was performed by applying a homolock clip to the base. The surgical site was irrigated, and a JP drain was placed. Due to the risk of infection, no repair was performed on the inguinal ring (hernia defect), and the procedure was terminated. The patient had an uneventful postoperative course and was discharged on the first postoperative day.

Conclusion: Although Amyand's hernia is rare, it should be considered in the differential diagnosis of incarcerated hernias. In inflammatory cases presenting with high CRP levels, as in this case, the laparoscopic approach is a safe option as it allows for both the exploration of the entire abdomen and the atraumatic reduction of the appendix from the hernia sac.

Keywords: Amyand's hernia, incarcerated inguinal hernia, laparoscopic appendectomy

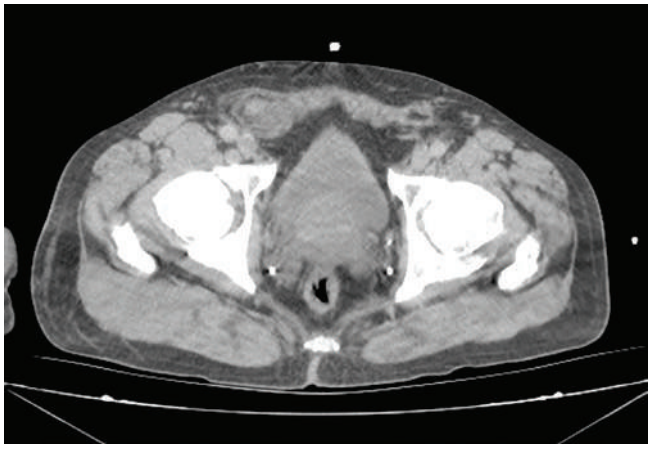


Figure 1. Preoperative computed tomography view of incarcerated Amyand's hernia.

[V-071]

Spleen-preserving laparoscopic distal pancreatectomy and simultaneous endoscopy-assisted laparoscopic gastric wedge resection: Minimally invasive surgery for synchronous gastric and pancreatic neuroendocrine tumors

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Objective: The presence of synchronous lesions in gastroenteropancreatic neuroendocrine tumors (GEP-NETs) is rare but carries significant importance for surgical planning. In this video report, we aimed to present the technique of spleen-preserving laparoscopic distal pancreatectomy combined with simultaneous gastric wedge resection in a case with synchronous NETs located in the stomach and pancreatic tail.

Material and Methods: A 58-year-old female patient with a history of hypothyroidism and diabetes mellitus presented to our clinic. Following an upper respiratory tract infection, she experienced a sensation of obstruction in the throat. Endoscopic examination revealed a gastric mass, prompting further evaluation. Dynamic pancreatic computed tomography (CT), endoscopic ultrasonography, Ga-68 DOTATE PET-CT, and endoscopic biopsy were performed. After a multidisciplinary evaluation, the patient was scheduled for a spleen-preserving laparoscopic distal pancreatectomy combined with simultaneous gastric wedge resection.

Results: The procedure was successfully completed entirely via a laparoscopic approach, with preservation of the spleen. No major intraoperative complications were encountered. Postoperatively, the patient remained hemodynamically stable, and early oral intake and ambulation were initiated without incident.

Conclusion: Spleen-preserving laparoscopic distal pancreatectomy represents a safe and effective minimally invasive approach for small pancreatic tail NETs, offering the added benefit of preserving immune function. In the presence of a synchronous gastric neuroendocrine tumor, combined laparoscopic resection constitutes a feasible surgical option. This video presentation demonstrates the key steps of the surgical technique along with practical procedural details.

Keywords: Minimally invasive surgery, endoscopy-assisted, synchronous neuroendocrine tumor

[V-072]

Robotic intersphincteric low anterior resection and coloanal anastomosis technique

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Objective: Sphincter-preserving surgical techniques in distal rectal cancer are essential for maintaining quality of life without compromising oncological safety. Intersphincteric resection represents an alternative to abdominoperineal resection in very low rectal tumors. Robotic surgery facilitates these complex procedures by providing enhanced visualization and superior maneuverability within the confined pelvic space. In this study, we aimed to present the technique of robotic intersphincteric low anterior resection with coloanal anastomosis performed in a patient with distal rectal cancer.

Material and Methods: A patient with a T2N0 distal rectal tumor located 1 cm proximal to the dentate line, showing near-complete regression after neoadjuvant chemoradiotherapy, underwent robotic intersphincteric low anterior resection with diverting ileostomy. Following standard robotic surgical principles, ligation of the inferior mesenteric vessels, splenic flexure mobilization, total mesorectal excision, and intersphincteric dissection were performed. The rectum was transected transanally at the level of the dentate line, followed by hand-sewn coloanal anastomosis. A diverting ileostomy was created in the right upper quadrant.

Results: The operation was completed without intraoperative complications. Final pathological examination revealed T2N0M0 disease with negative surgical margins.

Conclusion: Robotic intersphincteric low anterior resection with coloanal anastomosis is a safe and feasible sphincter-preserving option in selected patients with distal rectal cancer. The technical advantages of robotic surgery contribute significantly to precise dissection in the narrow pelvis while maintaining oncological principles.

Keywords: Intersphincteric resection, rectal cancer, robotic surgery

[V-073]

An incisionless approach in robotic colorectal surgery: Transanal specimen extraction

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Objective: This video presentation aims to demonstrate the management of an intraoperative rectal injury that occurred during robotic low anterior resection in a patient with mid-to-low rectal cancer, while preserving minimally invasive surgical principles.

Material and Methods: A patient diagnosed with rectal adenocarcinoma located just above the Houston valve and staged as cT2N0M0 was discussed in a multidisciplinary tumor board and scheduled for surgical treatment. Robotic low anterior resection was performed in the Lloyd-Davies position following the principles of total mesorectal excision. During distal dissection at the level of the levator muscles, an iatrogenic rectal injury occurred. As distal transection with a stapler was considered unsafe, an alternative approach was adopted. The rectum was transected distal to the tumor, and the proximal rectal stump was closed. The specimen was extracted transanally, and an anvil was secured extracorporeally. An end-to-end colorectal anastomosis was then created using a circular stapler.

Results: The integrity of the anastomosis was confirmed using air and fluid leak tests. The procedure was completed with a protective loop ileostomy. No additional abdominal incision was required. The postoperative course was uneventful. Final pathology revealed T2N0M0 disease, and the patient was followed without adjuvant therapy. The loop ileostomy was closed at the third postoperative month.

Conclusion: Intraoperative complications during robotic rectal surgery can be safely managed with appropriate surgical strategies while maintaining minimally invasive principles. Transanal specimen extraction and circular stapled anastomosis represent an effective alternative approach in selected cases without the need for additional abdominal incisions.

Keywords: Robotic rectal surgery, anastomotic technique, transanal specimen extraction

[V-074]

Video-based education with surgical-specimen correlation: Step-by-step laparoscopic splenectomy

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Objective: Laparoscopic surgery, by providing magnified images and a high-resolution visual field, enables clearer visualization of surgical anatomy and allows step-by-step observation of surgical procedures. With these features, laparoscopic approaches offer a more instructive environment for surgical education compared to open surgery. Laparoscopic splenectomy, however, is among the procedures with a long learning curve due to anatomical variations and the complex structure of the splenic ligaments. Accurate identification of intraoperative anatomical structures and the development of three-dimensional perception are of great importance in surgical education. Real-time specimen correlation stands out as an innovative educational method that can support this process by enabling simultaneous comparison of live surgical images with resected tissues.

Material and Methods: In this educational study, a structured training material was created based on a case in which step-by-step laparoscopic splenectomy was performed using standard port placement in the right lateral decubitus position. A total of 38 surgical residents were included and divided into two groups according to their duration of residency: ≤2 years (n=20) and >2 years (n=18). Splenic ligaments (gastrosplenic, splenorenal, splenocolic, splenophrenic, and pancreatosplenic) were identified on the surgical specimen,and a hybrid visual teaching method was employed by providing animation-assisted demonstration of the ligaments and dissection planes on specimen photographs synchronized with the operative video footage (Figure 1). The anatomical recognition levels of the surgical residents regarding the splenic ligaments were analyzed using a structured, 0-10 point evaluation form administered before and after the training. Total performance scores were calculated as percentages. Pre-training and post-training comparisons were performed using paired t-tests, while intergroup comparisons were conducted using independent t-tests.

Results: Before the training, the total anatomical recognition success was 52.0±10.8% in the ≤2-year group and 64.2±9.1% in the >2-year group (Table 2), with a significant difference between the groups ($p<0.001$). After the training, the total success rate increased to 82.0±9.6% among all participants (Table 3), and the intergroup difference was no longer observed ($p=0.219$). When pre-training and post-training change scores were evaluated, the increase in total success was more pronounced in the ≤2-year group compared to the >2-year group (29.0±11.2% vs. 18.8±8.9%; $p=0.003$). The most prominent improvements were observed in the identification of the gastrosplenic, splenorenal, and splenophrenic ligaments (Table 4). In the evaluation of the training method, three-dimensional anatomical perception and understanding of surgical dissection planes were rated significantly higher (Table 5) in the ≤2-year group ($p=0.006$, and $p=0.041$, respectively).

Conclusion: Video-based laparoscopic splenectomy training supported by real-time surgical-specimen correlation significantly improves the anatomical recognition of splenic ligaments. This method appears to be particularly effective in enhancing anatomical perception and shortening the learning curve in surgical residents with ≤2 years of experience. Integrating video-specimen correlation-based training approaches into the education of surgical residents for other laparoscopic procedures may further enhance the effectiveness of surgical training.

Keywords: Laparoscopic splenectomy, video-based surgical education, surgical-specimen correlation, surgical resident education

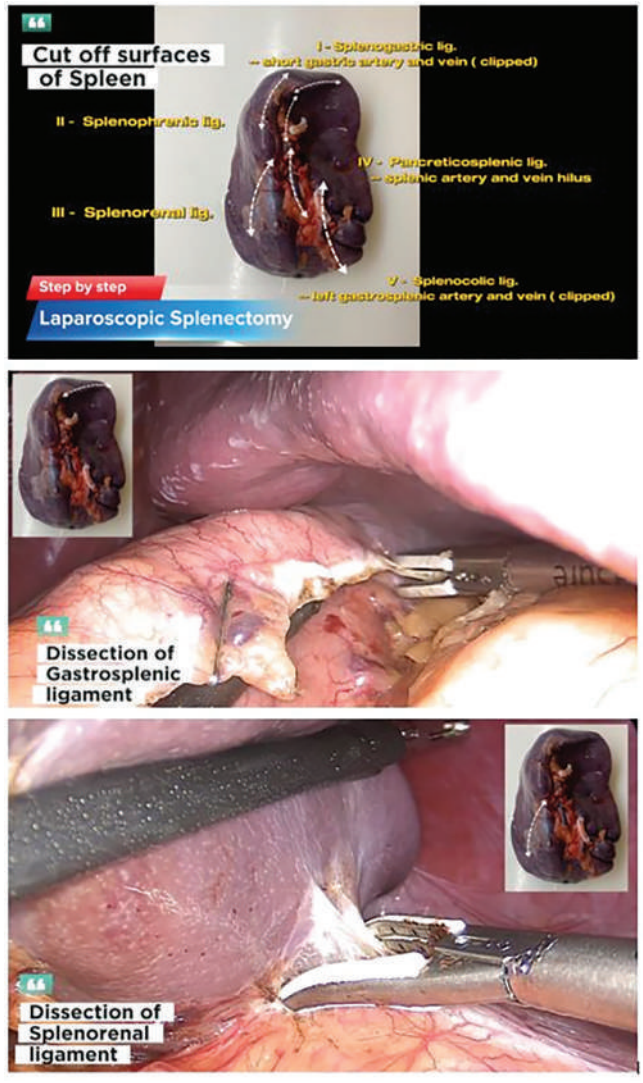


Figure 1. Hybrid educational visualization showing splenic ligament anatomy on the specimen and corresponding intraoperative dissection during laparoscopic splenectomy.

Table 2. Anatomical recognition scores-pre-training

Variable (0-10)	Total	≤2 years	>2 years	p-value
Gastrosplenic ligament	5.1±2.1	4.3±1.9	6.0±1.9	0.008
Splenorenal ligament	5.0±2.3	4.1±2.0	6.1±2.1	0.004
Splenocolic ligament	6.0±1.8	5.4±1.7	6.6±1.7	0.031
Splenophrenic ligament	5.3±2.2	4.6±2.1	6.0±2.1	0.048
Pancreaticosplenic ligament	5.6±2.0	5.2±2.1	6.0±1.9	0.214
Total performance (%)	57.8±11.9	52.0±10.8	64.2±9.1	<0.001

Table 3. Anatomical recognition scores-post-training

Variable (0-10)	Total	≤2 years	>2 years	p-value
Gastrosplenic ligament	8.7±1.5	8.5±1.6	8.9±1.3	0.412
Splenorenal ligament	8.6±1.6	8.4±1.7	8.8±1.4	0.356
Splenocolic ligament	8.1±1.9	8.0±2.0	8.3±1.8	0.598
Splenophrenic ligament	8.4±1.4	8.3±1.5	8.6±1.2	0.477
Pancreaticosplenic ligament	7.8±1.8	7.6±1.9	8.1±1.6	0.332
Total performance (%)	82.0±9.6	81.0±10.4	84.0±8.1	0.219

Table 4. Pre- and post-training change scores (Δ)

Variable (Δ point)	Total	≤2 years	>2 years	p-value
Gastrosplenic ligament	3.6±2.4	4.2±2.5	2.9±2.1	0.041
Splenorenal ligament	3.6±2.6	4.3±2.6	2.8±2.3	0.032
Splenocolic ligament	2.1±2.3	2.6±2.4	1.6±2.0	0.118
Splenophrenic ligament	3.1±2.5	3.7±2.6	2.4±2.2	0.047
Pancreaticosplenic ligament	2.2±2.4	2.4±2.6	2.0±2.1	0.592
Total performance (Δ, %)	24.2±	29.0±	18.8±8.9	0.003

Table 5. Evaluation of the training method (0-10)

Evaluation	Total	≤2 years	>2 years	p-value
Üç boyutlu anatomik algı	8.9±1.10	9.3±0.7	8.5±1.1	0.006
Cerrahi diseksiyon hatlarını anlama	9.0±0.9	9.2±0.8	8.7±1.0	0.041
Diğer laparoskopik girişimlere uygulanabilirlik	8.7±1.1	8.9±1.2	8.5±1.0	0.231

*: Veriler ortalama ± standart sapma olarak sunulmuştur. Gruplar arası karşılaştırmalar independent t-testi ile yapılmıştır.
**: Değerlendirmeler, 0-10 arası sayısal derecelendirme ölçek kullanılarak yapılmıştır.

[V-075]

Pilot application of EPSiT in the office setting

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Objective: Endoscopic pilonidal sinus treatment (EPSiT) was introduced approximately a decade ago and has rapidly gained acceptance in clinical practice. Traditionally, the procedure is performed using the Meinero fistuloscope, an 8-degree angled instrument measuring 3.2×4.8 mm in diameter and 18 cm in length, connected to a videoendoscopy unit. The fundamental rationale of EPSiT is the identification of the sinus anatomy under direct visualization, complete removal of hair and debris, and effective ablation. Beyond the advantages of direct vision, the ability to perform the procedure under local anesthesia, avoidance of a large surgical incision, same-day discharge, low risk of major complications, and recurrence rates comparable to other techniques have contributed to its clinical value. The concept of this study arose from the hypothesis that a fiber operoscope, originally designed for office-based procedures such as hysteroscopy or cystoscopy, could be applied to EPSiT with the same rationale while offering additional practical benefits.

Material and Methods: The fiber operoscope used is a self-contained device powered by a disposable battery, equipped with an integrated LCD screen and handle. It has a 4.2 mm diameter, a working length of 310 mm, and a central 5.5 Fr working channel. A miniature camera and cold light source are located at its tip, and two separate ports allow infusion and drainage. Unlike the classical fistuloscope, it functions independently without requiring an external unit, while images can be simultaneously transmitted to a standard monitor or recorded.

Results: The procedure begins with the patient in the prone position, the buttocks separated by adhesive bands, followed by local anesthesia. The external openings of the pilonidal sinus are enlarged using a 4 mm punch biopsy blade, and the diagnostic phase proceeds as in classical EPSiT. Isotonic saline (0.9% NaCl) is infused through the scope to explore the sinus cavity, secondary tracts, and any abscesses. In the operative phase, hair and debris are removed with forceps introduced through the working channel. Additional sinus openings are similarly explored, irrigated, and cleaned. Tracts are curetted with a brush and ablated using a ball-tip cautery. Final inspection ensures complete clearance and adequate ablation before termination of the procedure.

Conclusion: This pilot application suggests potential advantages over conventional EPSiT. The absence of operating room requirements, ease of use, and high-resolution imaging support the feasibility of EPSiT as an office-based procedure. Furthermore, integration with classical microsinusectomy may enhance tract clearance and improve overall efficacy. Further studies are warranted to evaluate these potential benefits.

Keywords: Pilonidal disease, EPSiT, office procedures

[V-076]

Surgical repair of Grade 3c and 4 obstetric anal sphincter injuries

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Objective: Obstetric anal sphincter injuries (OASIS) are a frightening complication of vaginal delivery. According to the Sultan classification, Grade 3c and 4 injuries involve sphincter involvement. When early intervention and appropriate anatomical repair are not performed, these injuries are associated with long-term anal incontinence. The purpose of this video presentation is to demonstrate the systematic and layered anatomical repair technique used in grade 3c and grade 4 OASIS through two case studies.

Material and Methods: In two patients consulted after vaginal delivery, clinical and digital rectal examinations revealed grade 3c injury involving the sphincter complex in one case and grade 4 injury involving the sphincter complex along with the rectal mucosa in the other case. The patients were taken to the operating room under emergency conditions and underwent surgery.

Results: Patients were placed in the lithotomy position to allow perineal exploration. In the patient with a grade 4 injury, the rectal mucosa and wall were identified, followed by identification of the external and internal anal sphincter muscle fibers. Dissection and exposure of the sphincter ends, repair with overlapping sphincteroplasty, perineal body reconstruction, and repair of the perineal muscles and vagina were performed. After checking with a rectal touch and air test, the subcutaneous tissue and skin were closed according to the appropriate plan, and the repair was completed. In the stage 3c patient, the steps mentioned above were performed exactly as described, except for rectal repair. No postoperative complications developed, and the patients were discharged on the second day. No continence problems were observed in the patients followed up at 3 months.

Conclusion: In grade 3c and 4 OASIS, layered repair performed early on, under operating room conditions and in accordance with anatomical principles, is the fundamental approach for preserving anal continence. The video presented offers an applicable and instructive surgical approach for these rare but severe OASIS cases.

Keywords: Obstetric anal sphincter injury, sphincteroplasty, Sultan classification

[V-077]

Robotic right hemicolectomy

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Keywords: Colon cancer, robotic surgery, right hemicolectomy

[V-078]

Ex situ liver with inferior vena cava resection and autotransplantation for hepatic alveolar echinococcosis infiltrating the vena cava

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Objective: Alveolar echinococcosis is a rare, parasitic disease that behaves locally similar to a malignant tumor. Due to its infiltrative nature, it may invade major vascular and biliary structures, resulting in technically challenging or conventionally unresectable disease. In advanced cases, advanced hepatobiliary and liver transplantation techniques may be required for cases involving hilar vascular and biliary structures, inferior vena cava (IVC), hepatic vein confluence. In these scenarios *ex situ* liver resection and autotransplantation provide an alternative for achieving curative resection in selected patients.

Material and Methods: Here we present a case to demonstrate the feasibility and surgical strategy of *ex situ* liver resection and autotransplantation in an otherwise unresectable case of advanced hepatic alveolar echinococcosis. Alveolar echinococcosis infiltrating the vena cava, hepatic vein confluence.

Results: A 63-year-old male with chronic hepatitis B presented with abdominal pain aggravated by the Valsalva maneuver. Imaging revealed a cystic-calcific infiltrative lesion involving segments IV, VII, and VIII of the liver, causing obliteration of the right and middle hepatic veins and significant narrowing of the retrohepatic IVC and left hepatic vein, resulting in atrophy in the right lobe and hypertrophy and congestion in the left lobe of the liver. The adjacent diaphragm was also invaded. Total hepatectomy, retrohepatic IVC resection, and partial diaphragmatic resection were performed. A dacron interposition graft was used for vena cava reconstruction, followed by portocaval shunt reconstruction. After backtable resection, quilt venoplasty was performed using autologous vein patch for intraparenchymal left hepatic vein. Liver graft was implanted on IVC interposition graft. Portal vein, hepatic artery, and duct-to-duct bile anastomosis was made. The diaphragm was reconstructed using a prosthetic mesh. The postoperative course was uneventful, and the patient was discharged on postoperative day seven.

Conclusion: *Ex situ* liver resection and autotransplantation is a safe and feasible surgical option that can provide curative treatment in selected patients with advanced alveolar echinococcosis deemed conventionally unresectable, when performed in experienced centers.

Keywords: Alveolar echinococcosis, autotransplantation, *ex situ* liver resection

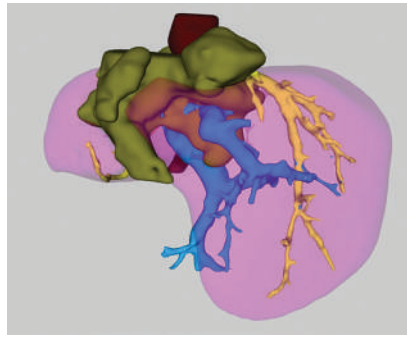


Figure 1.

[V-079]

A foreign body migrating to the hepatoduodenal area following silent duodenal perforation mimicking malignancy: A laparoscopic approach

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Objective: Most gastrointestinal foreign bodies pass spontaneously without causing complications. However, long, thin, and sharp objects such as toothpicks carry a high risk of perforation and may rarely lead to serious intra-abdominal complications. Due to its retroperitoneal location and close anatomical relationship with adjacent organs, duodenal perforations may occur without free intraperitoneal contamination, resulting in silent clinical courses accompanied by localized inflammation and migration. In such cases, pseudotumoral masses mimicking malignancy may develop and lead to misleading findings on advanced imaging modalities. In this study, we present a rare case of a foreign body migrating to the hepatoduodenal area following silent duodenal perforation and discuss the diagnostic and therapeutic role of laparoscopic surgery.

Material and Methods: A 67-year-old female patient with a history of intermittent right upper quadrant pain for several years was evaluated. Ultrasonography, magnetic resonance imaging, and PET-CT revealed a hypermetabolic mass lesion adjacent to the inferomedial segment of the left hepatic lobe and the duodenum, raising suspicion of malignancy. Due to increased FDG uptake on PET-CT, cholangiocarcinoma was considered among the primary differential diagnoses. After interventional radiology suggested the possibility of a foreign body, laparoscopic surgical exploration was planned for diagnostic and therapeutic purposes.

Results: Laparoscopic exploration revealed dense inflammatory adhesions between the duodenum and the liver. Careful sharp and blunt dissection exposed a foreign body migrating from the duodenum into the hepatoduodenal area. The foreign body was identified as a toothpick and was completely removed. A leak test using patent blue dye revealed no evidence of duodenal leakage. The procedure was completed without complications, and the patient had an uneventful postoperative course.

Conclusion: Duodenal foreign bodies may rarely cause silent perforation and migration, leading to pseudotumoral lesions that mimic malignancy on imaging studies. Foreign body migration should be considered in the differential diagnosis of unexplained hepatoduodenal masses with malignant features. Consistent with the literature, laparoscopic surgery provides a safe and effective minimally invasive approach, offering both accurate diagnosis and definitive treatment in such cases.

Keywords: Foreign body, duodenum, laparoscopy

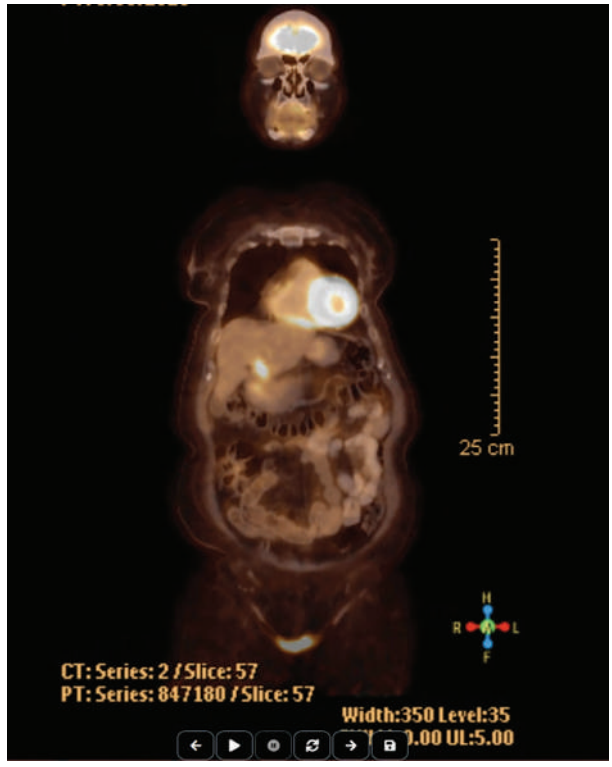


Figure 1. FDG PET image of the tumor.



Figure 2. Extracted foreign body (toothpick).

A toothpick identified during laparoscopic exploration, migrating from the duodenum to the hepatoduodenal area, and completely removed.

[V-081]

Median arcuate ligament syndrome (MALS): A case report and literature review using a laparoscopic decompression approach

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Objective: Median arcuate ligament syndrome (MALS) is a rare vascular syndrome resulting from extrinsic compression of the celiac artery by the median arcuate ligament at the diaphragmatic hiatus. Typical clinical findings include postprandial epigastric pain, weight loss, nausea, and gastrointestinal complaints. Diagnosis is usually based on imaging methods such as CTA (CT angiography) and duplex ultrasonography, and diagnosis is often delayed. This video report aims to present the surgical steps of the laparoscopic median arcuate ligament decompression technique performed in a patient diagnosed with MALS and to review the current literature.

Material and Methods: In the presented case, the patient, who was followed up with prolonged postprandial pain and weight loss, was diagnosed with MALS after detailed radiological evaluation. Using a laparoscopic approach, the gastrohepatic ligament was opened to expose the celiac trunk; the median arcuate ligament and perivascular nerve fibers were dissected, completely eliminating the extrinsic compression on the celiac artery.

Results: No complications developed during laparoscopic decompression, and the patient showed rapid postoperative recovery. In the postoperative period, the patient's complaints significantly decreased, and a control CT angiogram revealed a marked reduction in the external compression on the celiac artery. The patient was discharged without complications.

Conclusion: The clinical and radiological improvement findings are consistent with the results of laparoscopic MALS surgery reported in the literature. Current studies show that the laparoscopic approach provides low morbidity, rapid recovery, and high symptom control rates. This case supports that laparoscopic median arcuate ligament decompression is a safe and effective treatment option with appropriate patient selection.

Keywords: Median arcuate ligament syndrome, laparoscopic decompression, celiac artery compression

[V-082]

Transanal transection single-stapled (TTSS) anastomosis in rectal cancer: Video presentation and evidence-based evaluation of the laparoscopic approach

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Objective: Ensuring a safe distal margin and reducing the risk of anastomotic leakage are key determinants of surgical success in distal rectal cancer. The aim of this video report is to present the laparoscopic transanal transection single-stapled (TTSS) anastomosis technique performed in a patient with rectal cancer located 2 cm proximal to the anal canal who underwent surgery after total neoadjuvant therapy (TNT), and to evaluate the advantages of this method over conventional very low anterior resection and manually performed coloanal anastomoses in light of the literature.

Material and Methods: Laparoscopic total mesorectal excision was performed in a patient with a tumor lesion 2 cm proximal to the anal canal who had completed the TNT protocol. The distal rectum was transected in a controlled manner via the transanal route, and a TTSS anastomosis was created using a single stapler line. Anastomotic integrity was assessed intraoperatively, and the surgical steps were presented on video.

Results: The surgical procedure was completed without complications. Creating an anastomosis using a single stapler line with the TTSS technique eliminated the risk of ischemic areas and leaks associated with multiple stapler lines seen in classic ultra-low anterior resection. No intraoperative leaks were observed in the anastomosis line. Compared to manually performed coloanal anastomoses, the TTSS technique provided advantages in terms of shorter operation time, less pelvic dissection, a more homogeneous anastomosis line, and preservation of sphincter function. The patient had an uneventful postoperative course, with no anastomotic leakage or major morbidity observed.

Conclusion: The TTSS coloanal anastomosis technique in ultra-low rectal cancer surgery is a rational approach that aims to create a more homogeneous anastomosis line by eliminating staple line intersections. The TTSS technique applied with laparoscopic TME, presented in this video poster, is considered a safe alternative in terms of technical feasibility and early clinical outcomes. Consistent with the current literature, the TTSS approach has a noteworthy potential to reduce the risk of anastomotic leakage; however, prospective and randomized studies with high-level evidence, including long-term oncological and functional outcomes, are needed to demonstrate the true superiority of this method over the standard double-stapled technique.

Keywords: Rectal cancer, transanal transection single-stapled (TTSS), anastomosis laparoscopic, total mesorectal excision (TME)

[V-083]

Endoscopic resection in gastric gastrointestinal stromal tumors-video presentation

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Objective: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the gastrointestinal tract and may arise at various locations, most frequently in the stomach. With the widespread use of endoscopy and endoscopic ultrasonography (EUS), an increasing number of gastric GISTs are detected at an early stage, allowing complete resection. Laparoscopic surgery is considered the standard treatment for gastric GISTs smaller than 5 cm. Compared with laparoscopic surgery, endoscopic resection has been shown to provide similar surgical success and postoperative complication rates, while offering advantages such as reduced intraoperative blood loss, shorter operative time, and shorter hospital stay. Therefore, endoscopic resection has been accepted as an alternative treatment option for gastric GISTs originating from the muscularis propria.

Material and Methods: A 44-year-old female patient underwent endoscopy due to dyspeptic complaints, which revealed a lesion measuring approximately 1.5 cm located on the greater curvature at the corpus–antrum junction. Abdominal CT demonstrated an intraluminal mass of approximately 2 cm at the same location without evidence of invasion. No additional intra-abdominal pathology was detected. The patient underwent endoscopic submucosal resection. Histopathological examination was consistent with GIST, with a tumor size of 3 cm, mitotic count of 3/50 HPF, and no necrosis or atypia.

Results: GISTs are the most common mesenchymal neoplasms arising from the muscularis propria of the stomach and are malignant in approximately 10-30% of cases. According to NCCN guidelines, all GISTs larger than 2 cm should be resected. For GISTs smaller than 2 cm without high-risk features on EUS, endoscopic surveillance may be considered; however, long-term follow-up difficulties and the risks associated with repeated endoscopy limit this approach.

Conclusion: Endoscopic resection is an effective and safe treatment option for selected patients with gastric GISTs, providing comparable surgical success and complication rates, along with reduced operative time, intraoperative blood loss, and length of hospital stay.

Keywords: Endoscopic resection, gastrointestinal stromal tumor



Figure 1. CT image.

[V-084]

A case of celiac-SMA stenosis/chronic mesenteric ischemia treated with aorta-celiac aorta-SMA bypass-case report

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Objective: Chronic mesenteric ischemia (CMI) is a rare and underdiagnosed clinical condition associated with postprandial pain due to progressive mesenteric artery narrowing. However, it should not be overlooked that it is more common with age. This condition, explained by inadequate perfusion of the gastrointestinal tract, most often results from atherosclerosis. We aim to share our experience with a case, of which there are very few examples in the literature, of a patient who experienced impaired blood supply and dramatic weight loss following stenosis of the celiac and superior mesenteric arteries, and who underwent surgical treatment with simultaneous bypass surgery between the aorta, celiac, and superior mesenteric arteries.

Material and Methods: A 59-year-old male patient with a medical history of coronary artery disease presented with severe pain or episodes of severe diarrhea approximately half an hour after oral intake for about two years. Abdominal CT angiography revealed occlusion of the celiac artery and superior mesenteric artery, and endovascular intervention was deemed unsuitable. Following examination and investigations, surgical treatment was planned.

Results: The patient underwent surgery under general anesthesia. Following routine abdominal exploration, access to the bursa omentalis was gained through the medial aspect of the lesser curvature, and dissection was continued to expose the hiatal region, celiac trunk, and surrounding areas. The gastrocolic ligament was opened to expose the pancreas and suprapancreatic area. After identifying the celiac artery and related structures, the superior mesenteric artery was exposed in the inframecolic space with sharp dissection. Subsequently, a retropancreatic tunnel was created with the help of dissections performed on the supra- and infrapancreatic edges, and prepared to allow the passage of an 8 mm Dacron graft. After aortotomy, end-to-end anastomosis of the aorta and graft, followed by end-to-end graft-SMA anastomosis, and finally end-to-side anastomosis of the celiac graft were performed using 6.0 prolene sutures. Following general control and hemostasis, the patient experienced no significant problems during follow-up in the ward, and oral tolerance was observed. The patient was discharged after recovering.

Conclusion: Simultaneous aorta-celiac aorta-SMA bypass surgery is quite rare in the literature. It may be preferred in patients where interventional approaches have failed or are unsuitable. It can be safely performed in patients with significant symptoms of chronic mesenteric ischemia, allowing them to return to optimal nutritional status, thus leading to positive outcomes in terms of psychology and quality of life.

Keywords: Aorta-coeliac by-pass, chronic mesenteric ischemia, coeliac artery occlusion, mesenteric ischemia

[V-085]

Central pancreatectomy and pancreaticogastrostomy for a cystic tumor located at the pancreatic head/neck: A video-assisted surgical technique presentation

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Objective: Central pancreatectomy is a parenchyma-sparing surgical option for selected benign and low-grade malignant tumors located at the pancreatic head-neck junction. In contrast to standard pancreaticoduodenectomy, this approach preserves pancreatic endocrine and exocrine function while maintaining gastrointestinal continuity. Various reconstruction techniques have been described following resection. In this report, we present our surgical reconstruction technique using pancreaticogastrostomy after central pancreatectomy, accompanied by an operative video.

Material and Methods: A 67-year-old female presented with epigastric abdominal pain to the General Surgery clinic of Ondokuz Mayıs University Faculty of Medicine. She had no comorbidities or prior surgical history. Body mass index was 27 kg/m^2. Laboratory parameters, including serum amylase, lipase, and CA 19-9, were within normal limits. contrast-enhanced computed tomography revealed a 38 × 22 mm multiloculated cystic lesion with a solid component at the pancreatic head-neck junction. Distal to the lesion, irregularity of the main pancreatic duct and focal dilatation up to 5 mm were observed. Magnetic resonance cholangiopancreatography demonstrated no communication between the cystic lesion and the main pancreatic duct. Endoscopic ultrasonography showed normal cyst fluid glucose, carcinoembryonic antigen, and amylase levels. The patient underwent open central pancreatectomy with preservation of the duodenum. Intraoperative frozen-section analysis confirmed negative margins and absence of malignancy. The proximal pancreatic stump was closed with a stapler. Reconstruction was achieved via double-layer duct-to-mucosa pancreaticogastrostomy between the distal pancreatic remnant and the posterior gastric wall. The postoperative course was uneventful, and the patient was discharged on postoperative day five.

Results: Final histopathology confirmed serous cystic neoplasm.

Conclusion: In selected patients with benign or low-grade malignant lesions at the pancreatic head-neck junction, central pancreatectomy combined with pancreaticogastrostomy represents a safe and function-preserving alternative to more extensive resections. This technique maintains gastrointestinal continuity while preserving pancreatic parenchyma and may also be adapted to minimally invasive approaches in experienced centers.

Keywords: Pancreas, central pancreatectomy, pancreaticogastrostomy

[V-086]

New oncoplastic technique in tumors of the lower inner quadrant: Dogan Technique personel procedure

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Objective: Oncoplastic techniques defined in breast cancer treatment not only expand the indications for breast-conserving surgery but also enable improved cosmetic outcomes. Breast tumors located in the lower inner quadrant, however, pose additional challenges for oncoplastic surgery due to the scarcity of breast tissue and the frequent need for skin resection. In our study, we defined a new oncoplastic technique that prioritizes patient satisfaction for tumors in the lower inner quadrant, aiming to overcome the oncoplastic challenges associated with tumors in this location.

Material and Methods: Preoperatively the medial and inferior borders are determined using the breast fold inferiorly and the sternum medially. A triangular pyramid is designed with its base resting on the breast fold. The intersection of the apex of the triangular pyramid with the superior border of the tumor is one of the key points of the drawing. This defined pyramid is divided into two parts. After division, a parallelogram and a triangle are obtained. The remaining triangular area is where the de-epithelialization process is performed. The remaining parallelogram is designed to be the resection area. Following resection, a glandular flap is created in the superior region. To completely close the resulting defect, the glandular flap is sutured to the superior part of the de-epithelialized area. The incision is sutured along the superior skin line and the inferior border of the de-epithelialized area. This creates a hidden suture line in the inframammary fld.

Results: Multiple techniques are described for lower quadrant tumors. The Dogan Technique can be considered an important alternative in the literature at this point. In the postoperative period, the appropriate incision scar on the fold and the absence of another incision on the remaining breast tissue support cosmetic satisfaction. In tumors of the inner quadrant, the need for centralization in NAK arises in incisions made in the vertical plane, but in incisions made in the horizontal plane, such as our incision, the natural position of NAK is preserved. Not performing surgical procedures on the areola and surrounding area eliminates the risk of ischemia and hypesthesia for NAK. This differs from studies in the literature on this subject.

Conclusion: We applied this technique to five of our patients with lower inner quadrant tumors (2025-2026). We are very satisfied with the oncological and aesthetic results. We anticipate that this technique will be recognized in the literature as a safe, effective, and widely used oncoplastic technique in the future.

Keywords: Oncoplastic, tumors of the lower inner quadrant, Dogan Technique



Figure 1. Preoperative drawing.

Determining resection and de epithelialization areas based on tumor location post-resection appearance.



Figure 2. Resection area and de epithelialization area, free glandular flap.

[V-087]

Laparoscopic creation of permanent access for recurrent benign biliary stricture after open whipple procedure

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Objective: Pancreatoduodenectomy is a highly invasive surgery. Although mortality has decreased to approximately 1%, postoperative complications remain common. While early complications have decreased, late-onset benign hepaticojejunostomy stricture (BHS) remains a significant clinical issue. BHS causes recurrent cholangitis, intrahepatic stones, jaundice, and liver abscess, requiring invasive treatments. Thanks to advanced equipment, endoscopic retrograde cholangiography (ERC) is increasingly successful even in altered anatomies. However, when endoscopic access is impossible, alternative permanent surgical strategies are needed. In this video presentation, we present the laparoscopic creation of a permanent access loop to facilitate ERC in a patient who developed a biliary stricture following an open Whipple procedure.

Material and Methods: A 75-year-old female patient presented with late-onset complications following a Whipple procedure performed for benign reasons in 2005. Her medical history included recurrent cholangitis and liver abscesses since 2007. Throughout this period, multiple percutaneous transhepatic cholangiography interventions, balloon dilatations, and "stent-in-stent" metallic biliary stent placements were performed at external centers. Due to increasing symptoms over the last year, double-balloon enteroscopy was attempted; however, the hepaticojejunostomy (HJ) anastomosis could not be reached due to excessive looping and a long afferent limb. Interventional radiological assessment revealed that the stents were completely occluded and lithogenic. To reduce the morbidity of recurrent invasive procedures and ensure permanent endoscopic access, the laparoscopic creation of a permanent access loop was planned for the patient.

Results: Pneumoperitoneum was established via an open technique for camera trocar insertion; intra-abdominal exploration revealed dense adhesions secondary to the previous Whipple procedure. Following meticulous adhesiolysis, the segment identified as the biliopancreatic limb was mobilized from the transverse colon mesentery and surrounding structures. Intraoperative endoscopy was performed, advancing through the gastroenterostomy site. However, endoscopic air insufflation did not result in dilatation of the targeted loop, and laparoscopic transillumination of the endoscope light was localized at a different site, allowing for the correct identification of the true afferent limb. After identifying the appropriate segment, a facial defect was created in the right upper quadrant, and the prepared jejunal loop was fixed to this area as a "permanent access loop." To facilitate future radiological interventions, the loop was marked with a radiopaque band.

Conclusion: Managing benign biliary strictures after an open Whipple is challenging. Laparoscopic creation of a permanent access loop in this altered anatomy is a rarely reported strategy. The created permanent access loop provides a comfortable gateway for percutaneous or endoscopic interventions, offering a minimally invasive and effective solution in stricture management.

Keywords: Access loop, benign biliary stricture, laparoscopic surgery, pancreatoduodenectomy

[V-088]

A breath to acute mesenteric ischemia: Case series of embolectomy of the superior mesenteric artery

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Objective: Acute mesenteric arterial occlusion is a general surgical emergency with high morbidity and mortality, accounting for approximately 65-97% of acute mesenteric ischemia. When caused by embolism, it usually occurs 3 to 10 centimeters distally to the superior mesenteric artery (SMA) origin point.

Material and Methods: In this case series, we evaluated the outcomes of SMA embolectomy performed following explorative laparotomy in 6 patients who presented to the emergency department with acute mesenteric ischemia secondary to SMA embolism.

Results: A total of six patients, 3 males and 3 females, with a mean age of 67.8 years (range: 43-88 years), were included in this study. All patients presented to the emergency department with acute abdominal pain. Computed tomography revealed occlusion at the origin or mid-segment of the superior mesenteric artery (SMA) in all cases. Laboratory evaluation demonstrated a mean white blood cell count of 15.5×10^3/μL (range: $9\text{-}27\times10^3$/μL) and a mean serum lactate level of 2.9 mmol/L (range: 1.49-5.2 mmol/L). All patients were taken to surgery due to acute mesenteric ischemia. Preoperatively, three patients were evaluated by interventional radiology, in two cases no endovascular intervention was deemed appropriate, one patient underwent an endovascular attempt without effective results. All patients subsequently underwent emergency surgical intervention. After assessment of intestinal ischemia and necrosis, the SMA was exposed via a transperitoneal inframesocolic approach. The SMA and jejunal branches were isolated and looped, and SMA embolectomy was performed using a Fogarty catheter after arteriotomy. Intestinal perfusion was then reassessed, necrotic bowel segments were resected, and a planned second-look laparotomy was scheduled to evaluate potential ongoing ischemia. Postoperatively, 2 patients died before a second-look laparotomy could be performed. Two patients required additional bowel resection during the second-look, and at third-look exploration, no pathological findings were observed, allowing for abdominal closure. In the other 2 patients, no pathological findings were detected at second-look laparotomy, and the abdomen was successfully closed. The mean length of hospital stay was 8.5 days (range: 2-20 days). Two patients died on postoperative day 1. Although ischemia was initially controlled in four patients, two subsequently died due to sudden cardiac arrest on postoperative days 3 and 4, while two patients were discharged in good clinical condition.

Conclusion: Acute mesenteric ischemia, which is associated with high mortality, intraoperative SMA embolectomy may contribute to preservation of intestinal reserve and improved survival outcomes. Therefore, this is an effective treatment option in appropriately selected patients.

Keywords: Embolectomy, mesenteric ischemia, vasculary surgery, superior mesenteric artery

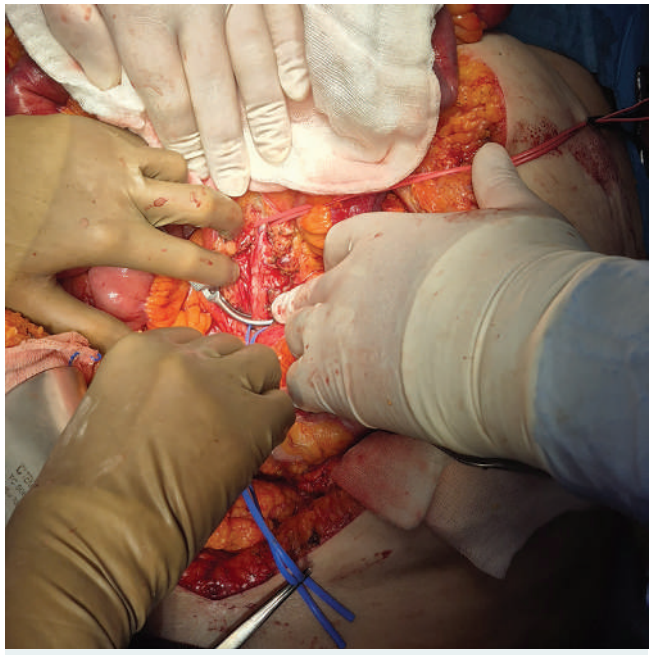


Figure 1. Superior mesenteric artery is exposed and looped.

Table 1. Patient distribution according to the results

	Age-gender	Computed-tomography	Interventional radiology	Operation	Mortality
Patient 1	59-Male	SMA proximally occluded	Ineffective procedure	Abdominal closure after second-look	Sudden cardiac arrest at postoperative day 4
Patient 2	69-Female	SMA occlusion at origin point	No intervention deemed appropriate	Abdominal closure after second-look	Sudden cardiac arrest at postoperative day 3
Patient 3	66-Male	SMA proximally occluded	No intervention deemed appropriate	Abdominal closure after third-look	Discharged
Patient 4	82-Female	SMA occlusion at origin point	-	Second-look couldn't performed	Exitus on postoperative day 1
Patient 5	43-Male	SMA proximally occluded	-	Abdominal closure after third-look	Discharged
Patient 6	88-Female	SMA mid-segment occlusion	-	Second-look couldn't performed	Exitus on postoperative day 1

[V-089]

Laparoscopic and thoracoscopic distal esophagectomy for distal esophageal adenocarcinoma: A video presentation

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Objective: Minimally invasive approaches have become increasingly common in the surgical management of distal esophageal adenocarcinoma with growing experience. Laparoscopic and thoracoscopic esophagectomy allows preservation of oncologic principles while potentially reducing surgical morbidity in appropriately selected patients. This video presentation demonstrates the technique of laparoscopic and thoracoscopic distal esophagectomy performed for distal esophageal adenocarcinoma.

Material and Methods: A patient with distal esophageal adenocarcinoma who was deemed suitable for surgery after preoperative evaluation underwent a minimally invasive approach. The abdominal phase was performed laparoscopically in the supine position. The omentum majus was dissected along the greater curvature, the gastrohepatic ligament was opened, and abdominal lymph node dissection was carried out. The left gastric artery was ligated and divided, and a gastric conduit was created. The staple line was reinforced with intracorporeal suturing. During the thoracoscopic phase, the esophagus was mobilized, the azygos vein was clipped and divided, and the gastric conduit was delivered into the thoracic cavity. Esophagogastric anastomosis was performed using a side-to-side technique with an endoscopic linear stapler.

Results: The procedure was completed successfully using a minimally invasive approach. No intraoperative complications were observed. The anastomosis was constructed safely, and the operation was completed under controlled conditions. The video clearly demonstrates the essential steps and technical aspects of the procedure.

Conclusion: Laparoscopic and thoracoscopic distal esophagectomy is a safe and effective surgical option for distal esophageal adenocarcinoma when performed by experienced teams. This video presentation highlights the feasibility of the minimally invasive approach and illustrates key technical steps of the procedure.

Keywords: Distal esophageal adenocarcinoma, esophagogastric anastomosis, laparoscopic esophagectomy, minimally invasive surgery, thoracoscopic esophagectomy

24th NATIONAL CONGRESS OF SURGERY ABSTRACTS

CASE PRESENTATIONS

[P-010]

A rare cause of ileus: Jejunal schwannoma

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Objective: Small bowel tumors constitute a small proportion of all gastrointestinal system tumors. Among benign mesenchymal tumors, schwannomas are quite rare. Although they are most commonly located in the stomach (approximately 60%) and the colon (approximately 3%), the development of schwannoma in the small intestine-particularly in the jejunal region-is uncommon. In this study, a case diagnosed with jejunal schwannoma presenting with mechanical ileus is presented in the context of the literature.

Material and Methods: A 61-year-old male patient presented to the emergency department with worsening abdominal pain that had persisted for several days. Contrast-enhanced abdominal computed tomography (CT) was reported as suggestive of ileus. With a preliminary diagnosis of mechanical ileus, emergency laparotomy was performed, during which a constricting mass was identified in the distal jejunum and resection with side-to-side anastomosis was carried out. Histopathological examination revealed a benign mesenchymal tumor consistent with a peripheral nerve sheath tumor (schwannoma). The postoperative course was uneventful, and the patient was discharged on postoperative day 8.

Results: Schwannomas are benign mesenchymal tumors originating from the peripheral nerve sheath. They are most commonly located in the stomach, whereas small bowel involvement is rare and jejunal localization is particularly uncommon; therefore, they are often overlooked in the differential diagnosis. Jejunal schwannomas usually grow slowly and may remain asymptomatic for long periods. When symptomatic, they present with nonspecific findings such as abdominal pain, chronic constipation, occult gastrointestinal bleeding, or anemia. Acute mechanical small bowel obstruction is rare and usually requires emergency surgery. In our case, a history of chronic constipation one year prior supports the insidious nature of these tumors. Radiological findings are non-specific. Contrast-enhanced CT may show focal bowel wall thickening, an intramural mass, or proximal bowel dilatation; however, these findings overlap with gastrointestinal stromal tumors (GIST), adenocarcinomas, and lymphomas. Therefore, careful small bowel evaluation is essential in patients with persistent or unexplained gastrointestinal symptoms. Definitive diagnosis relies on histopathological and immunohistochemical examination. S-100 positivity supports schwannoma, while CD117 negativity is critical for excluding GIST. Complete surgical resection is curative with a low recurrence risk. Our patient recovered without recurrence during one-year follow-up.

Conclusion: Jejunal schwannomas are very rare tumors. Because they may clinically lead to ileus, it is important to consider them in the differential diagnosis, particularly in cases of unexplained small bowel obstruction.

Keywords: Benign mesenchymal tumor, GIS schwannoma, mechanical bowel obstruction



Figure 1. Upright abdominal radiograph demonstrating prominent air-fluid levels in the ileal loops; absence of gas in the distal colon is consistent with mechanical bowel obstruction.

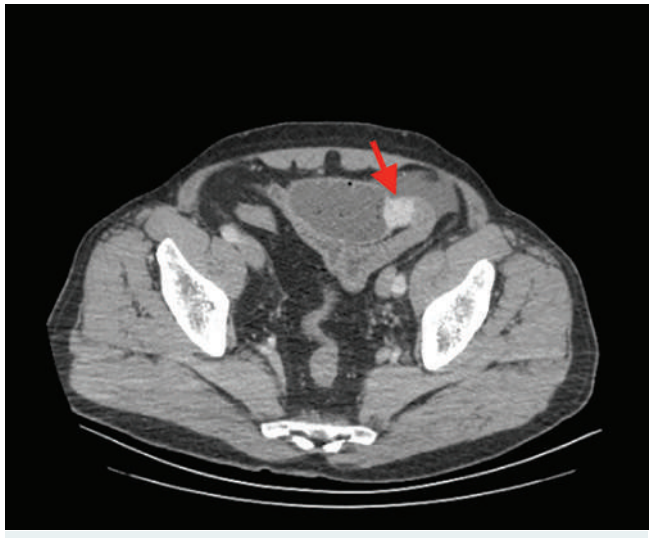


Figure 2. Contrast-enhanced abdominal CT (axial view) showing a transition zone at the level of the distal jejunum with marked dilatation of the proximal small bowel loops.



Figure 3. Contrast-enhanced abdominal CT obtained one year prior to presentation (axial view): retrospective evaluation reveals focal jejunal wall thickening causing partial luminal narrowing.

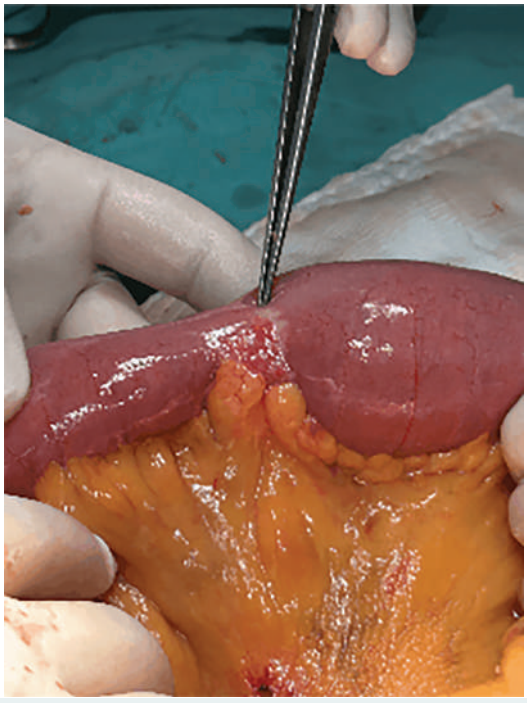


Figure 4. Intraoperative image showing an intramural mass lesion causing luminal narrowing of the distal jejunum.

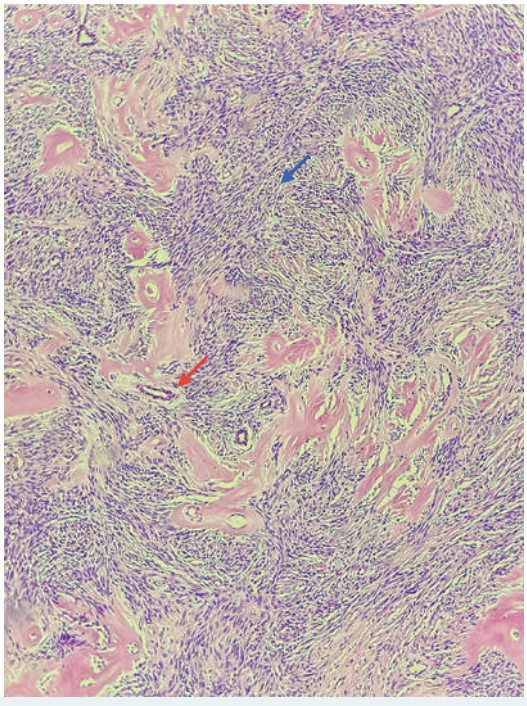


Figure 5. Spindle-shaped Schwannian cells with wavy nuclei arranged in short fascicles within a fibrohyalinized stroma (H&E, ×200).

[P-012]

A rare cause of recurrent small intestine obstruction: Well-differentiated ileal neuroendocrine tumor

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Objective: Small intestine neuroendocrine tumors (NETs) are one of the common subtypes of gastrointestinal neuroendocrine neoplasms. Those located in the ileum, in particular, may remain asymptomatic for a long time due to their slow growth and submucosal localization. Clinical findings are generally nonspecific. Diagnosis is often made when complications such as mechanical ileus or mesenteric fibrosis develop. Therefore, in patients presenting with recurrent ileus attacks, small bowel NETs should always be considered in the differential diagnosis, despite their rarity.

Material and Methods: The clinical course, imaging findings, surgical approach, and histopathological results of a 52-year-old female patient presenting with recurrent mechanical ileus attacks were retrospectively evaluated.

Results: Contrast-enhanced abdominal computed tomography (CT) at the patient's initial presentation revealed findings consistent with ileus. The patient was managed conservatively and discharged after clinical improvement. Two months later, the patient presented again with complaints of severe abdominal pain, nausea, vomiting, and inability to pass gas or stool. An upright abdominal X-ray showed air-fluid levels. A current contrast-enhanced CT scan showed asymmetric wall thickening in a 2 cm segment of the ileal loop. A nodular lesion was detected in the adjacent mesenteric fatty tissue, and there was marked bowel dilatation proximally. The patient underwent surgery with a preliminary diagnosis of mechanical ileus. A mass lesion narrowing the intestinal lumen was observed approximately 100 cm proximal to the ileocecal valve. Segmental small bowel resection and primary anastomosis were performed. There were no complications in the postoperative period. The patient was discharged on the fifth day. Histopathological examination of the resection specimen was consistent with a well-differentiated NET.

Conclusion: In patients presenting with recurrent mechanical ileus attacks, especially when symptoms recur despite conservative treatment, small bowel NETs should be considered in the differential diagnosis. Segmental wall thickening on computed tomography and the presence of accompanying mesenteric nodular lesions are diagnostic indicators. Timely surgical resection ensures both a definitive diagnosis and successful clinical outcomes.

Keywords: Small intestine, mechanical ileus, neuroendocrine tumor, ileal tumor, bowel obstruction

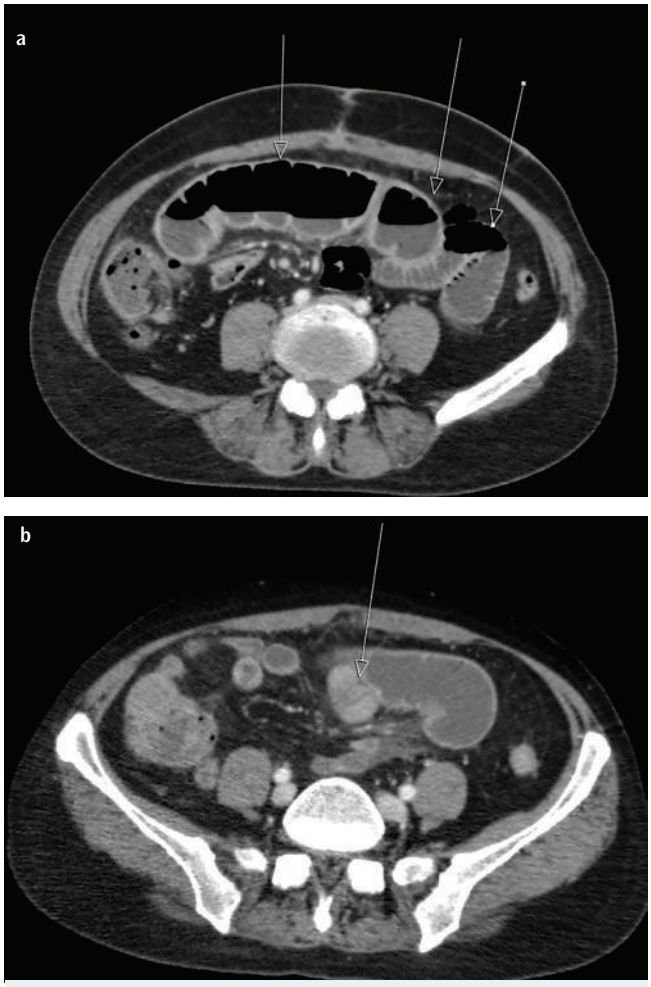


Figure 1. Ileus finding on contrast-enhanced abdominal CT scan. a) Findings of proximal ileus. b) Asymmetric wall thickness increase in ileal loops.

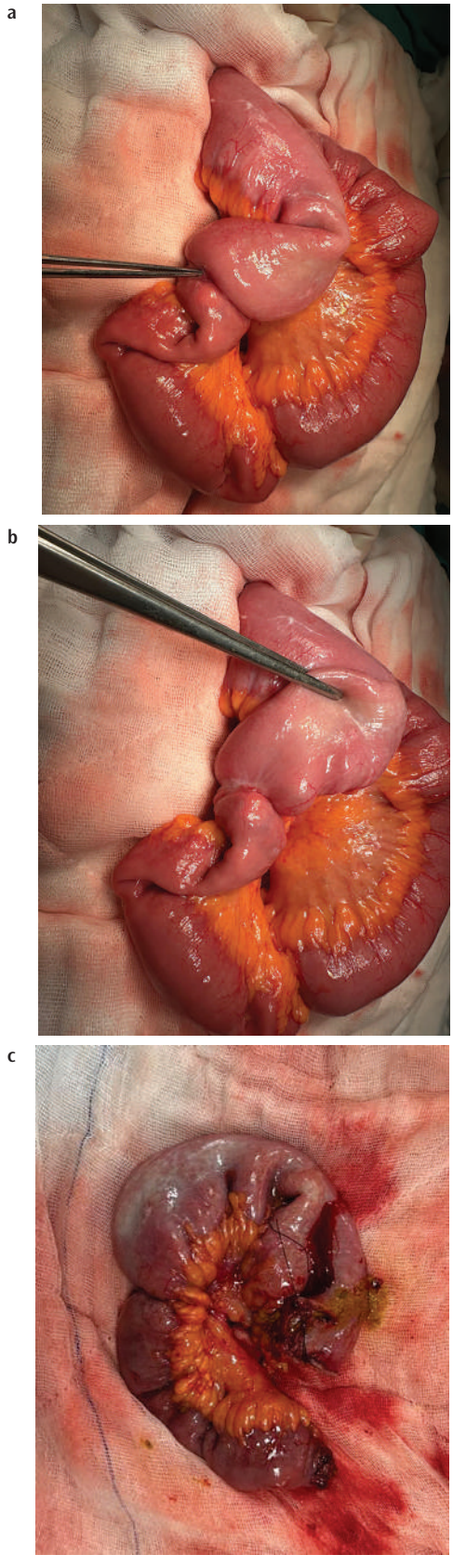


Figure 2. Intraoperative findings. **a)** Mass lesion that significantly narrows the intestinal lumen. **b)** Mass lesion significantly narrowing the intestinal lumen, proximal dilated. **c)** Segmental small bowel resection material.

[P-013]

A rare case report of a trichilemmal cyst extending from the anus to the scrotum

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Objective: A trichilemmal cyst is a generally benign cutaneous lesion originating from skin appendages, particularly hair follicles, and is filled with keratin. It occurs in approximately 5-10% of the population, with nearly 90% of cases located on the scalp due to the high concentration of hair follicles. Although trichilemmal cysts are almost always benign, rare cases may show proliferative activity, and malignant transformation with distant metastasis has been reported in approximately 2% of cases in the literature. Therefore, complete surgical excision with clear margins is the recommended treatment.

Results: A 47-year-old male patient presented to our clinic with swelling starting laterally to the anus and ending laterally to the scrotum. Magnetic resonance imaging revealed a subcutaneous cystic lesion approximately 20 cm in length, with no connection to the spermatic cord or scrotum. Microbiological culture of aspirated cyst fluid showed no pathogenic growth. Rectosigmoidoscopy demonstrated no communication between the lesion and the rectum. The lesion was completely excised with clear surgical margins and preservation of cyst integrity for diagnostic and therapeutic purposes. Histopathological examination confirmed a non-proliferative trichilemmal cyst. The postoperative course was uneventful, and no additional pathology was detected during follow-up.

Conclusion: Although trichilemmal cysts are most commonly located on the scalp, this case highlights the importance of considering trichilemmal cysts in the differential diagnosis of anal and perianal masses. Definitive diagnosis relies on histopathological examination following complete surgical excision with clear margins.

Keywords: Trichilemmal cyst, puborectal cyst, anal region cyst

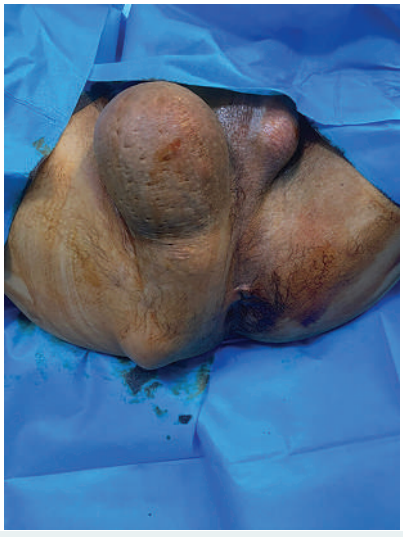


Figure 1. Image of the mass before excision.



Figure 2. Macroscopic image of the mass.

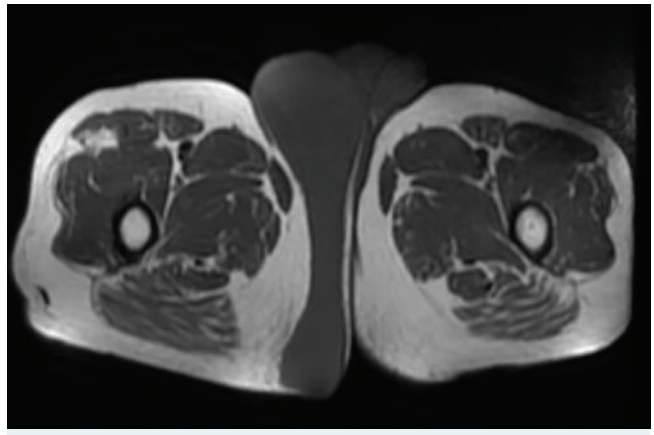


Figure 3. MRI image of the mass.

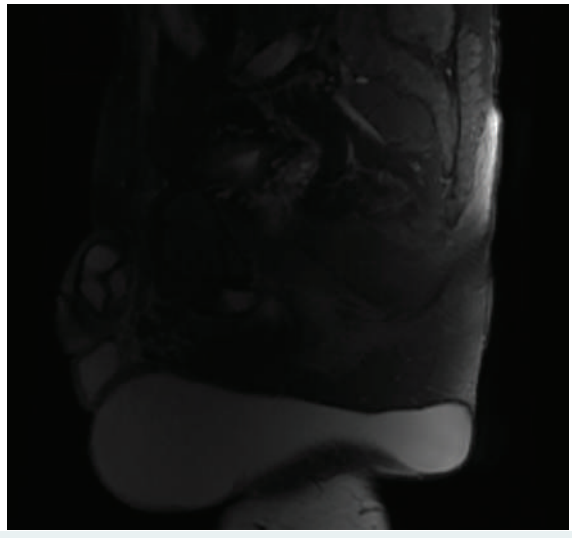


Figure 4. MRI image of the mass.

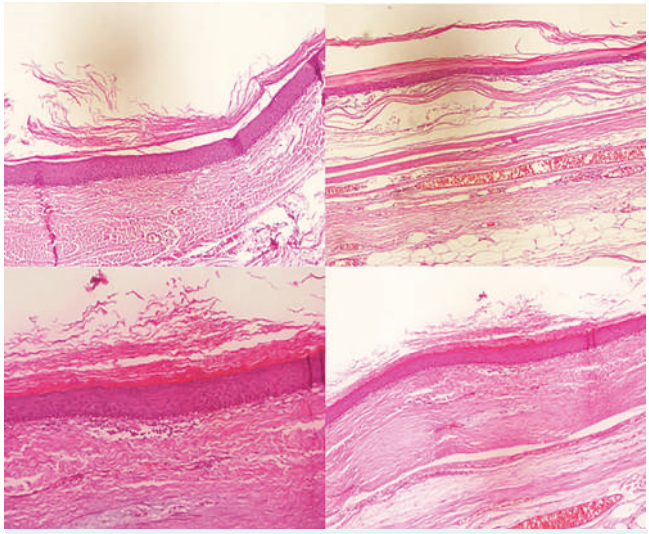


Figure 5. Microscopic image of the mass.

[P-014]

Oncoplastic approach in giant phyllodes tumor: Goldilocks mastectomy and nipple-sparing technique

Muharrem Sarkın, Zeki Demirok, İsmail Zihni, Veli Vural, Cumhur Arıcı

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Objective: Phyllodes tumors are rare fibroepithelial neoplasms of the breast. Particularly, "malignant" and "giant" (over 5 cm) forms may require mastectomy to ensure negative surgical margins. Reconstruction after mastectomy is critical for the patient's quality of life. Here, we aim to present a case of a giant phyllodes tumor recurrence treated with a left nipple-sparing mastectomy and dermal flap reconstruction (goldilocks mastectomy).

Material and Methods: A 46-year-old female patient, who was operated on three years ago for a "Borderline Phyllodes Tumor" in the left breast and subsequently lost to follow-up, presented with breast asymmetry and a giant mass.

• **Physical examination:** A tense, palpable mass filling the entire left breast was noted, accompanied by a significant increase in venous vascularity on the skin.

• **Imaging:** Contrast-enhanced mammography and MRI revealed a lobulated, heterogeneous solid lesion (BI-RADS 4c) measuring approximately 26x22 cm, filling all quadrants and extending into the axillary tail.

• **Pre-op diagnosis:** Following a tru-cut biopsy result of "Borderline Phyllodes Tumor", surgery was planned.

Results: • **Surgical procedure:** The patient underwent a left "Nipple-Sparing Mastectomy" combined with "Dermal Flap Reconstruction" (Goldilocks Mastectomy).

• **Intraoperative observations:** No pectoral fascia invasion was found.

• **Specimen:** The excised specimen measured 30 cm.

• **Pathology:** Postoperative histopathological examination confirmed a "Malignant Phyllodes Tumor" with a tumor size of 25 cm, atypia in stromal cells, 7/10 HPF mitosis, and a 40% Ki-67 index.

• **Surgical margins:** Margins were negative (5 mm distance).

• **Follow-up:** The case was evaluated by the oncology board, and 4 cycles of cisplatin + adriamycin chemotherapy were planned. Satisfactory cosmetic results were observed at the 1-month postoperative follow-up.

Conclusion: Wide resection and oncologically safe margins are indispensable in the surgical treatment of giant phyllodes tumors. The Goldilocks mastectomy technique is an effective oncoplastic method, especially for large-volume breasts, as it eliminates the need for implants or free flaps by providing an acceptable breast volume using the patient's own dermal tissue. This case demonstrates that aesthetic results can be optimized in giant masses without compromising oncological principles

Keywords: Dermal flap reconstruction, goldilocs mastectomy, malignant phyllodes tumor



Figure 1. Preoperative token the pictures.



Figure 2. Postoperative token the pictures.

[P-015]

Migration to a distant contralateral region following breast wire localization: A rare complication in the literature

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Objective: Wire-guided localization is a widely used and reliable method for the surgical treatment of non-palpable breast lesions. However, rare but potentially serious complications such as wire displacement, breakage, or migration to extra-mammary anatomical sites have been reported. While literature indicates that wire migration typically occurs within the same breast or to the ipsilateral thoracic wall, migration to contralateral and distant anatomical regions is extremely rare. This case report presents an extraordinary instance where a localization wire migrated from the right breast to the left shoulder joint following stereotactic marking and was subsequently removed surgically.

Material and Methods: A 52-year-old female patient, scheduled for right breast-conserving surgery and sentinel lymph node biopsy (SLNB) due to right breast malignancy, was referred to the radiology department for preoperative stereotactic localization on the day of surgery. Following the localization procedure, the patient was taken to the operating room; however, the operation was cancelled due to an active herpes simplex infection on her lip identified during the anesthesia evaluation. The patient was discharged with medical treatment as per dermatological recommendations. Three days after discharge, she presented to the emergency department complaining that the wire tip had retracted under the skin and was subsequently admitted.

Results: Imaging revealed that the wire placed in the right breast had unexpectedly migrated to the contralateral side, advancing into and embedding within the left shoulder joint region. Following the trajectory of the wire under ultrasound (USG) guidance, the wire was successfully removed through a surgical incision in the left shoulder. No complications occurred during the procedure.

Conclusion: Although wire migration following localization is rare, surgical delays can increase this risk. This case highlights that a localization wire can migrate beyond the breast tissue to contralateral and distant anatomical sites. In cases of surgical delay following wire localization, reevaluating the position of the wire and adopting a multidisciplinary approach are of paramount importance for the effective and safe management of potential complications

Keywords: Breast localization, localization wire migration breast-conserving surgery (BCS)

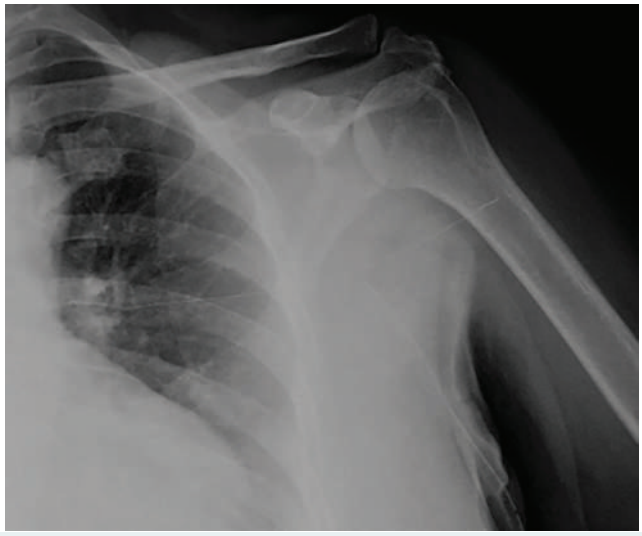


Figure 1.

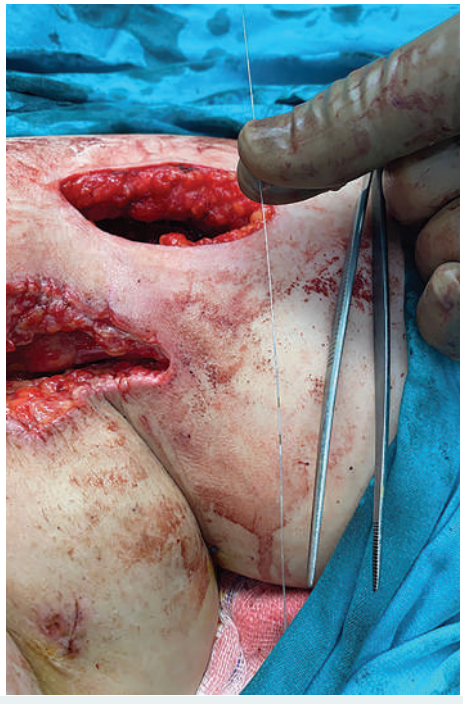


Figure 2.

[P-016]

Breast cancer developing six years after prophylactic bilateral simple mastectomy: A case report

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Objective: Breast cancer is the most common malignancy among women. Advances in genetic testing, screening programs, and multidisciplinary management enable prevention and early diagnosis, leading to improved disease-free survival. Genetic predisposition is a major risk factor, with *BRCA2* mutations among the most common. In mutation carriers, prophylactic mastectomy and routine mammographic screening after age 40 within national programs facilitate early detection and improve survival. Although prophylactic mastectomy significantly reduces cancer risk, malignancy may still develop, as demonstrated in this case.

Material and Methods: A 35-year-old woman underwent genetic testing in 2019 due to breast cancer in her two older sisters and was found to carry a *BRCA2* mutation. Breast ultrasonography showed a BI-RADS 2 lesion. She underwent prophylactic bilateral simple mastectomy with implant reconstruction; pathology was benign. She was followed with semiannual ultrasonography. In June 2025, lesions measuring 26×14 mm and 16×12 mm were detected in the right breast. Core needle biopsy was unsuitable because of the implant; incisional biopsy revealed invasive lobular carcinoma, estrogen- and progesterone-receptor positive, HER2 negative, with a Ki-67 index of 12%. PET-CT demonstrated right breast lesions and suspicious right axillary lymph nodes. After four cycles of neoadjuvant chemotherapy, follow-up imaging showed resolution of uptake.

Results: The patient was evaluated multidisciplinary. In October 2025, right subcutaneous mastectomy and sentinel lymph node biopsy were performed, followed by expander placement in collaboration with plastic surgery. Isosulfan blue was injected for mapping. Sentinel lymph node biopsy and subcutaneous mastectomy, including the nipple-areola complex to the pectoral fascia, were completed without implant damage. The specimen weighed 148 g. The implant was replaced with a tissue expander. She was discharged on postoperative day one without complications.

Conclusion: Patients with *BRCA2* mutations who undergo prophylactic mastectomy should continue close imaging surveillance. As shown in this case, breast cancer may arise in residual tissue despite risk-reducing surgery.

Keywords: Breast cancer, BRCA-2 mutation, prophylactic mastectomy

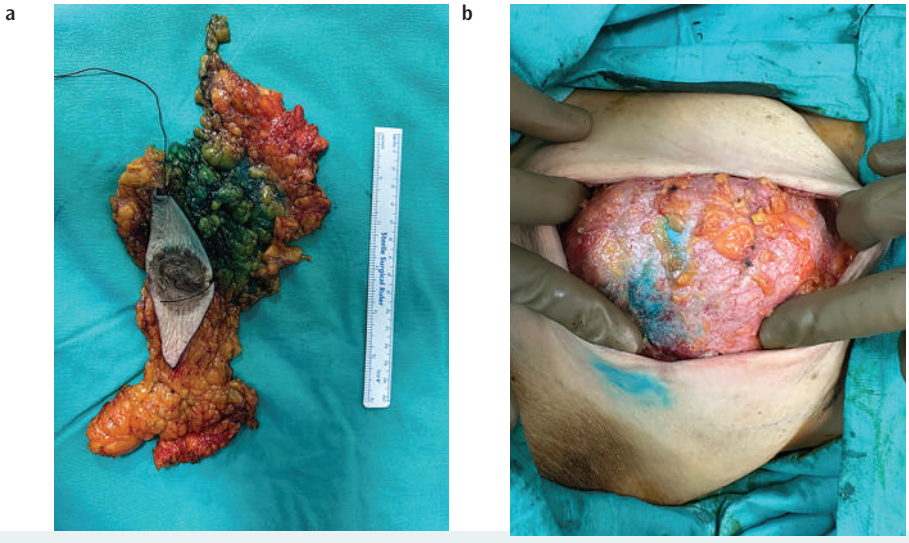


Figure 1. Intraoperative imagine. **a)** Spesimen. **b)** Intraoperative breast tissue.

[P-017]

Giant thyroid metastasis of renal cell carcinoma emerging fifteen years later: A rare case mimicking primary tumor

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Objective: Renal cell carcinoma (RCC) is known as the "great mimicker" due to the unpredictable biological behavior of tumor cells and its potential for hematogenous spread. Although thyroid metastases are clinically rare (1.1-3%), RCC is the most frequently detected primary focus in such cases. The most characteristic feature of RCC metastases is their ability to emerge years after the resection of the primary tumor; latent periods of up to 20 years have been reported in the literature. This poses a significant diagnostic challenge, particularly because it can be confused with primary clear cell neoplasms of the thyroid. This case presents a rare metastasis presenting as a 10.2 cm giant mass 15 years after nephrectomy.

Material and Methods: A 54-year-old male patient presented with a sense of pressure in the neck and a rapidly growing swelling. His medical history revealed a nephrectomy 15 years ago due to left RCC. Radiological examination showed a giant nodule, 10.2 cm in size with heterogeneous signal intensity, nearly completely filling the parenchyma of the right thyroid lobe (Figure 1). Total thyroidectomy was performed due to clinical suspicion and significant compressive symptoms in the patient, whose cytological findings were reported as "atypia of undetermined significance".

Results: Histopathological examination revealed a tumoral structure infiltrating the thyroid tissue, consisting of cells with extensive clear-eosinophilic cytoplasm and prominent nucleoli. Immunohistochemical staining showed that the tumor cells were strongly positive for PAX-8, CD10, and vimentin, while testing negative for TTF-1 and thyroglobulin (Figure 2). This immunoprofile and morphological findings confirmed the diagnosis of "Clear Cell RCC Metastasis".

Conclusion: Although the rich vascularization of the thyroid seems favorable for metastasis, high iodine content and rapid blood flow are factors that make metastatic settlement difficult. This case highlights the metastatic capacity of RCC, which can reach giant sizes exceeding 10 cm even after a long latent period of fifteen years. The greatest diagnostic challenge is that RCC morphologically mimics the clear cell variants of primary thyroid tumors. Consequently, in patients with a history of RCC, the possibility of metastasis must always be excluded in thyroid masses, even if decades have passed since the nephrectomy. In differential diagnosis, the use of specific markers such as PAX-8 and CD10 is vital to prevent incorrect radioactive iodine treatment and to determine the correct oncological surgical strategy. Appropriate surgical resection is the most effective method for providing local control and long-term survival in these cases.

Keywords: Renal cell carcinoma, thyroid metastasis, giant nodule, pathology

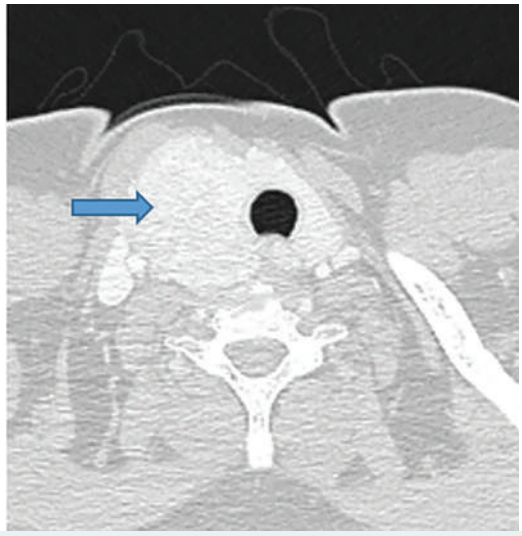


Figure 1. A 10 cm metastatic mass causing tracheal compression and deviation (axial CT scan).

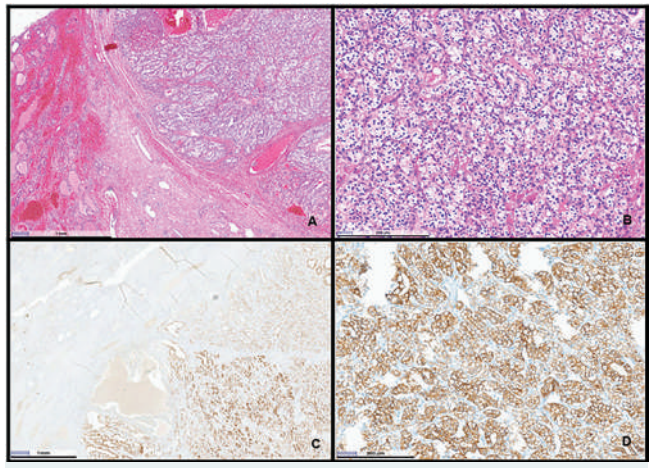


Figure 2. Metastasis of clear cell renal cell carcinoma showing a solid nodular pattern within the thyroid parenchyma (**A**). Tumor area consisting of clusters and sheets of cells with abundant clear cytoplasm belonging to clear cell renal cell carcinoma (**B**). Immunohistochemically, a positive immune reaction is observed in tumor cells with the RCC antibody. This antibody is negative in the thyroid parenchyma (**C**). The CA-IX antibody applied immunohistochemically shows a 'box-like' pattern of positive immune reaction in tumor cells (**D**).

[P-018]

Persistent hyperparathyroidism requiring three stage surgery

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Objective: Primary hyperparathyroidism is most commonly caused by a parathyroid adenoma and is typically cured with surgical treatment. However, in a subset of patients, biochemical remission cannot be achieved after surgery, resulting in persistent disease. The most frequent causes of persistent hyperparathyroidism include multiglandular disease, supernumerary glands, and ectopic parathyroid tissue. In such cases, reoperative neck surgery may be required, and accurate localization becomes crucial. We present a case requiring three-stage surgical intervention due to persistent hyperparathyroidism.

Material and Methods: A 42-year-old male patient presented to the emergency department with hypercalcemic crisis. Laboratory evaluation revealed a parathyroid hormone (PTH) level of 400 pg/mL. Serum calcium levels were approximately 20 mg/dL both preoperatively and between surgical interventions. Preoperative Imaging Before the First Surgery Tc-99m sestamibi parathyroid scintigraphy demonstrated MIBI retention in the posterior inferior aspects of both the right and left thyroid lobes, suggestive primarily of parathyroid pathology (adenoma/hyperplasia). Based on these findings, the patient underwent the first surgery, and the suspected parathyroid tissue was excised. The pathological specimen measured approximately 4×2×1.2 cm, consistent with parathyroid adenoma. Due to the absence of postoperative biochemical improvement, a second surgery was planned. Right total thyroidectomy and left superior parathyroidectomy were performed. Despite this intervention, serum calcium and PTH levels remained markedly elevated. Preoperative Imaging Before the Third Surgery Repeat parathyroid scintigraphy demonstrated focal increased uptake in the right upper paratracheal region, compatible with a parathyroid adenoma. Based on these findings, a third surgical exploration was undertaken.

Results: During the third operation, meticulous exploration revealed ectopic parathyroid tissue located between the esophagus and trachea. The ectopic gland was excised. Following the final surgery, serum PTH and calcium levels normalized, and the patient had an uneventful postoperative course.

Conclusion: In cases of persistent primary hyperparathyroidism where biochemical remission is not achieved after initial surgery, repeat localization studies are critically important. Cervical imaging modalities should be reassessed, and reoperative neck exploration should be carefully and systematically planned according to the obtained findings. With accurate localization and an experienced surgical approach, biochemical cure can be achieved.

Keywords: Hyperparathyroidism, parathyroid neoplasms

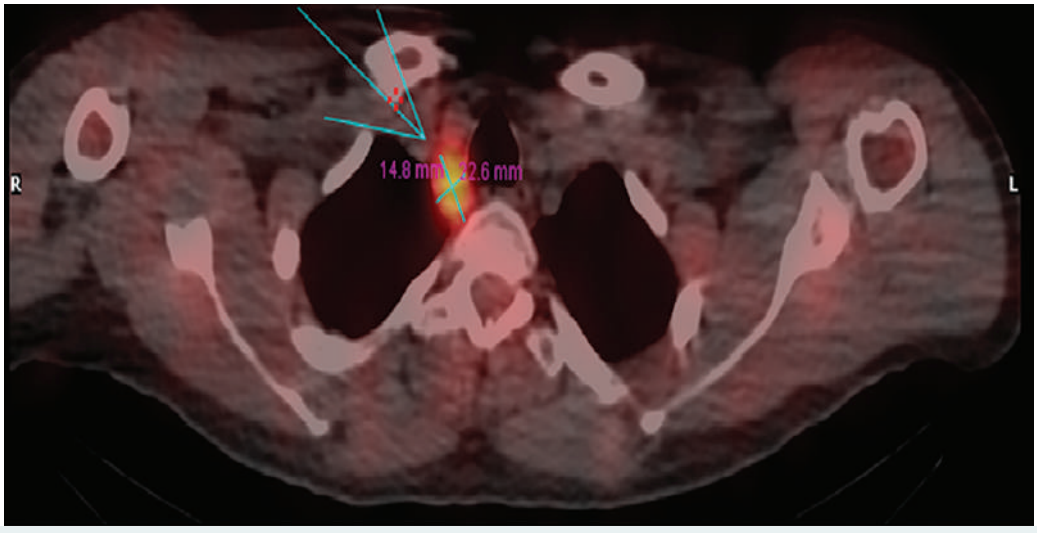


Figure 1. Scintigraphic image after the second surgery. Scintigraphy shows a focus consistent with parathyroid adenoma in the right paratracheal region.

[P-019]

Gallbladder duplication: A rare case report

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Objective: Congenital anomalies of the gallbladder are rare, and a wide range of anatomical malformations affecting its shape, size, number, and position have been described. Septate gallbladder is among the malformations that has not been well documented, because it is usually asymptomatic or discovered accidentally during the evaluation of jaundice or at postmortem examination. Variations in the cystic duct and vasculature in the portal triad have also not been well described. These anomalies are important to know for surgeons because of associated anatomical variations of main bile duct and hepatic artery and increased risk of common bile duct injury.

Results: We report the case of a double gallbladder in a forty-two year old man. He presented with recurrent episodes of biliary colic. Laboratory analysis of liver function was normal. Her blood values were within normal range. Preoperative ultrasound imaging confirmed the gallbladder filled with stones. There was no information about the number gallbladder, presence of septa, cystic arteries, and cystic ducts. A laparoscopic cholecystectomy was planned for the patient. During intraoperative exploration, anatomical variations were identified, including a double cystic artery and a double cystic duct. Due to these findings and concerns regarding operative safety, the procedure was converted to open surgery. Following a right subcostal incision, further exploration was performed. The common bile duct was identified and found to be normal. Two separate cystic ducts originating from the common bile duct and two cystic arteries arising from the hepatic artery were clearly visualized and carefully dissected. After precise identification of all biliary and vascular structures, a safe cholecystectomy was successfully completed without complications. Gross examination of the surgical specimen revealed a duplicated gallbladder separated by a septum. Histopathological evaluation confirmed the presence of a double gallbladder associated with double cystic duct and double cystic artery origins.

Conclusion: Duplication of the gallbladder is a rare congenital abnormality, which requires special attention to the biliary ductal and arterial anatomy. Accurate diagnosis and careful surgical planning are critical in managing double gallbladder cases to avoid iatrogenic injuries.

Keywords: Cholecystectomy, congenital malformation, double gallbladder

[P-020]

Distal pancreatectomy with en bloc celiac axis, partial superior mesenteric vein-portal vein resection and supraceliac aorta and common hepatic artery anastomosis with interposed saphenous vein graft case report

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Objective: Pancreatic ductal adenocarcinoma is an aggressive solid tumor where the 5-year survival rate rarely exceeds 10%, despite advances in surgical techniques and systemic therapies. Tumors located in the pancreas body and neck are often considered "locally advanced" at diagnosis due to their proximity to critical vascular structures like the celiac trunk (CTr). The modified Appleby procedure (distal pancreatectomy with en bloc celiac axis resection, DP-CAR) is an aggressive approach developed to improve survival in patients responding to neoadjuvant chemotherapy. This technique relies on retrograde hepatic perfusion provided by the superior mesenteric artery (SMA) via pancreaticoduodenal arcs and the gastroduodenal artery (GDA) to allow R0 resection. When this arc is insufficient, hepatic arterial revascularization is required.

Material and Methods: A 59-year-old female with hypertension presented with epigastric and back pain. Contrast-enhanced Computed Tomography revealed a 45x39 mm hypodense lesion in the pancreas body, invading the CTr branching level and causing splenic vein thrombosis. CA19-9 was 402 U/mL. Endoscopic ultrasonography confirmed that the mass invaded the CTr, as well as the splenic artery and vein. Biopsy confirmed pancreatic adenocarcinoma. Following 6 cycles of FOLFIRINOX, regression was observed. And modified Appleby procedure was planned. Preoperative celiac angiography demonstrated hepatic arterial flow via the GDA through the pancreatoduodenal arcade.

Results: During surgery, no metastases were observed. The tumor invaded the retroperitoneum and posterior stomach. Upon clamping the common hepatic artery (CHA), Doppler ultrasound showed arterial flow from the SMA to the liver via the GDA, but acceleration time was prolonged. Consequently, DP-CAR was performed alongside splenectomy, partial gastric resection, retroperitoneal lymph node dissection, and partial resection of the superior mesenteric vein (SMV) and portal vein (PV). An end-to-end anastomosis was performed between the distal SMV and proximal PV. Subsequently, an end-to-end anastomosis was created between the supraceliac aorta and the CHA using an interposed saphenous vein graft. Hepatic flow was confirmed via Doppler.

Conclusion: DP-CAR is a procedure that provides a survival advantage in selected patients with unresectable pancreatic cancer; however, it is associated with high morbidity and mortality rates. The most common causes of mortality are gastric/hepatic ischemia, and post-pancreatectomy hemorrhage. As DP-CAR is an invasive procedure, patients must be selected with extereme care. The feasibility of DP-CAR depends on the presence of adequate collateral flow to both the liver and the stomach to avoid ischemia. Therefore, it is essential to evaluate the patency of the GDA and the pancreatoduodenal arcade to determine the necessity of preoperative celiac axis embolization or arterial reconstruction.

Keywords: Arterial reconstruction, modified appleby procedure, pancreatic adenocarcinoma

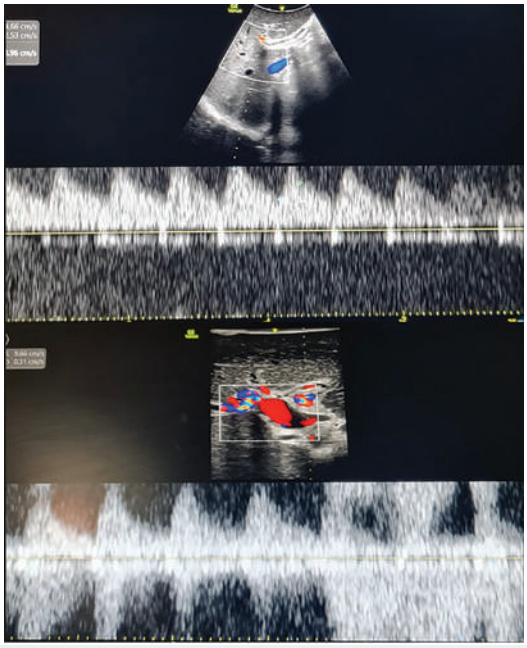


Figure 1. Intraoperative Doppler USG.

Intraoperative Doppler ultrasonography images: The upper image shows a prolonged acceleration time in the hepatic artery prior to anastomosis. The lower image demonstrates the restoration of normal arterial waveform and flow parameters following arterial reconstruction.

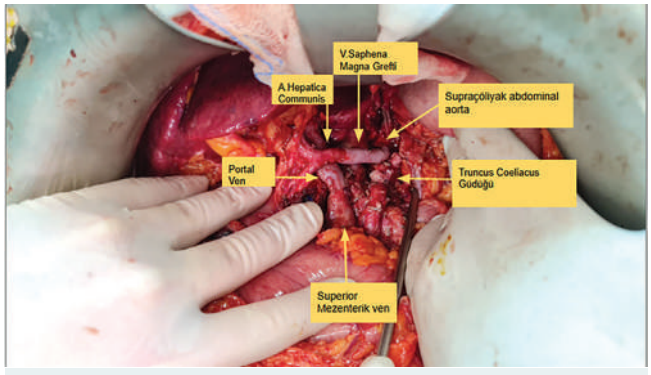


Figure 2. Intraoperative picture.

[P-024]

Ileal ureter reconstruction after long-segment ureteral resection due to recurrent sigmoid colon adenocarcinoma: A case report

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Objective: Long-segment ureteral defects may arise due to iatrogenic injury, radiation fibrosis, or malignancy. When the defect exceeds the limits suitable for primary anastomosis, Boari flap, or psoas hitch reconstruction, ileal ureter substitution becomes a viable alternative. Ileal ureter replacement was first introduced by Shoemaker in 1906 and later popularised by Goodwin in 1959. We present a case of recurrent sigmoid colon adenocarcinoma requiring long-segment ureteral resection and successful ileal ureter reconstruction.

Material and Methods: A 60-year-old male patient, who underwent anterior resection surgery for sigmoid colon adenocarcinoma four years prior, was diagnosed with moderately differentiated adenocarcinoma (pT3N2BM0) and received postoperative chemotherapy. Three years postoperatively, a local recurrence mass invading the left ureter was detected in the same area. Following a multidisciplinary evaluation, surgical resection was planned. During the operation, the tumor was found to infiltrate a long segment of the left ureter, and, in accordance with oncological principles, the affected ureteral segment along with the tumor was resected en bloc. Since primary ureteral anastomosis was not possible due to the length of the defect, continuity was achieved through ileal reconstruction (Figure 1).

Results: The postoperative course was uneventful. Renal function remained stable, and the patient was discharged uneventfully on postoperative day 16. In the 1st postoperative month, radiological examinations revealed that the anastomosis was intact (Figure 2).

Conclusion: Management of long-segment ureteral defects remains complex. Reconstruction options depend on defect length and location. Complete tumor excision must be balanced with preservation of renal function. Ileal ureter substitution provides a tension-free reconstruction in cases where alternative techniques are not feasible. In our case, the long-segment defect following oncologic resection precluded primary repair. Ileal substitution allowed restoration of urinary continuity without compromising oncologic principles. No early complications were observed. Ileal ureter reconstruction is a reliable option for extensive ureteral defects following oncologic resection of locally recurrent colorectal cancer. Multidisciplinary planning and meticulous technique are key to favourable outcomes.

Keywords: Ileal ureter, ureteral reconstruction, colorectal cancer recurrence

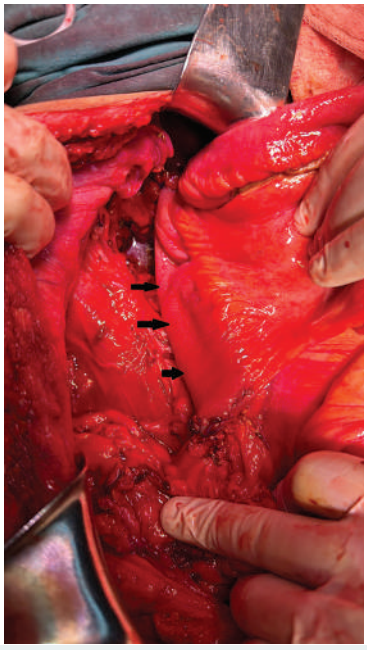


Figure 1. Transposed small intestine segment.



Figure 2. Postoperative magnetic resonance image (MRI) (the double J catheter placed in the ureter is clearly seen within the loop).

[P-033]

Emergency laparoscopic low anterior resection due to sigmoidal colon trauma secondary to high pressureized compressed air; case report

Tuğberk Tok

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Objective: Transanal insufflation with high-pressure compressed air is a rare but potentially life-threatening cause of colorectal barotrauma. Patients may rapidly develop severe abdominal pain, distension, pneumoperitoneum, and—if perforation occurs—fecal peritonitis. Injury most commonly involves the rectosigmoid region and sigmoid colon, and timely recognition with appropriate surgical management is critical to prevent morbidity and mortality.

Material and Methods: A 30-year-old man presented to the emergency department with abrupt-onset severe abdominal pain and marked distension that began approximately 2 hours after co-workers directed an industrial high-pressure air device toward his anal area over clothing as a practical joke. He reported no immediate anal pain or bleeding. He had no prior abdominal surgery, comorbidities, allergies, or regular medications. Vital signs were stable except for minimal tachypnea. Physical examination revealed diffuse abdominal tenderness with peritoneal signs. Digital rectal examination showed no bleeding or palpable rectal wall abnormality. Chest radiography showed no thoracic injury, while an abdominal radiograph demonstrated pneumoperitoneum. Abdominal CT revealed generalized free intraperitoneal air, prompting emergency diagnostic laparoscopy. Prior to abdominal surgery, anoscopy was performed and showed no laceration, hemorrhage, or rectal wall defect.

Results: Emergency laparoscopy revealed minimal hemorrhagic fluid in the pelvis without active bleeding and no fecal contamination. Multiple serosal defects (approximately 1-3 cm) were observed in about 15 areas involving the upper rectum and sigmoid colon; minimal hematomas were noted on the sigmoid appendices epiploicae without active hemorrhage. No pathology was identified in other colonic segments or solid organs. No clearly visible full-thickness perforation was identified intraoperatively; however, given the extent of serosal injury and the risk of occult perforation, laparoscopic low anterior resection was performed, selecting a secure distal margin beyond the rectal serosal defects. After specimen extraction with the proximal segment intact, intraluminal air insufflation of the resected segment confirmed a ~1 cm full-thickness perforation on the posterior aspect of the sigmoid colon. Resection was completed and a coloanal anastomosis was performed laparoscopically. The postoperative course was uneventful.

Conclusion: Colorectal barotrauma from high-pressure compressed air can produce extensive serosal injury and an occult perforation that may not be apparent on initial laparoscopic inspection. In hemodynamically stable patients without shock, significant fecal contamination, or major rectal destruction, laparoscopic resection with primary anastomosis can be an effective treatment option. Early diagnosis and prompt operative management are essential, and workplace safety measures are key to prevention.

Keywords: Colorectal barotrauma, compressed air, laparoscopic low anterior resection, pneumoperitoneum, sigmoid colon perforation

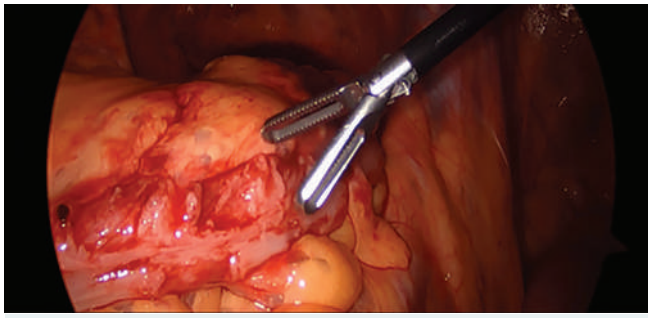


Figure 1. Along with the sigmoid colon, upper rectum and distal desending colon multiple serosal defects were observed. Intraoperative laparoscopic view demonstrating multiple serosal defects involving the sigmoid colon, upper rectum, and distal descending colon.

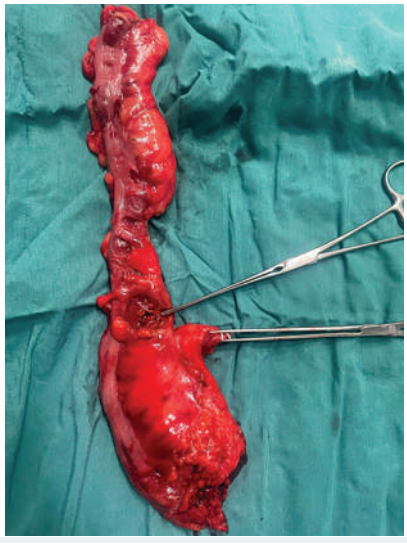


Figure 2. Gross appearance of the resected specimen demonstrating multiple serosal defects and the perforation site.

[P-034]

Small bowel intussusception secondary to colonic diverticular perforation: A rare cause of acute abdomen

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Objective: Adult intussusception is rare and usually associated with an underlying organic pathology. Invagination of a small bowel loop into the rectum is exceptionally uncommon. We present a case of acute abdomen caused by a strangulated small bowel loop protruding from the rectosigmoid junction into the rectum.

Material and Methods: A 75-year-old male presented with rectal bleeding, nausea, vomiting, and abdominal pain for three days. Physical examination revealed generalized guarding and rebound tenderness. Digital rectal examination detected hematochezia and a palpable mass. Laboratory tests showed leukocytosis (17,000/mm³) and elevated CRP (154 mg/L). CT demonstrated dilated small bowel loops and pelvic free fluid. Emergency rectosigmoidoscopy revealed a strangulated small bowel loop 5 cm from the anal verge.

Results: During emergency laparotomy, a 10-cm strangulated small bowel segment was found protruding through a diverticulitis-related perforation on the anterior rectosigmoid wall. After reduction, necrosis was identified and resected with anastomosis. Hartmann's procedure was performed. The patient was discharged on postoperative day five.

Conclusion: Although rare, small bowel intussusception into the rectum should be considered in patients presenting with rectal bleeding or prolapse-like symptoms. Early surgical intervention is essential to reduce morbidity and mortality.

Keywords: Intussusception, small bowel strangulation, colonic diverticular perforation



Figure 1. A small bowel loop observed on rectosigmoidoscopy.



Figure 2. A small bowel loop protruding from the rectosigmoid junction on computed tomography (CT).

[P-035]

Synchronous squamous cell carcinoma and adenoid cystic carcinoma of the breast: A rare case

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Objective: Squamous cell carcinoma (SCC), adenoid cystic carcinoma (ACC) of the breast are exceedingly rare histopathological subtypes among breast malignancies. Both tumors frequently demonstrate hormone receptor-negative profiles, their biological behavior and clinical course may differ significantly. The aim ofthis study is to present the clinical, pathological, and therapeutic features of a rarecase in which synchronous SCC and ACC of the breast were identified.

Material and Methods: A 41-year-old female patient presented to our clinic with a palpable breast mass. On physical examination, irregularly bordered mass measuring approximately 2 cm was detected in the right breast at the 1 o'clock position, located 3-4 cm from the areola. No additional pathology was identified inthe left breast or bilateral axillary regions. Mammography and ultrasonography revealed a solid lesion categorized as BI-RADS5. Tru-cut biopsy was performed, and the histopathological diagnosis was SCC. Staging work-up for distant metastasis was negative. Following multidisciplinary breast tumor board evaluation, the patient was scheduled for surgery. The patient underwent segmental mastectomy with SLNB in accordance with oncoplastic principles. Resection was performed with clear surgical margins, and the SLNB were reported as benign. However, histopathological examination of the surgical specimen revealed twodistinct tumor. In addition to SCC, ACC, a subtype of triple-negative breast cancer known for its favorable prognosis, was identified. Surgical margins were negative, and no metastasis was detected in the sentinel lymph nodes. Immunohistochemical analysis demonstrated that both tumor components were negative for ER-PR-HER2. Considering that breast-conserving surgery had been performed and taking into account the histopathological findings, the patient was referred for adjuvant radiotherapy. Chemotherapy was not administered due to negative surgical margins and absence of lymph node involvement. The decision regarding systemic therapy was made through a multidisciplinary evaluation based on patient characteristics and tumorbiology.

Results: SCC accounts for less than 0.1% of all breast cancers and is generally associated with an aggressive clinical course. In contrast, ACC, although rare in the breast, typically demonstrates an indolent clinical behavior and favorable prognosis. The synchronous presence of these two rare tumor types within the same breast has been reported only in a very limited number of cases inthe literature. Although both tumors may pose challenges in treatment planning, it is well recognized that ACC may exhibit a biological behavior distinct from that of conventional triple-negative breast cancers. Therefore, treatment strategies should not rely solely on immunohistochemical profiles but must also be individualized according to histopathological subtype and clinical characteristics. Given the potential for rapid progression in SCC, close postoperative surveillance is warranted in suchpatients. The coexistence of these two distinct tumor types further underscores the importance of a multidisciplinary approach in treatment planning.

Conclusion: Synchronous coexistence of SCC and ACC in the breast is an extremely rare condition. In this case, negative surgical margins were achieved with breast-conserving surgery, and the decision regarding adjuvant therapy was made based on the histopathological characteristics of the tumors. This case highlights the importance of managing the diagnostic, therapeutic process of rare breast tumors through a multidisciplinary approach.

Keywords: Squamous cell carcinoma, adenoid cystic carcinoma, breast cancer

[P-036]

Gestational gigantomastia: A rare pregnancy-related breast disorder

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Objective: Gestational gigantomastia (GG) is a rare condition characterized by excessive, often bilateral, breast tissue enlargement that usually appears toward the end of the first trimester of pregnancy. Patients typically present with rapid and extreme breast enlargement, back pain, dyspnea, mobility limitation, and breast skin complications such as pain, ulceration, bleeding, scaling, and sensory loss. Most affected patients are young, multiparous women without significant medical, surgical, or family history. Due to the severe impact on quality of life, surgical treatment is widely considered the gold standard. Medical therapies targeting hormonal effects include anti-estrogens and dopamine agonists, while diuretics and corticosteroids may reduce tissue and skin edema.

Material and Methods: A 24-year-old woman, approximately 24 weeks pregnant, presented to our breast surgery clinic with a 5-month history of rapid breast enlargement, back pain, and neck pain. She reported menarche at the age of 14, a 12 pack-year smoking history, and a diagnosis of multiple sclerosis with cervical spinal involvement. There was no significant family history of malignancy. On physical examination, the breasts were markedly enlarged, symmetrical, and tender, with edematous skin. Breast ultrasonography revealed dilated superficial veins, bilateral ductal ectasia, numerous bilateral anechoic cysts, and a few benign-appearing solid lesions. Considering her pregnancy and personal preference, an initial conservative approach with close follow-up was adopted.

Results: Three months later, the patient delivered a healthy infant. Postpartum evaluation considered cabergoline (a D2 receptor agonist) and tamoxifen 20 mg/day for three months; however, due to the persistence of severe symptoms, surgical treatment was chosen. Bilateral reduction mammoplasty was performed using a superomedial pedicle technique, and the nipple-areolar complexes were prepared as grafts. The excised tissue measured 29.5×18.5×5 cm from the right breast and 30×19.5×4.5 cm from the left breast. Histopathological examination revealed dilated cutaneous lymphatics, stromal edema, fibrosis, and fibroadenomas. The postoperative course was uneventful, and the patient was discharged on the second postoperative day.

Conclusion: While medical therapy may be considered in the management of gestational gigantomastia, surgical intervention remains the definitive treatment in the majority of patients with advanced breast enlargement, providing effective and lasting symptom relief.

Keywords: Gestational gigantomastia, macromastia, reduction mammoplasty



Figure 1. Macromastia. Macromastia at the time of presentation.

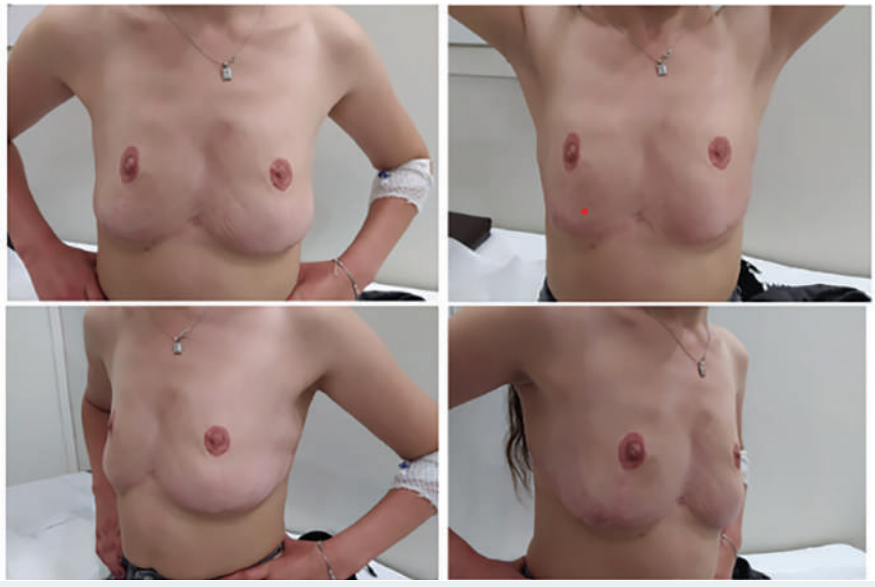


Figure 2. Post-op. Reduction of breast volume following surgery.

[P-037]

A rare lesion mimicking malignancy: Two cases of syringomatous tumor of the nipple

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Objective: Syringomatous tumor of the nipple is a rare benign neoplasm with locally infiltrative behavior. It is most commonly observed in young and middle-aged women. Because it can clinically and radiologically mimic malignancy, definitive diagnosis relies on histopathological examination. Wide local excision is recommended for treatment. We aimed to present two cases diagnosed in our clinic.

Material and Methods: Case 1A 40-year-old female patient presented with discharge from the left nipple. Ultrasonography revealed dense microcalcifications in the left nipple. Parenchymal distortion was observed in the periareolar region at the 12 o'clock position of the left breast. In the left axilla, 2-3 lymph nodes measuring 12.5×6 mm with preserved central hilum and mildly thickened cortex were detected. Breast magnetic resonance imaging (MRI) demonstrated intense contrast enhancement in the left nipple and retroareolar region, along with diffusion restriction in a 15×9 mm area. Radiologically, the findings were suspicious for malignancy. Tru-cut biopsy findings, when evaluated together with the retroareolar localization of the lesion, were primarily consistent with "Syringomatous Tumor of the Nipple". Case 2A 70-year-old female patient presented with retraction of the left nipple. Mammography demonstrated a 7.5 mm low-density nodular opacity located 14 mm from the nipple (BI-RADS 0). Breast MRI revealed a relatively irregularly marginated heterogeneous solid mass measuring 32×27 mm in the retroareolar region of the left breast, causing nipple retraction (BI-RADS 4C). Histopathological examination of biopsy sections showed an infiltrative pattern composed of squamous differentiation and syringomatous structures within a collagenized spindle-cell stroma. The histopathological findings were considered in the differential diagnosis of "Low-Grade Adenosquamous Carcinoma (Metaplastic Carcinoma)" and "Syringomatous Tumor of the Nipple".

Results: Both patients underwent lumpectomy. The excised surgical specimens were submitted for histopathological evaluation. Final pathology in both cases confirmed syringomatous tumor of the nipple. Surgical margins were negative in both patients.

Conclusion: Syringomatous tumor of the nipple is a rare benign neoplasm with locally infiltrative characteristics that frequently mimics invasive carcinoma clinically and radiologically. Although perineural invasion may be observed, no metastatic potential has been reported. Complete excision with negative surgical margins is curative. Accurate histopathological evaluation is crucial to prevent unnecessary radical surgery.

Keywords: Syringomatous tumor of the nipple, nipple discharge, retraction of the nipple

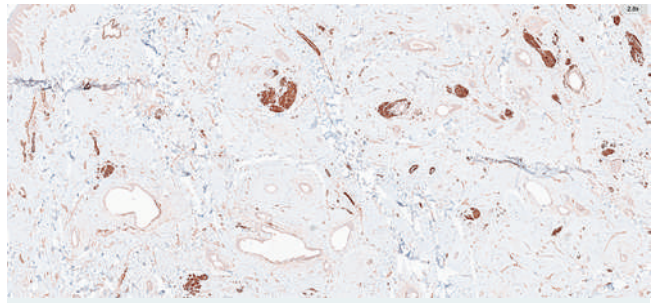


Figure 1. Lumpectomy material.

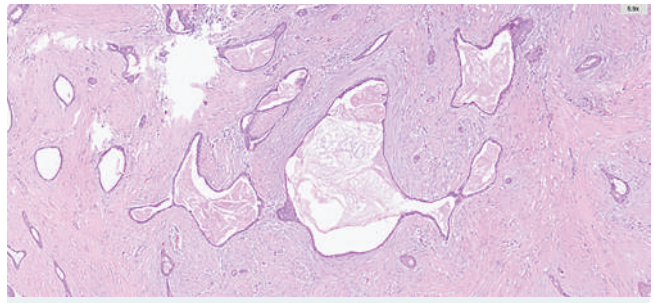


Figure 2. Lumpectomy material.

[P-038]

A rare form of goiter: Amyloid goiter - case presentation

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Objective: Amyloid goiter is characterized by the accumulation of an insoluble protein formed as a result of abnormal folding called amyloid, leading to a marked enlargement of the thyroid gland. The definitive diagnosis is made by pathological evaluation. Thyroid malignancies should be excluded in the differential diagnosis. Immunohistochemical evaluation should be performed to determine the subtype of the accumulated amyloid. Amyloid goiter rarely occurs as an isolated condition; there is usually an underlying systemic disease. Primary amyloidoses are associated with plasma cell dyscrasias, while secondary amyloidoses are associated with FMF, RA, chronic osteomyelitis, tuberculosis and IBD. The incidence of amyloid goiter is remarkably high in patients who develop amyloidosis associated with FMF and undergo hemodialysis due to renal failure.

Material and Methods: In this case, the diagnosis, treatment and follow-up process of a patient who underwent bilateral total thyroidectomy and tracheostomy due to amyloid goiter at our clinic was evaluated.

Results: A 44-year-old patient with known HT, FMF and secondary amyloidosis-related renal failure who underwent renal transplantation two years ago experienced sudden cardiac arrest at home. After 30 minutes of CPR, the patient was intubated and placed on inotropic support in the intensive care unit for follow-up during the post-CPR period. A tracheostomy was planned, but due to a massive goiter in the neck, the tracheostomy could not be performed and a thyroidectomy was planned instead. A neck ultrasound performed prior to thyroidectomy revealed solid nodules filling both lobes almost completely and intermingling with each other. A neck CT scan showed a deviated trachea to the left and a multinodular goiter appearance. The patient underwent bilateral total thyroidectomy and a tracheostomy was performed. The patient died on the 4th postoperative day due to general deterioration. Widespread amyloid deposition was observed in the examined thyroidectomy material.

Conclusion: Patients typically present with a progressive and rapidly advancing, hard, painless mass in the neck. Secondary to compression, dyspnea, dysphagia and dysphonia may occur. The vast majority of patients are euthyroid. Ultrasound, CT and MRI can be used as imaging methods. The primary and most effective treatment for amyloid goiter is thyroidectomy. There are three main strategies in treatment: relieving compression symptoms, establishing a definitive histopathological diagnosis and most importantly, managing the underlying disease. Amyloid goiter is rare but has an important place in clinical practice because it is a harbinger of an underlying systemic disease. Amyloid goiter may not only be a disease of the thyroid but also a potential indicator of a systemic process requiring a multidisciplinary approach.

Keywords: Amyloid, goiter, thyroidectomy

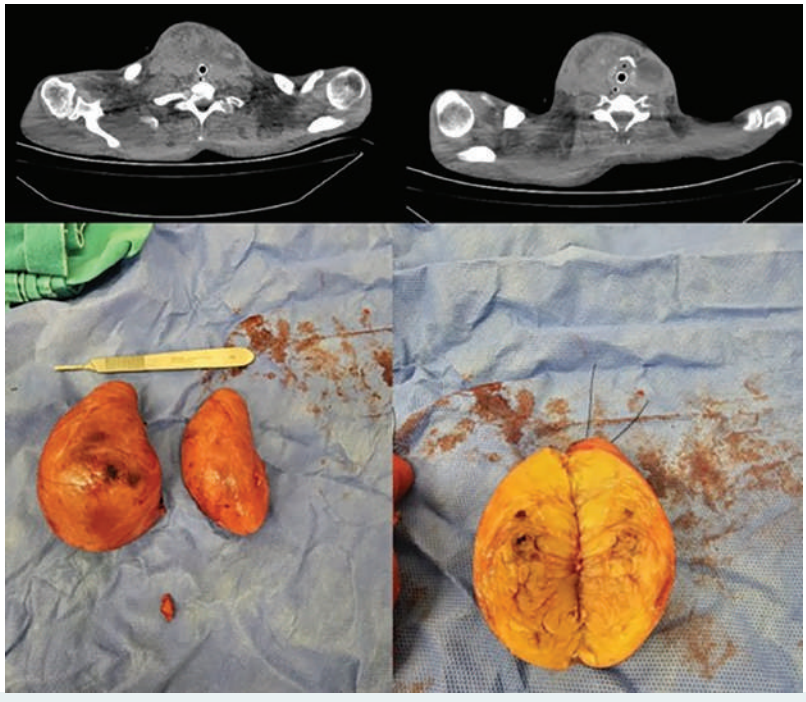


Figure 1. Preoperative CT scan and surgical specimen.

[P-039]

Delayed tracheal perforation after retrosternal thyroid surgery: A rare complication

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Objective: Thyroidectomy is a widely performed and generally safe surgical procedure for treating both benign and malignant thyroid diseases. While common complications include vocal-cord paralysis, hypoparathyroidism, hypocalcemia, and cervical hematoma, tracheal injuries are exceedingly rare, occurring in only approximately 0.06% of cases. Tracheal damage is typically identified and repaired intraoperatively. However, "delayed" tracheal necrosis and perforation arising from prolonged mechanical compression, tissue ischemia, or secondary infection carry significant morbidity risks. This report discusses a rare case of delayed perforation developing on the 11th postoperative day in a patient operated on for a giant- retrosternal goiter and its subsequent conservative management.

Material and Methods: A 49-year-old male presented with a heterogeneous thyroid mass showing significant retrosternal extension. Preoperative CT imaging revealed that the lesion displaced the trachea to the right, extended to the first-degree branches of the aorta in the mediastinum, and narrowed the tracheal lumen to approximately 10 mm. The patient underwent bilateral total thyroidectomy, and no complications were observed during the early postoperative period. However, on the 11th postoperative day, following an uncontrolled coughing fit, the patient returned with complaints of discharge and air-leakage from the cervical incision line. Physical examination revealed significant mobility of the neck skin flaps during expiration and air leakage synchronized with respiration. A fistula tract of approximately 2 cm was observed on the Kocher incision scar (Figure 1).

Results: Flexible laryngoscopic evaluation showed the left vocal-cord fixed in a paramedian position, while the right vocal-cord remained mobile. Radiological assessment identified a tracheal defect accompanied by pneumonia foci in the right lung (Figure 2). A conservative treatment plan was implemented instead of surgical revision: rifampicin and boric acid powder were applied to the incision line. Air-leakage was controlled using a pressure bandage with a sterile gauze-ball placed over the defect. Broad-spectrum intravenous antibiotic therapy was administered for 10 days. The patient was discharged following clinical improvement monitored through daily dressing changes. Long-term follow-up revealed no development of tracheal strictures or permanent hoarseness. The pathology report was "multifocal papillary microcarcinoma limited to the thyroid".

Conclusion: Delayed tracheal necrosis and perforation is an extremely rare but potentially life-threatening complication following thyroidectomy. In cases with preoperative tracheal compression, preventing intraoperative vascular and thermal damage is vital. Vigilance is required for signs such as sudden-onset dyspnea, subcutaneous emphysema, or air-leakage from the incision line postoperatively. Early diagnosis, aggressive infection control, and a multidisciplinary approach can yield successful outcomes with conservative treatment in selected cases.

Keywords: Thyroidectomy, tracheal perforation, retrosternal goiter



Figure 1. Clinical appearance. A 2-cm fistula tract on the Kocher incision line and skin changes consistent with active air leakage, developing after an uncontrolled coughing fit on the 11th postoperative day.

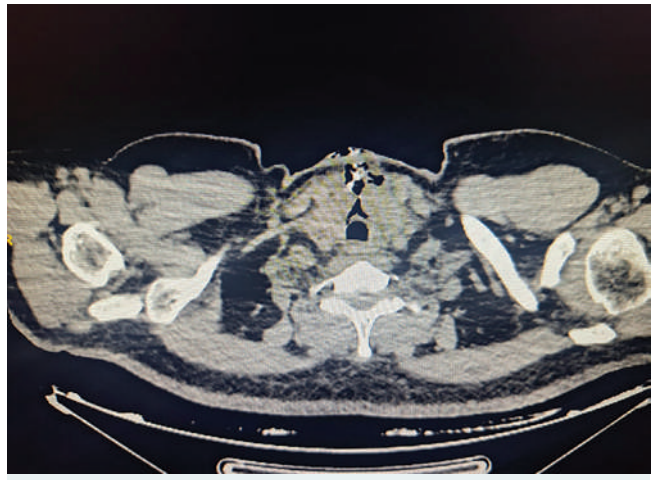


Figure 2. Radiological appearance. Axial neck CT scan showing disruption of tracheal lumen integrity (perforation) and emphysema consistent with air leakage into adjacent soft tissue planes.



Figure 3. Excised fistula tract.

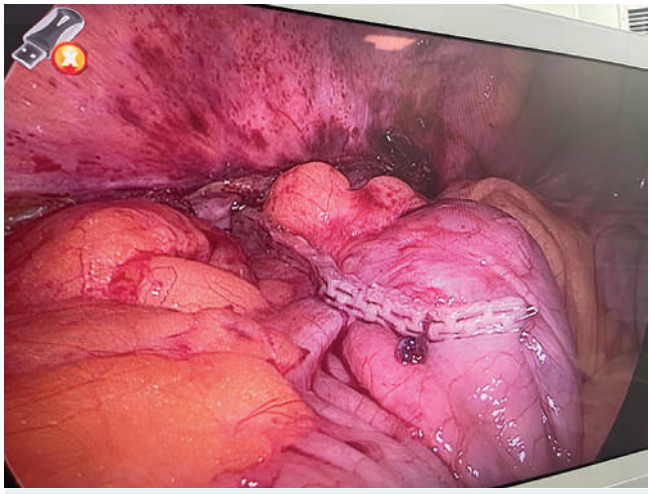


Figure 4. Intraoperative image. Appearance of colon loops and surgical site after excision of fistula tract.

[P-040]

Late-onset enterocutaneous fistula and recurrent retroperitoneal abscesses following spilled gallstones during laparoscopic cholecystectomy: A rare case report

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Objective: Iatrogenic gallbladder perforation and the subsequent spilling of gallstones into the peritoneal cavity is an intraoperative complication reported in up to 40% of laparoscopic cholecystectomy (LC) cases. Although these stones usually remain asymptomatic, they can cause serious morbidity, such as abscesses, foreign body granulomas, or complex fistulizations years later, particularly in patients with immune-modifying comorbidities like diabetes mellitus. This report discusses the surgical management of a rare case presenting with a retroperitoneal abscess and enterocutaneous fistula seven years after an LC procedure.

Material and Methods: A 44-year-old male with insulin-dependent diabetes mellitus presented with purulent drainage in the right lumbar region and a history of recurrent intra-abdominal abscesses. His medical history revealed gallbladder perforation and spilled stones during an LC in 2017. MRI findings showed 1.5 cm loculated abscess foci extending to the psoas muscle posterior to the right kidney, fistula tracts opening to the skin at the L3-L4 levels, and a mesenteric abscess focus adjacent to the anterior left lobe of the liver. A multidisciplinary operation was performed by general surgery and orthopedics teams. Laparoscopic exploration identified an enterocutaneous fistula line between the colon and the peritoneum, which was resected using a 45 mm endo-GIA. Subsequently, the patient's position was changed to excise the lumbar fistula tract and debride necrotic tissues near the psoas. Following a progressive oral intake protocol, the patient was discharged recovered on the 16th postoperative day. At the one-month follow-up, the patient remained asymptomatic with complete healing.

Results: Literature indicates that symptoms arising from "lost gallstones" can manifest up to 20 years postoperatively; the 7-year latent period in our case supports this data. The migration of stones into the retroperitoneal space can lead to challenging conditions like psoas abscesses and enterocutaneous fistulas. In diabetic patients, impaired leukocyte function enhances the tendency for foreign body reactions to combine with infection, facilitating fistulization. While MRI is the gold standard for mapping tracts, definitive treatment requires the complete surgical excision of all stones and the fistula tract rather than simple drainage.

Conclusion: Spilled gallstones represent a rare but significant source of morbidity that can present as complex fistulas years after surgery. For clinical success, it is critical to meticulously document intraoperative stone spillage, thoroughly investigate surgical history in chronic fistula cases, and implement early postoperative enteral nutrition to optimize healing.

Keywords: Enterocutaneous fistula, laparoscopic cholecystectomy, lost gallstones



Figure 1. Enterocutaneous fistula. Excised fistula tract, intraoperative image.

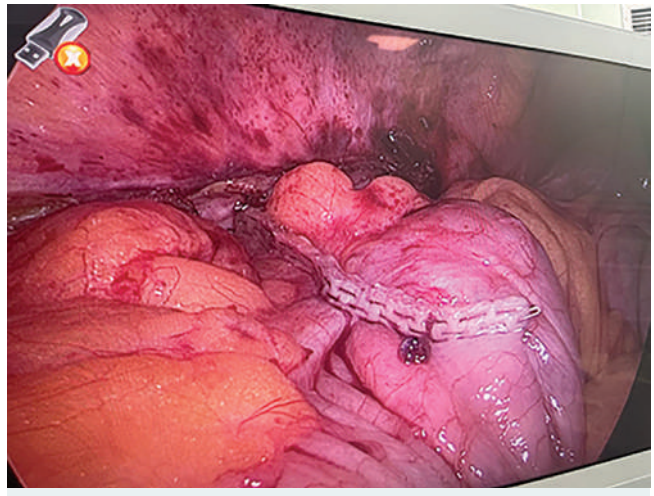


Figure 2. Appearance of the colonic loops and the operative bed following excision of the fistula tract.

[P-057]

Splenic abscess due to *Brucella melitensis* mimicking a malignant cystic lesion: A challenging diagnostic case

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Objective: Splenic abscess is a rare but potentially life-threatening clinical condition. In endemic regions, *Brucella* species should always be considered among infectious etiologies. However, radiological findings and elevated tumor marker levels may mimic malignant splenic lesions and complicate the diagnostic process.

Material and Methods: This is a case report of a splenic abscess caused by *Brucella melitensis* mimicking a malignant cystic lesion.

Results: A 26-year-old male patient presented with complaints of fever and abdominal pain. Laboratory investigations revealed elevated inflammatory markers and markedly increased CA 19-9 levels. Imaging studies demonstrated a large, thick-walled cystic lesion originating from the spleen; the lesion was initially considered compatible with a hydatid cyst or mucinous neoplasm. Endoscopic ultrasound-guided fine-needle aspiration yielded necrotic and infected material. Microbiological culture grew *Brucella melitensis*. Due to the large size of the lesion, its close relationship with adjacent organs, and persistent suspicion of malignancy, the patient underwent laparoscopic splenectomy and cyst excision. The postoperative course was uneventful.

Conclusion: This case demonstrates that splenic abscesses secondary to brucellosis may closely mimic malignant cystic splenic lesions both radiologically and biochemically, particularly in the presence of markedly elevated tumor markers. CA 19-9 levels can be significantly elevated in infectious and inflammatory processes and should not be interpreted as definitive evidence of malignancy. In endemic areas, brucellosis must be included in the differential diagnosis of cystic splenic lesions. In selected patients, surgical management provides both definitive diagnosis and effective treatment and remains a safe therapeutic option. Splenic abscesses due to brucellosis may mimic malignant cystic lesions in terms of both radiological and laboratory findings. Elevated tumor marker levels do not always indicate malignancy. In selected cases, surgical treatment remains a safe and definitive approach.

Keywords: Splenic abscess, brucellosis, CA 19-9, cystic splenic lesions

[P-058]

Chronic self-inflicted rectal trauma leading to superior rectal artery pseudoaneurysm: Successful endovascular management in an elderly patient on antiplatelet therapy

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Objective: Superior rectal artery pseudoaneurysm (SRAP) is an extremely rare but potentially life-threatening cause of lower gastrointestinal bleeding. Reported etiologies include pelvic trauma, colorectal interventions, inflammatory processes, and radiation injury. Because of its rarity, diagnosis may be delayed. Contrast-enhanced computed tomography angiography (CTA) and digital subtraction angiography are essential for early detection. Endovascular embolization has increasingly replaced surgical intervention in hemodynamically stable patients. We present a case of SRAP secondary to chronic repetitive rectal trauma and provide a focused review of previously reported cases.

Material and Methods: A single-patient case was retrospectively analyzed, including clinical presentation, imaging findings, interventional procedure details, and follow-up outcomes. Additionally, a focused literature review of reported SRAP cases between 2000 and 2024 was performed using PubMed-indexed publications to evaluate etiology, management strategies, and outcomes.

Results: An 82-year-old male presented with acute massive rectal bleeding. His medical history included hypertension, coronary artery disease, previous coronary artery bypass grafting, pacemaker implantation, and ongoing clopidogrel therapy. He reported a 3-4-year history of chronic constipation and repetitive manual rectal evacuation using a metallic spoon. CTA demonstrated a 5-mm pseudoaneurysm arising from a distal branch of the left superior rectal artery. Selective angiography confirmed the lesion, and coil embolization was successfully performed. Hemostasis was achieved without ischemic complications. The literature review identified fewer than 20 reported SRAP cases. Most were associated with trauma or iatrogenic injury. Endovascular embolization demonstrated high technical success with low complication rates, whereas surgical management was reserved for unstable patients.

Conclusion: SRAP should be considered in patients with acute rectal bleeding, particularly in the presence of chronic rectal trauma or antiplatelet therapy. CTA enables rapid diagnosis. Selective coil embolization is a safe and effective first-line treatment. Awareness of this rare entity may reduce diagnostic delay and improve outcomes.

Keywords: Superior rectal artery pseudoaneurysm, lower gastrointestinal bleeding, endovascular coil embolization, computed tomography angiography

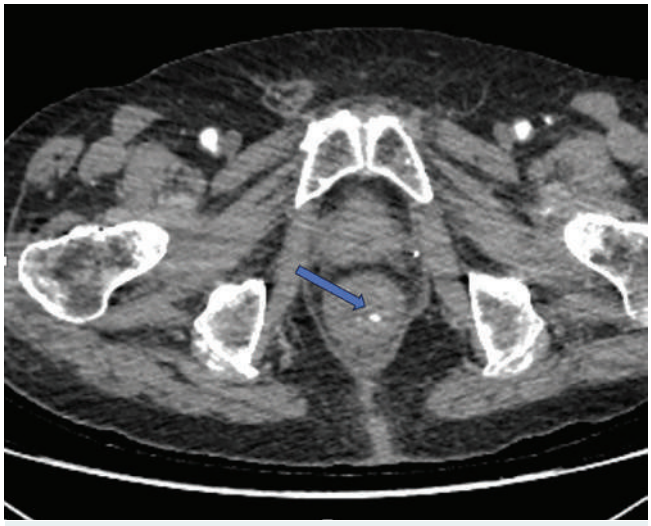


Figure 1. Contrast-enhanced CTA at admission. Demonstrating a 5-mm pseudoaneurysm arising from a distal branch of the left superior rectal artery (arrow), identified as the source of active lower gastrointestinal bleeding.



Figure 2. Pre-embolization digital subtraction angiography. Inferior mesenteric artery confirming the pseudoaneurysm in the distal branch of the superior rectal artery (arrow) prior to endovascular treatment.

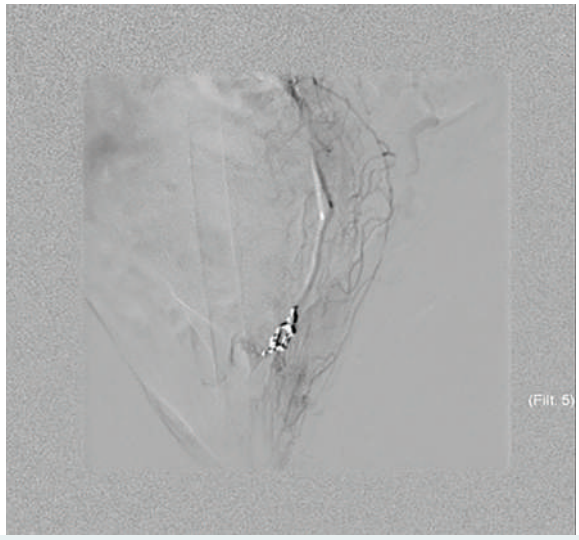


Figure 3. Post-embolization digital subtraction angiography. Complete occlusion of the pseudoaneurysm following selective coil embolization, with preservation of distal collateral perfusion and no evidence of contrast extravasation.

[P-059]

Rectal mass presenting at young age: Diffuse high-grade B-cell non-Hodgkin lymphoma

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Objective: Non-Hodgkin lymphoma (NHL) is a malignancy primarily affecting lymph nodes but capable of extranodal involvement. The gastrointestinal system is the most common extranodal site, although rectal involvement is rare and often clinically mistaken for adenocarcinoma. This case report presents diffuse high-grade B-cell NHL initially manifesting with constipation and bleeding.

Material and Methods: A 23-year-old male patient presented with lower gastrointestinal bleeding and constipation. Physical examination and colonoscopy were performed. Biopsies were obtained from the rectal lesion and sent for histopathological examination. Staging was completed with cross-sectional imaging and PET-CT. Clinical, endoscopic, pathological, and radiological findings led to diagnosis, followed by multidisciplinary tumor board evaluation of treatment options.

Results: History revealed fever, fatigue, night sweats, and 10 kg weight loss over two months. Physical examination identified multiple lymph nodes (>1 cm) in bilateral cervical, axillary, and inguinal regions. Digital rectal examination detected a posteriorly localized, mucosa-elevating, relatively smooth-surfaced, bleeding mass occupying half the lumen in the lower and middle third of rectum. Tumor marker CA 125 was elevated (62 U/mL, n <30). Computed tomography revealed multiple enlarged lymph nodes in thoracic, abdominal, and pelvic regions, with an approximately 11 cm mediastinal mass lesion consistent with widespread lymphomatous involvement. Rectal protocol MRI staged the tumor as cT4bN2bM1. Histopathological examination of biopsy material showed diffuse infiltration by atypical lymphoid cells. Immunohistochemical analysis confirmed high-grade B-cell NHL diagnosis, and the patient was referred to medical oncology.

Conclusion: Presentation of diffuse high-grade B-cell NHL as a rectal mass in young patients is extremely rare. This case emphasizes that lymphoma should be considered in the differential diagnosis of rectal tumors.

Keywords: Non-Hodgkin lymphoma, rectal neoplasm, lower gastrointestinal bleeding

[P-060]

A rare diagnostic dilemma after breast-conserving surgery: Differential diagnosis of titanium clip-induced hypersensitivity reaction and radiation dermatitis

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Objective: Marking the tumor bed with titanium clips following breast-conserving surgery (BCS) is a standardized procedure to facilitate accurate target volume definition and precision of the boost dose in adjuvant radiotherapy (RT). Titanium is widely preferred in medical implants due to its biocompatibility and favorable biomechanical properties. However, emerging literature suggests that these clips may trigger localized type IV delayed-type hypersensitivity reactions, particularly in patients with nickel cross-reactivity or specific metal sensitivities. The clinical presentation often overlaps with post-RT radiation dermatitis or cellulitis, posing a significant diagnostic challenge for clinicians.

Material and Methods: A 62-year-old female patient presented with a 17 mm mass in the lower-inner quadrant of the right breast. Following BCS and sentinel lymph node biopsy, histopathological analysis revealed a stage I (pT1N0M0) mixed invasive ductal carcinoma with a 90% mucinous component (ER+, PR+, CerbB2: +1). Four titanium clips were placed in the excision cavity during surgery. The patient, who reported a history of contact dermatitis to non-gold metals, received hypofractionated RT (40 Gy in 15 fractions to the whole breast plus a 10 Gy boost) starting four weeks post-surgery. Following RT, persistent erythema, induration, and increased local temperature were observed at the operative site.

Results: Initial treatments targeting radiation dermatitis and infection, including topical/systemic steroids and antibiotics, yielded no clinical improvement. Subsequent dermatological evaluation via patch testing revealed a strong positive reaction to nickel sulfate. The clinical condition was interpreted as a secondary allergic reaction to the titanium clips (possibly due to trace nickel content or titanium itself). Consequently, surgical intervention was planned. The clips were localized using stereotactic wire guidance and surgically excised. Postoperatively, the patient's symptoms rapidly regressed, and complete clinical resolution was achieved. The patient remains on hormonal therapy (letrozole).

Conclusion: This case underscores the necessity of a multidisciplinary approach in managing chronic skin reactions following BCS. In cases of "radiation dermatitis" that remain refractory to standard therapies and are localized to the surgical site, hypersensitivity to implanted metallic materials must be considered in the differential diagnosis. For patients with a known history of metal allergy, utilizing biopolymer clips or alternative marking techniques during surgical planning may minimize the risk of such complications.

Keywords: Breast cancer, titanium clip hypersensitivity, nickel allergy, radiation dermatitis, surgical excision



Figure 1. Clinical appearance of marked erythema and local inflammation in the surgical field following radiotherapy, refractory to standard treatments.

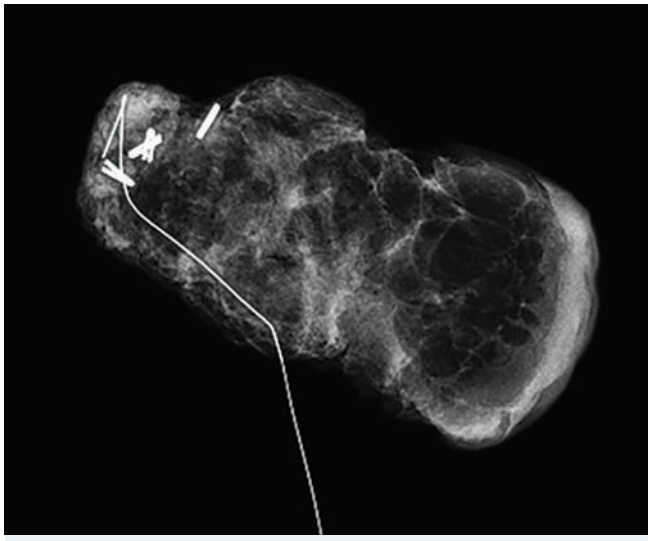


Figure 2. Mammographic image showing stereotactic wire localization of the titanium clips for surgical excision as the source of the allergic reaction.

[P-062]

Gastric fistulization into a mastectomy site: A rare and challenging clinical entity

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Objective: Gastrocutaneous fistulas are rare but serious complications typically associated with surgery, malignancy, or interventional procedures. A gastro-mammary fistula draining into a mastectomy site represents an exceptionally rare clinical entity. We present an unusual case with a complex clinical course.

Material and Methods: An 81-year-old female patient underwent modified radical mastectomy for invasive breast cancer approximately 4.5 years earlier, followed by adjuvant chemotherapy and radiotherapy. About 1.5 years prior, percutaneous radiofrequency ablation was performed for liver metastasis. Following the procedure, the patient experienced recurrent hospitalizations due to abdominal pain and abscess formation at the mastectomy site. During the most recent admission, discharge resembling gastric contents was observed from the mastectomy site. Contrast-enhanced computed tomography demonstrated a fistulous tract between the stomach and the mastectomy scar region. The patient was transferred to the general surgery department and evaluated in a multidisciplinary setting.

Results: Due to advanced age and comorbidities, endoscopic management was initially preferred. Endoscopic clipping of the internal fistula opening was attempted but was unsuccessful. Subsequently, placement of a percutaneous endoscopic gastrostomy tube through the fistula tract was performed to achieve controlled fistula drainage; however, leakage persisted. Surgical intervention was therefore undertaken, consisting of gastric wedge resection and wound debridement. On postoperative day three, the patient developed sudden cardiac arrest and was declared deceased despite resuscitative efforts.

Conclusion: Gastro-mammary fistula is an extremely rare and challenging clinical condition. Prior surgical history and interventional procedures may contribute to fistula development. Advanced age and comorbidities significantly influence treatment decisions. A multidisciplinary approach is essential in the management of such atypical fistulas.

Keywords: Gastrocutaneous fistula, breast cancer, radiofrequency ablation

[P-063]

Occult papillary thyroid carcinoma lymph node metastasis detected during surgery for tertiary hyperparathyroidism: A case report

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Objective: Papillary thyroid carcinoma (PTC) is generally a malignancy with a favorable prognosis; however, in some cases, it may present with lymph node metastasis without a clinically detectable primary tumor. Particularly in immunosuppressed patients, the tumor biology has been reported to exhibit a more aggressive course. The detection of occult PTC during neck surgeries performed for tertiary hyperparathyroidism is extremely rare. In this case report, we present a PTC lymph node metastasis incidentally identified within parathyroidectomy specimens in a renal transplant recipient.

Material and Methods: A 43-year-old female patient had a history of cadaveric renal transplantation in January 2025. She was diagnosed with tertiary hyperparathyroidism due to persistent hypercalcemia refractory to medical therapy and markedly elevated parathyroid hormone levels. High-resolution thyroid ultrasonography demonstrated a 5×4 mm hypoechoic nodule with punctate microcalcifications in the right thyroid lobe, categorized as TIRADS 7. Parathyroid scintigraphy revealed a hyperfunctioning parathyroid lesion located in the inferior region of the left thyroid lobe, consistent with parathyroid adenoma or hyperplasia. The patient subsequently underwent subtotal (3/4) parathyroidectomy with concomitant excision of the thyrothymic ligament.

Results: Histopathological examination revealed parathyroid hyperplasia in the right superior and left parathyroid glands. In the tissue specimens labeled as the right inferior parathyroid gland, four metastatic lymph nodes were identified, the largest measuring 5 mm in diameter. The lymph nodes exhibited morphological features consistent with PTC, including the presence of psammoma bodies, and extranodal extension was observed in one lymph node. An additional lymph node containing psammomatous calcifications within the thyrothymic ligament was also considered metastatic. Immunohistochemical analysis demonstrated positivity for TTF-1 and HBME-1. Postoperative histopathological evaluation revealed that the specimen submitted as the right inferior parathyroid gland contained metastatic lymph nodes. Additionally, a lymph node identified within the thyrothymic ligament specimen exhibited psammomatous-type calcifications and was therefore considered metastatic. Hyperfunctioning parathyroid tissue is observed in the area corresponding to the left inferior parathyroid lodge.

Conclusion: Although central lymph node metastasis is not uncommon in cases of occult PTC, the presence of multiple metastatic lymph nodes with extranodal extension in the absence of an identifiable primary tumor is noteworthy. In renal transplant recipients, chronic immunosuppression has been implicated in the development of more aggressive tumor biology in differentiated thyroid carcinomas, potentially contributing to advanced nodal disease at presentation. This case underscores the critical importance of meticulous histopathological examination of all surgical specimens obtained during surgery for tertiary hyperparathyroidism and highlights that occult thyroid malignancies in immunosuppressed patients may present with clinically significant metastatic disease.

Keywords: Occult thyroid cancer, papillary thyroid carcinoma, tertiary hyperparathyroidism

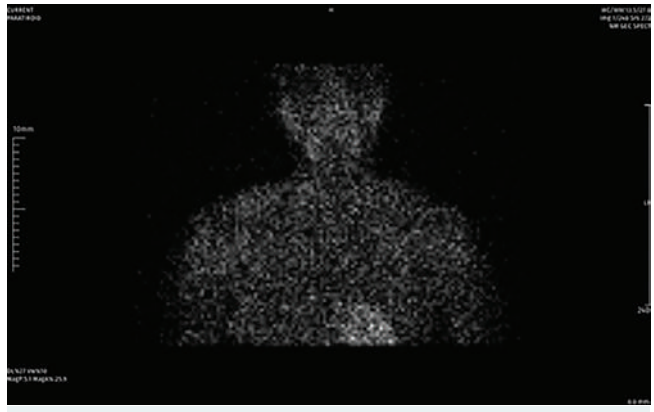
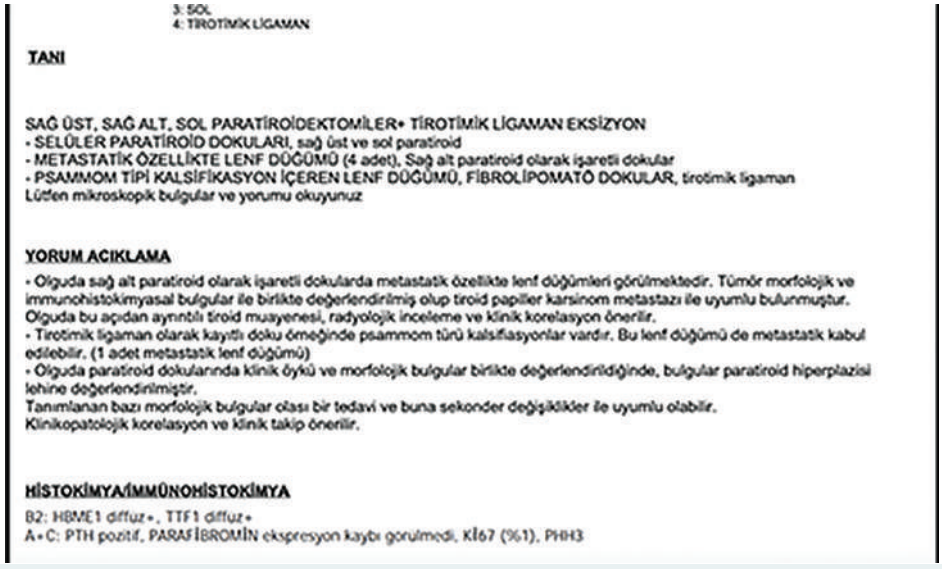


Figure 1. Preoperative Tc-99m MIBI parathyroid scintigraphy.



3: SOL
4: TİROTİMİK LİGAMAN

TANI

SAĞ ÜST, SAĞ ALT, SOL PARATİROİDEKTOMİLER+ TİROTİMİK LİGAMAN EKSİZYON
- SELÜLER PARATİROİD DOKULARI, sağ üst ve sol paratiroid
- METASTATİK ÖZELLİKTE LENF DÜĞÜMÜ (4 adet), Sağ alt paratiroid olarak işaretli dokular
- PSAMMOM TİPİ KALSİFİKASYON İÇEREN LENF DÜĞÜMÜ, FİBROLİPOMATÖ DOKULAR, tirotimik ligaman

Lütfen mikroskopik bulgular ve yorumu okuyunuz

YORUM AÇIKLAMA

- Olguda sağ alt paratiroid olarak işaretli dokularda metastatik özellikte lenf düğümleri görülmektedir. Tümör morfolojik ve immunohistokimyasal bulgular ile birlikte değerlendirilmiş olup tiroid papiller karsinom metastazı ile uyumlu bulunmuştur. Olguda bu açıdan ayrıntılı tiroid muayenesi, radyolojik inceleme ve klinik korelasyon önerilir.
- Tirotimik ligaman olarak kayıtlı doku örneğinde psammom türü kalsifasyonlar vardır. Bu lenf düğümü de metastatik kabul edilebilir. (1 adet metastatik lenf düğümü)
- Olguda paratiroid dokularında klinik öykü ve morfolojik bulgular birlikte değerlendirildiğinde, bulgular paratiroid hiperplazisi lehine değerlendirilmiştir.

Tanımlanan bazı morfolojik bulgular olası bir tedavi ve buna sekonder değişiklikler ile uyumlu olabilir.
Klinikopatolojik korelasyon ve klinik takip önerilir.

HİSTOKİMYA/İMMÜNOHİSTOKİMYA

B2: HBME1 diffuz+, TTF1 diffuz+
A+C: PTH pozitif, PARAFİBROMİN ekspresyon kaybı görülmedi, Ki67 (%1), PHH3

Figure 2. Postoperative pathology result.

[P-064]

Parathyroid adenoma arising from autotransplanted tissue: A rare cause of primary hyperparathyroidism

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Objective: Primary hyperparathyroidism (PHPT) is most commonly caused by a solitary parathyroid adenoma and is characterized by hypercalcemia and elevated parathyroid hormone levels. Parathyroid autotransplantation is frequently performed during thyroidectomy when gland perfusion is compromised in order to prevent permanent hypoparathyroidism. Although autotransplanted parathyroid tissue may remain viable and functional for many years, adenoma formation in grafted tissue is extremely rare. Most reported cases in the literature are associated with secondary hyperparathyroidism or multiple endocrine neoplasia syndromes. The aim of this study is to present a case of PHPT caused by an adenoma arising from autotransplanted parathyroid tissue approximately three decades after thyroid surgery.

Material and Methods: Clinical, laboratory, radiological, and surgical findings of a 60-year-old female patient presenting with hypercalcemia and elevated parathyroid hormone levels were retrospectively evaluated. The patient had previously undergone total thyroidectomy and parathyroid autotransplantation for multinodular goiter. Neck ultrasonography, Tc-99m sestamibi scintigraphy, and four-dimensional computed tomography (4D-CT) were used for lesion localization. Intraoperative PTH monitoring and histopathological findings were analyzed following surgical treatment.

Results: Initial ultrasonography and sestamibi scintigraphy were inconclusive. 4D-CT demonstrated a small arterially enhancing lesion adjacent to the right strap muscles. Targeted ultrasonography confirmed the lesion. Minimally invasive parathyroidectomy was performed under intraoperative ultrasonographic guidance. Intraoperative PTH levels decreased from 318 pg/mL to 70 pg/mL, indicating adequate resection. Histopathological examination confirmed a parathyroid adenoma arising from autotransplanted tissue. Postoperatively, serum calcium and PTH levels normalized, and the patient's symptoms improved.

Conclusion: Adenoma formation in autotransplanted parathyroid tissue is a rare but important cause of PHPT and may occur decades after thyroidectomy. Careful evaluation of prior surgical history and autotransplantation sites is essential in patients with unexplained hyperparathyroidism. Advanced imaging modalities such as 4D-CT can facilitate localization of atypically located parathyroid lesions and contribute to accurate surgical planning.

Keywords: Primary hyperparathyroidism, parathyroid autotransplantation, parathyroid adenoma

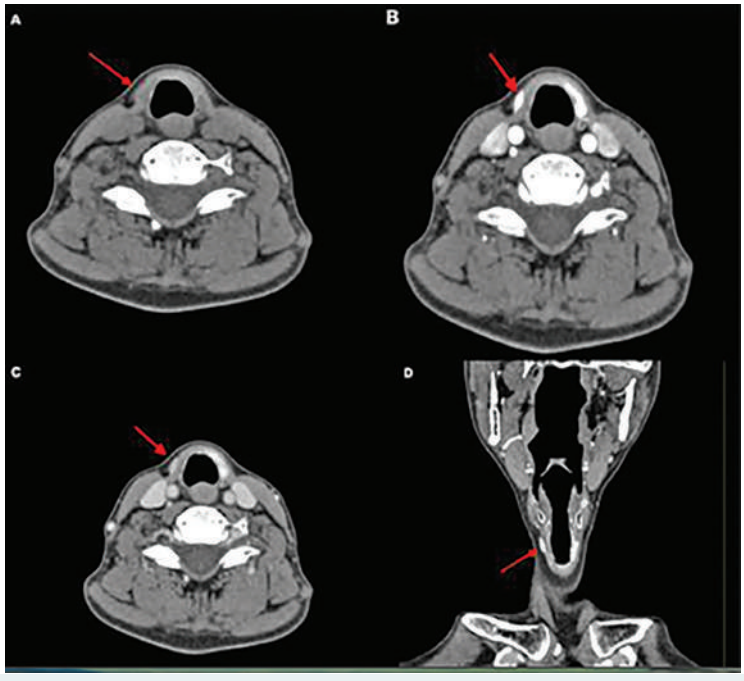


Figure 1. Four-dimensional contrast-enhanced CT imaging of the neck. (A) Non-contrast axial image shows an isodense fusiform lesion. (B) Axial arterial-phase images demonstrate a well-defined, avidly enhancing 7×5 mm lesion located anterior to the strap muscles. (C) The lesion exhibits a washout pattern on venous-phase images. (D) The arterial-phase coronal reconstructed image demonstrates an arterially hyperenhancing, tear-drop-shaped lesion located adjacent to the strap muscles, consistent with an autotransplanted parathyroid adenoma.

[P-065]

Laparoscopic cholecystectomy in a patient with situs inversus: Case report

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Objective: Situs inversus totalis (SIT) is a rare congenital anomaly characterized by the mirror-like arrangement of thoracic and abdominal organs. Its incidence is reported to be approximately 1/5,000-20,000. This variation presents significant challenges, particularly in terms of orientation and ergonomics during surgery. In this study, we aimed to share our experience with laparoscopic cholecystectomy in a patient diagnosed with SIT on the background of the rare Kartagener syndrome, along with a review of the literature.

Material and Methods: A 66-year-old female patient with Kartagener syndrome (situs inversus, chronic sinusitis, bronchiectasis) presented to our clinic with complaints of abdominal pain in the left upper quadrant radiating to the back after meals. Ultrasonography confirmed cholelithiasis and the location of the gallbladder in the left upper quadrant. The patient's laboratory findings were normal. Elective cholecystectomy was planned for the patient. The operation was performed with the surgical tower and ports positioned to create a mirror image of standard laparoscopic cholecystectomy. Critical visibility was achieved by following safe cholecystectomy steps. The cystic artery and cystic duct were safely dissected and clipped, and the gallbladder was removed without any complications. No biliary tract variation anomalies were observed during the operation. No complications developed in the postoperative period. Port entry points video presentation of laparoscopic cholecystectomy performed on a patient with SIT.

Results: Laparoscopic cholecystectomy in the presence of SIT is technically challenging, especially for right-handed dominant surgeons. Various port placement and surgeon positioning strategies have been described in the literature, including mirror-image American and French techniques. Khanzada et al. reported that mirror-image positioning of the surgical team and ports improved operation time and ergonomics. In a series of 12 cases by Jani et al., the modified French technique was shown to be safe and effective; with technical adaptations, complication rates were similar to those in patients with normal anatomy. In our case, cholecystectomy was planned according to the American technique; despite the confusion and difficulty caused by the mirror image during the operation, the surgery was completed without complications, meeting all the requirements for safe cholecystectomy.

Conclusion: In conclusion, laparoscopic cholecystectomy, while technically challenging, is a safe treatment option for patients with SIT. However, detailed preoperative evaluation, appropriate surgical modifications and strategic port placement, adherence to surgical principles, and adaptability are critical for successful surgery. When performed by experienced teams, clinical outcomes similar to those seen in patients with normal anatomy can be achieved in SIT patients.

Keywords: Laparoscopic cholecystectomy, situs inversus totalis

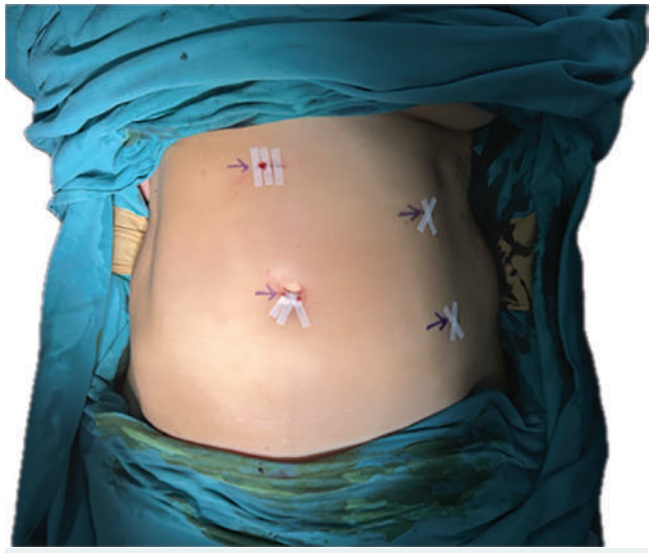


Figure 1. Port entry points.

Figure 2. The video can be accessed via QR code.

[P-066]

Hepatic hydatid cyst fistulized to the lung: Surgical management and a multidisciplinary approach

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Objective: Hydatid disease is an endemic zoonotic infection caused by *Echinococcus granulosus*, predominantly affecting the liver and lungs. Although hepatic hydatid cysts are often asymptomatic, rupture may result in severe and potentially life-threatening complications. Transdiaphragmatic fistulization of a hepatic hydatid cyst into the thoracic cavity and lung is a rare but highly morbid condition. In particular, type 4 hydatid cysts with atypical radiological features may lead to delayed diagnosis. The rupture mechanism is associated with prolonged pressure exerted by the cyst, diaphragmatic erosion, alterations in intrathoracic pressure, and a history of previous surgical interventions. According to the World Health Organization classification, type 4 hydatid cysts are considered degenerative and inactive; however, their solid appearance may mimic malignancy, abscesses, or other solid lesions.

Material and Methods: A 76-year-old female patient was diagnosed with indirect hemagglutination assay (IHA) positivity in 2022. Imaging findings were consistent with a type 4 hydatid cyst. The patient was evaluated by interventional radiology and deemed unsuitable for puncture-aspiration-injection-reaspiration (PAIR) therapy. Albendazole treatment was initiated, and IHA seronegativity was observed at the 6-month follow-up. No increase in cyst size was detected during routine follow-up. Three years later, the patient was hospitalized by the pulmonology department with a preliminary diagnosis of pneumonia. Due to clinical deterioration, thoracic computed tomography was performed, revealing fistulization of the hepatic hydatid cyst into the thoracic cavity. The patient was referred to our department and underwent emergency surgery. Multiloculated cystic lesions are observed within the lung parenchyma in the right hemithorax, adjacent to the diaphragm. Cystic structures are present in the basal segments of the right lower lobe, accompanied by surrounding parenchymal changes. Disruption of diaphragmatic integrity and the presence of an inserted thoracic tube are noted.

Results: The operation was performed in collaboration with the thoracic surgery department. Intraoperatively, bilious and purulent fluid was observed in the thoracic cavity. After drainage and debridement, a fistulous tract was identified on the diaphragm. The diaphragm was incised, and the hydatid cyst cavity located at the hepatic dome was debrided. A bile duct detected at the inferior aspect of the cyst cavity was sutured and closed. Postoperatively, bile leakage from the thoracic drain was observed, and endoscopic retrograde cholangiopancreatography was performed. Following the procedure, the patient's clinical condition improved, and she was discharged uneventfully after a 30-day follow-up period.

Conclusion: This case demonstrates that hydatid cysts may cause serious complications despite serological negativization over time. Therefore, clinical and radiological findings should be evaluated in conjunction with serological tests. Although PAIR is an effective treatment option in selected cases, it is generally not recommended for type 4 or complicated hydatid cysts.

Keywords: Hepatic hydatid cyst, hydatid cyst complication, ERCP



Figure 1. Coronal thoracic computed tomography image.



Figure 2. Axial thoracic computed tomography.

[P-067]

Pseudopapillary neoplasia of the pancreas in childhood: Our experience with pancreatectomy

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Objective: Solid pseudopapillary tumors of the pancreas are rare, low-grade malignant exocrine neoplasms of the pancreas. They are known in the literature as "Frantz tumors". Although they account for only 1-3% of all pancreatic tumors, they represent 70% of pancreatic tumors in children. Typically seen in patients aged 20-30 years, 20-25% of cases occur in the pediatric population. The mass grows slowly and symptoms generally appear secondary to compression. The most common symptoms are abdominal pain and a palpable mass. Tumor markers are mostly normal in blood tests. Approximately 10% of cases are incidentally detected. In this report, we present surgical approaches for two pediatric patients with incidentally detected pancreatic masses.

Material and Methods: Two patients with pancreatic masses were evaluated in these cases, where the general surgery and pediatric surgery clinics jointly managed the diagnosis, treatment and follow-up process.

Results: Case 1: A 17-year-old female patient with no known medical history presented to the outpatient clinic due to failure to gain weight. The requested abdominal ultrasound revealed a hyperechoic lesion measuring 55x52 mm in the head of the pancreas, containing solid and cystic components. The abdominal CT scan showed a 55-mm mass in the head of the pancreas with peripheral contrast enhancement. A tru-cut biopsy was planned from the mass. No complications were observed in the postoperative period. The patient was discharged on the 8th postoperative day. No recurrence was observed during follow-up at 3 years postoperatively. Case 2: A 15-year-old female patient with no known medical history presented to the outpatient clinic with abdominal pain and a palpable mass. A solid lesion measuring 90x65x107 mm in size, with heterogeneous characteristics and internal vascularization, was observed in the body-tail section of the pancreas. The patient underwent a spleen-preserving distal pancreatectomy. The patient was discharged on the 6th postoperative day. No complications were observed during the postoperative period. No recurrence was observed during the 3-month postoperative follow-up.

Conclusion: The definitive diagnosis of pancreatic pseudopapillary neoplasm is established through pathological and immunohistochemical evaluations. In immunohistochemical staining, beta-catenin, CD10, CD56, CD99, vimentin and NSE are typically positive, while chromogranin-A is negative. Surgical resection is the only effective treatment. The extent of surgical resection varies depending on the location of the mass. Five-year survival after complete resection is over 95%. Recurrence is usually seen in 6-7% of cases within the first 4 years. It most commonly metastasizes to the liver and peritoneum. Complete resection is essential for successful treatment. In the pediatric population, success rates are increasing and complication rates are decreasing thanks to a multidisciplinary team approach to the patient.

Keywords: Child, pancreas, pseudopapillary neoplasia

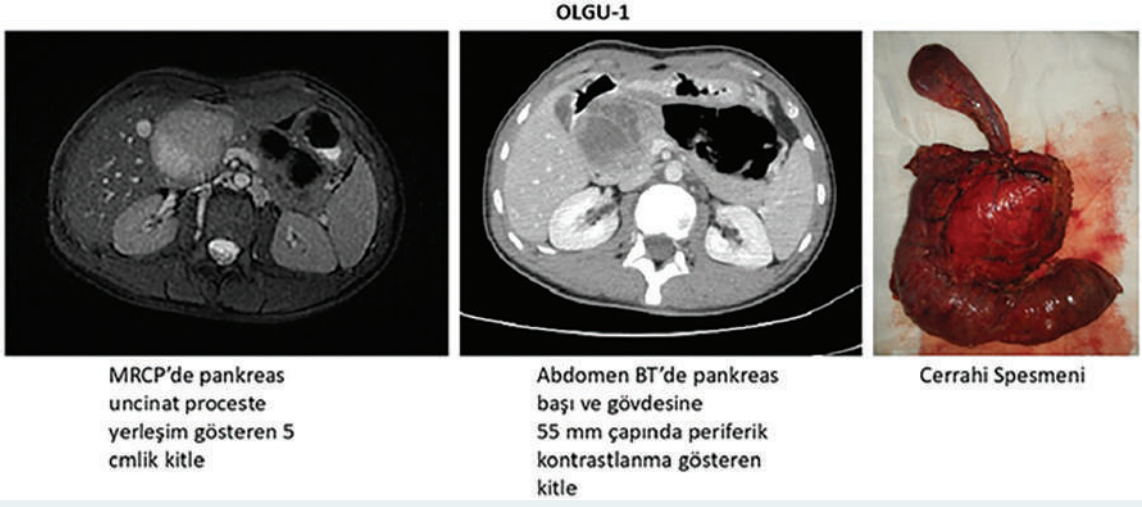


Figure 1. Case 1.

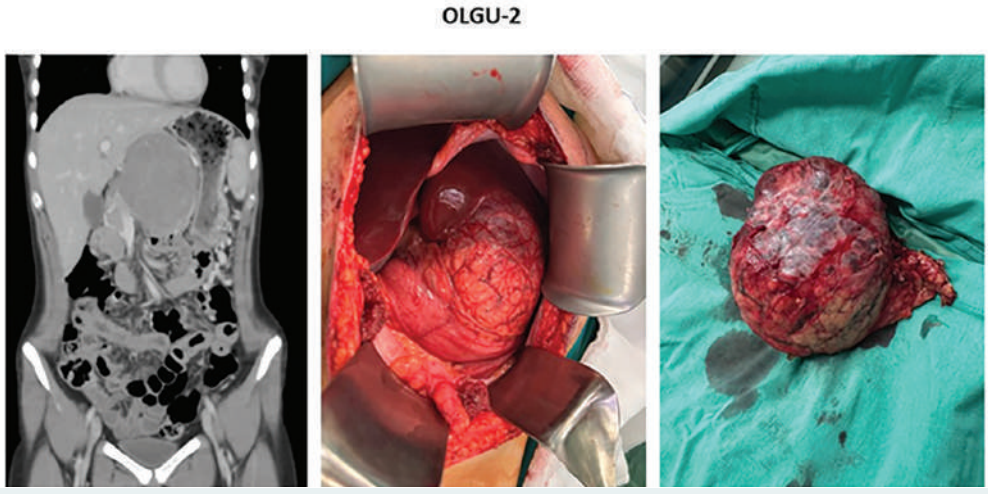


Figure 2. Case 2.

[P-068]

Pancreatic head adenocarcinoma in a 19-year-old patient evaluated for suspected bile duct injury

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Objective: In patients presenting with jaundice, malignancies should be kept in mind as much as benign causes. Particularly in young patients, the diagnosis of pancreatic cancer can be delayed due to its rarity in this age group. This case is presented to highlight the diagnostic challenges, as the patient was initially evaluated following a cholecystectomy with a preliminary diagnosis of bile duct injury, but was subsequently diagnosed with pancreatic head adenocarcinoma.

Material and Methods: This is a retrospective review of our patient whose treatment process was completed in our clinic.

Results: A 19-year-old female patient presented with jaundice on the 4th postoperative day following a laparoscopic cholecystectomy performed at an external center. Laboratory investigations revealed elevated cholestatic enzymes and bilirubin levels of 4.73/8.59 mg/dL. MRCP and percutaneous transhepatic cholangiography showed blunt termination of the distal common bile duct. Based on these findings, the patient was operated on with a preliminary diagnosis of bile duct injury (bismuth type E). During exploration, no injury was identified; biopsies were taken from the common bile duct and the head of the pancreas. Assuming a benign stricture in the distal common bile duct, a choledochoduodenostomy was performed. Following the report of adenocarcinoma from the diagnostic tru-cut biopsies of the pancreatic head, the patient underwent a Whipple procedure (pancreaticoduodenectomy). Pathological examination revealed a moderately differentiated adenocarcinoma, 1.7 cm in diameter. Surgical margins and oncological processes are currently being followed up with evaluations from different centers.

Conclusion: The symptoms of pancreatic cancer, such as jaundice and pain, are non-specific, and diagnostic specificity is limited by clinical findings alone. This case highlights that suspicion of malignancy must always be maintained in young patients presenting with postoperative jaundice, regardless of history or age. During intraoperative processes involving a diagnostic dilemma, biopsy and frozen section examination should not be avoided, and standard surgical principles must not be compromised.

Keywords: Bile duct injury, pancreatic cancer, Whipple procedure

[P-069]

Primary pancreatic lymphoma: A rare case

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Objective: In this case report, we aim to present a patient whose treatment was completed after a mass located in the head of the pancreas, causing obstructive jaundice, and which could not be diagnosed due to a crushing artifact in the preoperative biopsy, was diagnosed as primary pancreatic lymphoma (PPL) upon histopathological examination following pancreaticoduodenectomy.

Material and Methods: PPL is a rare disease, constituting less than 1% of extranodal lymphomas and approximately 0.2-0.5% of pancreatic tumors. According to the definition by the World Health Organization, PPL is a type of extranodal lymphoma that primarily occurs in the pancreas and should be localized in the pancreas for the majority of the disease, but lymph node and distant metastases can be seen. Due to the similarity of the clinical presentation, PPL is often confused with pancreatic adenocarcinoma during the diagnostic process. Imaging methods are insufficient for definitive diagnosis; pathological examination of tissue samples obtained by methods such as percutaneous, endoscopic, and EUS-FNA is necessary. Unlike adenocarcinoma, PPL is a disease that responds well to chemotherapy and has a better prognosis. Accurate differential diagnosis is crucial to avoid unnecessary surgical interventions.

Results: A 48-year-old female patient presented with jaundice and itching. Laboratory investigations revealed cholestasis and liver function tests above normal levels, while tumor markers were within normal limits. Radiological examinations showed dilation of the intrahepatic and extrahepatic bile ducts, an 8-mm hypointense nodular appearance narrowing the lumen posterior to the distal common bile duct, and asymmetric wall thickening in the medial part of the second duodenum. ERCP was planned. Endoscopic examination revealed coarse ulcerated and irregular mucosa at the papilla level. A biopsy yielded ulcerated, inflamed papilla samples, prompting a repeat endoscopy and biopsy. This biopsy yielded ulcerated, inflamed ampulla samples showing widespread crushing artifacts. The patient, who underwent pancreaticoduodenectomy after the cholangitis subsided and cholestasis levels reached acceptable limits, was discharged with a plan for oncological treatment after the main specimen revealed diffuse large B-cell lymphoma.

Conclusion: Accurate preoperative diagnosis is critical in the management of PPL to protect the patient from unnecessary and highly morbid surgical interventions. Data presented in the literature emphasize that chemotherapy is the primary treatment for PPL and that surgical resection does not provide a significant advantage in survival; on the contrary, it increases morbidity. Therefore, in masses that may be radiologically confused with pancreatic adenocarcinoma, histopathological confirmation must be performed before a surgical decision is made.

Keywords: PPL, EUS-FNA, pancreaticoduodenectomy

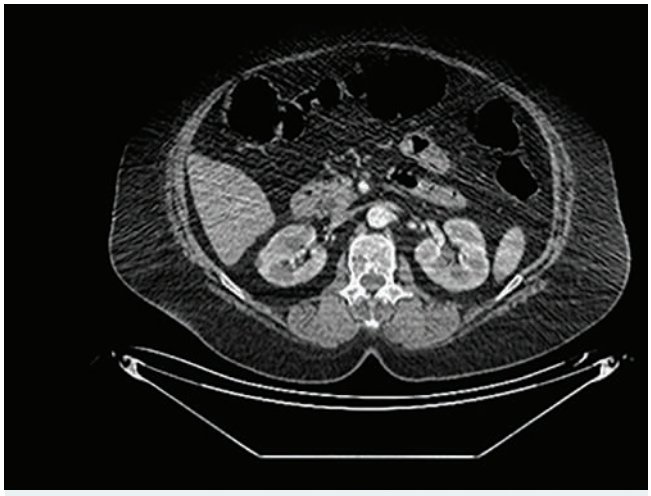


Figure 1. Tomography image.

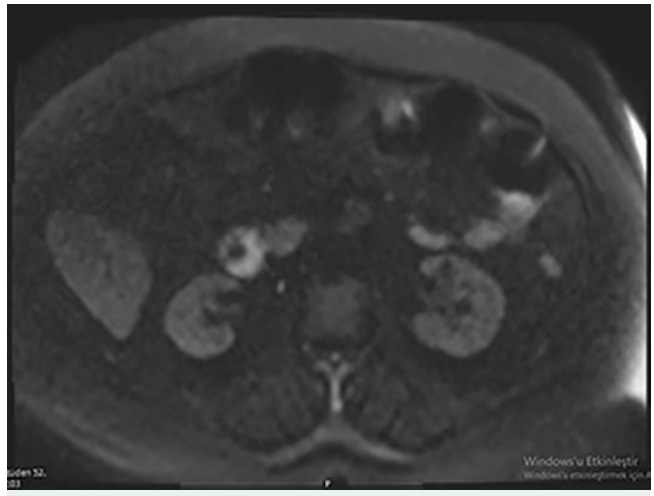


Figure 2. MR image.

[P-070]

Laparoscopic reversal of Roux-en-Y gastric bypass with conversion to sleeve gastrectomy for dumping syndrome

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Objective: Roux-en-Y gastric bypass (RYGB) may be performed following sleeve gastrectomy (SG) due to mechanical complications or severe food intolerance. However, RYGB itself may lead to significant postoperative complications such as dumping syndrome, hypoglycemia, and impaired quality of life. Reversal (takedown) of RYGB with restoration of restrictive anatomy represents a rarely reported and technically demanding revisional bariatric procedure. We present a case of laparoscopic RYGB reversal with conversion to SG performed for severe dumping syndrome.

Material and Methods: A 20-year-old male underwent laparoscopic SG in 2020 at an external center. Postoperatively, he developed reflux and solid food intolerance. In 2022, a laparoscopic revision (twist correction and partial bridectomy) was performed; however, symptoms persisted. In 2023, endoscopic and radiological evaluations revealed a stricture at the level of the incisura angularis, and an open RYGB was performed. Severe postoperative dumping syndrome subsequently developed, and the patient was referred to our center. Due to persistent and quality-of-life–limiting dumping symptoms, revisional surgery was planned and performed in 2025. During laparoscopic exploration, the gastrojejunostomy was carefully dissected and divided, the Roux limb was excluded, and intestinal continuity was preserved. The gastric pouch and remnant stomach were mobilized, and a stapled gastro-gastrostomy was created using a linear stapler to restore restrictive sleeve anatomy. During laparoscopic RYGB reversal, a gastro-gastrostomy anastomosis is created between the gastric pouch and the remnant stomach using a circular stapler. This technique restores the restrictive sleeve anatomy. Following the detection of a gastro-gastrostomy leak on postoperative day 9, an internal drainage catheter was placed endoscopically. After radiological confirmation of leak resolution, the catheter was removed endoscopically at 6 weeks.

Results: On postoperative day 9, drainage of oral intake through the surgical drain was observed. Endoscopic evaluation revealed a 0.5-1 cm defect at the gastro-gastrostomy site. A bariatric stent was initially placed but removed on postoperative day 2 due to intolerance. Internal drainage was subsequently established using a double-J catheter. Clinical and radiological follow-up demonstrated progressive resolution of the leak. After radiological confirmation of fistula closure, the catheter was removed endoscopically at 6 weeks. The patient achieved full oral intake with marked improvement of dumping symptoms and remained clinically stable during follow-up.

Conclusion: Reversal of RYGB with conversion to SG may be considered in selected patients with severe dumping syndrome. Anastomotic leakage remains a significant complication in such complex revisional procedures; however, it can be managed with appropriate advanced endoscopic interventions. Careful surgical planning and experience are essential in complex revisional bariatric surgery.

Keywords: Roux-en-Y gastric bypass reversal, conversion to sleeve gastrectomy, anastomotic leakage

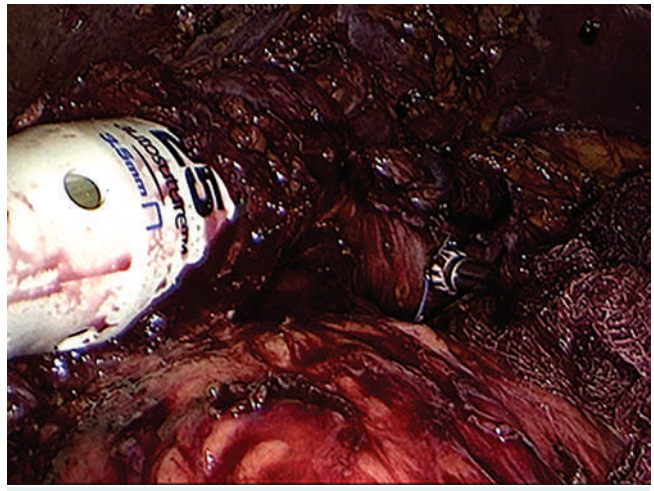


Figure 1. Gastro-gastrostomy anastomosis created using a circular stapler.

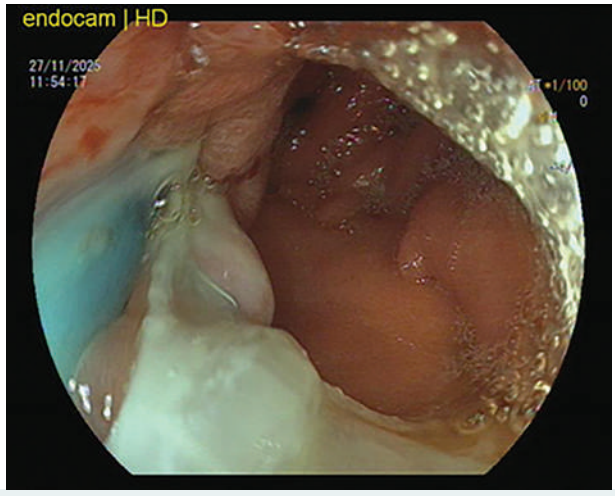


Figure 2. Endoscopic removal of the drainage catheter from the leak site at 6 weeks.

[P-071]

Acute splenic torsion following sleeve gastrectomy: Laparoscopic splenopexy-a case report

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Objective: Splenic complications following sleeve gastrectomy are rare and may result from disruption of splenic suspensory ligaments, leading to abnormal splenic mobility, venous congestion, and torsion.

Material and Methods: A 31-year-old woman with a history of sleeve gastrectomy presented with acute onset left upper quadrant abdominal pain of one-day duration. Laboratory evaluation revealed normal liver and renal function tests, normal coagulation parameters, and normal complete blood count values except for mild elevation of acute-phase reactants. Previous imaging demonstrated chronic splenomegaly without torsion. Extensive etiological investigations for splenomegaly were unremarkable. Contrast-enhanced computed tomography revealed newly developed acute anterior splenic torsion associated with focal ischemic changes, splenic vein tortuosity, free fluid, and collateral vessels consistent with left-sided portal hypertension.

Results: Laparoscopic meshless splenopexy using a preperitoneal pouch technique was successfully performed for symptomatic relief. The postoperative course was uneventful, with resolution of pain and radiologic improvement.

Conclusion: Acute splenic torsion with ischemic changes may occur on a background of chronic splenomegaly after sleeve gastrectomy. In patients with preserved splenic viability, laparoscopic splenopexy represents a safe and effective spleen-preserving alternative to splenectomy.

Keywords: Splenic torsion, sleeve gastrectomy, laparoscopic splenopexy

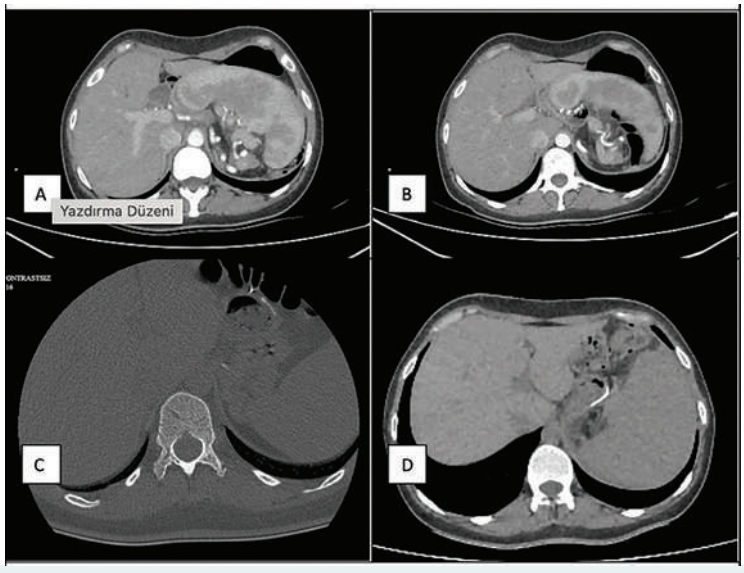


Figure 1. Radiologic findings before and after laparoscopic splenopexy. (A) Preoperative contrast-enhanced CT demonstrating anterior displacement of the spleen with heterogeneous parenchymal enhancement and patchy ischemic areas consistent with acute splenic torsion. (B) Preoperative CT showing a tortuous splenic pedicle and distorted splenic vessels, suggestive of vascular twisting and venous outflow obstruction. (C) Contrast-enhanced CT performed two years earlier demonstrating splenomegaly with the spleen located in its normal anatomical position, without evidence of torsion or vascular distortion. (D) Postoperative CT demonstrating restoration of the spleen to its normal anatomical position with reduction of the previously observed patchy parenchymal changes. The spleen remains enlarged but shows improved homogeneous enhancement.

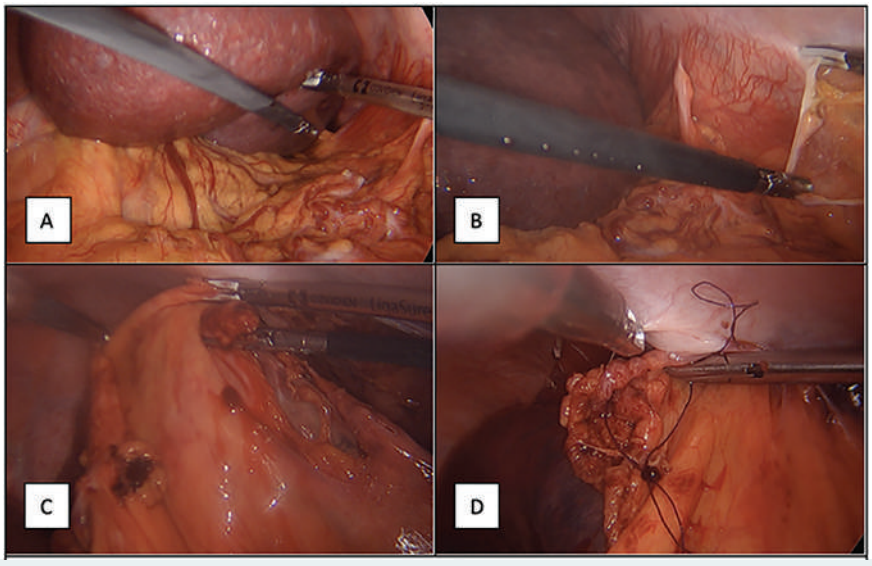


Figure 2. Intraoperative steps of laparoscopic splenopexy. (A) Intraoperative view demonstrating splenomegaly with ischemic discoloration of the splenic parenchyma. Prominent collateral vessels secondary to impaired splenic venous perfusion are visible around the spleen. (B) Creation of the preperitoneal flap for splenic fixation. (C) Placement of the spleen into the preperitoneal pouch after adequate flap mobilization. (D) Closure of the preperitoneal flap using absorbable sutures to secure the spleen in its anatomical position.

[P-072]

A case of gastric perforation presenting with silent abdomen and massive pneumoperitoneum

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Objective: Gastric perforation, classically known as "board abdomen," is an acute surgical emergency presenting with severe peritonitis. However, perforations occurring in atypical locations due to chronic non-steroidal anti-inflammatory drug (NSAID) use can present with unusual clinical outcomes. This case report describes a clinically asymptomatic case of gastric perforation due to NSAID use.

Material and Methods: Patients presenting to our hospital's tertiary emergency department undergo diagnostic, imaging, and specialist evaluation processes. After their treatment is determined, they are admitted to the relevant department if deemed necessary, and their final treatment, including surgery, is carried out.

Results: Case Report: A 32-year-old female patient presented to the main ward with complaints of significant abdominal distension and weakness. Physical examination revealed a very pale appearance, but no signs of acute illness such as tachycardia, dyspnea, or the need for positioning; vital signs were within physiological limits. Detailed history revealed chronic use of naproxen. Abdominal examination showed distension and tympanic sounds; however, no tenderness or pain was felt on palpation. Laboratory tests revealed a very low hemoglobin level (3.5 g/dL), indicating chronic anemia. Blood transfusions were initiated, and further imaging studies were planned to elucidate the etiology of the abdominal distension. Radiographic examination revealed widespread free air. Oral contrast imaging was repeated; however, no contrast leakage was observed in the peritoneal cavity, so surgery was not initially planned; the patient was kept under observation. During the follow-up period, it was observed that the pneumoperitoneum gradually increased within 6-8 hours and spread to the subcutaneous tissue of the chest and trunk. Due to this progressive condition, a decision was made to perform a diagnostic abdominal surgery (laparotomy). During the laparotomy, a hole (perforation) of approximately 5 mm in size was found on the anterior surface of the gastric fundus, and it was understood that this was the source of the massive air. There was no sign of chronic ulceration in this area of the stomach. The perforation was partially closed by the spleen. This perforation was closed with an omental patch, the abdomen was cleaned, and the surgery was concluded. The patient recovered within 3 days, started oral food intake, and was discharged from the hospital.

Conclusion: Inappropriate NSAID use can lead to atypical gastric perforations, causing unusual clinical presentations. Excessive pneumoperitoneum and subcutaneous emphysema may be indicators of this condition. This case highlights how important progressive radiological findings are for intervention decisions, even in the absence of classic symptoms.

Keywords: Gastric perforation, NSAIDs, pneumoperitoneum, asymptomatic perforation

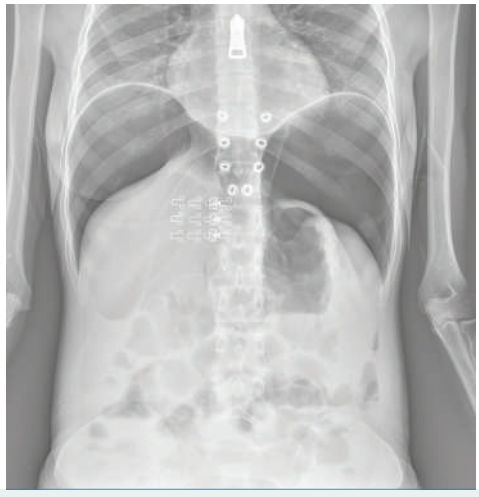


Figure 1. Standing abdominal X-ray.

Table 1. Imaging findings		
Test	**Result**	**Unit**
HGB	14.2	g/dL
RBC	4.46	10^{12}/µL
WBC	9.87	10^{9}/µL
CRP	0.7	mg/L
Chloride (Cl)	101	mEq/L
Potassium (K)	2.73	mEq/L
Sodium (Na)	141	mEq/L
e-GFR	156	-
Creatinine	0.33	mg/dL

[P-073]

Repair of an incarcerated scrotal hernia in an adult dwarf patient with type IV mucopolysaccharidosis (Morquio syndrome) using open preperitoneal Nyhus procedure: A case report

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Objective: Type IV mucopolysaccharidosis (Morquio syndrome) is a rare metabolic disorder characterized by skeletal dysplasia, short stature, and thoracic deformities. The incidence of Morquio syndrome ranges from 1 in 250,000 to 1 in 1,000,000 live births. In these patients, the choice of anesthesia and surgical approach presents significant challenges due to skeletal, thoracic, abdominal, and cardiac abnormalities. When surgical intervention is required, laparoscopic abdominal surgery may not always be feasible. In the present case, the patient was admitted for emergency surgery with a preliminary diagnosis of incarcerated scrotal hernia, and mesh repair was performed using a preperitoneal approach through a lower midline abdominal incision.

Material and Methods: A 44-year-old immobilized male patient with a diagnosis of type IV mucopolysaccharidosis presented to the emergency department with constipation for one week and abdominal distension and pain for three days. The patient reported nausea without vomiting. His medical history included hip arthroplasty, tympanoplasty, and spinal surgery. On physical examination, the patient, who was 80 cm in height and weighed 22 kg, had a distended abdomen and an incarcerated left scrotal hernia, which was irreducible. Computed tomography revealed markedly dilated ileal loops, and ileus was diagnosed. A nasogastric tube was inserted and emergency surgery was planned. Due to anatomical and respiratory characteristics, a laparoscopic approach was considered inappropriate. The abdomen was entered through a lower midline incision and the cecum and ileal loops herniated into the scrotum were reduced into the abdominal cavity. Colon and small bowel loops were viable with preserved perfusion. The preperitoneal space was accessed through the same lower midline incision, the hernia sac was reduced, and mesh repair was performed using an open preperitoneal technique. The operation was completed without complications.The postoperative course was uneventful, and the patient was followed for six days and discharged in stable condition.

Results: In patients with type IV mucopolysaccharidosis, laparoscopic surgery and general anesthesia may carry a high risk due to short stature, thoracic deformities, and airway difficulties. The literature contains a limited number of reports regarding complicated hernia repair in this patient population. The open preperitoneal approach provides a safe and effective alternative in cases where laparoscopy is not feasible.

Conclusion: Surgical management of complicated hernias in patients with type IV mucopolysaccharidosis requires special consideration. The midline preperitoneal approach is a useful and effective technique for incarcerated scrotal hernias and allows bowel resection to be performed through the same incision when necessary. In cases where laparoscopy is not feasible, open preperitoneal mesh repair can be safely performed.

Keywords: Midline preperitoneal repair, incarcerated inguinal hernia, mucopolysaccharidosis type IV

Table 1. Laboratory results		
Test	**Result**	**Unit**
HGB	14.2	g/dL
RBC	4.46	10^{12}/µL
WBC	9.87	10^{9}/µL
CRP	0.7	mg/L
Chloride (Cl)	101	mEq/L
Potassium (K)	2.73	mEq/L
Sodium (Na)	141	mEq/L
e-GFR	156	-
Creatinine	0.33	mg/dL



Figure 1. Mucopolysaccharidosis type IV.

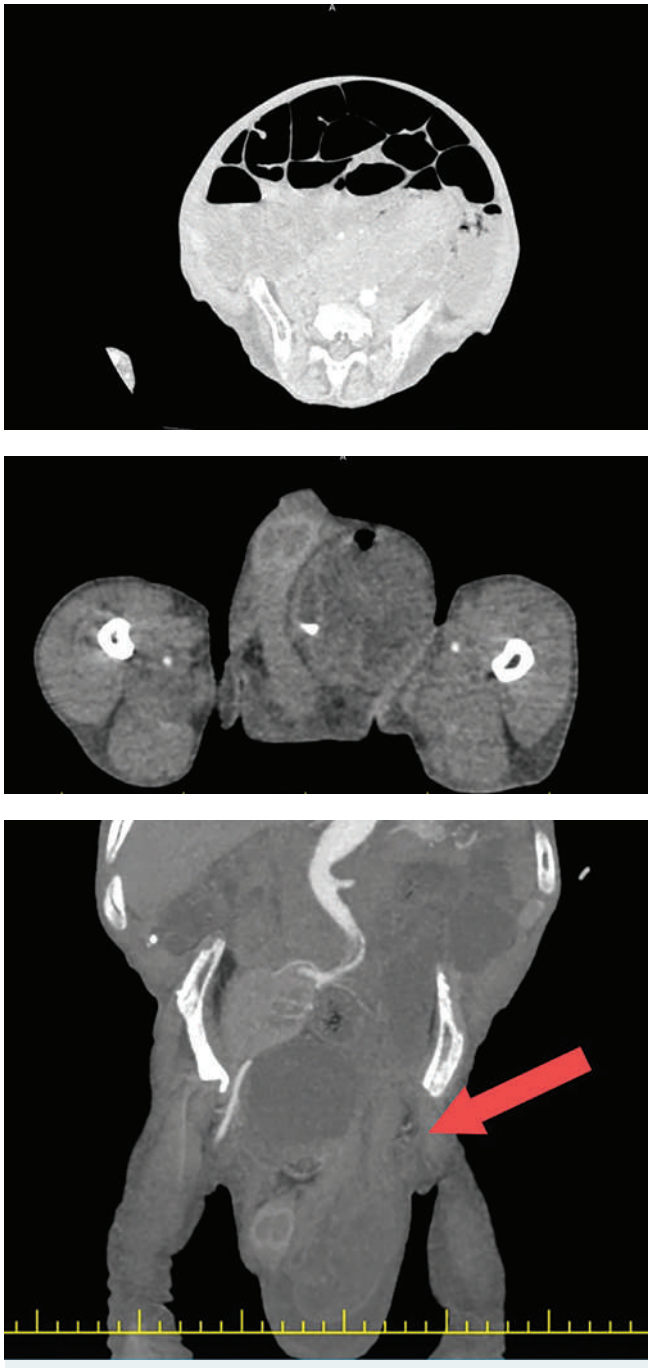


Figure 2. Imaging findings.

[P-074]

Living-donor liver transplantation for liver-confined colorectal cancer metastases: A case with long-term follow-up

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Objective: Surgical resection is the cornerstone of curative treatment for colorectal liver metastases. Nevertheless, despite advances in modern systemic chemotherapy, targeted agents, immunotherapy strategies, and liver-directed therapies, a considerable proportion of patients eventually develop unresectable disease. This challenge is particularly evident in patients with metastases confined to the liver who no longer have effective surgical options. In recent years, liver transplantation has gained increasing attention as a potentially curative strategy in highly selected patients. This report presents the detailed clinical, surgical, and oncologic outcomes of a patient with long-standing liver-confined colorectal cancer metastases treated with living-donor liver transplantation (LDLT).

Material and Methods: A 33-year-old woman was diagnosed with colon adenocarcinoma following emergency subtotal colectomy for acute intestinal obstruction and gastrointestinal bleeding in 2019. Pathological staging revealed pT3N2 disease. Initial staging demonstrated multiple liver-confined metastases without extrahepatic spread. The patient underwent systemic chemotherapy and targeted therapy followed by multisegmental liver metastasectomies and local ablative treatments, achieving disease control for approximately three years. In 2023, isolated intrahepatic recurrence occurred. Due to insufficient future liver remnant and intolerance to further chemotherapy, LDLT was planned after multidisciplinary evaluation.

Results: LDLT using a right-lobe graft was performed in May 2023. The surgical procedure included partial inferior vena cava resection and diaphragmatic resection. Postoperative recovery was uneventful, with satisfactory early graft function. No episodes of acute or chronic rejection, vascular complications, or severe infections were observed during follow-up. The patient was maintained on standard immunosuppressive therapy and enrolled in a strict oncologic surveillance program. Serial assessments included liver function tests, tumor markers, and cross-sectional imaging. At the most recent follow-up on January 2, 2026, all laboratory parameters were within normal ranges, and imaging studies demonstrated no evidence of intrahepatic recurrence or extrahepatic metastasis, indicating sustained complete remission.

Conclusion: LDLT may provide durable disease-free survival incarefully selected patients with liver-confined colorectal cancer metastases. Key advantages of the living-donor approach include optimal timing without waiting-list progression, the ability to select recipients with favorable tumor biology, and predictable graft availability. High donor safety standards, rapid postoperative recovery, and close oncologic surveillance further support the feasibility of this strategy. Meticulous patient selection, comprehensive staging, multidisciplinary decision-making, and structured long-term follow-up are essential to achieve favorable outcomes.

Keywords: Colorectal cancer, liver metastasis, long term survival

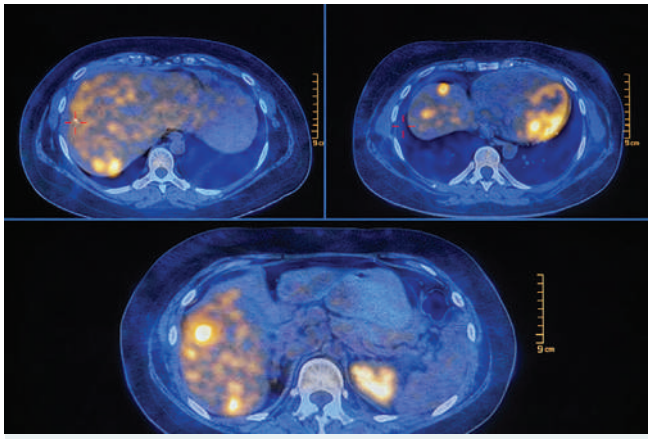


Figure 1. Initial PET view.

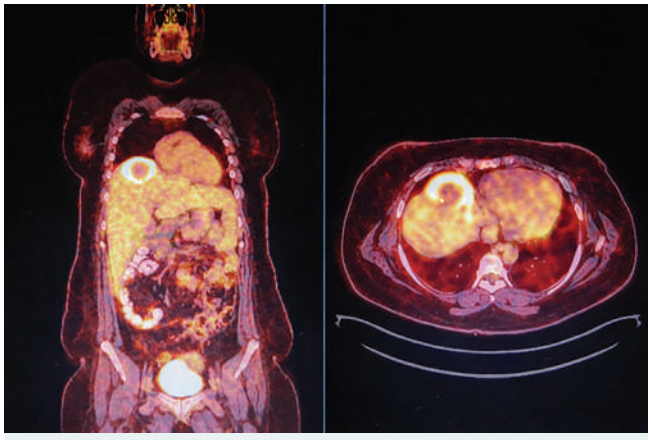


Figure 2. PET before LDLT.

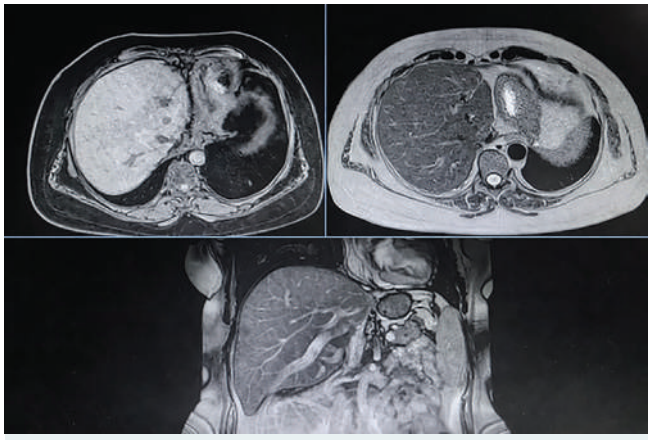


Figure 3. Last follow-up MRI.

[P-076]

Management of incidental Meckel's diverticulum detected during colon adenocarcinoma surgery: A case report and literature review

Orhan Tatlı, Abdülaziz Emek, Mehmet Furkan Avcı, Sertaç Ata Güler, Turgay Şimşek

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Objective: Meckel's diverticulum (MD) is the most prevalent congenital anomaly of the gastrointestinal tract, arising from the incomplete obliteration of the omphalomesenteric duct. While it is a true diverticulum involving all layers of the intestinal wall, the necessity of surgical resection for asymptomatic MD discovered incidentally during unrelated procedures remains a subject of ongoing debate in the literature.

Material and Methods: A 75-year-old male patient presented with a six-month history of abdominal pain and rectal bleeding. Following a diagnosis of sigmoid colon adenocarcinoma, a laparotomy was performed. Intraoperative exploration revealed an ulcerovegetative mass in the sigmoid colon and an incidental, asymptomatic, broad-based MD, approximately 6 cm in length, located 60 cm proximal to the ileocecal valve. Localized adhesions suggested prior subclinical inflammatory episodes. Following an oncological anterior resection, a segmental small bowel resection with primary anastomosis was performed for the MD. This decision was based on the patient's advanced age and the anticipated initiation of adjuvant chemotherapy; it was determined that potential MD-related complications during immunosuppression could significantly increase morbidity and disrupt the oncological treatment course. Histopathological examination confirmed colonic adenocarcinoma (11/18 positive lymph nodes) and a benign MD with no ectopic tissue or malignancy. The patient was discharged uneventfully on the fifth postoperative day.

Results: Management strategies for asymptomatic MD vary widely in the literature. While some authors advocate for resection regardless of age due to potential complications, others recommend specific criteria such as age under 50, male gender, and diverticular length exceeding 2 cm to justify surgery. Conversely, some studies suggest that prophylactic resection may unnecessarily increase postoperative complication rates.

Conclusion: This case emphasizes that surgeons must perform a meticulous whole-abdomen exploration rather than focusing solely on the primary pathology. The approach to incidental MD should be individualized. In patients facing immunosuppression due to malignancy, prophylactic resection is a reasonable and proactive strategy to prevent future complications that could jeopardize the patient's systemic treatment.

Keywords: Meckel's diverticulum, sigmoid colon adenocarsinoma, incidental resection, prophylactic resection, surgical management



Figure 1. Incidentally detected Meckel's diverticulum. Meckel's diverticulum detected incidentally during intra-abdominal exploration.

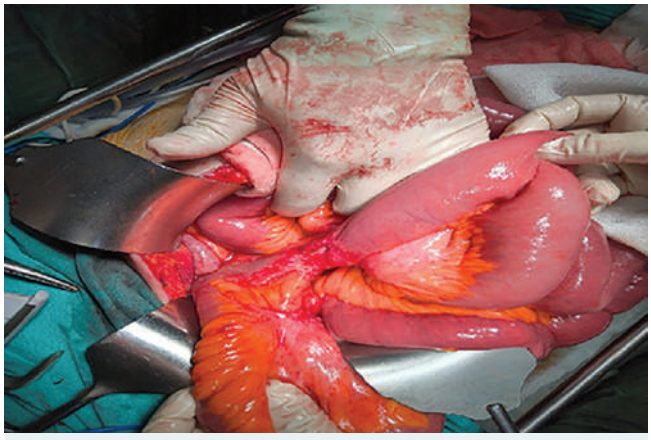


Figure 2. Meckel's diverticulum and adhesions in surrounding tissues. Meckel's diverticulum and adhesions in surrounding tissues.

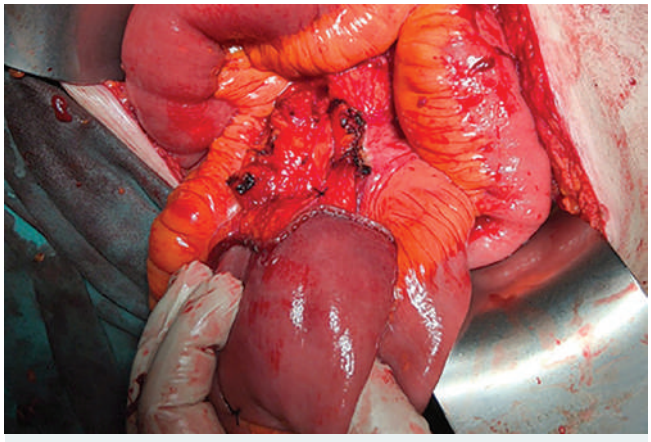


Figure 3. Resection anastomosis performed on the Meckel's diverticulum area. Side-by-side stapler resection and anastomosis was performed in the Meckel's diverticulum area.

[P-077]

Severe anal stenosis developing after pelvic radiotherapy: A rare case report

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Objective: Anal stenosis is a rare but clinically significant condition caused by pathological narrowing of the anal canal, leading to difficulty or inability to defecate. It most commonly results from anorectal surgery, particularly hemorrhoidectomy, while inflammatory bowel disease, infections, trauma, and rarely pelvic radiotherapy may also be responsible. Radiation-induced anal stenosis is exceptionally rare and is attributed to chronic microvascular injury, ischemia, and progressive fibrosis. Due to its rarity, diagnosis may be delayed, especially in patients without prior anorectal surgery. This report presents a case of severe anal stenosis following pelvic radiotherapy for cervical cancer and its management.

Material and Methods: A 75-year-old female patient presented with progressive constipation, pencil-thin stools, and difficulty in defecation. She had no prior history of anal or anorectal surgery. Her medical history revealed moderately differentiated squamous cell carcinoma of the cervix diagnosed by incisional tru-cut biopsy and staged as FIGO stage IB. The patient received five cycles of chemotherapy combined with pelvic radiotherapy consisting of 28 fractions, including the anal canal within the radiation field. Approximately six months after completion of radiotherapy, a marked deterioration in bowel habits was reported. Physical examination revealed a fibrotic and markedly narrowed anal verge, and digital rectal examination could not be performed due to severe stenosis. Under spinal anesthesia, evaluation demonstrated near-complete obliteration of the anal canal by dense circumferential fibrotic tissue. Controlled radial incisions were performed using unipolar electrocautery to partially widen the anal canal, without intraoperative complications.

Results: Colonoscopy performed 48 hours after the procedure revealed diffuse fecal contamination, millimetric hematomas on the colonic walls, and mucosal elevations suggestive of ulceration at 10 cm and 40 cm from the anal verge. Retroflexion demonstrated internal hemorrhoids and a fissure line at the 7 o'clock position of the anal canal. Biopsies obtained from suspicious areas showed melanosis coli without dysplasia or malignancy, excluding radiation proctitis and secondary malignancy. No early postoperative complications occurred. The patient's constipation symptoms improved significantly, and at 1-, 3-, and 6-month follow-up visits, no evidence of recurrent stenosis or need for further dilation was observed.

Conclusion: Severe anal stenosis after pelvic radiotherapy is a rare but important complication. In patients with prior radiotherapy presenting with unexplained constipation or defecation difficulty, anal stenosis should be considered. Controlled radial electrocautery incisions may provide an effective diagnostic and therapeutic option in advanced cases, and long-term management should be individualized.

Keywords: Anal stenosis, pelvic radiotherapy, cervical cancer, radiation induced fibrosis, electrocautery incision



Figure 1. Postoperative.

[P-078]

Complicated breast abscess developing on the background of diabetic mastopathy

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Objective: Diabetic mastopathy (sclerosing lymphocytic lobulitis) is a rare, benign fibroinflammatory breast disease in patients with a long history of diabetes mellitus, which can clinically and radiologically mimic malignancy. Patients typically present with a firm mass in the breast. Although infection and abscess formation are rare, the clinical course can become complicated with poor glycemic control.

Material and Methods: This study is a case report evaluating the clinical, surgical, and metabolic processes of a patient with a complicated breast infection developing on the basis of diabetic mastopathy. Clinical, laboratory, and microbiological data, along with the surgical and medical treatments, were reviewed through the patient's medical record. The diagnosis and treatment were managed with a multidisciplinary approach involving surgery, infectious diseases, and endocrinology departments. All data were anonymized and presented in accordance with ethical guidelines.

Results: A 47-year-old female patient with a long-standing history of type 2 diabetes mellitus presented with a lesion that began as an acne-like lesion in the lower quadrant of the right breast about a week ago and rapidly progressed into an abscess. In addition to type 2 diabetes, the patient had a history of hypertension, arrhythmia, allergic asthma, obstructive sleep apnea, hypothyroidism, and HPV. Despite initial topical treatment, clinical progression was observed, leading to abscess drainage in the emergency department. Due to recurrence, the patient was admitted for inpatient care. On physical examination, a necrotic, infected wound was found in the lower right breast quadrant. The patient underwent serial surgical debridements and negative pressure wound therapy was initiated. On the 21st day of linezolid therapy, initial aspirates and tissue cultures showed no growth, but later *Acinetobacter baumannii* was isolated. Given the ongoing clinical improvement, negative acute-phase reactants, and healthy wound appearance, this finding was interpreted as colonization. An endocrinology consultation revealed the patient's HbA1c was 11.7%, indicating poor glycemic control. Insulin dosages were increased to improve metabolic regulation, and the patient was noted to be at high metabolic risk for surgical interventions. A comprehensive evaluation of clinical, surgical, and metabolic data led to the conclusion that the case was consistent with a complicated breast infection developing on the basis of diabetic mastopathy.

Conclusion: Diabetic mastopathy is a rare breast disease, but it can become complicated by severe infections in the presence of poor glycemic control. This case demonstrates that a multidisciplinary approach and metabolic regulation are as important as surgical treatment in managing breast infections in diabetic patients.

Keywords: Diabetic mastopathy, negative pressure wound therapy, sclerosing lymphocytic lobulitis



Figure 1. Before surgery.



Figure 2. After surgery.

[P-079]

Retroperitoneal paraganglioma as a cause of secondary hypertension: A case detected in an etiological investigation

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Objective: Paragangliomas are uncommon neoplasms arising outside the adrenal gland, often presenting with catecholamine-secreting activity that can lead to episodic attacks or resistant hypertension. In this report, we describe a case involving a retroperitoneal mass identified during the diagnostic workup for hypertension.

Material and Methods: A 52-year-old male patient was evaluated for secondary hypertension due to persistent elevation of blood pressure despite adherence to a comprehensive medical regimen with multiple antihypertensive agents. Diagnostic investigations revealed a 62 by 59 mm retroperitoneal mass adjacent to the inferior vena cava and abdominal aorta, at the level where the left renal vein exits. A paraganglioma was suspected based on imaging findings, and the case was subsequently referred to the multidisciplinary oncology council for further assessment. Preoperative preparation was completed, and a decision was made to proceed with surgical exploration.

Results: During surgery, an 8x6 cm solid mass with cystic components, surrounded by a capsule, was observed on the left renal vein, located between the vena cava and the abdominal aorta. The mass was resected along with its capsule. Histopathological examination was consistent with paraganglioma.

Conclusion: Secondary causes should be carefully evaluated in cases of resistant or unexplained hypertension. Although retroperitoneal paraganglioma is uncommon, maintaining awareness of it is essential to avoid diagnostic delays and to guide appropriate management.

Keywords: Paraganglioma, retroperitoneal mass, secondary hypertension

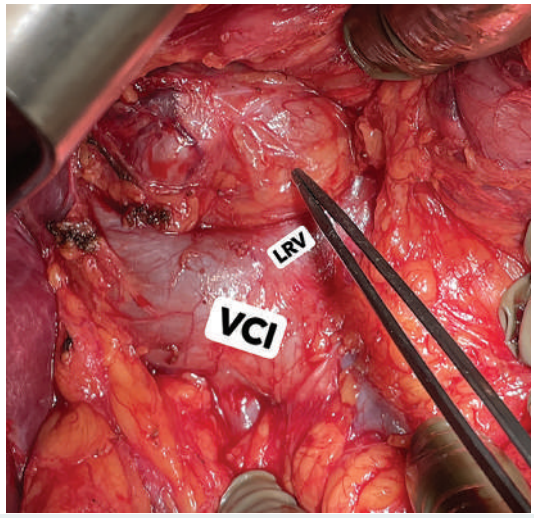


Figure 1. Intraoperative view of the mass detected in the retroperitoneal space.

VCI: Inferior vena cava, LRV: Left renal vein.

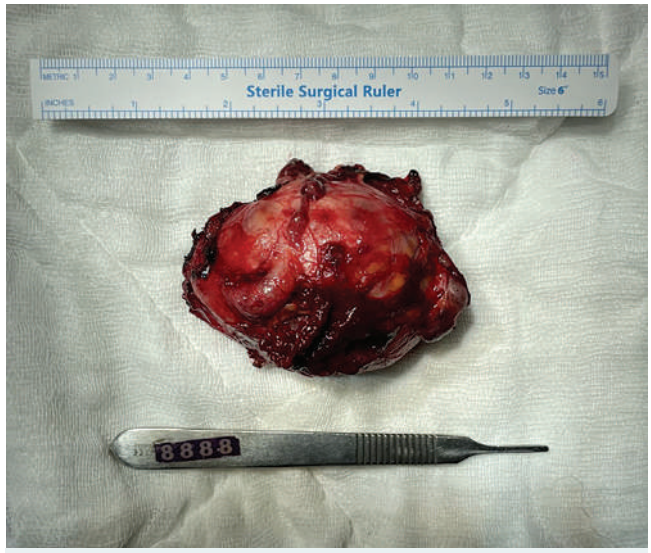


Figure 2. Image of the mass after resection.

[P-080]

Gastric metastasis of breast cancer presenting with gastric outlet obstruction

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[1]*Department of General Surgery, Bursa Uludağ University Faculty of Medicine, Bursa*

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Objective: Breast cancer rarely metastasizes to the gastrointestinal tract; however, such involvement is more commonly observed in the invasive lobular carcinoma (ILC) subtype. Gastric metastas is often present with nonspecific symptoms and may closely mimic primary gastric malignancies, resulting in delayed or incorrect diagnosis. Gastric outlet obstruction as the initial manifestation of breast cancer metastasis is particularly uncommon. This report aims to present a rare case of gastric outlet obstruction caused by gastric metastasis of invasive lobular breast carcinoma and to emphasize the importance of clinicopathological correlation.

Material and Methods: Clinical data, endoscopic findings, radiological imaging, histopathological examination, and immunohistochemical analyses of a patient presenting with gastric outlet obstruction were retrospectively reviewed. Upper gastrointestinal endoscopy with targeted biopsies was performed. Contrast-enhanced abdominal computed tomography was used for radiological assessment. Histopathological diagnosis was established using routine hematoxylin-eosin staining and a comprehensive immunohistochemical panel to determine the origin of the tumor.

Results: A 70-year-old female patient with a history of left-sided invasive lobular breast carcinoma presented with constipation, reduced oral intake, and symptoms suggestive of gastric emptying disturbance. Upper gastrointestinal endoscopy revealed a circumferential vegetative mass extending from the antrum to the pylorus and duodenal bulb, causing marked luminal narrowing consistent with gastric outlet obstruction. Histopathological evaluation of gastric biopsies demonstrated infiltration by atypical epithelial cells with hyperchromatic nuclei and scant eosinophilic cytoplasm. Immunohistochemical analysis showed tumor cells positive for pan-cytokeratin, CK7, and GATA-3, while CK5/6, CDX2, PAX-8, and LCA were negative, supporting the diagnosis of gastric metastasis from breast carcinoma. Contrast-enhanced abdominal computed tomography revealed diffuse gastric wall thickening, a mass lesion obliterating the antropyloric lumen, and findings consistent with peritoneal carcinomatosis, including omental cake appearance and diffuse ascites. Due to progressive obstructive symptoms, the patient underwent palliative gastroenterostomy.

Conclusion: Gastric metastasis of invasive lobular breast carcinoma should be considered in patients presenting with gastric outlet obstruction, especially in those with a history of breast cancer. Differentiation from primary gastric malignancies requires careful integration of clinical history, radiological findings, and immunohistochemical profiling. Although curative surgery is not feasible in metastatic disease, palliative surgical interventions can provide effective symptom relief and improve quality of life.

Keywords: Breast cancer, gastric metastasis, gastric outlet obstruction

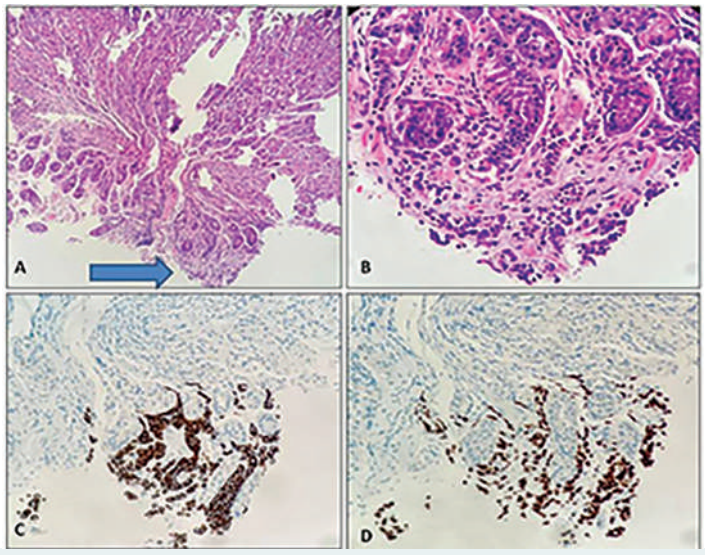


Figure 1. Morphological and immunohistochemical findings. (A) Low-power view showing neoplastic infiltration in the deep portion of the gastric mucosal biopsy specimen (arrow) (hematoxylin-eosin, ×200). (B) High-power view demonstrating diffuse infiltration of atypical epithelial cells with hyperchromatic nuclei and signet-ring-like morphology (H&E, ×400). (C) Tumor cells showing cytoplasmic positivity for CK7 (Immunohistochemistry, ×400). (D) Tumor cells demonstrating nuclear positivity for GATA3 (Immunohistochemistry, ×400).

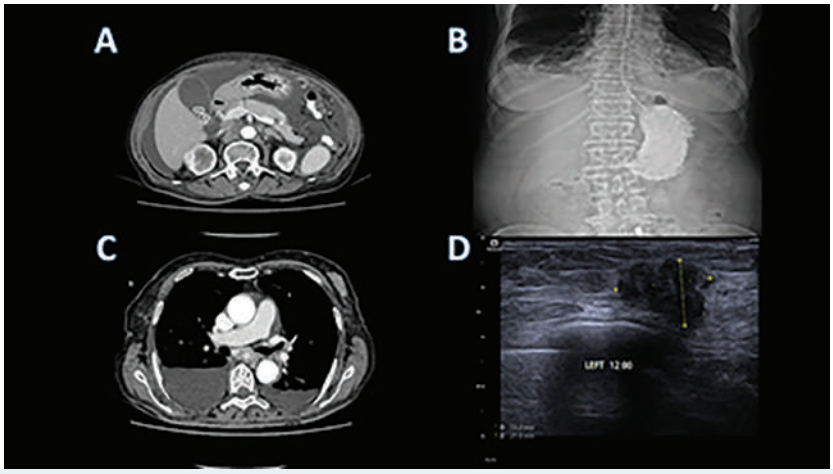


Figure 2. Radiological findings. (A) Contrast-enhanced abdominal CT demonstrating diffuse gastric wall thickening and a mass lesion in the antropyloric region causing luminal narrowing. (B) Upper gastrointestinal contrast study showing marked narrowing in the antropyloric region consistent with gastric outlet obstruction. (C) Thoracic CT demonstrating an irregular, solid mass lesion in the left breast. (D) Breast ultrasonography showing a hypoechoic, irregularly bordered mass lesion measuring approximately 21×13 mm at the 12 o'clock position of the left breast.

[P-083]

Cutaneous fistula developing at the intervention site following PAIR procedure in liver hydatid cyst: A case report

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Objective: Cystic echinococcosis (CE) is a zoonotic infection caused by *Echinococcus granulosus*, typically characterized by liver involvement. The puncture, aspiration, injection, re-aspiration (PAIR) technique, developed as an alternative to surgery in the treatment of hepatic CE, is a minimally invasive method recommended by the WHO for CE1 and CE3a stages due to its short hospital stay and low cost. However, complications such as allergic reactions and biliary fistulas may develop following PAIR. Cutaneous fistulization is a very rare complication that develops along the PAIR tract and significantly affects the patient's quality of life. In this presentation, we aimed to discuss the surgical management of a resistant cutaneous fistula developing after PAIR, in the light of the literature.

Material and Methods: An eighteen-year-old female patient presented with a persistent biliary discharge from the intervention site following a PAIR procedure performed on September 8, 2025, for a hydatid cyst in the left lobe of the liver. *Echinococcus* IgG antibody testing and radiological imaging were utilized during the diagnostic process. Liver MRI revealed a cystic lesion measuring 3.5×4 cm in segments 2-3, consistent with WHO-CE2/3. MRCP showed a communication between the intrahepatic bile ducts and the cyst wall. Due to the high-output fistula that did not close with conservative methods, a decision for surgical intervention was made.

Results: During exploration, a fistula tract extending between the PAIR entry site and the cyst cavity in the left lobe of the liver was identified. During the surgical procedure, the fistula tract was completely excised, the cyst content was cleared, and the identified micro-biliary communication points were sutured. Cystectomy and omentopexy were performed to obliterate the cyst cavity and prevent recurrence. The patient, whose skin discharge ceased and biliary drainage stopped during the postoperative period, was discharged without complications.

Conclusion: PAIR complications range from 5-25%, yet cutaneous fistulas remain rare. Etiopathogenesis involves high intracystic pressure, back-flow induced necrosis, and short needle tracks. Primarily, missed micro-biliary communications redirect bile toward the tract. MRCP is diagnostic. While percutaneous drainage suits low-output cases, radical surgery like cystectomy with omentopexy definitively treats high-output biliary fistulas. Despite PAIR's minimal invasiveness, high-morbidity complications require prompt surgical consideration.

Keywords: Cutaneous fistula, cystic echinococcosis, PAIR complications

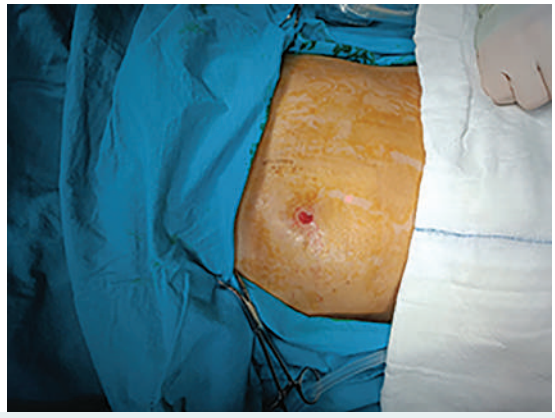


Figure 1. Cutaneous fistulization (formation of a tract between the cyst and the skin).

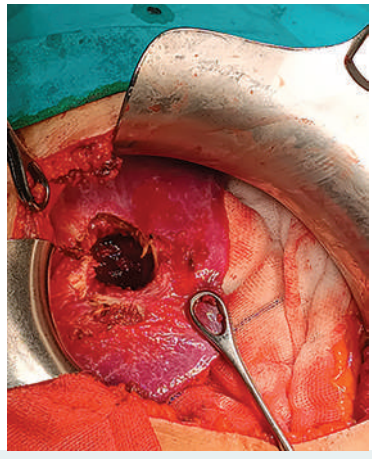


Figure 2. Cutaneous fistulization (formation of a tract between the cyst and the skin).

[P-084]

Post-robotic Ivor Lewis esophagectomy nursing care: A case report

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Objective: Surgical resection is one of the fundamental steps in curative treatment for malignancies of the esophagus and gastric cardia region. Robotic surgical techniques offer advantages such as less tissue trauma, early mobilization, and shorter hospital stay. However, close nursing care, particularly during ward monitoring after robotic esophagectomy, is crucial for respiratory function, pain management, drainage management, nutrition, bleeding risk, and infection risk. The aim of this case presentation is to demonstrate the contribution of nursing care provided during ward monitoring to patient recovery in a patient who underwent robotic Ivor Lewis esophagectomy.

Material and Methods: A 63-year-old female patient presented with complaints of epigastric pain and dysphagia; endoscopic and pathological examinations resulted in a diagnosis of adenocarcinoma located in the gastric cardia. Following neoadjuvant chemotherapy, the patient underwent robotic Ivor Lewis esophagectomy, esophagogastrostomy, and retroperitoneal lymph node dissection. The patient was monitored in the intensive care unit for two days after the operation, and after achieving hemodynamic stability, was transferred to the surgical ward.

Results: Nursing care in the ward was planned with a focus on maintaining respiratory function, drain monitoring, pain management, reducing infection risk, and early mobilization. The patient had one chest tube, one Jackson-Pratt drain, and a peripheral venous catheter. The number, color, and characteristics of the drains were monitored and recorded at regular intervals. Due to the presence of a chest tube, breath sounds, oxygen saturation, and signs of dyspnea were closely evaluated, and the patient was taught deep breathing and coughing exercises. Pain level was monitored using a numerical pain scale, and analgesic treatment was administered as ordered by the physician. Drain and catheter care was performed using aseptic techniques, and the patient was regularly evaluated for signs of infection. The patient was observed during feeding, considering the risk of aspiration, and fluid and electrolyte balance was monitored. Early and gradual mobilization was supported, and the patient was encouraged to safely resume daily activities. The patient was discharged on the 6th postoperative day. In this case, the systematic and planned implementation of ward nursing care played a significant role in preventing complications in the postoperative period.

Conclusion: Planned, holistic, structured, and individualized nursing care applied in the ward period after robotic esophagectomy offers an effective approach in preventing surgical complications and supporting the patient's safe recovery process. Effective nursing care directly supports the success of surgical treatment.

Keywords: Robotic surgery, esophagectomy, nursing care

[P-090]

When axillary radiotherapy reaches the eye: The cause of acute central scotoma, macular hemorrhage, and radiation-induced macular degeneration in a 70-year-old female patient with stage IIIB breast cancer

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Objective: Radiotherapy is widely used in the treatment of breast cancer, and its cardiac and pulmonary toxicities are well recognized. However, although the retina is an extremely radiosensitive organ, ocular injury is rarely considered during regional radiotherapy planning.

Material and Methods: A 70-year-old female patient with stage IIIB breast cancer received adjuvant radiotherapy to the axillary region. During treatment, the ipsilateral arm was positioned in full abduction and elevation. No ocular shielding was applied during radiotherapy. Written informed consent was obtained from the patient for publication of this case report.

Results: Two years after completion of radiotherapy, the patient developed sudden onset of central visual loss in the form of an acute central scotoma. Funduscopic examination revealed a fresh macular hemorrhage. Optical coherence tomography demonstrated subretinal fluid and disruption of the retinal pigment epithelium. Fluorescein fundus angiography showed active leakage from newly formed abnormal vessels, findings consistent with choroidal neovascularization and radiation-induced macular degeneration.

Conclusion: Excessive arm elevation may have altered beam geometry and increased scatter radiation toward the orbit. In the absence of ocular protection, secondary radiation may reach the macula, leading to endothelial injury, ischemia, pathological neovascularization, and hemorrhage. This mechanism explains the delayed yet sudden visual loss observed in this patient. The retina is at risk during axillary radiotherapy. Ocular protection should be considered during treatment planning, and the potential for radiation-induced visual loss should be clearly explained to patients before the initiation of therapy.

Keywords: Axillary radiotherapy, breast cancer, macular degeneration, radiation retinopathy

[P-091]

Adrenal metastasis of pleomorphic sarcoma: A rare case report

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Objective: Pleomorphic sarcoma is one of the most common soft-tissue sarcoma subtypes, accounting for 10-15% of malignant soft-tissue tumors. The lungs, liver, and bones are the most frequent metastatic sites, while adrenal gland metastasis is extremely rare and reported only in a few case reports. Surgical resection of isolated adrenal metastasis may offer a survival benefit in selected patients.

Material and Methods: A 49-year-old male underwent surgery in 2018 for a posteriorly located left thigh mass, which was diagnosed as high-grade pleomorphic sarcoma. After adjuvant radiotherapy, a metastatic nodule in the left lower lung lobe was resected in 2020. During follow-up, metastasis developed in the right paraspinal region and left deltoid muscle; the patient received 20 cycles of chemotherapy and achieved a complete response. Local recurrence occurred in 2022 and was surgically resected.

Results: In the second quarter of 2025, a progressive solid lesion measuring 8×6.5 cm was detected in the right adrenal gland with high FDG uptake (SUV_{max}: 9.7) on PET-CT. The patient underwent right adrenalectomy. Intraoperatively, the mass was adherent to the retrohepatic vena cava; an iatrogenic injury occurred and was repaired primarily. Pathology confirmed metastatic pleomorphic sarcoma. Postoperative follow-up for 6 months after adrenalectomy is uneventful.

Conclusion: Adrenal metastasis of pleomorphic sarcoma is extremely rare. Surgical resection of isolated adrenal lesions can provide effective local control and disease-free survival. Even in cases with invasion of major vascular structures, adrenalectomy can be safely performed in experienced centers.

Keywords: Pleomorphic sarcoma, adrenal metastasis, adrenalectomy, soft tissue sarcoma, case report

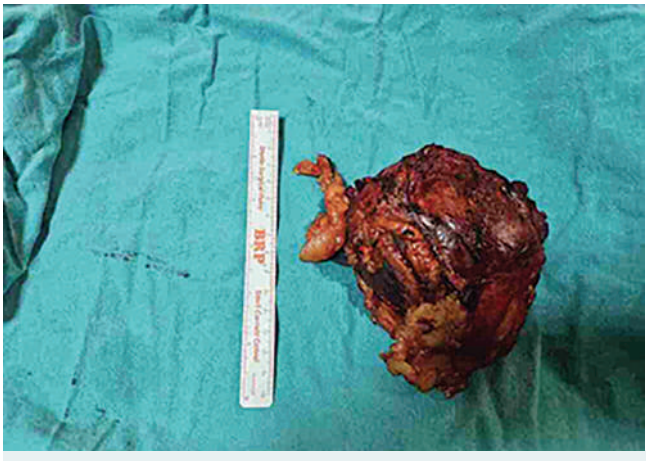


Figure 1. Macroscopic appearance of the resected adrenal gland containing metastatic pleomorphic sarcoma.

[P-103]

Bleeding well-differentiated gastric neuroendocrine tumor managed with a NOTES-based minimally invasive endoscopic approach: A case report

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Objective: Gastric neuroendocrine tumors (gNETs) are rare gastric neoplasms with heterogeneous biological behavior and are usually detected incidentally. Presentation with upper gastrointestinal bleeding is uncommon. Advances in therapeutic endoscopy have expanded organ-preserving options for selected patients, and NOTES-based minimally invasive concepts support effective treatment without skin incisions. We report a bleeding well-differentiated gNET successfully managed using an advanced minimally invasive endoscopic approach and highlight the importance of close surveillance.

Material and Methods: A 38-year-old woman without comorbidities was referred for upper gastrointestinal bleeding. An external center had identified a bleeding pedunculated gastric mass and recommended surgery. After multidisciplinary evaluation, minimally invasive endoscopic management was planned. Endoscopy demonstrated a ~5 cm pedunculated polypoid lesion on the greater curvature of the gastric corpus and adjacent diminutive polyps. An endoloop was placed at the stalk for preemptive hemostasis, followed by snare polypectomy with transoral retrieval. Due to suspected tumor involvement at the resection margin, a second session was performed with endoscopic mucosal resection after submucosal injection; intraprocedural arterial bleeding was controlled using hemoclips. The patient was enrolled in close endoscopic follow-up.

Results: Initial histopathology was consistent with a well-differentiated neuroendocrine tumor (Grade 1; Ki-67 2%; low mitotic activity). Specimens from the second session showed focal higher proliferation (Ki-67 5-10%), suggesting a Grade 2 component. Follow-up endoscopy at two months revealed diminutive polyps near the scar that were removed; pathology again demonstrated Grade 1 NET. No perforation or major post-procedural complications occurred, and no recurrence was observed during follow-up.

Conclusion: In bleeding well-differentiated gNETs, advanced minimally invasive endoscopic management may be a safe and effective alternative to surgery in appropriately selected patients at experienced centers. Variable Ki-67 findings across specimens suggest intratumoral heterogeneity, supporting comprehensive histopathological assessment and structured endoscopic surveillance.

Keywords: Gastric neuroendocrine tumor, minimally invasive endoscopy, upper gastrointestinal bleeding

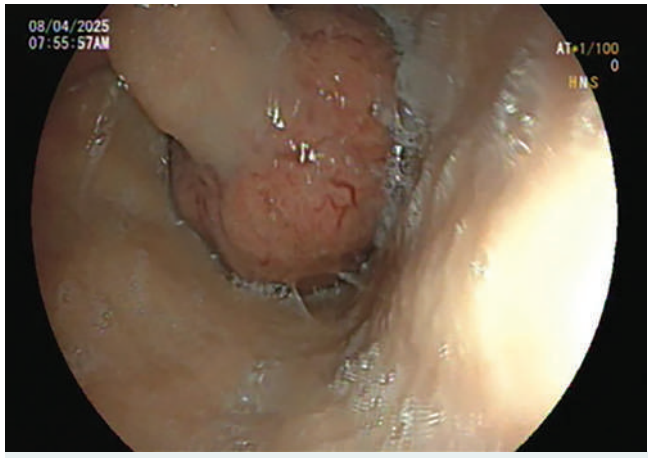


Figure 1. Endoscopic view of a giant polypoid lesion with an irregular stalk, about 5 cm in diameter, observed in the large curvature of the gastric corpus at the first gastroscopy.

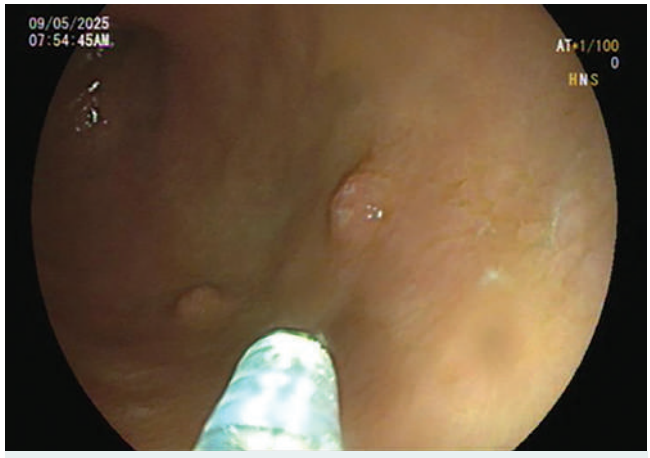


Figure 2. In the second session of gastroscopy, multiple diminutive polyps observed in and around the scar tissue showing battery convergence in the previous polypectomy area.

[P-104]

Unusual breast metastasis of gastrointestinal stromal tumor

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Objective: Gastrointestinal stromal tumor (GIST) is the most common mesenchymal neoplasm of the gastrointestinal tract and is believed to originate from the interstitial cells of Cajal. Metastasis most frequently involves the liver and peritoneum. Breast metastasis is extremely rare, with only a few cases reported in the literature. We present a rare case of isolated breast metastasis from a primary gastric GIST without liver or peritoneal involvement.

Material and Methods: A 70-year-old female patient previously underwent wedge resection for a gastric GIST and received adjuvant imatinib therapy for three years. After five years of disease-free follow-up, a mass was detected in the left breast. The patient underwent breast magnetic resonance imaging (MRI), PET-CT, abdominal CT, endoscopy, and colonoscopy. A biopsy of the breast mass was performed, followed by segmental resection. Histopathological and immunohistochemical analyses were conducted.

Results: Histopathological examination of the breast mass revealed a mesenchymal neoplasm. Immunohistochemical staining demonstrated similar characteristics between the primary gastric tumor and the breast lesion, including positivity for CD117 and CD34. Systemic evaluation showed no evidence of liver or peritoneal metastasis. The findings were consistent with isolated distant breast metastasis from the primary gastric GIST.

Conclusion: Breast metastasis from GIST is an exceptionally rare clinical entity and should be considered in the differential diagnosis of spindle cell lesions of the breast, particularly in patients with a history of GIST. Immunohistochemical evaluation plays a crucial role in establishing the diagnosis. This case contributes to the literature by demonstrating isolated breast metastasis without hepatic involvement.

We made a literature review, breast metastasis from GIST have been previously described three cases (Table 1).

Keywords: Breast, GIST, metastasis



Figure 1. Left breast mass, breast MRI.

Table 1. Literature review

	Author	Year	Age	Gender	Side	Primary location	Clinical status
1	Hasbay et al.	2017	46	Female	Left	Unknown	Systemic disease in diagnosis
2	Filonenko et al.	2022	55	Female	Right	Rectum	Systemic disease in diagnosis
3	Back et al.	2023	62	Female	Right	Jejunum	Systemic disease in diagnosis
4	Sarohan et al. (present case)	2025	70	Female	Left	Stomach	Isolated, monofocal, distant breast metastasis

[P-105]

Thoracic wall extraskeletal Ewing sarcoma: A rare case report

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Objective: Ewing sarcoma is predominantly a primary bone tumor; however, extraosseous involvement is rare and may clinically mimic benign soft-tissue lesions. In this report, we present the clinical, histopathological, and molecular characteristics of an extraskeletal Ewing sarcoma originating from the thoracic wall.

Material and Methods: A 21-year-old female patient presented with a rapidly enlarging subcutaneous mass in the right hypochondriac region that had progressed over a three-month period. Ultrasonographic evaluation revealed a 46×19 mm heterogeneous, hypervascular solid lesion, and surgical excision was subsequently performed. Intraoperatively, the mass was observed to extend between the intercostal muscle planes. Histopathological examination demonstrated a monomorphic population of small round cells, rosette-like structures, and areas of necrosis. Immunohistochemical analysis showed positivity for NKX2.2, while fluorescence *in situ* hybridization identified EWSR1 rearrangement with a t(22q12) translocation, supporting the diagnosis of Ewing sarcoma. The patient was referred for oncological follow-up and further treatment planning.

Results: Extraskeletal Ewing sarcomas may present as rapidly growing soft-tissue masses and encompass a broad differential diagnosis. Confirmation of the diagnosis relies on the integration of morphological findings with immunohistochemical markers and molecular analyses. Thoracic wall involvement poses additional challenges with regard to surgical planning and local disease control.

Conclusion: Ewing sarcoma should be considered in the differential diagnosis of rapidly enlarging thoracic wall masses in young patients. Early recognition and appropriate referral play a crucial role in establishing an effective and timely treatment strategy.

Keywords: EWSR1, extraskeletal Ewing sarcoma, soft tissue tumor

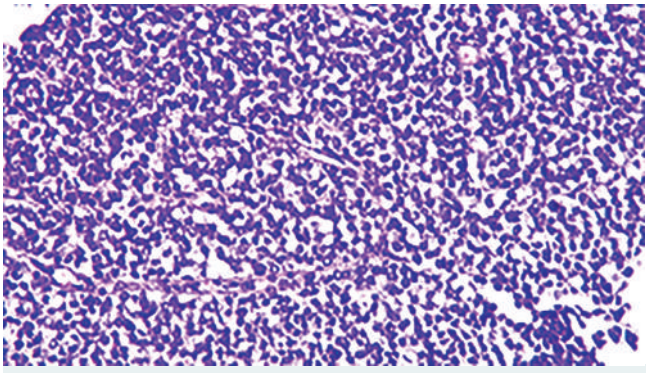


Figure 1. Histopathological features of extraskeletal Ewing sarcoma (H&E staining).

Hematoxylin and eosin–stained sections reveal a tumor composed of uniform small round cells with scant cytoplasm and round to oval nuclei. Occasional rosette-like structures and focal areas of necrosis are observed, consistent with the morphology of a small round blue cell tumor.

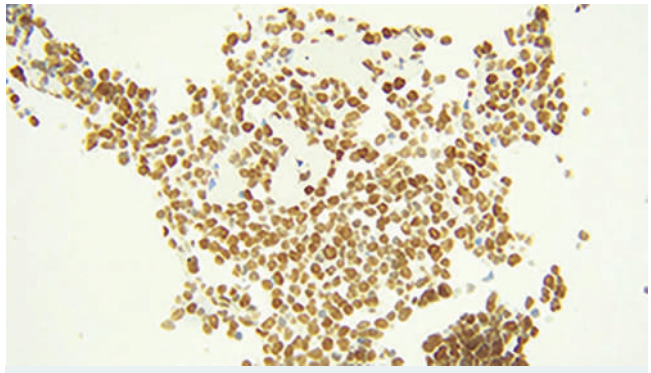


Figure 2. Immunohistochemical findings in extraskeletal Ewing sarcoma (NKX2.2 positivity).

Immunohistochemical analysis demonstrates diffuse nuclear positivity for NKX2.2 in tumor cells. The monomorphic population of small round cells is consistent with the diagnosis of Ewing sarcoma.

[P-106]

The effect of age on clinical and laboratory findings in patients with acute colonic diverticulitis: Comparison of patients over and under 70 years of age

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Objective: This study aims to evaluate the differences in clinical characteristics, complication rates, and laboratory parameters between patients over 70 years of age diagnosed with acute colonic diverticulitis and other age groups.

Material and Methods: Twenty-one patients over 18 years of age, of both sexes, diagnosed with acute colonic diverticulitis by clinical evaluation and computed tomography were included in the study. Patients were divided into two groups: those over 70 years of age and those under 70 years of age.

Results: The proportion of patients over 70 years of age was 19.9% (n=40), and the proportion of patients under 70 years of age was 80.1% (n=161). While female patients were in the majority in the over-70 age group, the proportion of male patients was higher in the under-70 age group (p=0.005). Right colon diverticulitis involving the cecum and ascending colon was not observed in patients over 70 years of age (p=0.022). Although the complication rate was higher in the under-70 age group, it was not statistically significant (p=0.060). In the multivariate regression analysis performed with variables that were significant with p<0.01 in univariate analyses of laboratory findings, only low GFR and high INR showed a significant difference between the two patient groups.

Conclusion: Right colon diverticulitis was not observed in patients over 70 years of age. It is known that symptomatic right colon diverticula are more common in younger patients, and the results of our study are consistent with the literature. Multivariate analysis showed a significant difference in GFR and INR in patients over 70 years of age. Low GFR and high INR are important indicators of organ failure, especially in the context of multiple organ dysfunction syndrome. Both parameters are of great importance in evaluating the severity and course of organ dysfunction in critically ill patients. The faster development of clinical deterioration in elderly patients may necessitate close monitoring and inpatient treatment. In our study, no significant difference was observed in complication rates between patient groups over and under 70 years of age. Although age is often considered a risk factor for complications, it is not a parameter that alone predicts negative outcomes. In addition, the presence of comorbidities, the type of surgical procedure performed, and the patient's overall health status are more critical in determining outcomes. This supports a more personalized patient care approach focusing on comprehensive preoperative assessments and individualized postoperative management strategies to ensure optimal outcomes in all patients.

Keyword: Acute colonic diverticulitis

[P-107]

The challenging stoma care process from debulking surgery to short bowel syndrome: A case report

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Objective: Complications following gynecological oncology surgeries can seriously affect both the physical health and quality of life of the patient. Conditions such as anastomotic leakage, stoma ischemia, and short bowel syndrome are significant problems that negatively impact the patient's quality of life and treatment process. Peristomal complications require a multidisciplinary approach and meticulous wound/stoma care. This presentation addresses the complex stoma management and care process following repeated surgeries.

Material and Methods: A 63-year-old female patient was diagnosed with Stage 4 Serous Ovarian Carcinoma and underwent total colectomy with debulking (TAH + BSO + omentectomy) at a university hospital, where an end-of-stomach ileostomy was created in the right quadrant and she was discharged. Three months after the surgery, she presented to our hospital with hyperemia and discharge in the peristomal area. She underwent surgery due to anastomotic leakage. Early ischemia in the newly created stoma was regularly monitored. Because the ischemia progressed towards the incision line and an abscess developed, a second surgery was performed 20 days later to debride the infective slag-filled areas and establish a vacuum system. The newly created stoma had to be moved back to the right quadrant. Following the second surgery, the patient, diagnosed with short bowel syndrome, was monitored with parenteral nutrition, gradually opened orally, and mobilization was supported. From the early postoperative period, efforts were made to improve and protect peristomal skin integrity using barrier spray, stoma powder, hydrocolloid dressing, hyaluronic acid-based silver spray, and a stoma belt. Due to the proximity of the peristomal area to the incision line and contact with bowel contents, cleaning was performed with a hypochlorous acid-based wound antiseptic.

Results: Initially, the patient experienced leakage and skin irritation requiring adapter changes four times a day. However, after the implementation of barrier methods and the transition to a convex system, the adapter change interval was extended to five days. Peristomal skin integrity was preserved, and drainage to the incision line was prevented. The patient's gradual transition from parenteral to oral feeding and mobilization improved proportionally with increased stoma security.

Conclusion: In high-output stoma situations such as short bowel syndrome, proper product selection and professional stoma care are vital. Maintaining stoma viability and ensuring peristomal skin integrity significantly improves the patient's quality of life and contributes positively to stoma adaptation. In challenging and multi-stage surgeries, individualized stoma care, conducted in collaboration with the patient, plays a crucial role in the successful completion of the treatment process.

Keywords: Stoma care, wound care, stoma and wound care nursing



Figure 1. Stoma monitoring process.



Figure 2. Healing process.

[P-108]

Breast-localized Mondor disease: The importance of clinicopathological correlation in a rare case mimicking malignancy

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Objective: Mondor disease is a rare clinical entity characterized by thrombophlebitis of the superficial veins of the breast and anterior chest wall. Because it may clinically and radiologically mimic malignancy with findings such as a palpable cordlike induration and skin retractionlike appearance, it is important in the differential diagnosis. Conditions to be considered in the differential diagnosis of Mondor disease include cellulitis, erythema nodosum, lymphangiectasia, lymphangioma and metastatic skin cancers. In Mondor disease, the lateral thoracic vein, thoracoepigastric vein and superior epigastric vein may be involved with the thoracoepigastric vein being the most commonly affected. In this case report we present the diagnostic process of a patient with concern for breast cancer in whom malignancy was excluded and a diagnosis of Mondor disease was established through correlation of clinical and radiological findings with histopathology.

Material and Methods: A 36 year old female patient presented with sudden onset localized tenderness in the retroareolar region of the right breast, exacerbated by movement, along with a sensation of a cordlike, firm band under the skin. Her history revealed recent use of a tight bra and engagement in activities/exercises straining the upper extremity; she denied fever, nipple discharge or marked erythema. There was no family history of breast cancer. On physical examination, a localized firm area with associated tenderness was noted on palpation in the right retroareolar region. On inspection, a linearly oriented, cord-like band appearance conse immunohistochemical stent with the patient's description, along with mild skin retraction, was observed. Following clinical evaluation, breast ultrasonography was planned. Imaging demonstrated a solid lesion measuring approximately 17×10 mm in the retroareolar region of the right breast, with oval contours, well-defined margins, and focal areas of cystic degeneration. To exclude malignancy, a biopsy was obtained from the lesion, and histopathological examination with immunohistochemical evaluation, where appropriate, was performed.

Results: Histopathological examination revealed prominent inflammatory cell infiltration within the breast parenchyma, with lymphocyte-predominant inflammatory involvement of some venous walls, findings indicative of thrombophlebitis of superficial venous structures (Figures 1 and 2). On immunohistochemical analysis, no findings suggestive of malignancy or invasion were observed with pan-cytokeratin (Pan-CK) staining (Figure 3). When evaluated together with the clinical and imaging findings, the overall picture was considered consistent with Mondor disease.

Conclusion: Breast-localized Mondor disease may mimic mass lesions on physical examination and imaging, leading to suspicion of malignancy. Therefore, histopathological confirmation and clinicopathological correlation are of critical importance to avoid unnecessary surgical interventions. This case demonstrates that careful evaluation of venous wall inflammation and exclusion of malignancy through immunohistochemical methods are decisive in the diagnostic process. In most patients, a conservative approach is sufficient, and excessive interventions should be avoided in patient management.

Keywords: Biopsy, breast, clinicopathological correlation, Mondor disease, superficial thrombophlebitis

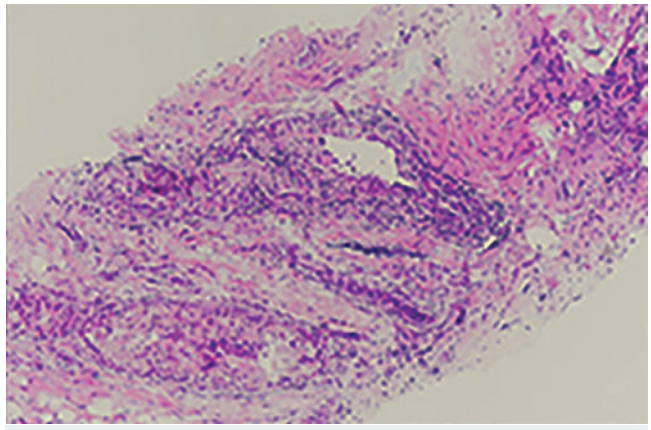


Figure 1.

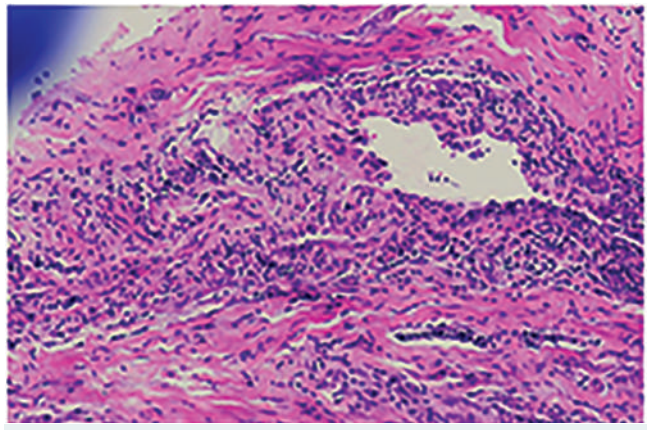


Figure 2.

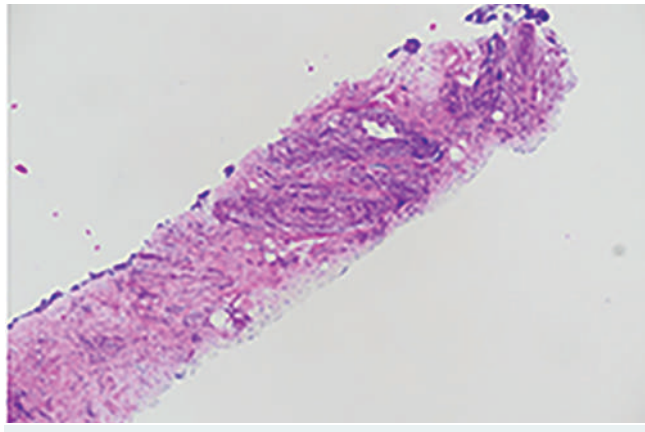


Figure 3.

[P-109]

A rare complication of calculous chronic cholecystitis: A case of cholecystocutaneous fistula

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Objective: Cholecystocutaneous fistula is a rare complication in contemporary practice, characterized by the spontaneous fistulization of the gallbladder to the skin. The most common cause is untreated calculous cholecystitis, and its incidence has markedly decreased due to early surgical interventions.

Material and Methods: The patient's clinical, radiological, intraoperative, and histopathological data were evaluated retrospectively. Preoperative assessment was performed using physical examination, laboratory tests, and contrast-enhanced abdominal computed tomography (CT). Surgical treatment was carried out via an open approach through a right subcostal incision. The resection specimen was submitted for standard histopathological examination.

Results: A 74-year-old female patient presented with a long-standing draining wound in the right upper quadrant. Her medical history revealed intermittent right upper quadrant pain. On physical examination, a cutaneous fistula opening with purulent drainage was observed in the right hypochondrium. Laboratory tests showed leukocytosis and elevated inflammatory markers. Contrast-enhanced abdominal CT demonstrated gallstones, marked thickening of the gallbladder wall, and a fistulous tract extending from the gallbladder to the skin surface. The findings were consistent with a cholecystocutaneous fistula. The patient was operated on under elective conditions. During exploration through a right subcostal incision, the gallbladder was found to be adherent to the anterior abdominal wall and opening to the skin surface via a fistulous tract. The gallbladder containing stones was dissected, and a cholecystectomy was performed. The fistulous tract was totally excised. After achieving hemostasis, a drain was placed and the operation was concluded. The postoperative course was uneventful. The patient was discharged without complications. Histopathological examination was consistent with chronic calculous cholecystitis.

Conclusion: Cholecystocutaneous fistula, although rare today, is a serious complication of chronic calculous cholecystitis. It should be considered in the differential diagnosis in the presence of a chronic draining lesion in the right upper quadrant. Contrast-enhanced CT plays an important role in diagnosis and surgical planning. The definitive treatment is cholecystectomy and total excision of the fistulous tract. Successful outcomes can be achieved with appropriate surgical intervention.

Keyword: Cholecystocutaneous fistula



Figure 1. Preoperative CT image. Preoperative CT scan shows a cholecystocutaneous fistula.



Figure 2. Intraoperative cholecystocutaneous fistula tract. The intraoperative cholecystocutaneous fistula tract was identified and excised.

[P-110]

A rare case of SGLT-2–associated refractory metabolic acidosis following robotic left hemicolectomy

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Objective: Sodium-glucose cotransporter-2 (SGLT-2) inhibitors are oral antihyperglycemic agents widely used in the management of type 2 diabetes mellitus and are generally considered safe. However, euglycemic diabetic ketoacidosis (EDKA) is a rare but serious complication associated with this drug class. Unlike classical diabetic ketoacidosis, SGLT-2 inhibitor-associated DKA may present with severe metabolic acidosis despite normal or only mildly to moderately elevated serum glucose levels. In addition, cases of non-ketotic, normal anion gap metabolic acidosis have also been reported. During the perioperative period, surgical stress, acute illness, and reduced carbohydrate intake may increase the risk of EDKA. Near-normal glucose levels may delay diagnosis and treatment. Herein, we present a case of non-ketotic, euglycemic/mildly hyperglycemic metabolic acidosis that developed after reinitiation of empagliflozin following robotic left hemicolectomy.

Material and Methods: A 59-year-old male was diagnosed with adenocarcinoma on biopsy obtained from the sigmoid colon during screening colonoscopy performed due to family history. Robotic left hemicolectomy was planned. Sitagliptin, insulin glargine, and empagliflozin were discontinued two days prior to surgery. On postoperative day 6, oral intake was resumed and antidiabetic therapy was restarted.

Results: On postoperative day 7, the patient developed nausea, vomiting, tachycardia, and polyuria. Cardiac, pulmonary, and intra-abdominal complications were excluded. Arterial blood gas analysis revealed severe metabolic acidosis with pH 7.041, bicarbonate 9 mmol/L, sodium 147 mmol/L, chloride 121 mmol/L, and lactate 2.1 mmol/L. Plasma glucose was 249 mg/dL, creatinine 0.73 mg/dL, and albumin 4.3 g/dL. Urinalysis showed negative ketones and positive glucose. Normal lactate levels excluded lactic acidosis and sepsis. The patient was diagnosed with euglycemic/mildly hyperglycemic hyperchloremic metabolic acidosis. Oral antidiabetic agents were discontinued, and intensive intravenous fluid resuscitation along with insulin infusion therapy was initiated. The primary goals of treatment were correction of volume depletion, restoration of glucose–insulin balance, and suppression of keto/preketotic metabolism. Clinical and metabolic improvement was observed during follow-up. Repeat urinalysis demonstrated persistent glycosuria with negative ketones. The patient was discharged after adjustment of antidiabetic therapy.

Conclusion: SGLT-2 inhibitors increase urinary glucose excretion by inhibiting proximal tubular glucose reabsorption. Persistence of glycosuric effects beyond 48 hours after drug discontinuation, combined with postoperative stress hormone elevation and inadequate caloric intake, may reduce the insulin-to-glucagon ratio and precipitate resistant metabolic acidosis. Therefore, discontinuation of SGLT-2 inhibitors at least 48-72 hours prior to surgery is recommended. High clinical awareness is essential in atypical presentations to enable early diagnosis and prompt, effective management.

Keywords: Robotic left hemicolectomy, SGLT-2 inhibitors, postoperative metabolic acidosis

Table 1. Arterial blood gas values

pH	Lactate	Glucose	Chloride	HCO_3-	Sodium
7.061	2.9	247	-	7.2	141
7.041	2.1	247	116	6.0	146
7.302	0.8	151	-	11.6	143
7.203	1.5	158	121	9.9	147
7.334	1.3	149	116	13.0	146

[P-111]

Colonic perforation due to ventriculoperitoneal shunt migration: A rare complication

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Objective: Ventriculoperitoneal (VP) shunting remains the most commonly performed surgical procedure for the management of hydrocephalus. Although VP shunts are generally considered safe, various complications may occur, including infection, obstruction, mechanical failure, and catheter migration. Gastrointestinal perforation caused by distal catheter erosion is an extremely rare but serious complication, potentially leading to peritonitis, sepsis, and mortality. In this report, we present an unusual case of asymptomatic sigmoid colon perforation with transanal protrusion of the VP shunt catheter.

Material and Methods: This report describes the clinical presentation, radiological findings, surgical management and postoperative course of a patient diagnosed with colonic perforation secondary to VP shunt migration. Clinical examination, laboratory evaluation, abdominal computed tomography and intraoperative findings were reviewed retrospectively.

Results: A 27-year-old male patient with a history of decompressive craniectomy developed post-hemorrhagic hydrocephalus and underwent VP shunt placement in 2021. He was admitted to the emergency department after noticing extrusion of the distal catheter through the anus. Remarkably, the patient did not report abdominal pain, fever, nausea, vomiting, or changes in bowel habits. On physical examination, the distal end of the shunt catheter was visibly protruding from the anal canal. Abdominal examination revealed no tenderness, guarding, or rebound, and laboratory findings were unremarkable, suggesting the absence of acute intra-abdominal infection. Abdominal computed tomography demonstrated that the peritoneal catheter had migrated into the pelvic cavity, perforated the sigmoid colon, and advanced intraluminally through the rectum, resulting in transanal extrusion. A diagnosis of asymptomatic colonic perforation secondary to VP shunt migration was established. The patient underwent urgent exploratory laparotomy. Intraoperative findings confirmed perforation of the sigmoid colon caused by the catheter. The shunt was identified in the subcutaneous tract, ligated at the abdominal entry site, and the distal segment was carefully removed transanally. The colonic defect was repaired primarily. Postoperatively, the patient was closely monitored in collaboration with the neurosurgery team. No complications such as peritonitis or sepsis developed, and the patient was discharged uneventfully on postoperative day five.

Conclusion: Colonic perforation due to VP shunt migration is a rare but potentially life-threatening complication. Clinical presentation may be subtle, and patients can remain asymptomatic until transanal protrusion occurs. Most reported cases in the literature present with abdominal symptoms or infectious complications, whereas our patient remained clinically asymptomatic. Early recognition, appropriate imaging, and timely surgical management are crucial for preventing severe infectious outcomes. Multidisciplinary follow-up is essential in the treatment of such complex cases.

Keywords: Hydrocephalus, ventriculoperitoneal shunt, catheter migration, colonic perforation, transanal protrusion

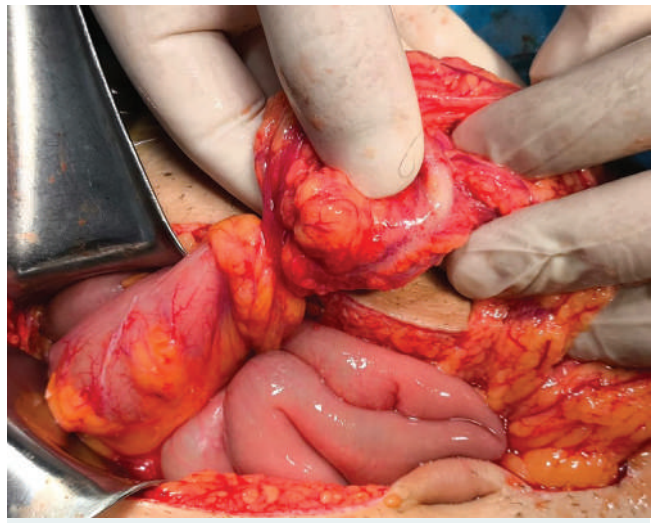


Figure 1. Intraoperative view of sigmoid colon perforation caused by distal migration of the VP shunt catheter.



Figure 2. Removal of the migrated distal VP shunt catheter during surgery.

[P-112]

Emergency laparoscopic appendectomy in a patient with a history of semaglutide use who developed appendiceal mesenteric infarction: A case report

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Objective: The appendix mesentery contains the arteries, veins, and lymphatic vessels of the appendix. The appendix is usually supplied by a single terminal artery. Due to the single terminal artery nature of the Arteria appendicularis passing through the appendix mesentery, infarction inevitably leads to rapid ischemia of the appendix, and surgical appendectomy is the only treatment option. On the other hand, Semaglutide, an active ingredient whose use is rapidly increasing today for obesity/weight management indications, is a GLP-1 receptor agonist and was discovered in 2012. It was approved by the FDA in 2017. In 2018, its use for obesity/weight management indications began in the US. There are studies in the literature indicating that it does not increase the risk of infarction. This case presentation describes a patient with a history of Semaglutide use who developed appendiceal mesenteric infarction.

Material and Methods: The clinical and laboratory data of the patient included in the study were reviewed retrospectively.

Results: A 33-year-old male patient with no known comorbidities or history of surgery presented to the emergency department with complaints of nausea and vomiting accompanied by abdominal pain localized to the right lower quadrant, which had been progressively worsening for 5 days. It was learned that the patient had started semaglutide treatment at another center 29 days prior to presentation due to obesity. There is no history of coagulation disorders in the family. Physical examination revealed generalized abdominal tenderness, defense, and rebound tenderness in the right lower quadrant. Rectal examination was normal. Laboratory tests showed WBC: 12.2×10^9/L, total bilirubin: 1.7 mg/dL, direct bilirubin: 0.4 mg/dL, CRP: 14.9 mg/L; INR: 0.9 within normal limits. Contrast-enhanced abdominal CT showed a 16×12 mm hypodense area in the distal vermiform appendix with retrocecal placement and marked contamination in the surrounding mesenteric fat tissue. Based on the current clinical and radiological findings, emergency surgery was planned. During exploration, an approximately 2 cm area of infarction was detected in the appendix mesentery, and laparoscopic appendectomy was performed. The patient had an uneventful postoperative course and was discharged on postoperative day 2 with an ASA prescription.

Conclusion: The development of isolated mesenteric infarction of the appendix following semaglutide use in this patient without comorbidities or coagulation disorders suggests that further clinical and experimental studies are needed to elucidate the potential vascular or microcirculatory effects of semaglutide.

Keywords: Appendix, semaglutide, mesenteric infarction of the appendix

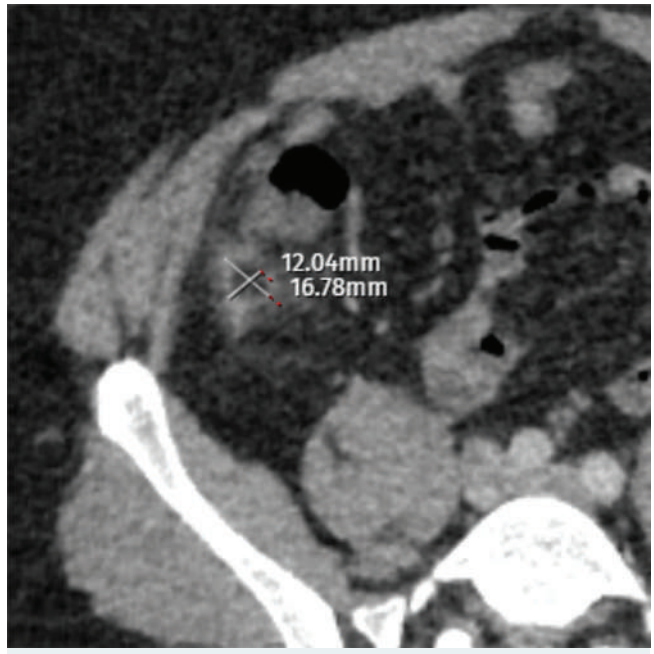


Figure 1. CT imaging. Fat necrosis? Mental infarction? Area at the distal vermiform appendix.



Figure 2. Main specimen.

[P-113]

Ruptured cholangitic liver abscess presenting as acute abdomen in locally advanced pancreatic cancer: A case report

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Objective: Pancreatic cancer is an aggressive malignancy associated with high mortality and morbidity. Gastrointestinal perforations are rare in locally advanced pancreatic cancer and are typically linked to direct tumor invasion or post-chemoradiotherapy necrosis. However, acute abdomen secondary to the rupture of a cholangitic abscess is highly atypical and infrequently documented in literature.

Material and Methods: We retrospectively evaluated the clinical course of a 65-year-old male patient with locally advanced pancreatic cancer and a metallic biliary stent. The diagnostic process, findings of emergency surgical exploration for acute abdomen, and postoperative biliary restoration via ERCP are analyzed and reported.

Results: We report the case of a 65-year-old man diagnosed two months prior with locally advanced pancreatic head adenocarcinoma, who had undergone metallic biliary stent placement. He initially presented to the emergency department with epigastric pain, nausea, and vomiting. His symptoms transiently improved with symptomatic treatment, and he was discharged against medical advice. He re-presented the following day with persistent complaints. Imaging revealed intraperitoneal free air, and a physical examination demonstrated signs of an acute abdomen, necessitating emergent surgical exploration. Intraoperative findings ruled out definite perforation in the duodenum, stomach, or small bowel. Instead, widespread peritonitis and a biliary leak were identified adjacent to the mass invading the hepatoduodenal ligament, originating from the rupture of a cholangitic abscess located in hepatic segment 2. The deformed Glisson's capsule overlying the abscess was incised, the cavity was debrided, and the intrahepatic bile ducts were repaired. Postoperatively, an endoscopic retrograde cholangiopancreatography (ERCP) was performed to replace the obstructed stent, and the patient achieved clinical improvement with targeted antibiotic therapy. Perforation in patients with pancreatic cancer is a marker of poor prognosis, most commonly resulting from tumor invasion into adjacent organs. In contrast, our case highlights a rare acute abdomen etiology caused by the rupture of a cholangitic liver abscess that developed secondary to a blocked biliary stent. This emphasizes the critical importance of biliary stent surveillance and aggressive cholangitis management in the multidisciplinary care of locally advanced pancreatic cancer patients.

Conclusion: In patients with locally advanced pancreatic cancer who develop an acute abdomen, atypical causes such as the rupture of a cholangitic abscess due to stent occlusion must be considered in the differential diagnosis, in addition to perforation related to tumor invasion. Early surgical intervention and prompt control of the infectious source are paramount for improving survival in these patients.

Keywords: Pancreatic cancer, cholangitis, liver abscess, rupture, biliary stent

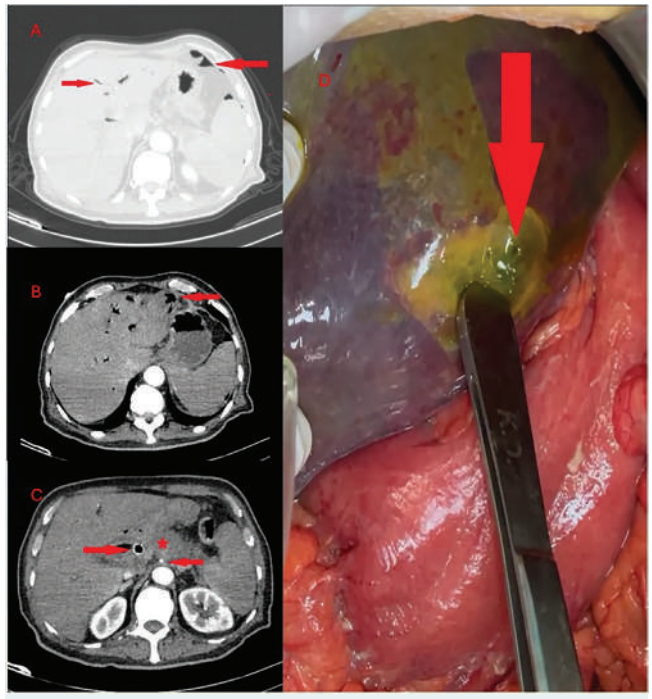


Figure 1. Preoperative radiological evaluation and Intraoperative findings. (A) Abdominal CT scan shows subdiaphragmatic free air (left arrow) and intrahepatic pneumobilia (right arrow). (B) Suspected rupture area at the level of Segment 2 of the liver (left arrow). (C) Mass at the head of the pancreas (star) and metallic biliary stent (right arrow). (D) Intraoperative image: Glisson's capsule opened, cavity debridement performed, and U-suture repair.

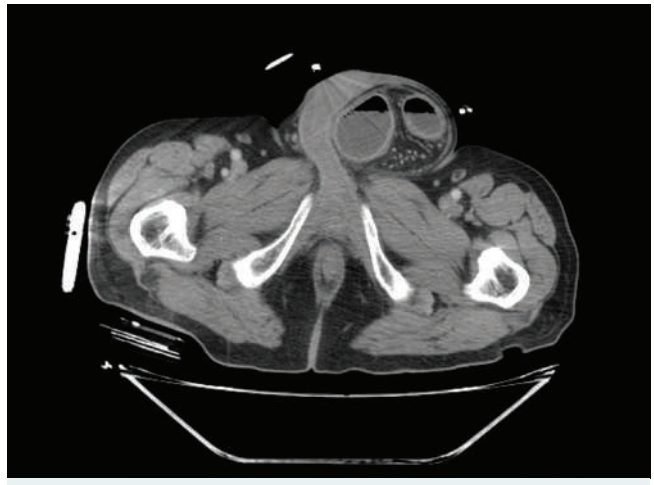


Figure 2. Sigmoid colon within the strangulated hernia on CT.

[P-114]

Persistent postoperative distension revealing an occult colorectal cancer after emergency inguinal hernia repair

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Objective: Strangulated inguinal hernias are a frequent cause of emergency surgery. The presence of a colon segment within the hernia sac is rare, and the presence of a secondary mechanical obstruction due to distal colorectal malignancy is even more unusual. This poster aims to present a rare case of a patient operated on for a strangulated inguinal hernia, in whom persistent postoperative distension revealed underlying occult colorectal cancer.

Material and Methods: This study retrospectively evaluated the clinical course, imaging and endoscopic findings, and surgical treatment of a patient who underwent surgery for ileus. Informed consent was obtained from the patient.

Results: A 71-year-old male patient presented to the emergency department with complaints of inability to pass gas and stool, nausea, and vomiting for two days, along with an unreducible swelling in his left groin. Physical examination revealed a strangulated left inguinal hernia and abdominal distension. Plain abdominal X-ray showed colonic air-fluid levels. Abdominal CT showed incarceration of a segment of the sigmoid colon in the left inguinal canal and dilation throughout the entire colon proximally. Following nasogastric decompression, the patient underwent emergency surgery. Exploration under spinal anesthesia revealed a strangulated but viable sigmoid colon with good blood supply within the hernia sac. The bowel was reduced to the abdomen, and due to the absence of contamination, the hernia was repaired with prolene mesh. On the first postoperative day, persistent abdominal distension led to further nasogastric decompression and enema administration. On the second day, due to increased distension and the passage of approximately 2000 mL of fecal matter via nasogastric drainage, a contrast-enhanced whole-abdomen CT scan was performed. The CT scan revealed significant dilation throughout the colon and small intestine, starting from the rectosigmoid junction. Rectosigmoidoscopy revealed a mass lesion 16 cm from the anal verge, completely obstructing the lumen. The patient underwent reoperation 48 hours postoperatively, with low anterior resection of the rectosigmoid junction. Due to proximal colonic dilation and the patient's clinical condition, anastomosis was omitted, and the Hartmann procedure was chosen instead. Pathology reported the tumor as a T2N0 stage adenocarcinoma. The patient had an uneventful postoperative course and was discharged; no recurrence was detected during follow-up, and the colostomy was closed.

Conclusion: Persistent postoperative distension following strangulated inguinal hernia should not be dismissed with the assumption of paralytic ileus. Especially in elderly patients, the possibility of distal mechanical obstruction and occult colorectal malignancy should be kept in mind, and a secondary area of obstruction should be ruled out with early further investigation.

Keywords: Colonic obstruction, inguinal hernia, postoperative distension, strangulation



Figure 1. The initial pre-operative CT scan showed the sigmoid colon within a strangulated hernia. CT scan of sigmoid colon within strangulated hernia.

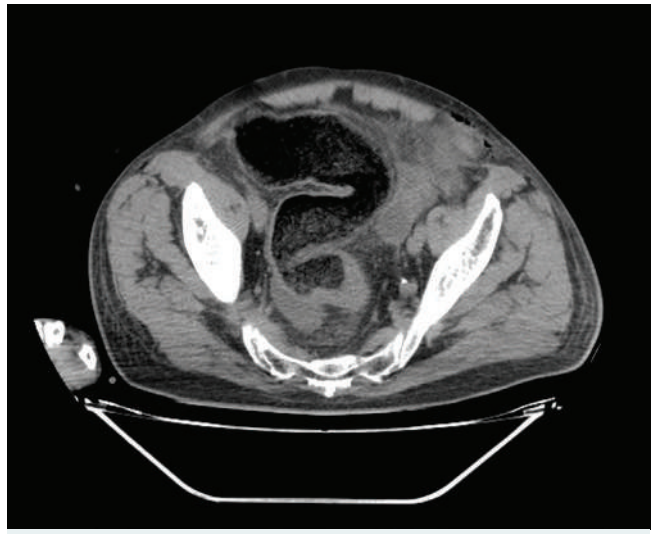


Figure 2. Contrast-enhanced CT scan on the second postoperative day revealed a scirrhous mass at the rectosigmoid junction and dilation proximal to it.

[P-115]

Pancreatic injury in major blunt trauma

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Objective: Blunt pancreatic injuries are relatively rare, accounting for only 0.25% of all trauma cases and 2.4% of abdominal traumas, and are associated with 4.3% of trauma-related mortality. Isolated pancreatic injuries are uncommon. In this study, we present two cases of AAST Grade 4 pancreatic injuries that were managed using non-operative approaches.

Material and Methods: The clinical courses of two patients with high-grade pancreatic injuries were retrospectively reviewed and compared with current literature.

Results: Two patients with AAST Grade IV pancreatic injuries were initially managed with non-operative follow-up. In one patient, distal pancreatectomy with splenectomy was performed due to deterioration of hemodynamic parameters and the development of generalized peritonitis at the 30th hour of follow-up. The second patient was successfully managed non-operatively and discharged. The operated patient was a 27-year-old male with pancreatic injury accompanied by multiple extremity traumas. Following the initial operation, he underwent three additional re-explorations for peritoneal lavage. At approximately one month of follow-up, he continues to be monitored with a pancreatic fistula producing a daily output of approximately 100 mL. The second patient was a 43-year-old male with an isolated pancreatic injury. CT-guided drainage catheters were placed for pseudocysts by the interventional radiology team. MRCP and ERCP demonstrated misalignment of the proximal and distal ends of the transected pancreatic duct, and stent placement was not feasible. During follow-up, the patient was discharged at the end of the first month with a daily drainage output of less than 50 mL.

Conclusion: In patients with grade IV pancreatic injuries, the treatment approach should be individualized according to the patient's hemodynamic status and clinical course. While surgical intervention may be unavoidable in certain cases, non-operative management can be considered a viable option in carefully selected patients when managed in appropriately equipped centers with multidisciplinary expertise. These cases highlight the importance of close monitoring and flexible treatment strategies in the management of high-grade pancreatic injuries.

Keywords: Blunt pancreatic injury, non-operative management



Figure 1. Control tomography of the operated patient taken before the operation.



Figure 2. Admission CT scan of a patient who underwent non-operative treatment.

[P-116]

Management of postoperative nursing care in a patient who underwent pancreaticoduodenectomy (Whipple) due to periampullary tumor: A case presentation

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Objective: The aim of this study is to evaluate the nursing care provided during the diagnostic, treatment, and surgical processes of a patient diagnosed with a periampullary tumor who underwent pancreaticoduodenectomy (Whipple procedure).

Material and Methods: Patient: 61-year-old female.

Chief complaint: Fatigue, abdominal pain.

History: Three months ago, the patient presented to a different medical center with fatigue and abdominal pain. Investigations revealed choledocholithiasis. Further imaging with CT and endoscopic retrograde cholangiopancreatography detected a periampullary tumor. She was referred to our department after evaluation by the Gastrointestinal-Oncology Council. The patient was admitted to General Surgery (Ward 53) for surgical management.

Present condition: No active complaints. No jaundice. Normal stool and urine color. No abdominal pain.

Past surgery: None.

Allergies: None.

Medical history: Diabetes mellitus.

Medications: Novomix FlexPen, Forziga.

Surgical procedure: Pancreaticoduodenectomy on 15.01.2026. Postoperatively, the patient was monitored in the general surgery ICU for 2 days. After achieving hemodynamic stability, she was transferred to Ward 53 with an NG tube, feeding tube, one sump drain, Foley catheter, arterial line, and two peripheral IV lines.

Results: In the postoperative period, comprehensive nursing care was provided. To prevent atelectasis, breathing exercises were taught and early mobilization was encouraged. Drain output was monitored for amount and color, and the sump drain was changed as scheduled. Hourly urine output was measured via Foley catheter, and the patient was observed for signs of infection. Pain was assessed using a standardized scale, and prescribed analgesics were administered. As the patient was receiving anticoagulants, bleeding risk was closely monitored and laboratory values were recorded. Blood glucose levels, previously uncontrolled preoperatively, were carefully followed and regulated postoperatively. Due to leakage around the sump drain, it was removed and replaced with a wound pouch; the drainage characteristics were monitored and documented each shift. On postoperative day 6, oral feeding was commenced with a prescribed dumping diet. A multidisciplinary approach supported the patient's daily activities and self-care. Systematic nursing care played a key role in preventing potential postoperative complications.

Conclusion: Pancreaticoduodenectomy is an effective treatment option for periampullary tumors when performed with appropriate patient selection and a multidisciplinary approach. In this case, it was observed that teamwork and structured nursing care played a significant role in patient management from the diagnostic process through surgery and the postoperative care period. In surgical patients, early diagnosis, appropriate surgical intervention, and systematic care practices are critical in reducing complications and accelerating recovery.

Keywords: Nursing care, postoperative period, pancreaticoduodenectomy



Figure 1. Relationship of the pancreatic pseudocyst with the stomach and omentum during laparoscopic exploration. Contrast-enhanced abdominal computed tomography shows a recurrent pancreatic pseudocyst at the level of the pancreatic body–tail, accompanied by marked ductal dilatation and surrounding peripancreatic inflammatory changes.

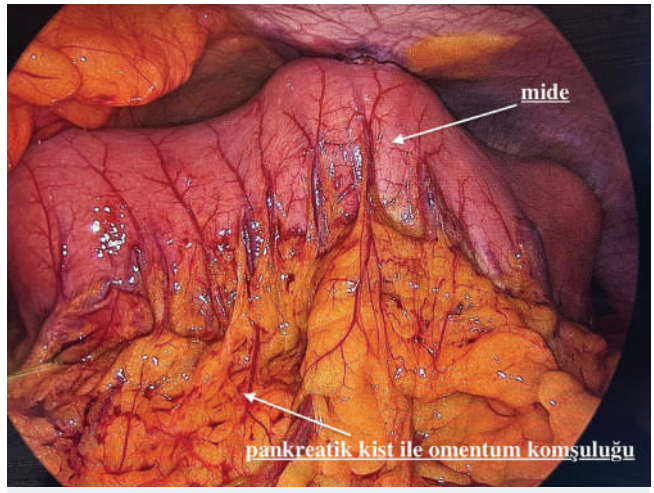


Figure 2. View of laparoscopic intragastric cystogastrostomy and the anastomosis line. During laparoscopic exploration, the pancreatic pseudocyst is seen in close proximity to the posterior gastric wall and the omentum. The cyst is located posteriorly and displaces the stomach anteriorly.

[P-119]

Laparoscopic management of a recurrent pancreatic pseudocyst despite minimally invasive interventions: A case report

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Medicana Ataşehir Hospital, İstanbul

Objective: Percutaneous and endoscopic interventions are considered first-line treatment options for pancreatic fluid collections following acute necrotizing pancreatitis. However, despite these minimally invasive approaches, recurrent pancreatic pseudocysts remain a clinical challenge, particularly in complex cases 3. This case report presents the laparoscopic surgical management of a recurrent pancreatic pseudocyst in a patient who previously underwent percutaneous and endoscopic interventions.

Material and Methods: A 41-year-old male patient with no known comorbidities or familial/genetic pancreatic disease presented with abdominal pain exacerbated by fatty meals and was diagnosed with acute biliary pancreatitis. Despite medical treatment, persistent pancreatitis findings and the development of a giant pancreatic pseudocyst were observed. The patient underwent percutaneous cholecystostomy and endoscopic cystogastrostomy at different centers. Following laparoscopic cholecystectomy, the patient remained clinically stable; however, approximately one year later, follow-up imaging revealed a recurrent pancreatic pseudocyst with marked ductal dilatation at the pancreatic body-tail junction (Figure 1). Due to persistent symptoms and recurrence despite conservative and endoscopic management, laparoscopic exploration was performed. Intraoperatively, the pseudocyst was found to be located posteriorly, closely associated with the stomach and omentum, causing anterior displacement of the stomach (Figure 2). A laparoscopic intragastric cystogastrostomy was performed. As shown in Figure 3, the cyst was drained transgastrically through the posterior gastric wall, and a wide cystogastrostomy anastomosis was created. The postoperative course was uneventful, oral intake was resumed early, and the patient was discharged. At one- and three-month follow-up visits, the patient remained asymptomatic, and no recurrence was detected on imaging.

Results: Current management of pancreatic fluid collections following acute necrotizing pancreatitis favors a step-up approach with minimally invasive techniques. While percutaneous and endoscopic interventions are effective in many cases, recurrence remains a concern, particularly in patients with necrotizing pancreatitis. Previous studies have reported that, in selected cases, surgical drainage may provide more durable long-term outcomes compared to endoscopic approaches. In patients with large, complex, or recurrent pancreatic pseudocysts—especially those who have undergone multiple prior interventions—laparoscopic surgical management represents an important treatment option. This case highlights that, despite advances in minimally invasive endoscopic techniques, surgery continues to play a critical role in the management of complex pancreatic fluid collections.

Conclusion: Pancreatic pseudocysts may recur despite percutaneous and endoscopic interventions. In recurrent and complex cases, laparoscopic surgery is a safe and effective treatment option. A step-up and multidisciplinary approach is essential to achieve optimal outcomes in the management of pancreatic pseudocysts.

Keywords: Pancreatic pseudocyst, recurrence, laparoscopic surgery, step-up approach, cystogastrostomy

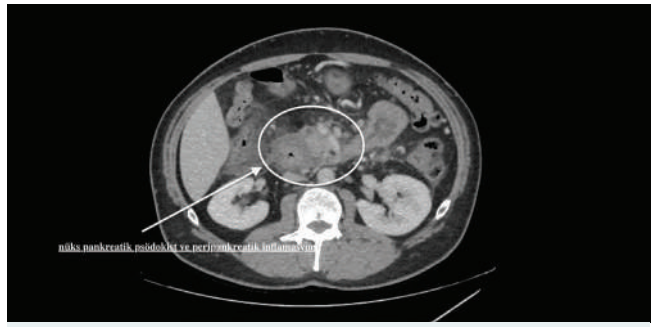


Figure 1. Contrast-enhanced computed tomography showing a recurrent pancreatic pseudocyst. Contrast-enhanced abdominal computed tomography demonstrates a recurrent pancreatic pseudocyst located at the body–tail region of the pancreas, accompanied by marked ductal dilatation and surrounding peripancreatic inflammatory changes.

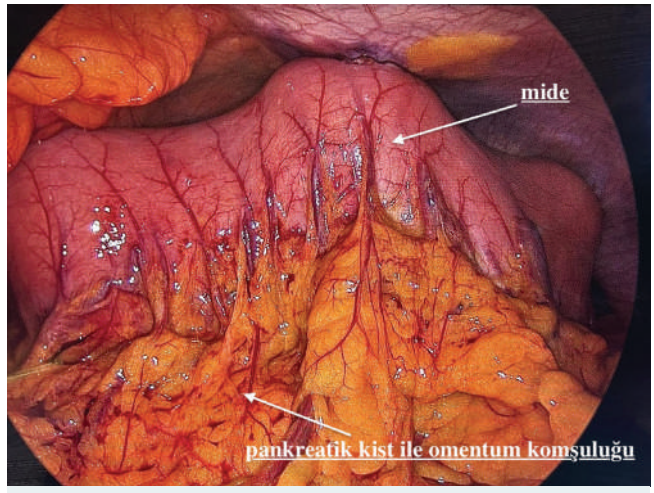


Figure 2. Laparoscopic view of the pancreatic pseudocyst and its relationship with the stomach and omentum. During laparoscopic exploration, the pancreatic pseudocyst is seen in close proximity to the posterior wall of the stomach and the omentum. The cyst is located posteriorly and causes anterior displacement of the stomach.

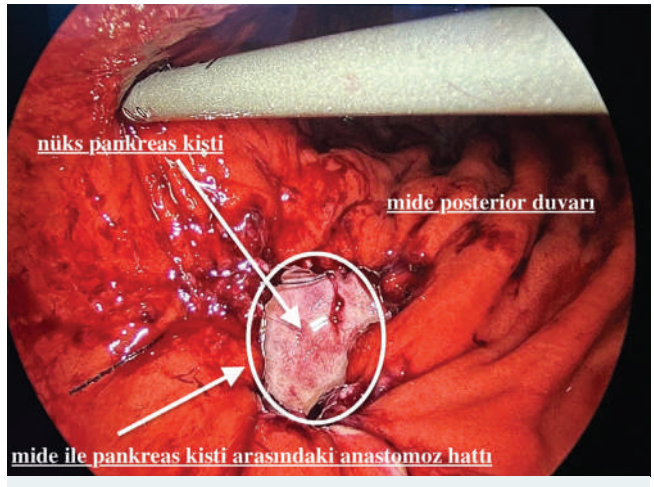


Figure 3. Laparoscopic intragastric cystogastrostomy and anastomosis site. The pancreatic pseudocyst was drained laparoscopically using a transgastric approach through the posterior gastric wall, and a wide cystogastrostomy anastomosis was created. The anastomosis site and cyst cavity are clearly visualized intraoperatively.

[P-121]

Temporary closure of anterior abdominal wall defect developing after recurrent liposarcoma excision with BTM on prolene mesh

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Objective: Biodegradable temporary matrices (BTM) create granulation tissue suitable for skin grafting in deep lesions where the skin and subcutaneous tissue are completely absent. We wanted to present our application of skin grafting after BTM in a case of recurrent liposarcoma that underwent extensive abdominal wall excision.

Material and Methods: We retrospectively evaluated the surgical excision, BTM application, and grafting performed on a recurrent patient who had previously undergone liposarcoma excision twice in the abdominal wall, after no metastasis was detected following PET-CT.

Results: A 47-year-old male patient had previously undergone two surgical treatments for liposarcoma in the abdominal wall. He was evaluated for a recurrent mass larger than 40 cm in diameter extending into the peritoneum on the anterior abdominal wall. PET-CT showed no distant metastasis. The mass had extended into the peritoneum, incorporating the rectus fascia and the muscle itself on one side. During excision, surgical margins could not be evaluated with frozen-section biopsies. While awaiting pathological examination, prolene mesh was placed to induce granulation formation. Upon negative surgical margins, the wound was covered with BTM. The prolene mesh was fully integrated and largely preserved due to granulation. When the BTM delaminated and was removed, the skin was covered with split-thickness grafts taken from the thigh. In the follow-up, the patient developed localized prolene mesh exposure. The exposed meshes were removed, and wound care treatments were applied. After three months, the patient, who had no remaining wound problems, was transferred to the oncology clinic.

Conclusion: BTMs are commonly used in burn treatment. However, in recent years they have also found a place in chronic wound treatment. In this case, we prepared a wound of a size that could not be closed with flaps or wound care methods for grafting. We do not consider it correct to place BTMs without evaluating the surgical margin. Therefore, we triggered granulation by placing prolene mesh for a short period, but we saw high-quality granulation tissue on the prolene mesh before BTM, and therefore we did not remove it completely. Thanks to BTM, we applied grafts to the high-quality granulation tissue that developed on the exposed mesh without infection. We removed the exposed prolene mesh areas with wound care methods. Our unconventional approach developed specifically for this case. However, the application of BTM on prolene mesh has served as an example for us in the treatment of complex wounds such as hernia repairs that develop wound complications.

Keywords: BTM, wound, graft



Figure 1. Mass, excised and BTM application.



Figure 2. Grafted wound.

[P-125]

Late-diagnosed coexistance of intraabdominal serouse carcinoma and B-cell lymphoma: Case report

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Objective: Trauma, benign and malignant pathologies are important in the etiology of intraabdominal masses. Multidisciplinary approach is important in cases where a preliminary diagnosis of hematological disease is present. Patients often present late for surgical intervention, and this case report aims to highlight the importance of diagnosis in a patient with a preliminary diagnosis of B-cell non-Hodgkin lymphoma who had both intramesenteric serous carcinoma and B-cell lymphoma.

Results: A 77-year-old woman presented with palpable abdominal swelling and pain, was referred to the hematology department for further investigation due to lymphocytosis detected in her hemogram at an external center. Computed tomography scan revealed a septated mass lesion extending into the pelvis, approximately 30x23x22 cm, containing cystic components of varying density, and a similar lesion measuring 10x3 cm with a tendency to coalesce, located adjacent to the pelvis (Figure 1). Bone marrow biopsy showed involvement of B-cell non-Hodgkin lymphoma. Exploratory laparotomy revealed two masses in the abdomen; the larger mass projected into the abdominal cavity between the mesenteric layers, was of retroperitoneal origin, and showed loose adhesions to the uterus. A second mass, also retroperitoneally located, was found adjacent to it (Figure 2). Total extirpation of the masses revealed a total weight of 6.200 grams. The masses were found not to be of ovarian origin. The patient's postoperative period was without any complications and was referred to the hematology clinic. Histopathological examination of the mass revealed a diagnosis of "non-invasive low-grade serous carcinoma," and immunohistochemical examination showed neoplastic B lymphocytes with CD20(+), PAX5(+), Bcl-2(+), Bcl6(-), Cd10(-), CyclinD1(-), SOX11(-), TDT(-), Annexin-A1 (-), CD5 (-), CD23 (-), and IgD (-) immunophenotype, and a proliferation index of approximately 20% with Ki-67, thus confirming the diagnosis of marginal zone lymphoma. The patient was initiated on rituximab treatment in accordance with R-Bendamustine chemotherapy in the hematology clinic.

Conclusion: In surgical practice for the diagnosis of intraabdominal masses, the patient's medical and family history are important, early diagnosis should be achieved using laboratory and imaging methods. Since delayed diagnosis can lead to mass growth, it is essential to treat the mass before emergency situations such as compression symptoms, bleeding, perforation, obstruction occur. However, there is no immunohistochemical method to differentiate between primary and genital organ-derived serous carcinomas. Therefore, the mass in our patient contains a combination of primary serous carcinoma and B-cell lymphoma, and this possibility should be considered in the differential diagnosis in similar cases during the early stages of the disease.

Keywords: Intraabdominal mass, lymphoma, serous carcinom

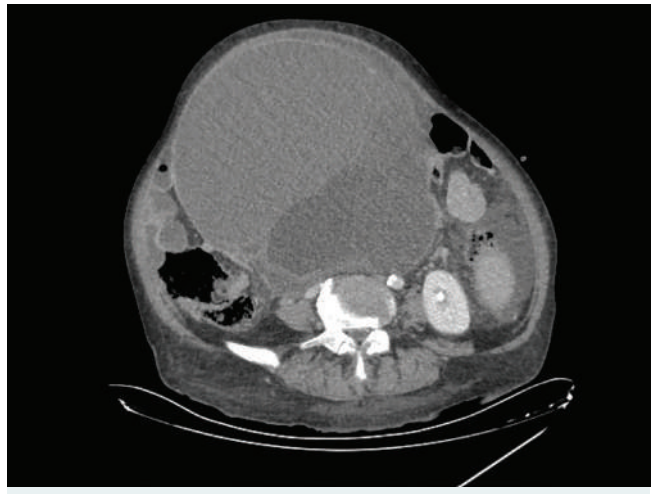


Figure 1. Preoperative CT image. Imaging of intraabdominal giant mass.
CT: Computed tomography.



Figure 2. Intraoperative image of the mass. Image of intraabdominal giant mass in laparotomy.

[P-126]

Brachial artery-axillary vein arteriovenous fistula created using autologous saphenous vein in a hemodialysis patient with exhausted vascular access: An alternative solution

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Objective: Establishing and maintaining reliable vascular access is essential for long-term survival and quality of life in patients undergoing hemodialysis. Repeated arteriovenous fistula (AVF) procedures, prolonged central venous catheterization, and progressive vascular deterioration may eventually lead to exhaustion of available access sites. This situation represents a major clinical challenge, particularly in patients receiving long-term hemodialysis. The use of autologous vessels is preferred over synthetic grafts due to lower rates of infection and thrombosis. However, alternative surgical approaches are required when superficial veins are inadequate. In this report, we present a case of brachial artery-axillary vein AVF created using an autologous saphenous vein graft in a patient with exhausted vascular access.

Material and Methods: A 64-year-old male patient undergoing hemodialysis for four years was evaluated. The patient had a medical history of hypertension. Previous vascular access procedures included right radiocephalic and brachiocephalic AVFs, central venous catheterization, and left radiocephalic and brachiocephalic AVFs. Due to failure of all previous access sites, an alternative vascular access strategy was planned. Preoperative Doppler ultrasonography demonstrated a brachial artery diameter of 4 mm and an axillary vein diameter of 7 mm. Based on these findings, the use of an autologous saphenous vein graft was considered appropriate. The saphenous vein was harvested from the left leg and reversed before implantation. An end-to-side anastomosis was created between the brachial artery and the axillary vein using the parachute technique with 5/0 polypropylene sutures. The total operative time was 124 minutes. All procedures were performed in accordance with standard surgical protocols. Written informed consent was obtained from the patient.

Results: No intraoperative or early postoperative complications, including bleeding, thrombosis, infection, or hematoma, were observed. Postoperative clinical examination revealed adequate thrill and bruit, indicating satisfactory blood flow through the fistula. At the sixth postoperative week, follow-up Doppler ultrasonography showed a fistula diameter of 6 mm and a flow volume of 650 mL/min, confirming successful maturation. The fistula was successfully cannulated for hemodialysis at the eighth postoperative week. During follow-up, the access remained patent and fully functional, allowing uninterrupted dialysis sessions.

Conclusion: Brachial artery-axillary vein AVF created using an autologous saphenous vein graft appears to be a safe and effective alternative for hemodialysis patients with exhausted vascular access. Favorable maturation parameters and sustained patency observed in this case support the potential role of this technique in selected patients. Careful patient selection and meticulous surgical technique are essential for achieving optimal outcomes.

Keywords: Autologous saphenous vein, exhausted vascular access, brachial-axillary fistula

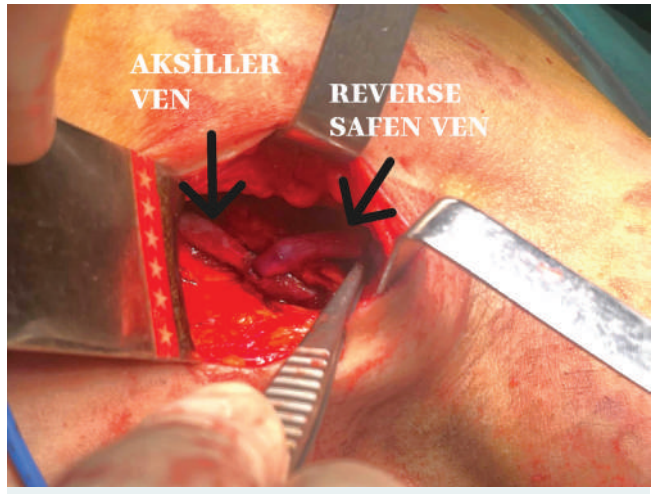


Figure 1. Proximal anastomosis. Intraoperative view of the proximal anastomosis between the axillary vein and the reversed autologous saphenous vein graft.



Figure 2. Distal anastomosis and ultrasonography (USG) image. Intraoperative view of the distal anastomosis created between the brachial artery and the reverse autologous saphenous vein graft. Control USG performed at the 6th week after surgery.

[P-155]

A rare case report: An intra-abdominal mass caused by actinomyces infection

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Objective: Actinomycosis is a rare, subacute to chronic infection caused by Actinomyces species, which are Gram-positive, filamentous, non–acid-fast, anaerobic or microaerophilic bacteria. The infection is typically characterized by granulomatous and suppurative inflammation and, in its chronic form, progresses with multiple abscess formations and granulation tissue containing sulfur granules. Approximately 70% of cases are caused by *Actinomyces israelii* or *Actinomyces gerencseriae*.

Material and Methods: A 55-year-old male with no comorbidities or prior abdominal surgery presented with abdominal distension and a 15-kg weight loss over two months. Physical examination revealed a palpable abdominal mass, and he was referred for further evaluation. Laboratory findings showed elevated inflammatory markers (CRP 213 mg/L, WBC 12.86×10^9/L) with normal tumor markers. Colonoscopy demonstrated a suspicious lesion in the left colon; biopsies revealed chronic active inflammation with eosinophilic infiltration. Abdominal computed tomography (CT) identified a 57×74 mm mass in the right lower quadrant involving the terminal ileum and rectosigmoid junction, with associated bowel wall thickening and right ureteral invasion causing hydronephrosis. PET-CT showed intense FDG uptake (SUV_{max} 17.77) confined to the mass, with no distant involvement. The patient underwent elective surgery. Intraoperatively, a granulomatous mass invading the colon, distal small intestine, duodenum, ureters, and retroperitoneum was identified. Debulking surgery with colectomy was performed, leaving a rectal stump and creating a jejunostomy. Duodenal injury due to tumor invasion was repaired, and a feeding jejunostomy was placed. Histopathological examination revealed actinomycosis with xanthogranulomatous inflammation and abscess formation. The patient was treated with intravenous meropenem followed by oral amoxicillin and was discharged in good condition.

Conclusion: Actinomycosis is a disease that can occur in the presence of risk factors such as surgical or invasive procedures, trauma, or diabetes mellitus, and may present with a wide range of clinical manifestations depending on the affected region of the body. However, as demonstrated in our case, it is important to recognize that actinomycosis can also develop in the absence of any identifiable risk factors.

Keywords: Actinomycosis, intra-abdominal mass, debulking



Figure 1. Appearance of the mass on CT scan, horizontal section.

CT: Computed tomography.

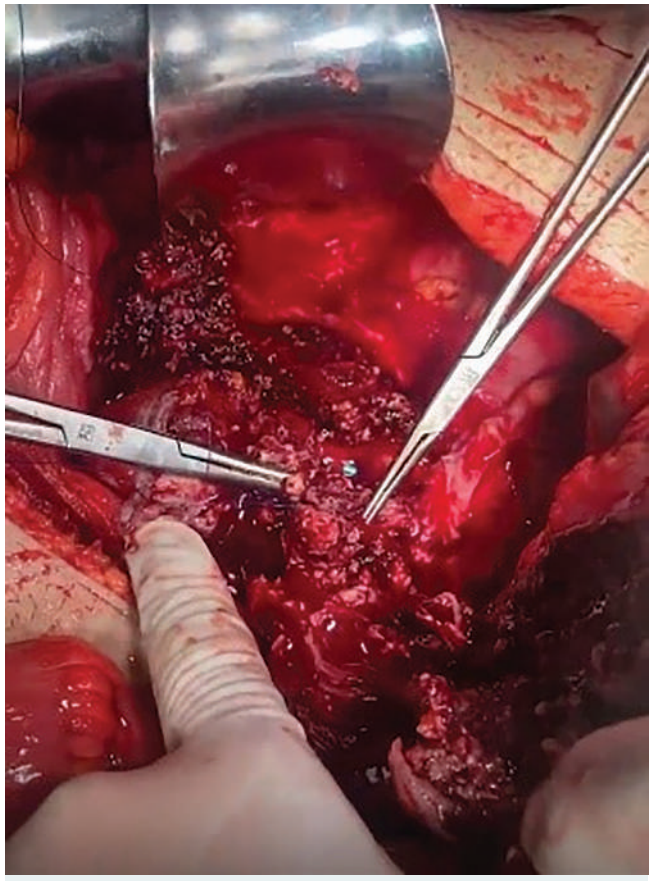


Figure 2. Intraoperative view following debulking surgery.

[P-156]

Metaplastic breast carcinoma: A rare case report of coexistence of invasive ductal carcinoma and mesenchymal sarcoma

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Objective: Metaplastic breast cancer is a histologically and molecularly diverse cancer type. It is a rare and poorly prognostic malignancy, accounting for 0.2-5% of all breast cancers. Therefore, metaplastic cancer has the worst prognosis compared to other types of breast cancer and plays a significant role in global breast cancer mortality.

Results: This report presents a 70-year-old woman with metaplastic breast carcinoma. The patient was followed up at an external center with a cystic lesion in her right breast. During the follow-up period, it was observed that the cystic area grew rapidly and caused necrosis in the skin. Follow-up imaging revealed a solid component within the cyst, prompting frozen section examination followed by segmental mastectomy and sentinel lymph node sampling. Histopathological examination revealed an 11x8x4 cm lesion containing T2N0, nuclear grade III, ER (-), PR (-), cerbB2 (-), invasive ductal carcinoma, high-grade papillary carcinoma *in situ*, and high-grade mesenchymal sarcoma components. The patient received adjuvant radiotherapy and is being followed up 11 months postoperatively without recurrence.

Conclusion: In conclusion, metaplastic breast cancer has very different clinical and pathological characteristics from invasive ductal carcinoma. Its large size, high grade, and associated local recurrence and poor prognosis are negative features. Despite these negative characteristics, breast-conserving surgery can be performed in patients for whom it is possible, with adjuvant radiotherapy planned. The infrequent occurrence of nodal involvement should not rule out axillary surgery in these tumors, which can contain many components.

Keywords: Metaplastic carcinoma, invasive ductal carcinoma, mesenchymal sarcoma of the breast

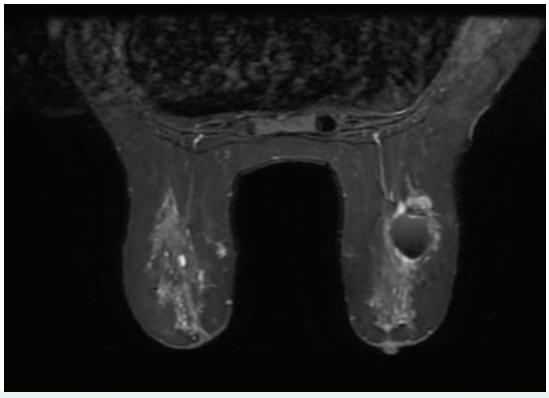


Figure 1. Patient's 2022 MRI image.
MRI: Magnetic resonance imaging.



Figure 2. The patient's final condition before the operation.

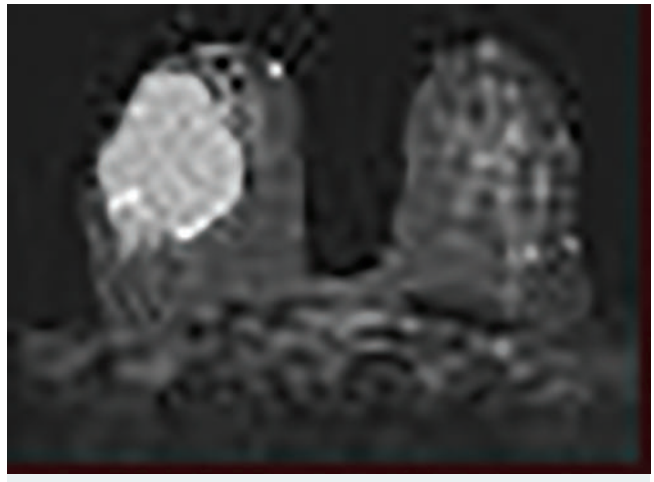


Figure 3. Patient's 2024 MRI image.
MRI: Magnetic resonance imaging.

[P-157]

Approach to metaplastic squamous cell carcinoma of the breast: A rare case

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Objective: Metaplastic breast carcinomas account for less than 1% of all breast malignancies. Metaplastic squamous cell carcinoma is a distinct subtype characterized by prominent squamous differentiation, keratinization, and absence of glandular structures. Most tumors demonstrate a triple-negative immunophenotype, lacking estrogen receptor, progesterone receptor, and HER2 expression. Due to the absence of specific clinical and radiological findings, definitive diagnosis is usually established by histopathological and immunohistochemical examination. Fine-needle aspiration and core needle biopsy may have limited diagnostic accuracy, and excisional biopsy is often required for definitive diagnosis.

Material and Methods: A 67-year-old female patient presented with a complaint of a palpable mass in the left breast. Mammography and ultrasonography revealed a 26x2 mm lesion in the upper outer quadrant of the left breast, described as a complex cyst containing internal echoes with layering, without pathological vascularization on Doppler sonography, and partially mobile internal echoes (BI-RADS 4A). Preoperative fine-needle aspiration biopsy performed prior to surgery reported atypical cells with large nuclei. To obtain a definitive diagnosis, a wire-localized excisional biopsy was planned. Histopathological examination of the excisional biopsy specimen revealed metaplastic squamous cell carcinoma. Immunohistochemical evaluation demonstrated that the tumor cells were ER 0%, PR 0%, HER2 0%, and the Ki-67 proliferation index was 40%; these findings were consistent with the triple-negative phenotype reported in the literature. Following the definitive diagnosis, the patient underwent PET-CT for oncological staging. No distant organ metastases were detected. A small, mildly hypermetabolic lymph node (SUV_{max}: 2.7) was observed in the right axilla, and a second operation for sentinel lymph node biopsy was planned. During this procedure, four sentinel lymph nodes were identified and removed using subcutaneous periareolar injection of methylene blue, and no metastases were detected. Axillary lymph node involvement in metaplastic breast carcinoma has been reported to be lower than in invasive ductal carcinoma.

Results: Metaplastic squamous cell carcinoma of the breast is a rare malignancy with aggressive biological behavior. Poor response to conventional systemic chemotherapy has been reported, contributing to an unfavorable prognosis compared with invasive ductal carcinoma. The frequent occurrence of inconclusive or suspicious cytological findings highlights the importance of excisional biopsy for accurate diagnosis. Although surgical resection remains the cornerstone of treatment, the role of adjuvant chemotherapy and radiotherapy remains controversial.

Conclusion: Metaplastic squamous cell carcinoma of the breast is rare; excisional biopsy confirms diagnosis, negative sentinel nodes may avoid axillary dissection, and it should be considered in differential diagnosis.

Keywords: Breast tumor, metaplastic breast carcinoma, squamous cell carcinoma

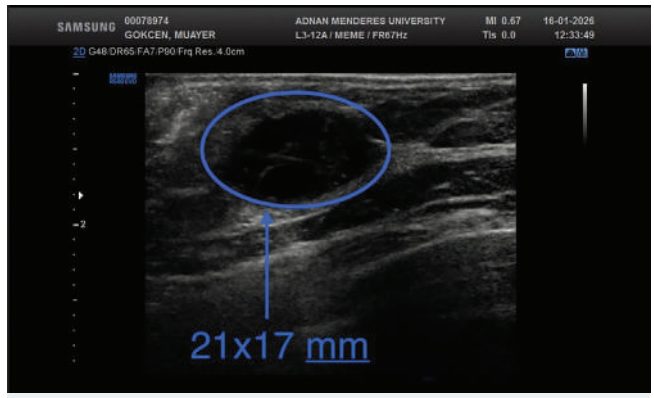


Figure 1. Ultrasonography (USG). Preoperative USG image of the lesion.



Figure 2. Mammography. Preoperative mammography image of the lesion.

[P-158]

Migration of an intra-abdominal drainage catheter into the ileal lumen after surgery for perforated appendicitis: A case report

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Objective: Surgical drainage catheters are commonly used after intra-abdominal procedures to prevent fluid accumulation, control infection, and facilitate postoperative monitoring. Despite their prophylactic and therapeutic benefits, drainage catheters may rarely cause serious complications. Intraluminal migration of a surgical drain into the bowel is an extremely rare but potentially life-threatening event, with only a limited number of cases reported in the literature. Migration of a drainage catheter following appendectomy is particularly uncommon. In this report, we present a rare case of ileal intraluminal migration of a drainage catheter resulting in enterocutaneous fistula formation after surgery for perforated appendicitis.

Material and Methods: This study is a retrospective case report of a 26-year-old male patient who underwent emergency surgery for perforated appendicitis and subsequently developed intraluminal migration of an intra-abdominal drainage catheter. Clinical findings, laboratory parameters, radiological imaging, operative findings, and postoperative follow-up data were reviewed. Diagnosis and treatment decisions were guided by contrast-enhanced computed tomography and surgical exploration findings.

Results: The patient underwent emergency laparotomy for perforated appendicitis with fecal peritonitis. Appendectomy, intra-abdominal abscess drainage, and irrigation were performed, followed by placement of four Jackson-Pratt drainage catheters into the right and left paracolic gutters, pelvis, and appendectomy bed. On postoperative day 11, gastrointestinal content was observed draining from the catheter placed in the appendectomy bed. Oral contrast-enhanced computed tomography revealed that the drainage catheter had migrated intraluminally into the ileum. As the patient remained clinically stable, conservative management was initially preferred. After resolution of intra-abdominal inflammation, elective surgery was performed. Intraoperatively, the drainage catheter was found to have fistulized into an ileal loop approximately 50 cm proximal to the ileocecal valve and progressed intraluminally. Segmental ileal resection with primary anastomosis was performed. The postoperative course was uneventful, and the patient was discharged without complications.

Conclusion: Although intra-abdominal drainage catheters are valuable tools in postoperative management, they may rarely lead to serious complications such as intraluminal bowel migration and enterocutaneous fistula formation. Early recognition based on clinical findings and prompt radiological evaluation are essential to reduce morbidity. Careful patient selection, appropriate drain type, and early removal of drainage catheters may help prevent such complications. This rare case highlights the importance of vigilance regarding drain-related complications and contributes to the limited literature on this subject.

Keywords: Drainage catheter migration, perforated appendicitis, enterocutaneous fistula



Figure 1. Drain.

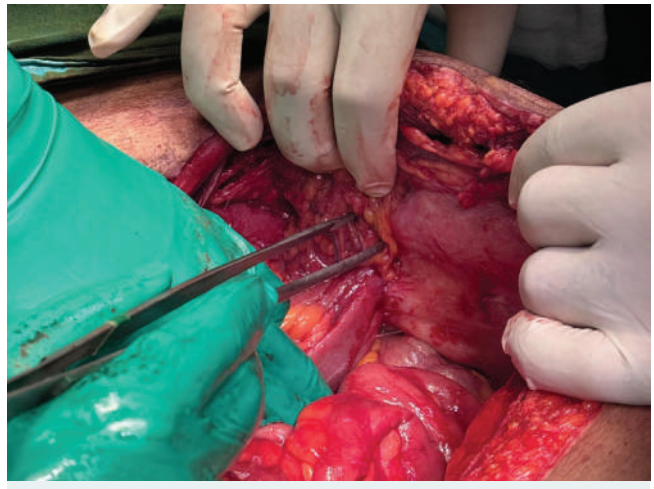


Figure 2. Drain migration.

[P-159]

Fecal-related stercoral rectosigmoid perforation: A serious complication of fecal impaction

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Objective: Chronic constipation is a common clinical problem in the elderly population and significantly reduces quality of life. Prolonged constipation can lead to hardening and accumulation of feces, a condition defined as fecaloma, which is frequently observed in elderly patients. Although fecaloma is usually benign, it can rarely lead to serious and life-threatening complications. Most important of these is stercoral colon perforation, which is associated with a high mortality rate. Stercoral perforation typically occurs in elderly individuals with multiple systemic comorbidities, limited mobility, and dependency in daily living activities.

Material and Methods: A 67-year-old male patient with a long-standing history of chronic constipation presented to the emergency department with progressively worsening abdominal pain for two days, accompanied by inability to pass gas and stool. Physical examination revealed significant abdominal distension and diffuse tenderness in all quadrants. Laboratory tests showed leukocytosis (WBC: 14,500/mm^3). Abdominal computed tomography demonstrated widespread fecalomas at the level of the left colon and rectum, accompanied by free air within the abdominal cavity. Based on these findings, the patient was taken for emergency surgical intervention. A large perforation area was identified at the rectosigmoid junction, with fecal contents spread into the abdominal cavity. A Hartmann procedure was performed. The distal rectum was closed with a stapler, the fecalomas in the left colon were evacuated, and an end colostomy was created. The postoperative course was uneventful, and the patient was discharged on postoperative day seven with appropriate recommendations.

Results: Constipation and fecal impaction are common clinical conditions, especially in elderly and bedridden patients. Prolonged fecal stasis leads to the formation of hardened fecal masses within the colonic lumen, known as fecalomas. Although the presence of fecaloma usually does not cause serious problems, in rare cases, increased intraluminal pressure may lead to ischemia of the colonic wall, which can subsequently result in stercoral perforation. Stercoral perforation is a severe and potentially fatal condition that occurs when hardened fecal masses exert continuous pressure on the intestinal wall, leading to loss of bowel integrity. Following perforation, intestinal contents can spread into the peritoneal cavity, resulting in severe peritonitis, rapid bacteremia, and multi-organ failure. The Sudeck point, located at the rectosigmoid junction where the marginal artery circulation is limited, is a watershed area prone to ischemia in the presence of increased intraluminal pressure and fecaloma.

Conclusion: Stercoral perforation is a rare but serious emergency surgical condition with a high mortality risk, particularly in elderly patients with chronic constipation and comorbidities.

Keywords: Chronic constipation, fecaloma, stercoral perforation

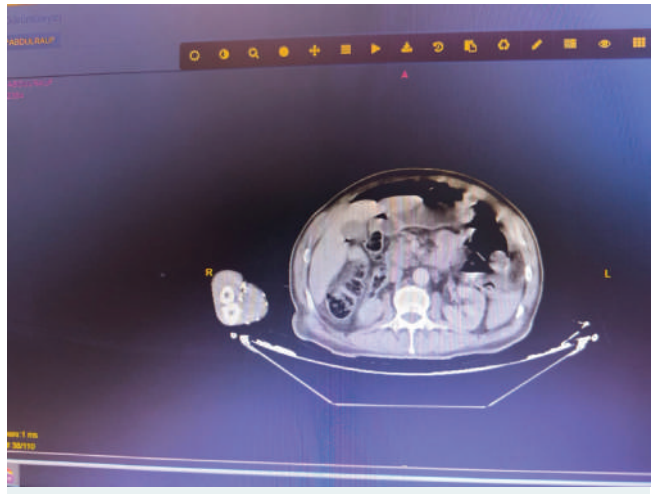


Figure 1. Computed tomography (CT) image. Intra-abdominal free air image in CT scan.

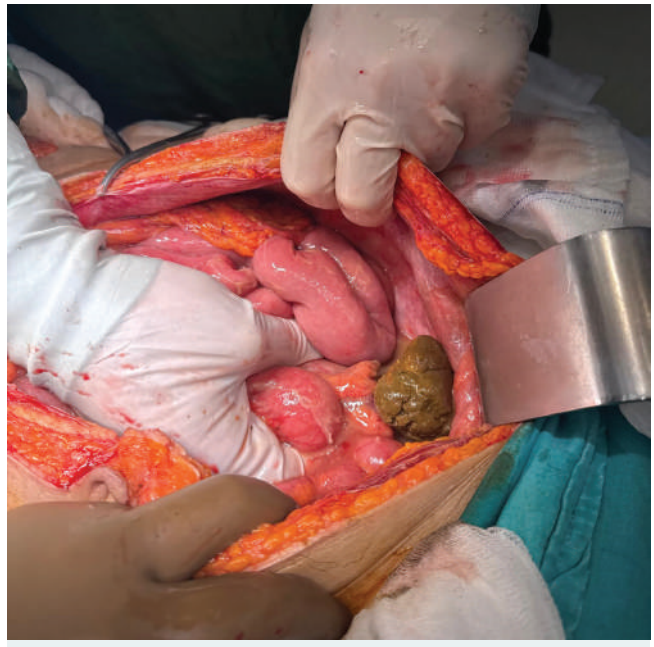


Figure 2. Rectosigmoid perforation and intra-abdominal fecaloma. Intraoperative image of rectosigmoid perforation.

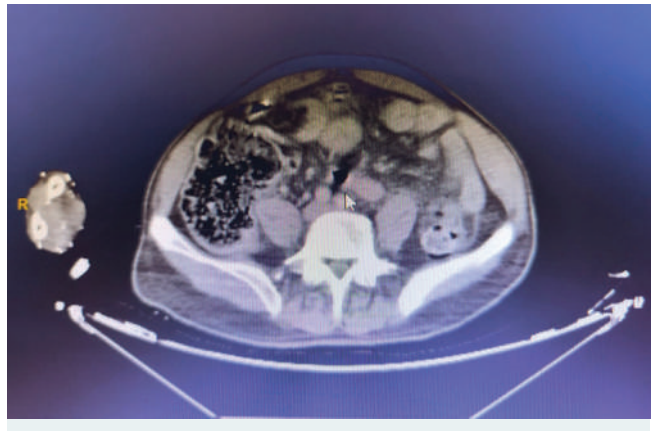


Figure 3. Fecaloma image on tomography.

[P-160]

Combined preoperative botulinum toxin A injection and progressive pneumoperitoneum for the repair of a type II giant inguinoscrotal hernia: A case report

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Karadeniz Technical University Faculty of Medicine, Trabzon

Objective: Giant inguinoscrotal hernias are rare and challenging conditions. They are classified using two anatomical landmarks: The midpoint of the inner thigh and the superior border of the patella. Hernias extending above the midpoint are classified as type I, those below as type II, and those extending below the patella as type III. Hernioplasty alone is often insufficient in type II and III hernias due to loss of domain caused by long-standing herniation. Tensioned closure may result in respiratory compromise or abdominal compartment syndrome. This study presents a successful combined botulinum toxin A and progressive pneumoperitoneum approach in a type II case.

Material and Methods: In the preoperative evaluation, computed tomography (CT) was used as the primary imaging modality for abdominal assessment. The abdominal cavity and hernia sac were assumed to be ellipsoid in shape. Volumetric calculations were performed by selecting the maximum craniocaudal, transverse, and anteroposterior diameters from all CT slices. The day of the patient's initial presentation was designated as day 0. Abdominal cavity volume and hernia sac volume were calculated using CT images obtained on day 0 (Figure 1). On day 1 of follow-up, botulinum toxin was administered under ultrasound guidance by interventional radiology. A total dose of 200 IU (100 IU on the right and 100 IU on the left) was injected into the external oblique, internal oblique, and transversus abdominis muscles at three points on each side. Follow-up imaging was performed on day 10, and volumetric measurements and lateral abdominal wall muscle elongation were calculated. On day 20, an intraperitoneal catheter was placed. Insufflation was performed through this catheter with 500 mL of room air administered twice daily. This procedure was continued for five days. The patient was closely monitored with serial abdominal examinations, vital sign assessments, and urine output measurements. On day 26, the patient underwent elective surgical repair. Abdominal cavity volume and hernia sac volume calculations were performed using the ellipsoid volume formula, where a is the radius in the craniocaudal plane, b is the radius in the transverse plane, and c is the radius in the anteroposterior plane. Ellipsoid volume: $V=4/3\cdot\pi\cdot a\cdot b\cdot c$.

Results: Following botulinum toxin administration, the abdominal cavity volume increased to 4387 mL. Additionally, elongation of the lateral abdominal wall muscles by 4-5 cm was observed. CT performed on day 25 after progressive pneumoperitoneum demonstrated a further increase in abdominal cavity volume to 7084 mL. All procedures performed, along with changes in abdominal cavity volume, variations in lateral abdominal wall muscle length, and the ratio of hernia sac volume to abdominal cavity volume, are summarized in conclusion.

Conclusion: This case shows that botulinum toxin A and progressive pneumoperitoneum correct loss of domain and allow tension-free repair in type II inguinoscrotal hernia.

Keywords: Giant inguinoscrotal hernia, loss of domain, botulinum toxin A, progressive pneumoperitoneum

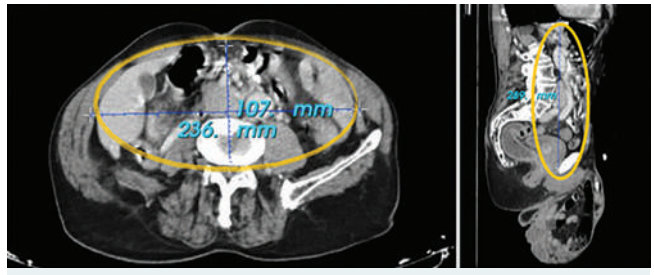


Figure 1. Abdominal cavity volume and hernia sac volume calculations.

Table 1. Volume changes

Parameter	Day 0	Day 10	Day 25
Abdominal cavity volume	3794	4387	7084
Hernia sac volume/abdominal cavity volume (%)	44%	38%	23%
Right lateral muscle length (mm)	237	244	291
Left lateral muscle length (mm)	229	234	287

[P-161]

Local recurrence and leukemia twelve years after breast cancer treatment: A rare case report in a TP53-positive patient

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Objective: Li-Fraumeni syndrome (LFS) is a hereditary cancer predisposition syndrome first described in 1969 by Frederick P. Li and Joseph F. Fraumeni Jr. It is caused by germline mutations in the *TP53* tumor suppressor gene, which regulates the cell cycle and induces apoptosis in response to DNA damage. *TP53* mutations are associated with a broad spectrum of malignancies, including breast cancer, sarcomas, brain tumors, and hematologic cancers. The tumor spectrum in LFS is age-dependent, with adrenocortical carcinoma, choroid plexus tumors, and rhabdomyosarcoma in childhood; osteosarcoma, leukemia, and gliomas in young adulthood; and breast and gastrointestinal cancers in early adulthood. This case highlights the development of a secondary hematologic malignancy in a *TP53*-positive breast cancer patient with long-term survival.

Material and Methods: A 54-year-old woman had been diagnosed with left breast invasive ductal carcinoma (ER+, PR+, HER2-) 12 years earlier and was treated with breast-conserving surgery, adjuvant AC-T chemotherapy, radiotherapy, and five years of hormonotherapy. Imaging performed for suspected ipsilateral recurrence revealed a 1.5×1 cm spindle cell malignant tumor with marked pleomorphism and 6-7 mitoses per 10 high-power fields on excisional biopsy.p53 positivity on immunohistochemistry prompted molecular analysis, which identified a heterozygous *TP53* c.844C>T (p.Arg282Trp) variant. Following genetic counseling, bilateral prophylactic mastectomy was performed. During follow-up, the patient developed bone pain, and PET/CT showed increased FDG uptake in the femur. Bone marrow biopsy confirmed acute myeloid leukemia. She underwent allogeneic bone marrow transplantation but died due to early post-transplant complications.

Results: This case is notable because it demonstrates both a solid tumor (breast cancer) and a hematologic malignancy (AML) developing years later in a *TP53*-positive patient. *TP53* mutations, particularly those associated with LFS, confer a lifetime cancer risk of up to 70-90%. Although hematologic malignancies typically occur in early childhood in this syndrome, they developed after age 50 in our patient. In addition, chemotherapeutic agents used in breast cancer treatment—especially alkylating agents and anthracyclines—may contribute to therapy-related AML; however, the presence of a germline mutation indicates an underlying genetic predisposition. The decision for prophylactic mastectomy may therefore be important not only for pathological risk but also for patients with genetic susceptibility. This case highlights the need for careful long-term surveillance for secondary hematologic malignancies in *TP53*-positive individuals.

Conclusion: Breast cancer patients harboring *TP53* mutations have an increased risk of developing secondary hematologic malignancies. Therefore, long-term genetic counseling, a personalized oncologic approach, and multidisciplinary follow-up are of great importance in this patient population.

Keywords: *TP53* mutations, breast cancer, Li-Fraumeni syndrome

[P-162]

Extended surgical approach for substernal goiter: Bilateral total thyroidectomy with sternotomy

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Objective: Substernal goiter is defined as the presence of more than half of the enlarged thyroid mass below the sternal notch. Its incidence varies, but it is seen in approximately one in 5,000 people.While 20-40% of cases are detected incidentally during radiological examinations, the majority of cases present with symptoms such as dyspnea, dysphagia, and hoarseness secondary to mass compression.Approximately 81-99% of substernal goiter cases can be treated surgically with a cervical incision, while 2-19% require more invasive approaches such as sternotomy or thoracotomy. In this case, we present a bilateral total thyroidectomy with sternotomy in a patient with symptomatic substernal goiter.

Material and Methods: In this case, the diagnosis, treatment, and follow-up process of a patient who underwent bilateral total thyroidectomy with sternotomy due to substernal goiter at our clinic was evaluated.

Results: A 57-year-old male patient with a history of known diabetes, hypertension, and coronary artery disease, who is an ex-smoker, presented to the outpatient clinic with neck swelling and progressive dyspnea. On examination, a multinodular goiter was palpated in the substernal region. Blood tests showed euthyroid thyroid function. Due to its retrosternal location, a contrast-enhanced neck CT scan was planned. The CT scan showed hypodense nodules extending retrosternally, containing coarse calcifications in places. The patient was evaluated by a surgical endocrinology team consisting of general surgery, endocrinology, anesthesiology and resuscitation, ear nose and throat, and cardiovascular surgery teams. A decision was made to perform bilateral total thyroidectomy with sternotomy. The substernally located thyroid tissue was removed from the posterior mediastinum via sternotomy. The patient was intubated and monitored in the intensive care unit for two days postoperatively. Subsequently, the patient was transferred to the ward, and no pathology was observed in the postoperative vocal cord examination. The patient was discharged on the 6th postoperative day. No complications were observed during postoperative follow-up. The pathology results showed no malignancy.

Conclusion: Patients diagnosed with substernal goiter should undergo multidisciplinary evaluation during the preoperative period. Computed tomography is the primary imaging method used in the preoperative evaluation process to plan the surgical procedure and determine the necessity of sternotomy. During surgical treatment, the degree of extension into the mediastinum and the anatomical relationship with the surrounding tissue should be evaluated. Substernal goiter surgery has a higher morbidity rate compared to standard thyroid surgery. In these cases, not avoiding sternotomy increases surgical safety and reduces the risk of complications. The effective use of CT and a multidisciplinary approach play an effective role in determining the appropriate surgical approach.

Keywords: Goiter, sternotomy, thyroidectomy

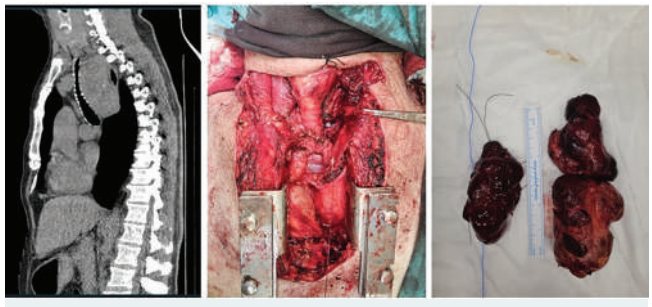


Figure 1. Intraoperative case image and surgical specimen.

[P-163]

Completecholedoc obstruction and choledocoduodenal fistula at 9 months after cholecystectomy

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Objective: A 52-year-old female patient underwent cholecystectomy at an external center and presented to our hospital with jaundice and abdominal pain 9 months postoperatively. Imaging revealed complete obstruction of the common bile duct, and further investigation/endoscopic/interventional/surgical treatment options were planned for the patient.

Material and Methods: Initially, a percutaneous biliary tract (PTC) procedure was planned for the patient. A cholangiogram revealed a tract identified as a choledochoduodenal fistula, but without bile flow. External biliary drainage catheters were placed in the right and left hepatic ducts via PTC. Subsequently, an ERCP procedure was performed, locating and cannulating the fistula tract opening in the bulb, but bile drainage was not achieved. Therefore, a decision was made to proceed with surgical exploration. Surgical exploration revealed a severely dense and adherent hepatoduodenal ligament. The common bile duct was dissected, showing complete obstruction just distal to the level of the confluence, and severely dilated proximal to the stenosis, with an approximate diameter of 3 cm. The choledochoduodenal fistula tract was also located and excised. A Roux-N-Y hepaticojejunostomy was performed. The external biliary drainage catheters were preserved to ensure anastomotic safety. External biliary drainage catheters were discontinued one month after discharge.

Results: Nine months after cholecystectomy, a benign biliary stricture, potentially causing complete obstruction of the common bile duct, was considered the primary cause. Intraoperative exploration revealed no clips, staples, or sutures in the common bile duct. However, a choledochuodenal fistula allowed for continued bile drainage, enabling the patient to live with asymptomatic benign biliary stricture for nine months. Spontaneous obliteration of the fistula tract resulted in symptoms due to bile stasis.

Conclusion: Jaundice, abdominal pain, and intrahepatic bile duct dilation after cholecystectomy generally suggest the possibility of surgical complications/injury; however, it should be kept in mind that benign biliary strictures can also present with bile duct obstruction, proximal segment bile duct dilation, and jaundice. Nevertheless, in our patient, the presence of a choledochuodenal fistula prevented bile stasis even in the presence of complete obstruction, allowing for an asymptomatic course.

Keywords: Clodedoch cholecystectomy bile

[P-164]

Organ-preserving surgical experience in a young woman with solid pseudopapillary neoplasm of the pancreatic head

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Objective: Solid pseudopapillary neoplasm (SPN) is one of the rare epithelial tumors of the pancreas with low malignant potential. It accounts for approximately 1-3% of all pancreatic tumors and is observed predominantly in young women. Clinical findings are often non-specific; it most commonly presents with abdominal pain or as an incidentally detected mass. Although imaging modalities are helpful in guiding the diagnosis, definitive diagnosis is established through histopathological examination. In SPN, surgical resection is curative, and long-term survival rates are high. Particularly in young patients, parenchyma-sparing surgical approaches aimed at preserving pancreatic function have gained increasing importance.

Material and Methods: A 22-year-old female patient presented with recurrent epigastric abdominal pain. Laboratory investigations revealed mildly elevated serum amylase and CA 19-9 levels. Contrast-enhanced abdominal CT and magnetic resonance imaging demonstrated a well-circumscribed, solid mass measuring approximately 5×4 cm in the head of the pancreas. The lesion showed no invasion of the surrounding vascular structures, and no distant metastasis was detected. Although radiologically consistent with SPN, the possibility of malignancy could not be completely excluded. Considering the presence of a resectable mass and the patient's young age, surgical resection was planned by multidisciplinary board decision without performing a preoperative biopsy. The patient underwent central pancreatectomy with Roux-en-Y pancreaticojejunostomy. Preoperative CT imaging shows a 5 cm tumor located in the body and head of the pancreas.

Results: During the operation, a well-circumscribed solid mass was identified in the head of the pancreas, without invasion into the surrounding tissues. The resection was macroscopically complete. Histopathological examination reported the tumor size as 5 cm and established the diagnosis of solid pseudopapillary carcinoma. The surgical margins were negative for tumor involvement (R0 resection). No metastasis was detected in the resected lymph nodes. No major complications developed in the postoperative period. Serum amylase and CA 19-9 levels returned to normal ranges during follow-up. The patient was discharged without any problems, and no evidence of recurrence was observed during early follow-up visits.

Conclusion: Although SPN is rare in young female patients, its prognosis is generally favorable. This case demonstrates that R0 resection can be achieved without lymph node involvement despite the diagnosis of solid pseudopapillary carcinoma. In appropriately selected patients, central pancreatectomy may be a safe and effective organ-preserving surgical option that contributes to the preservation of pancreatic function.

Keywords: Solid pseudopapillary neoplasm, tumor of the head of the pancreas, organ preserving surgery

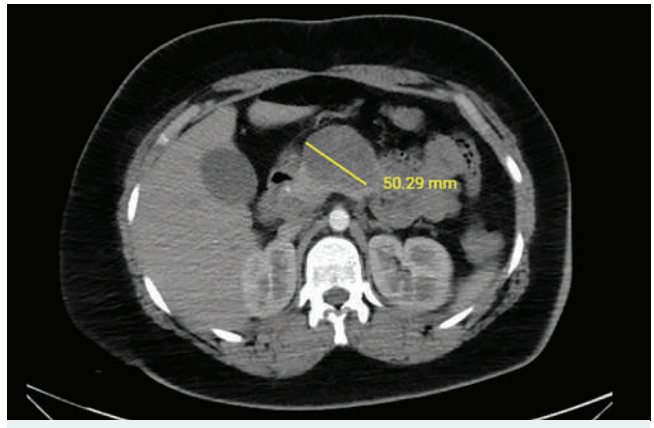


Figure 1. Preoperative CT images. Following resection, 8 cm of pancreatic tissue was preserved in the tail and 2 cm in the head of the pancreas.

CT: Computed tomography.

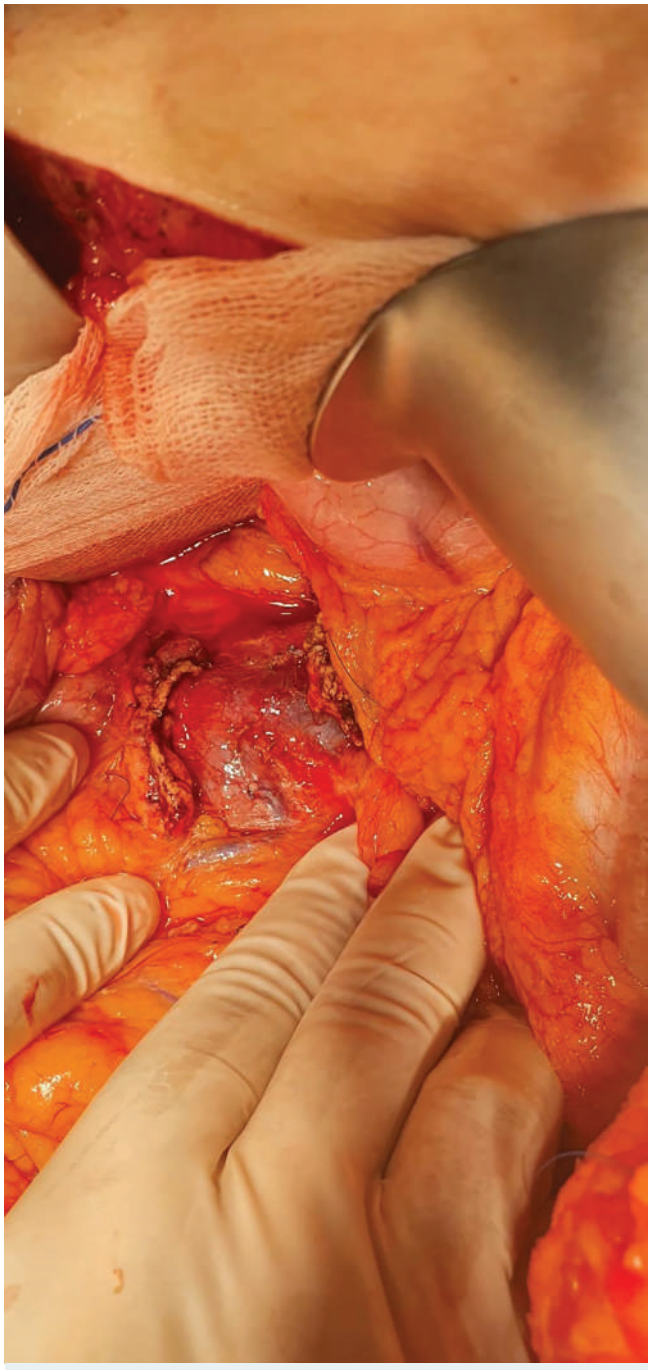


Figure 2. Post-resection image. Following resection, 8 cm of pancreatic tissue was preserved in the tail and 2 cm in the head of the pancreas.

[P-165]

Use of stent and endo-SPONGE therapy in esophageal perforation

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Objective: Esophageal perforation and postoperative anastomotic dehiscence are challenging clinical conditions associated with high morbidity. Although surgical intervention has traditionally been the mainstay of treatment, minimally invasive endoscopic techniques such as esophageal stenting and endoscopic vacuum therapy (endo-SPONGE) have recently emerged as effective alternatives in selected patients.

Material and Methods: Forty-five-year-old female patient underwent upper gastrointestinal endoscopy for dyspepsia, nausea, and vomiting, which revealed a well-defined 2-cm submucosal lesion located 20 cm from the incisors. The patient was operated on via thoracotomy, and a posteromediastinal mass was excised. Intraoperatively, esophageal invasion was identified, resulting in a minimal esophageal defect that was primarily repaired with double-layer suturing. One month postoperatively, the patient presented with nausea and fever. Endoscopic evaluation demonstrated anastomotic dehiscence and fistula formation at the site of primary repair. A fully covered esophageal stent was placed. During follow-up, progressive esophageal wall thinning and tissue loss involving approximately one-third of the esophageal lumen were observed due to prolonged stent therapy. Consequently, treatment was converted to endoscopic vacuum therapy. Endo-SPONGE was applied twice monthly for a total of five sessions.

Results: Serial endoscopic evaluations during vacuum therapy showed a significant reduction in defect size. The diameter of the paraesophageal cavity decreased from 4 cm to 2 cm, and the depth regressed from 3.5 cm to 2 cm. Granulation tissue formation was observed, and complete closure of the fistula tract was achieved. Following successful healing, endo-SPONGE therapy was discontinued and a fully covered esophageal stent was reinserted. After three uneventful stent controls, the stent was removed one month later. The patient tolerated oral intake well and returned to normal daily activities.

Conclusion: This case demonstrates that esophageal perforations can be successfully managed without additional surgery using minimally invasive endoscopic techniques in appropriately selected patients.

Keywords: Esophageal stent, endo-SPONGE therapy

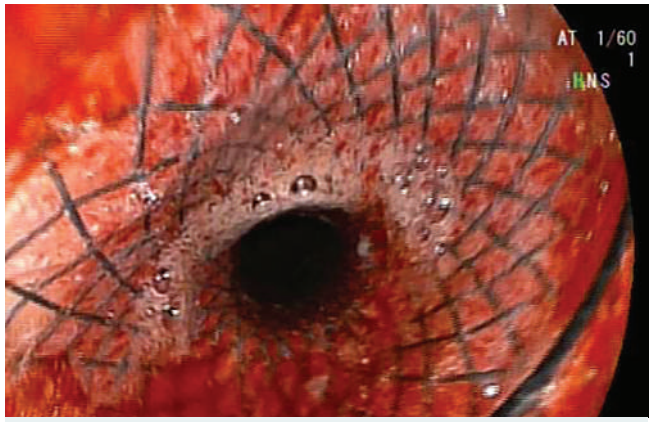


Figure 1. Esophageal stent placement.

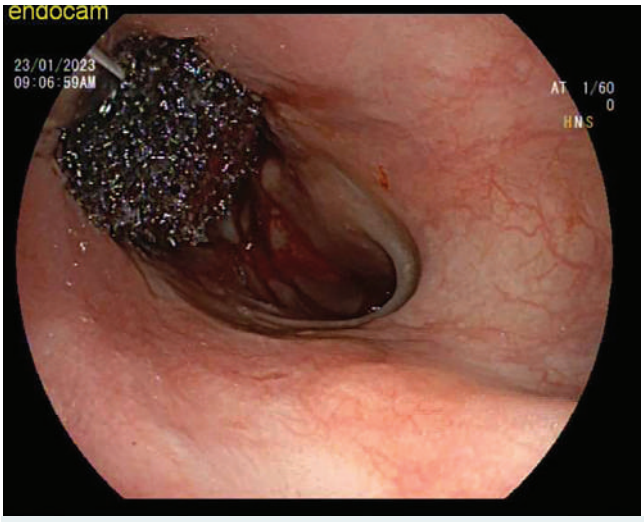


Figure 2. Endo-SPONGE vacuum therapy.

[P-166]

A rare case of Meckel's diverticulum perforation: A case report

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Objective: Meckel's diverticulum is the most common congenital anomaly of the gastrointestinal tract and is usually asymptomatic. Complications of Meckel's diverticulum secondary to foreign bodies are extremely rare. Perforations caused particularly by sharp foreign bodies have been reported in only a limited number of cases in the literature. In this case report, we aimed to present a localized perforation of Meckel's diverticulum caused by ingestion of a sewing pin.

Material and Methods: A 20-year-old female patient presented to an external emergency department after accidentally swallowing a sewing pin that she had been holding in her mouth while fixing her headscarf. As there were no signs of acute abdomen, she was followed up with daily standing abdominal radiographs. Due to the lack of progression of the foreign body during a 10-day follow-up period, she was referred to our center for endoscopic evaluation. Endoscopic intervention was not considered because the pin was localized in the ileum. The patient reported right lower quadrant pain; however, abdominal examination findings were unremarkable. Since no progression was observed on radiographs despite oral contrast administration and enemas, surgical intervention was planned.

Results: During laparotomy, a Meckel's diverticulum was identified, and the sharp end of the sewing pin was found to have perforated the tip of the diverticulum and penetrated into the omentum. As there was no intra-abdominal contamination, diverticulectomy was performed using a linear stapler.

Conclusion: Meckel's diverticulum may serve as an anatomical trap for foreign bodies. In cases of sharp foreign body ingestion, Meckel's diverticulum should be kept in mind as a rare site of perforation.

Keywords: Meckel's diverticulum, perforation, sharp foreign body

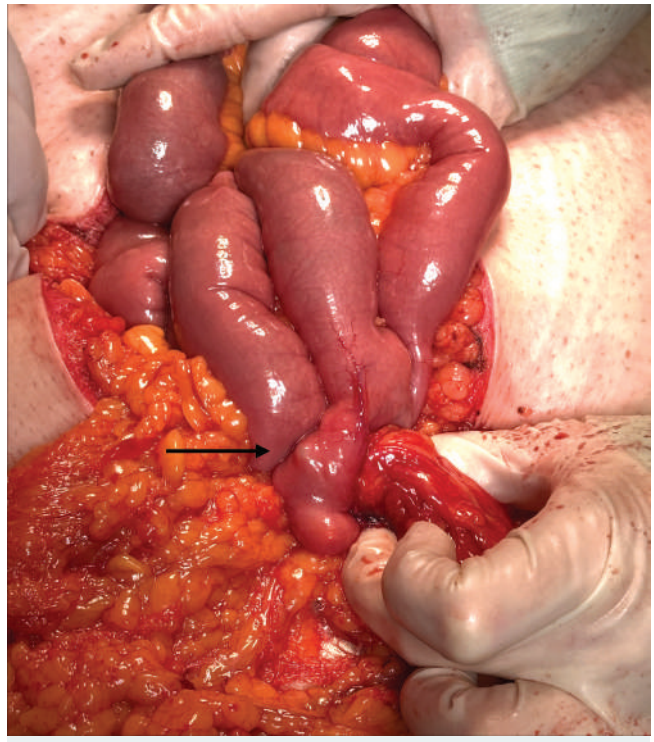


Figure 1. Foreign body within Meckel's diverticulum.

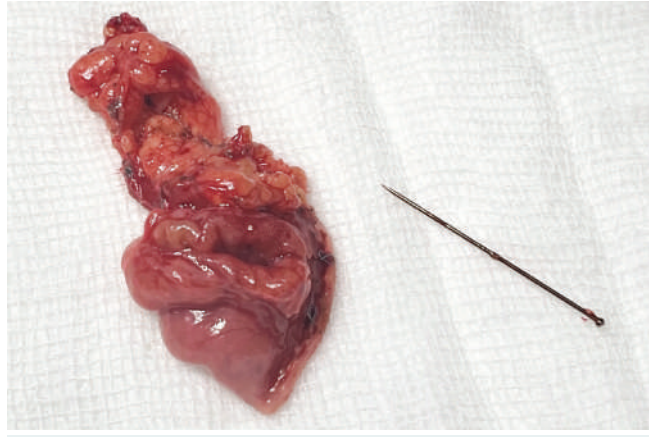


Figure 2. Resected Meckel's diverticulum specimen and a safety pin.

[P-167]

Spontaneous spleen rupture secondary to infectious mononucleosis

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Objective: The etiology of spontaneous splenic rupture can be classified into six subgroups: infectious, neoplastic, inflammatory, congenital or structural, iatrogenic, idiopathic. In this classification, reviewed 632 relevant publications and examined a total of 845 patients. In this review, pathological rupture due to one or more etiological causes was observed in 93% of cases. In the remaining 7%, the spleen was normal (idiopathic rupture). Neoplastic diseases were the most frequent etiology (30.3%), followed by infectious causes (27.3%). The remaining 7% classified as idiopathic. Among neoplastic causes, hematological malignancies were reported as the most common. Among infectious causes, viral infections are the most common, followed by bacterial, protozoal infections. Among inflammatory etiologies, the most frequent causes include acute, chronic pancreatitis, pancreatic cancer, amyloidosis, Wegener's granulomatosis. Treatment options for SSR include total splenectomy (84.1%), organ-preserving surgery (1.2%), conservative treatment (14.7%).

Material and Methods: This is a poster presentation of a patient diagnosed with SSR due to EBV infection and who underwent surgery for this reason.

Results: A 21-year-old male patient presented with complaints of sore throat, fever, malaise, and left upper quadrant pain that started 3 days prior. He had no known underlying medical conditions. He had started treatment for an upper respiratory tract infection two days prior to admission; however, his symptoms had progressively worsened despite treatment. SPO_2: 100, BP: 125/72 mmHg, pulse: 105/min, temperature: 37.5 °C. Physical examination revealed marked tonsillar hypertrophy, cervical, submandibular lymphadenopathy, hepatosplenomegaly, and tenderness, guarding in the left upper quadrant. Laboratory tests showed leukocytosis (17.3 K/uL), significant elevation of liver transaminases (AST: 216 IU/L, ALT: 347 IU/L), increased LDH (489 U/L), thrombocytopenia (123 K/uL). Abdominal CT scan revealed hepatosplenomegaly, perisplenic, perihepatic free fluid, subcapsular hematoma. These findings were considered to be spontaneous splenic rupture. Due to the absence of a history of trauma and the sudden onset of splenic rupture, infectious causes were investigated. Serological tests showed positive results for EBV, VCA IgM, and IgG, leading to a diagnosis of spontaneous splenic rupture secondary to infectious mononucleosis. Emergency splenectomy was performed. During the operation, 1000 cc of free hemorrhagic fluid aspirated, and a ruptured hematoma observed in the lower pole of the spleen. The patient monitored in the intensive care unit for 48 hours after surgery and discharged after 7 days. An infection prevention protocol and necessary vaccination programs planned, and regular check-ups recommended. Pathology results showed no malignancy.

Conclusion: SSR although rare, is a life-threatening complication of IM. It should be considered in cases of left upper quadrant pain with hemodynamic instability. Early intervention with surgery when conservative treatment options fail is life-saving.

Keywords: Emergency surgery, Epstein-Barr virus, infectious mononucleosis, splenectomy, spontaneus splenic rupture



Figure 1. CT scan image. Spleen laceration, perisplenic fluid, and subcapsular hematoma.

CT: Computed tomography.

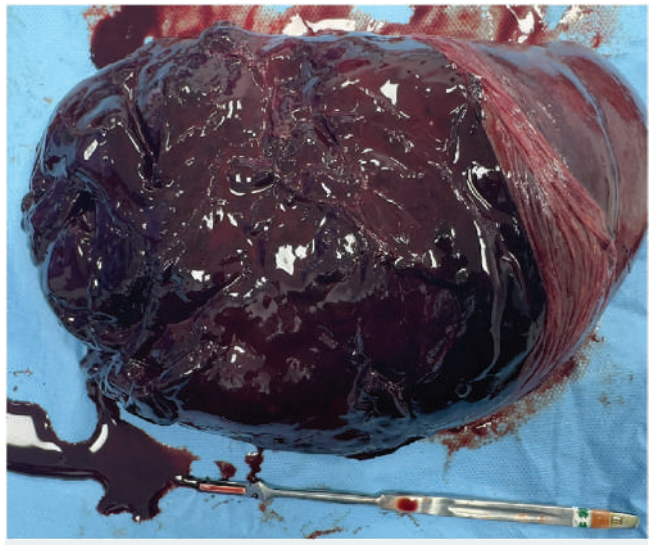


Figure 2. Postoperative image of splenectomy material.

[P-168]

Diagnosis of Behçet's disease in a young male patient presenting with superior mesenteric vein thrombosis: Surgical approach and multidisciplinary management

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Objective: Superior mesenteric vein (SMV) thrombosis is a rare but potentially life-threatening condition due to the risk of intestinal ischemia and high mortality. Its clinical presentation ranges from non-specific abdominal symptoms to bowel infarction and perforation. In young patients presenting with isolated venous thrombosis, underlying systemic inflammatory or vasculitic diseases should be carefully investigated. Behçet's disease is a multisystemic vasculitis that may involve the venous system and, in rare cases, present with mesenteric venous thrombosis. This report describes the diagnostic process and multidisciplinary management of a young male patient presenting with SMV thrombosis who was subsequently diagnosed with Behçet's disease.

Material and Methods: The clinical course, laboratory findings, and radiological imaging of a 20-year-old male patient presenting with abdominal pain and diarrhea were retrospectively reviewed. Surgical decision-making criteria and the multidisciplinary diagnostic approach were analyzed.

Results: The patient presented with a two-week history of epigastric abdominal pain and recent onset of watery diarrhea. Physical examination revealed abdominal distension with mild diffuse tenderness, without peritoneal signs. Laboratory evaluation showed marked leukocytosis (20,000/mm³) and elevated C-reactive protein levels (200-223 mg/L), while serial lactate measurements demonstrated a decreasing trend. Contrast-enhanced abdominal computed tomography revealed a filling defect in the proximal SMV. On the fourth day of hospitalization, CT angiography demonstrated a thrombus in the proximal SMV with loss of distal luminal flow. Despite these findings, no radiological evidence of intestinal ischemia, necrosis, or perforation was observed. Given the patient's clinical stability, normalization of lactate levels, and absence of peritoneal signs, surgical intervention was deferred, and conservative management with therapeutic-dose low-molecular-weight heparin was initiated. The patient's clinical condition gradually improved without surgical complications. Further evaluation for thrombotic etiology revealed negative results for JAK2 mutation and paroxysmal nocturnal hemoglobinuria. Dermatological findings, including recurrent oral aphthae, papulopustular lesions, a history of uveitis, and recurrent thromboembolic events, led to the diagnosis of Behçet's disease according to the International Criteria for Behçet's disease. Immunosuppressive therapy was initiated, and anticoagulation was continued with warfarin.

A thrombus consistent with a filling defect is observed in the proximal SMV; no accompanying findings of overt intestinal ischemia or free air are identified.

Conclusion: In young patients presenting with SMV thrombosis, underlying systemic vasculitides should be investigated after excluding acute surgical pathology. This case highlights that Behçet's disease may present with isolated venous occlusion and that conservative management can be safely applied under appropriate clinical conditions. Early diagnosis and multidisciplinary evaluation are essential to avoid unnecessary surgical intervention.

Keywords: Superior mesenteric vein thrombosis, Behçet's disease, acute abdomen, multidisciplinary approach, conservative management

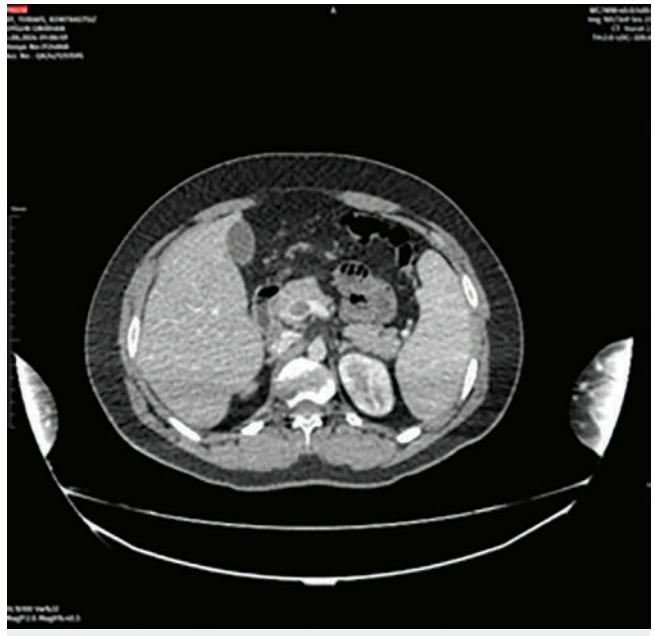


Figure 1. Contrast-enhanced abdominal CT showing superior mesenteric vein thrombosis (axial).

CT: Computed tomography.

[P-169]

Organoaxial gastric volvulus secondary to hiatal hernia: A case report

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Gebze Fatih State Hospital, Kocaeli

Objective: Gastric volvulus is a rare clinical condition that occurs when the stomach loses its normal anatomical position and rotates around its axis, carrying a high-risk of morbidity and mortality if diagnosis is delayed. The organoaxial type develops as a result of rotation along the stomach's longitudinal axis and is most commonly associated with hiatal hernia. Because clinical findings are often non-specific, diagnosis may be delayed, leading to serious complications. In this case report, we present the diagnostic process and successful treatment of organoaxial gastric volvulus secondary to hiatal hernia using a laparoscopic approach.

Material and Methods: A 56-year-old female patient presented to the emergency department with sudden-onset abdominal pain and recurrent vomiting. Her medical history was unremarkable except for hypertension. Physical examination revealed mild abdominal tenderness and distension, with no signs of guarding or rebound. Laboratory evaluation showed a leukocyte count of 13,160/mm³, while other parameters were within normal limits. Contrast-enhanced abdominal computed tomography demonstrated marked gastric distension, displacement of the greater and lesser curvatures, and abnormal positioning of the antropyloric region and part of the duodenum in the right upper quadrant. These findings were consistent with organoaxial gastric volvulus.

Results: Gastric decompression was achieved by insertion of a nasogastric tube, draining approximately 1600 cc of bilious gastric content. Subsequent upper gastrointestinal endoscopy revealed findings supporting gastric volvulus, along with diffuse mucosal edema and focal superficial ulcerations. Based on the clinical and radiological findings, emergency surgical intervention was planned. The patient underwent laparoscopic surgery. Intraoperative exploration revealed herniation of the proximal stomach into the thoracic cavity through the esophageal hiatus, resulting in organoaxial volvulus. The stomach was reduced from the thorax and restored to its anatomical position. No evidence of gastric wall ischemia or necrosis was observed. Crural repair and Nissen fundoplication were performed to address the hiatal hernia and prevent reflux. The postoperative course was uneventful, and the patient was discharged on postoperative day four.

Conclusion: Although rare, organoaxial gastric volvulus is an important surgical emergency requiring rapid diagnosis and intervention. In the presence of hiatal hernia, acute upper gastrointestinal symptoms should be carefully evaluated for gastric volvulus. In appropriately selected patients, laparoscopic management is a safe and effective option, offering both diagnostic and therapeutic benefits.

Keywords: Gastric volvulus, hiatal hernia, organoaxial volvulus, laparoscopic surgery

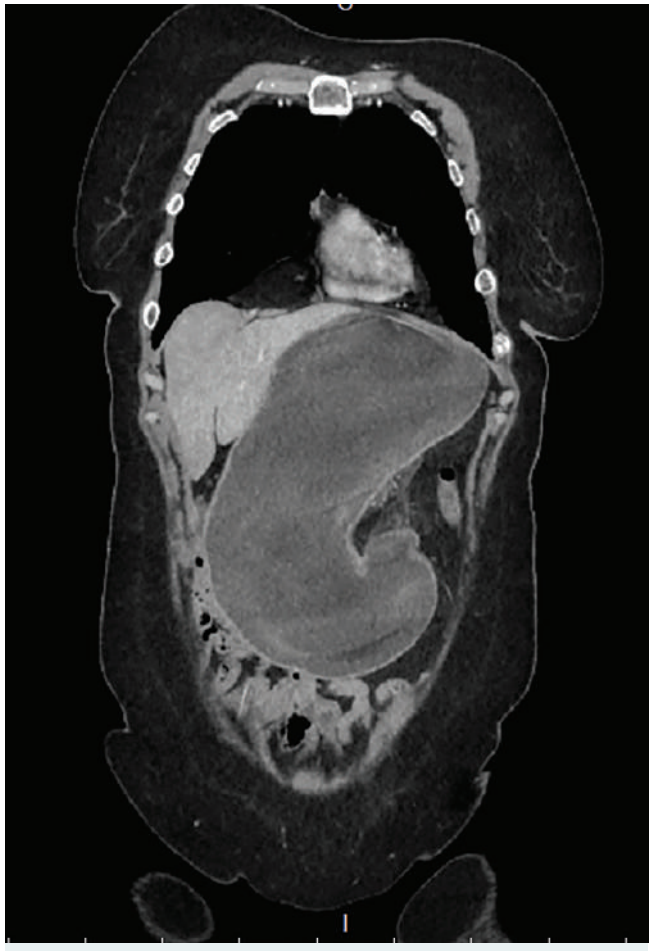


Figure 1. CT image showing gastric volvulus.

CT: Computed tomography.



Figure 2. Gastroscopic image.

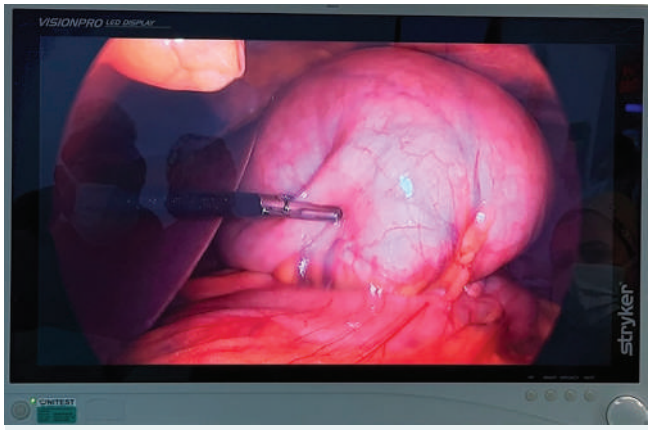


Figure 3. Intraoperative image of gastric volvulus.

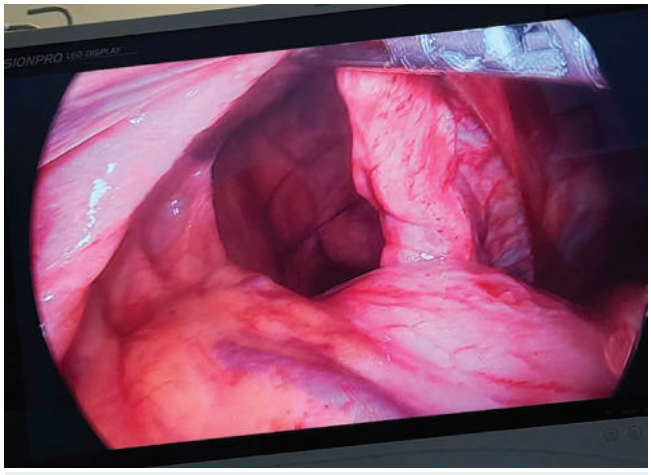


Figure 4. Image showing hiatal hernia.

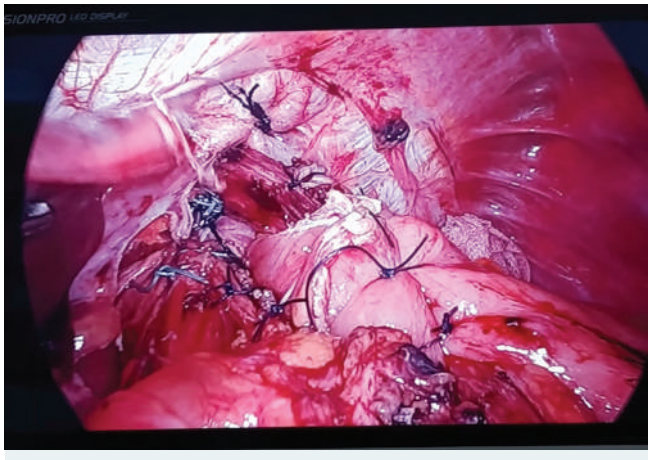


Figure 5. Crural repair and Nissen fundoplication.



Figure 6. xxxxxxxxxxx

[P-170]

A rare cause of ileus: Small intestinal involvement in Behçet's disease and ileus secondary to hematoma

Atahan Uzun[1], Hikmet Özel[1], Fatih Kından[1], Derya Alparslan[2]

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Objective: Behçet's disease is a chronic, relapsing multisystem vasculitis affecting both small and large vessels. Gastrointestinal involvement, reported in 3-25% of patients, represents one of the most serious complications and is associated with increased morbidity and mortality. The terminal ileum is the most commonly involved site, while isolated proximal small bowel involvement is rare. We report a case of a 49-year-old female with Behçet's disease who underwent segmental small bowel resection for ileus caused by an intramural hematoma.

Material and Methods: A 49-year-old female patient presented to the emergency department with complaints of abdominal pain, constipation, nausea, and vomiting persisting for approximately 10 days. The patient had a known diagnosis of Behçet's disease and a surgical history significant for total colectomy and cholecystectomy performed 10 years earlier. On physical examination, abdominal distension was noted, with tenderness on palpation in the right lower quadrant. Laboratory investigations revealed hemoglobin of 11.6 g/dL, leukocyte count of 18,180/µL, platelet count of 521,000/µL, and C-reactive protein level of 28.1 mg/L. Abdominal computed tomography demonstrated gastric and intestinal loop dilatation up to 42 mm, as well as millimetric air densities within the mesenteric fat tissue adjacent to small bowel loops in the right lower quadrant. Surgical exploration revealed a conglomerated small bowel segment with intramural hematoma and mass-like formation, starting approximately 110 cm distal to the ligament of Treitz and extending for nearly 40 cm. Segmental small bowel resection followed by side-to-side anastomosis was performed.

Results: Small bowel specimen: A resected small bowel segment measuring approximately 60 cm in length with a luminal diameter of 2.5 cm, collectively measuring 13×11.5×6 cm. Gross examination revealed multiple adhesions on the serosal surface, along with focal areas of hemorrhage. Histopathological evaluation demonstrated adhesions (macroscopic and microscopic), inflammatory granulation tissue, xanthomatous inflammation, and hemorrhage.

Conclusion: Gastrointestinal involvement in Behçet's disease is uncommon but may result in severe complications. Vasculitis-related intramural hematoma, although rare, can present with acute abdomen or mechanical ileus and lead to significant morbidity if not recognized early. In patients with Behçet's disease presenting with sudden-onset abdominal pain and obstructive symptoms, intestinal vasculitis–related complications should be considered. Early diagnosis and appropriate management are essential to reduce morbidity and prevent recurrence.

Keywords: Behçet's disease, hematoma, ileus

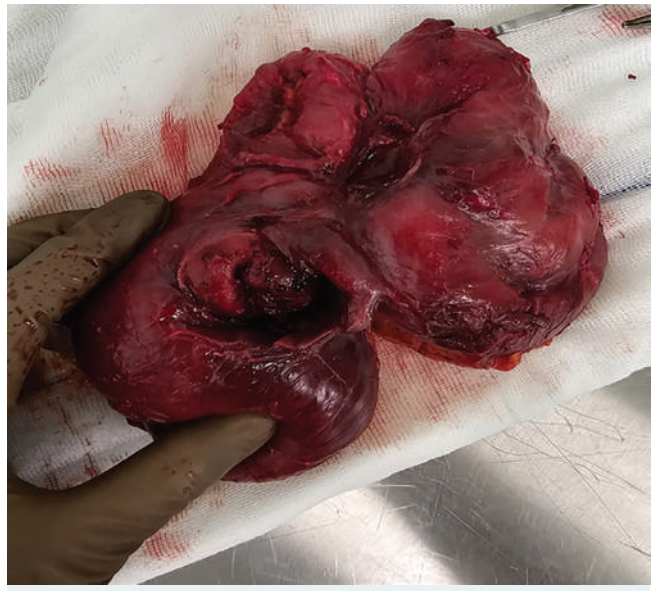


Figure 1. Behçet's secondary hematoma in the small intestine

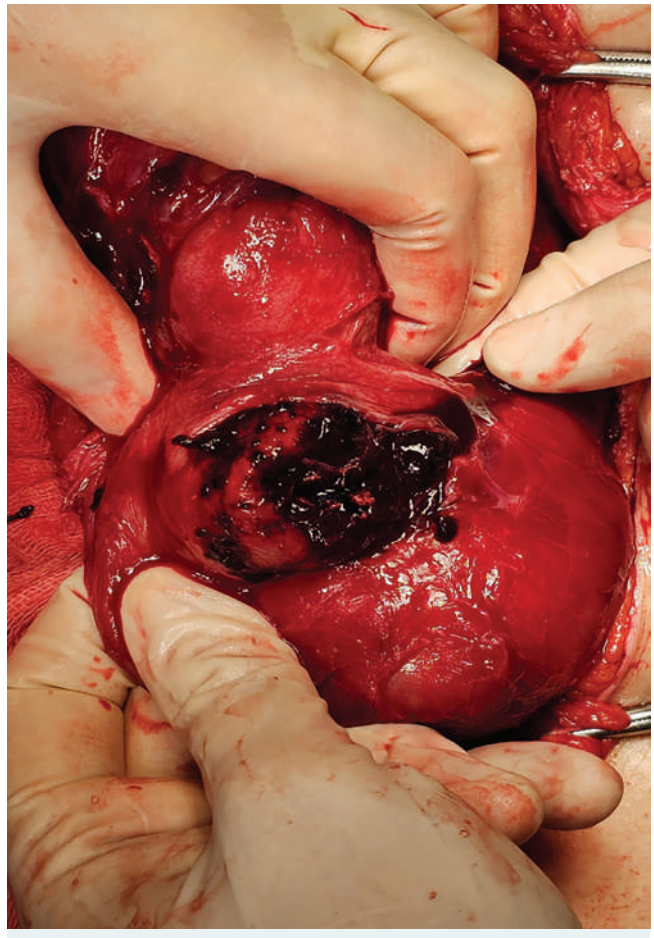


Figure 1. Behçet's secondary hematoma in the small intestine.

[P-171]

A rare cause of ileus; colon incarceration due to diaphragm rupture after right hepatectomy

Özde Başar, Ali Cihat Yıldırım, Saim Taşpınar, Ayşe Tuğba Kurt

Clinic of General Surgery, Kütahya City Hospital, Kütahya

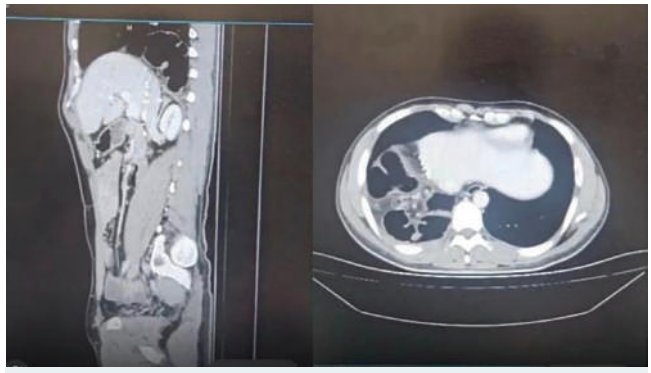
Objective: The diaphragm is a musculotendinous structure separating the thoracic and abdominal cavities and plays a key role in respiration. Diaphragmatic hernia is defined as herniation of intra-abdominal organs into the thoracic cavity through a congenital or acquired diaphragmatic defect. Most diaphragmatic ruptures are related to blunt or penetrating trauma and commonly occur on the left side, as the liver provides relative protection to the right hemidiaphragm. Delayed diaphragmatic rupture following trauma or upper abdominal surgery is uncommon and often presents with non-specific symptoms, leading to diagnostic delay and increased risk of complications such as organ incarceration, strangulation, and bowel obstruction. Diaphragmatic rupture after hepatectomy is rarely reported. This poster presents a case of delayed right-sided diaphragmatic rupture occurring two years after right hepatectomy and presenting with colonic obstruction.

Material and Methods: A 24-year-old male patient with a history of right hepatectomy for hepatocellular carcinoma two years earlier presented to the emergency department with a one-week history of abdominal pain and nausea. Physical examination revealed diffuse abdominal tenderness without signs of peritonitis. Contrast-enhanced computed tomography demonstrated a 4-cm defect in the right hemidiaphragm with herniation of colonic segments into the thoracic cavity and associated proximal bowel dilatation. Despite nasogastric decompression, the patient showed no clinical improvement during a 24-hour observation period. Based on radiological findings and persistent symptoms, emergency surgical intervention was planned.

Results: The patient underwent exploratory laparotomy under general anesthesia through a midline incision. Dense intra-abdominal adhesions related to the previous surgery were encountered. A diaphragmatic defect with surrounding deperitonized muscle tissue was identified on the right side, consistent with preoperative imaging. Incarcerated colonic segments were carefully reduced into the abdominal cavity. Due to an iatrogenic opening of the right parietal pleura during reduction, a closed underwater chest drainage system was placed. The diaphragmatic defect was repaired with a double-layer primary suture technique and reinforced with a composite mesh. The postoperative course was uneventful. Oral intake was initiated 24 hours after surgery, bowel function returned on postoperative day three, and the patient was discharged on postoperative day six without complications.

Conclusion: Delayed diaphragmatic rupture should be considered in the differential diagnosis of acute abdomen and intestinal obstruction, particularly in patients with a history of upper abdominal surgery. Following right hepatectomy, loss of the liver's protective effect and potential diaphragmatic weakening may predispose patients to late-onset rupture. Early recognition and prompt surgical repair are essential to prevent serious complications and ensure favorable outcomes.

Keywords: Colonic obstruction, diaphragmatic rupture, hepatectomy



Figures 1, 2. The patient's preoperative imaging studies.

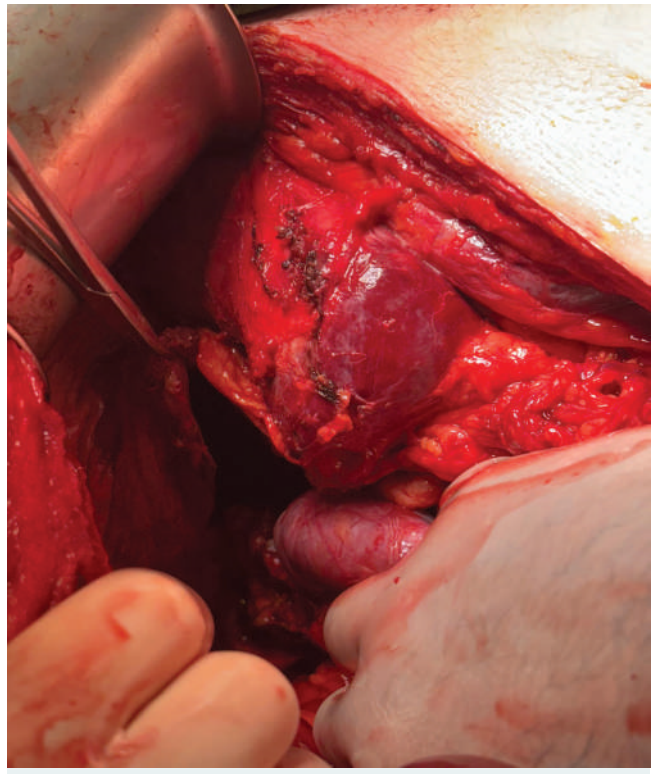


Figure 3. Intraoperative view of the diaphragmatic defect.

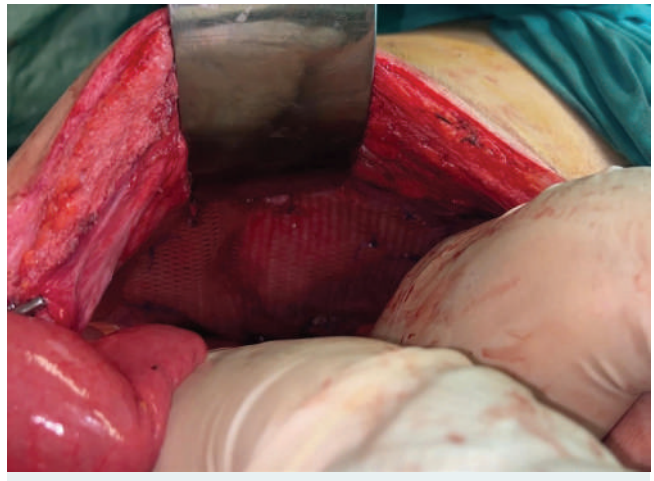


Figure 4. Post-repair view of the diaphragmatic defect.

[P-172]

Intra-abdominal hemorrhage due to ruptured HCC: A case report

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Objective: Hepatocellular carcinoma (HCC) is the most common primary malignant tumor of the liver and typically develops in the setting of cirrhosis or chronic hepatitis B infection. Spontaneous rupture of HCC is a rare but life-threatening complication associated with high mortality rates. In this case report, we present the diagnostic process and treatment of a hypotensive and tachycardic patient with no prior diagnosis of HCC who presented to the emergency department with syncope and abdominal pain, and whose management required a multidisciplinary approach across two centers.

Material and Methods: A 74-year-old male patient presented to an outside institution with complaints of syncope and epigastric pain. His medical history was significant for diabetes mellitus and chronic hepatitis B virus infection. On abdominal examination, tenderness was noted in the epigastric region and bilateral lower quadrants. No evidence of gastrointestinal bleeding was observed on nasogastric tube aspiration or digital rectal examination. Abdominal imaging performed due to decreased hemoglobin levels and the need for transfusion revealed a mass lesion in liver segment III and a large volume of free intraperitoneal fluid. Emergency laparotomy was performed, during which 1.700 cc of hemorrhagic fluid was aspirated. The source of bleeding was identified as the mass in liver segment III (Figure 1). As bleeding control was deemed unachievable at the referring center, intraoperative communication was established with our team. Perihepatic packing was applied, and following transfusion of six units of packed red blood cells, the patient was transferred to our center.

Results: The patient was admitted to the intensive care unit intubated and on low-dose inotropic support. A contrast-enhanced CT scan revealed a 48×40 mm heterogeneously enhancing hemorrhagic mass in liver segment III. Transarterial embolization of the hepatic artery branches via the celiac artery was performed (Figure 2), resulting in hemodynamic stability and no further hemoglobin decline. On postoperative day 1, the patient underwent removal of the packing and left lateral sectorectomy under low central venous pressure with a single 12-minute Pringle maneuver. The patient was extubated during follow-up and discharged on postoperative day 14.

Conclusion: Spontaneous rupture of HCC is a rare but potentially fatal clinical condition. Initial management must be systematic and rapidly implemented. In the present case, a favorable outcome was achieved through embolization at a tertiary referral center followed by elective surgical resection after initial surgical hemostasis.

Keywords: Hepatocellular carcinoma, spontaneous rupture, intraabdominal hemorrhage



Figure 1. Intraoperative appearance of the lesion.



Figure 2. Transarterial embolization.

[P-173]

A rare case of incidental colo-appendiceal fistula with appendiceal diverticulosis presenting as acute appendicitis: A case report

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Objective: Acute appendicitis is the most common surgical cause of acute abdominal pain, Delayed diagnosis may lead to serious complications such as abscess, perforation, peritonitis, sepsis, and fistula formation.Appendiceal diverticulitis is a rare condition and may clinically mimic acute appendicitis. Appendiceal diverticula may be congenital or acquired. Due to mild or atypical symptoms, diagnosis may be delayed and the risk of perforation increases. Additionally, appendiceal diverticula are associated with a risk of neoplasia, particularly carcinoid tumors and mucinous adenomas. Colo-appendiceal fistula is a very rare complication. It is most commonly associated with Crohn's disease, colorectal malignancy, complicated appendicitis, or diverticular disease. Appendiceal diverticulitis is a rare but clinically significant condition that may lead to fistula formation.

Material and Methods: Patient: 51-year-old male History: Abdominal pain for 2 days Past medical history: Unremarkable Physical Examination:• Localized tenderness in the right lower quadrant Laboratory findings: • WBC: 7500 • CRP: 149 Imaging: Contrast-enhanced CT revealed findings consistent with acute appendicitis. Intraoperative Findings During diagnostic laparoscopy: • The appendix was found to be fistulized to the ascending colon • Multiple nodular structures consistent with diverticula were observed along the appendiceal wall • No macroscopic findings suggestive of malignancy or inflammatory bowel disease were detected • Terminal ileum and cecum appeared normalSurgical Procedure • The appendiceal base was closed and transected using an endo-stapler • Wedge resection of the involved colonic segment was performed with an endo-stapler for the distal fistulized segment • Laparoscopic appendectomy was completed.

Results: Pathological Findings Macroscopic examination: • Thickened and edematous appendiceal wall • Multiple diverticular structures • Thin fistula tract along the distal stapler line Histopathological examination: • Acute appendicitis • No malignancy or chronic inflammatory disease detected. The patient was discharged uneventfully on postoperative day 2.

Conclusion: Surgical approach surgical treatment should be individualized according to: • Etiology • Extent of colonic involvement • Intraoperative findings segmental colectomy may be required in cases with suspected malignancy or extensive inflammation. However, in selected cases without malignancy or widespread inflammation, simple appendectomy and separation of the fistula tract may be sufficient. The laparoscopic approach offers advantages including: • Less postoperative pain • Lower morbidity • Faster recovery • Shorter hospital stay technical evaluation if hem-o-lok clips or sutures are used instead of an endo-stapler, the procedure can be performed through a 5-10 mm port instead of a 15 mm port. This minimally invasive modification may reduce the risk of port-site incisional hernia and provide technical improvement for future cases. Colo-appendiceal fistula is a rare finding encountered during acute appendicitis surgery. Intraoperative awareness is important. In selected cases without malignancy or extensive inflammation, laparoscopic appendectomy and fistula separation is a safe and effective treatment option.

Keywords: Acute appendicitis, appendiceal diverticulosis, colo-appendiceal fistula

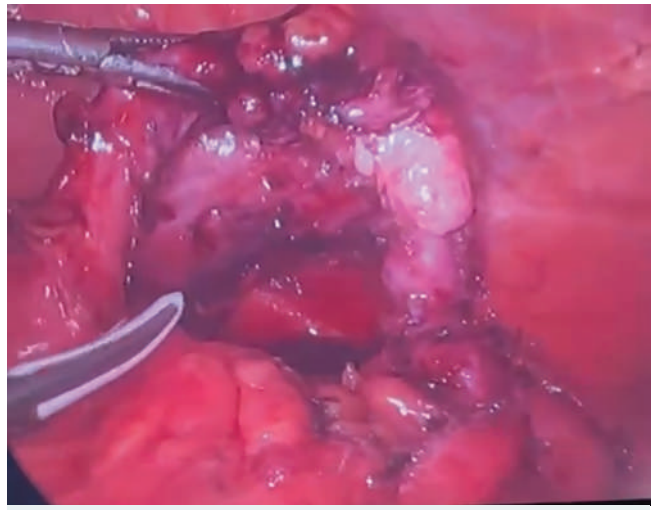


Figure 1. Laparoscopic wiew of colo-appendiceal fistula and appendiceal diverticulosis.

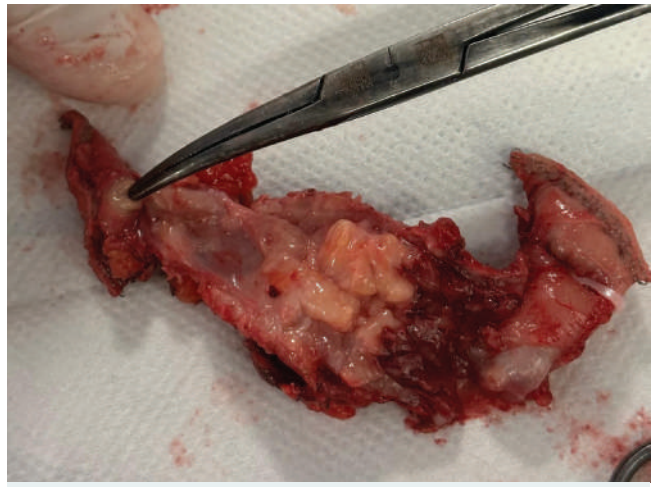


Figure 2. Gross examination of the specimen. Colo-appendiceal fistula and appendiceal diverticulosis shown in the specimen.

[P-174]

Giant Meckel's diverticulum causing adhesive small bowel obstruction with ischemia and inflamation: A case report

Elif Yılmaz

Ordu Umut Private Hospital, Ordu

Objective: Meckel's diverticulum is the most common congenital anomaly of the gastrointestinal tract, yet symptomatic disease in adults is uncommon. Most diverticula are <5 cm; truly giant diverticula are rare and can present as mechanical ileus—particularly in patients without prior abdominal surgery.

Material and Methods: A 67-year-old man presented with 3 days of nausea, vomiting, and obstipation. He had no history of abdominal surgery. Contrast-enhanced CT demonstrated markedly dilated small-bowel loops and a blind-ending, inflamed tubular structure (92×39 mm) in the right lower quadrant, separate from the cecum (Figure 1). Based on these findings, emergency laparotomy was performed.

Results: At exploration, the small bowel was diffusely dilated. A giant Meckel's diverticulum (approximately 14×4 cm) was identified about 50 cm proximal to the ileocecal valve on the antimesenteric border, with ischemic/necrotic changes and dense adhesions causing obstruction (Figure 2). Adhesiolysis and stapled diverticulectomy were carried out. Recovery was uneventful: Oral intake resumed on postoperative day 2, and the patient was discharged on day 4. Pathology confirmed transmural necrosis and intense neutrophilic inflammation, with no ectopic gastric or pancreatic mucosa.

Conclusion: Meckel's diverticulum is an uncommon but important cause of small bowel obstruction in adults. Keeping it in mind—especially when there is no surgical history—can speed up decision-making, and surgery remains definitive treatment.

Keywords: Meckel's diverticulum, small bowel obstruction, diverticulitis, emergency surgery

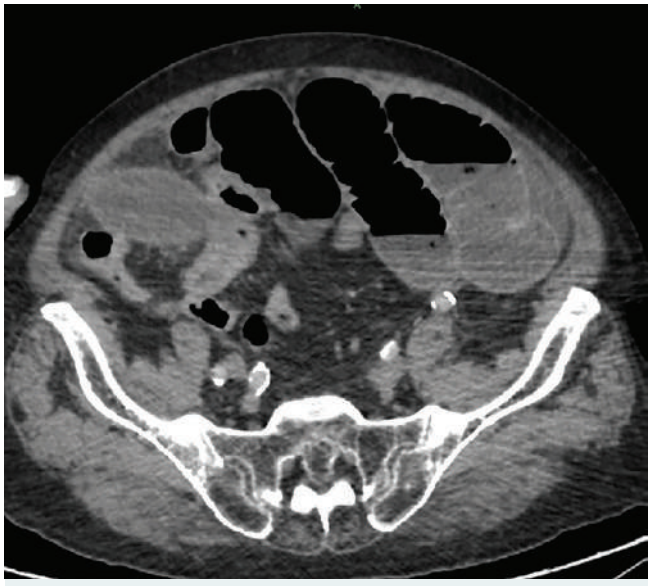


Figure 1. CT scan: Blind-ending inflamed tubular structure in the right lower quadrant (yellow circle) with dilated small-bowel loops.

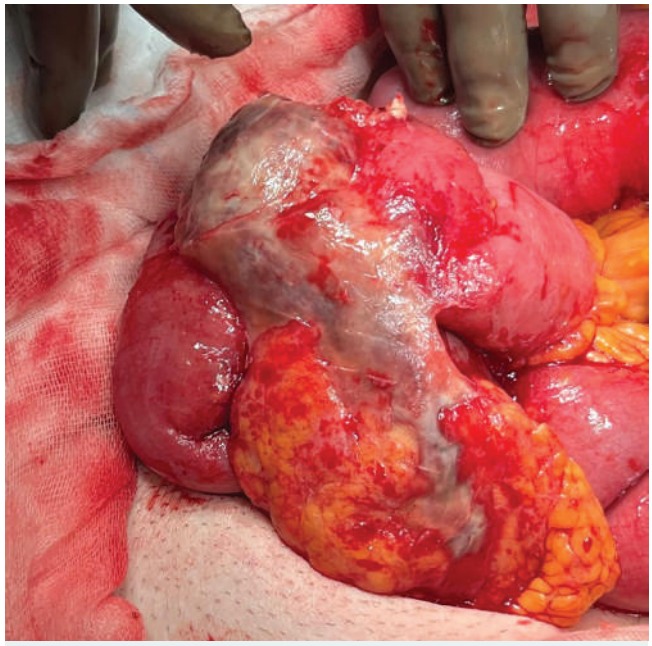


Figure 2. Inraoperative view: Giant Meckel's diverticulum with ischemic and inflammatory changes prior to resection.

[P-175]

Massive gastrointestinal hemorrhage due to splenic artery erosion in the setting of a pseudocyst: A rare vascular complication following necrotizing pancreatitis

Ayşe Abdukaya, Hüseyin Kılavuz, Murat Demir, Derya Selamoğlu, Birkan Bozkurt

Department of General Surgery, University of Health Sciences Türkiye, Başakşehir Çam ve Sakura City Hospital, İstanbul

Objective: Acute pancreatitis is a heterogeneous disease whose clinical course can vary from a mild form to severe necrotizing pancreatitis, which carries a 20% mortality risk. Endoscopic and surgical drainage methods, such as cystogastrostomy or cystojejunostomy, are commonly used for the treatment of local complications, like pseudocysts and walled-off necrosis, in symptomatic patients following necrotizing pancreatitis. Complications such as infection, hemorrhage, and perforation may develop after these procedures. However, rare vascular complications following these interventions are of great clinical significance due to the difficulty in diagnosis and the high risk of mortality.

Material and Methods: This report presents a case of massive gastrointestinal hemorrhage due to vascular erosion at the junction of the splenic artery and celiac trunk, occurring late in a patient who underwent endoscopic cystogastrostomy and subsequent surgical cystojejunostomy for a pseudocyst that developed on the basis of necrotizing pancreatitis.

Results: A forty-nine-year-old male patient presented with a complaint of abdominal pain. His medical history included endoscopic cystogastrostomy and surgical cystojejunostomy for non-biliary necrotizing pancreatitis. The patient, who was being followed with medical treatment after an infected collection was detected in the pancreas body on imaging, developed hemodynamic instability with sudden syncope, hypotension, and massive hematochezia during follow-up. Active bleeding foci could not be demonstrated in upper and lower gastrointestinal endoscopies, CT angiography, or selective angiographies. Due to the continued clinical deterioration, the patient was taken for emergency laparotomy. During the exploration, it was found that the splenic artery was eroded in the setting of a pseudocyst at its junction with the celiac trunk, and the bleeding fistulized into the pseudocyst and from there into the stomach and small intestine, leading to massive gastrointestinal hemorrhage. Arterial repair was performed to control the bleeding, and the pseudocyst drainage tract was repaired.

Conclusion: In patients with a history of pancreatic drainage, vascular erosion and arterial rupture must be kept in mind as a possibility in the presence of unexplained massive gastrointestinal hemorrhage, even if endoscopic and radiological examinations are negative. Early surgical exploration and a multidisciplinary approach are of critical importance in reducing mortality.

Keywords: Necrotizing pancreatitis cystogastrostomy, pancreatic pseudocyst artery erosion

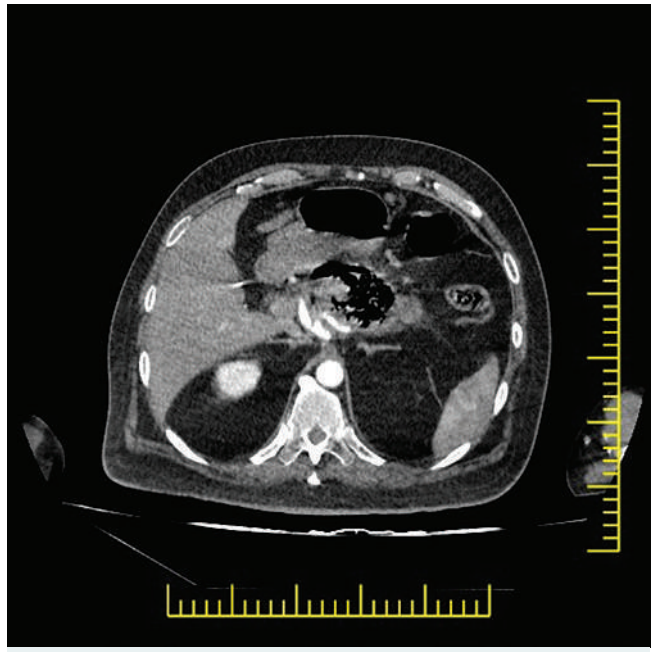


Figure 1. CT angiography. CT angiography showed irregularity at the splenic artery root.

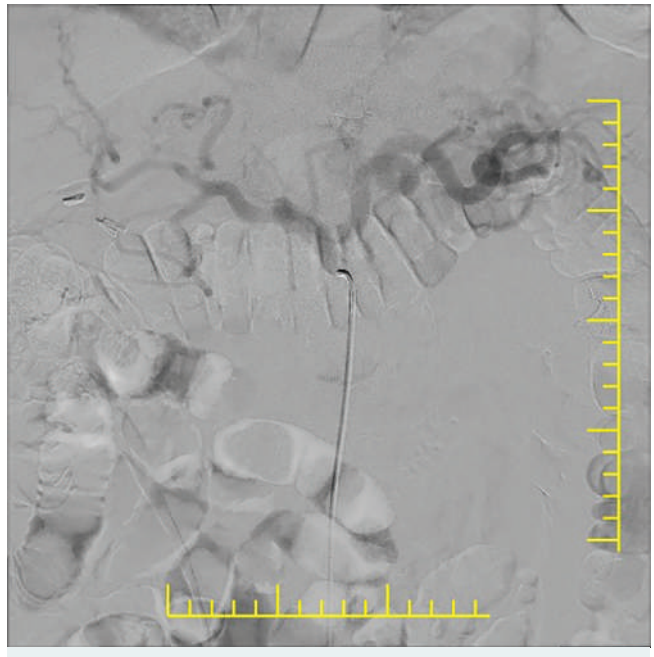


Figure 2. Selective arterial angiography. No extravasation was detected on the arterial angiography performed due to gastrointestinal bleeding.

[P-176]

Closed-loop obstruction from internal hernia caused by a peritoneal band: A case report

Ahmet Receb, Dilara Yılmaz Köse, Esmatullah Alizai, Muhammed Kerem Çolak, Berkan Acar, Ali Muhtaroğlu, Selahattin Vural, Tuğrul Kesicioğlu

Giresun University Faculty of Medicine, Giresun

Objective: Internal hernias are an uncommon but high-risk cause of acute bowel obstruction; once a closed-loop forms, ischemia can develop quickly. We present a case of closed-loop obstruction caused by an internal hernia related to a peritoneal band in a patient with no prior abdominal surgery.

Material and Methods: A 41-year-old man presented with sudden-onset abdominal pain, nausea, and vomiting. He had no comorbidities, no regular medications, and no history of abdominal surgery. Because the examination suggested an acute abdomen, contrast-enhanced abdominal CT was obtained and an emergency laparotomy was performed.

Results: CT showed dilated jejunal loops consistent with a closed-loop obstruction and two contiguous internal hernias extending from a defect toward both sides of the abdomen. Bowel wall enhancement in the obstructed segments was reduced (Figure 1). At surgery, a peritoneal band extending from the transverse colon mesentery to the descending colon mesentery was identified (Figure 2). Proximal small-bowel loops were herniated and trapped through the space between this band and the small-bowel mesentery. The band was divided and the bowel was reduced. The involved loops appeared edematous with only minimal ischemia, and peristalsis was preserved. After warming, perfusion improved, so no resection was needed. A pelvic drain was placed. The patient resumed oral intake on postoperative day 1 and was discharged uneventfully on day 6.

Conclusion: Even without a surgical history, internal hernias and peritoneal bands can cause mechanical obstruction. Closed-loop features and reduced enhancement on CT should prompt timely surgery. Early reduction may spare the bowel and avoid resection.

Keywords: Mechanical ileus, internal herniation, ischaemia, emergency surgery

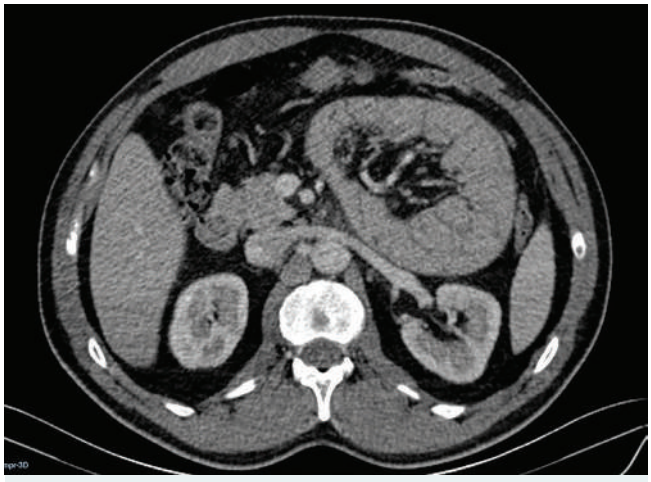


Figure 1. Contrast-enhanced CT: Closed-loop obstruction of jejunal loops with findings suggestive of internal hernia.

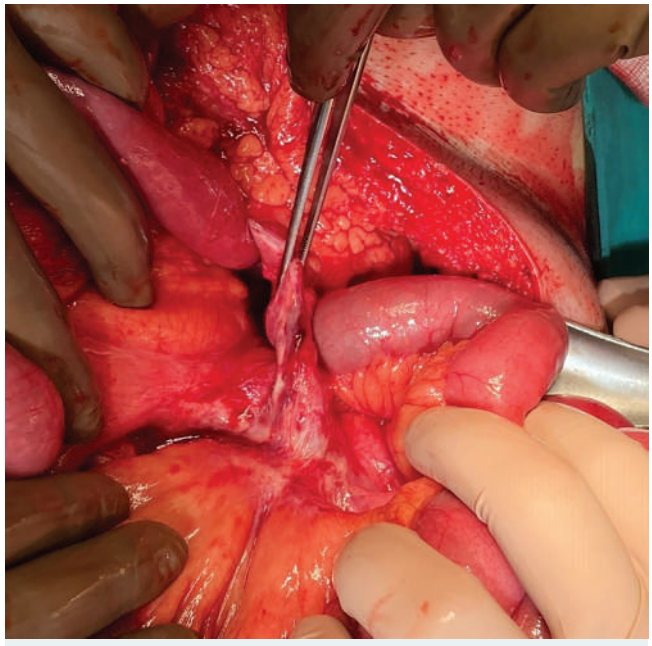


Figure 2. Intraoperative view: Peritoneal band and band/mesentery window.

[P-177]

A rare traumatic biliary complication after blunt abdominal trauma: Cystic duct stump rupture mimicking mesenteric hemorrhage

Banu Karapolat, Ahmet Yüğrük, Cennet Pınar Oymak, Selim Altındaş

Trabzon University Faculty of Medicine, Trabzon

Objective: Extrahepatic bile duct injuries following blunt abdominal trauma are exceedingly rare and are often diagnosed late. The main reason for this delay is the lack of specific early clinical findings and the fact that imaging studies frequently appear normal or provide misleading results. In patients with a history of cholecystectomy, decreased mobility of the short and fibrotic cystic duct stump renders this structure more vulnerable to traction forces. Consequently, rare but potentially serious biliary complications may occur. In this presentation, we report a rare case of traumatic cystic duct stump rupture that was initially operated on with a presumptive diagnosis of mesenteric hemorrhage but was identified intraoperatively.

Material and Methods: The clinical findings, radiologic images, and surgical intervention of a 22-year-old female patient with a history of laparoscopic cholecystectomy four years earlier who presented after a fall from approximately three meters were retrospectively reviewed. The trauma computed tomography (CT) images obtained at the initial presentation were compared with the contrast-enhanced CT findings from the second admission. Intraoperative findings during emergency laparotomy and the surgical management were analyzed.

Results: No pathological findings were detected on the initial trauma CT, and the patient was discharged (Figures 1 and 2). She returned the following day with worsening abdominal pain, vomiting, and loss of appetite. Physical examination revealed diffuse abdominal tenderness and rebound. Laboratory evaluation demonstrated a 2 g/dL decrease in hemoglobin level. Contrast-enhanced CT showed extensive intraperitoneal free fluid, and mesenteric hemorrhage was suspected (Figures 3 and 4). During emergency laparotomy, bile-stained fluid was identified in the subhepatic region. Following a wide Kocher maneuver, no injury to the duodenum, pancreatic head, or major bile ducts was detected. Careful dissection toward the hepatic hilum revealed detachment of the cystic duct stump clip with active bile leakage from the open end (Figure 5). The cystic duct stump was securely ligated using a double-ligation technique, the abdominal cavity was irrigated, and drains were placed. No postoperative bile leakage occurred, and the patient was discharged without complications.

Conclusion: This case demonstrates that isolated cystic duct stump rupture following blunt abdominal trauma in patients with prior cholecystectomy, although rare, can result in a life-threatening condition. Normal findings on early imaging do not exclude severe biliary injury. When clinical findings are discordant with radiologic results, surgical exploration should not be delayed. Such an approach facilitates timely diagnosis and may significantly reduce morbidity and mortality.

Keywords: Blunt abdominal trauma, cystic duct stump rupture, biliary injury

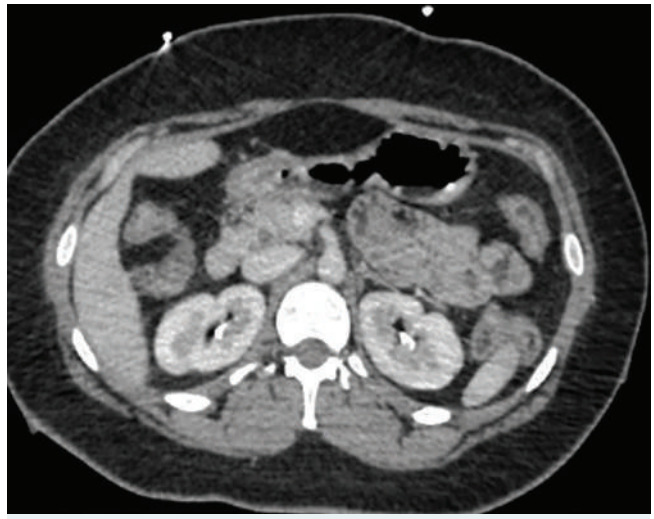


Figure 1. Initial axial trauma computed tomography (CT) image demonstrating no pathological findings.

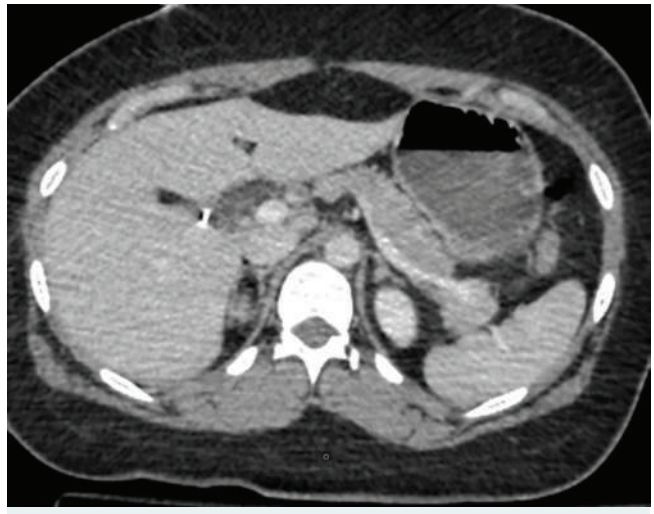


Figure 2. Initial trauma CT scan of the upper abdomen showing no evidence of free fluid or solid organ injury.

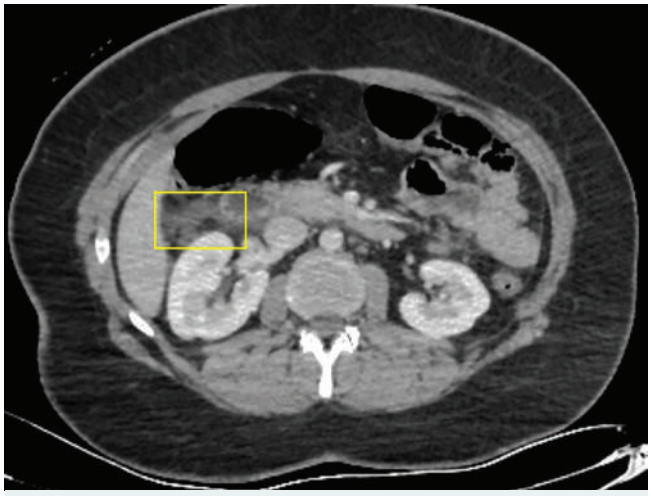


Figure 3. Contrast-enhanced CT obtained at the second admission demonstrating extensive intraperitoneal free fluid (arrows).

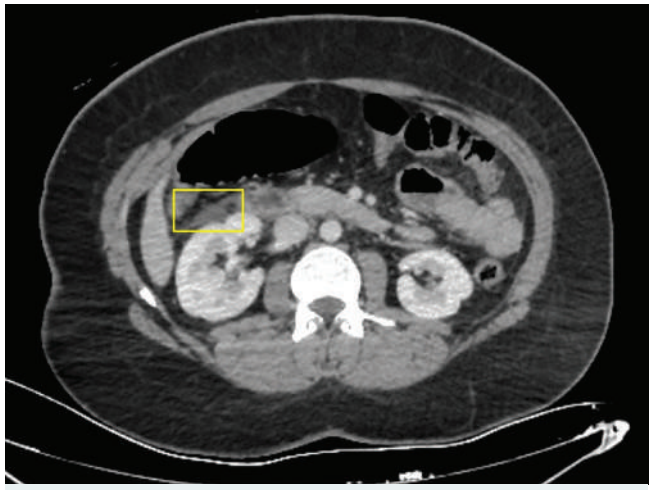


Figure 4. Contrast-enhanced CT showing free fluid collections initially suspected to represent mesenteric hemorrhage (arrows).

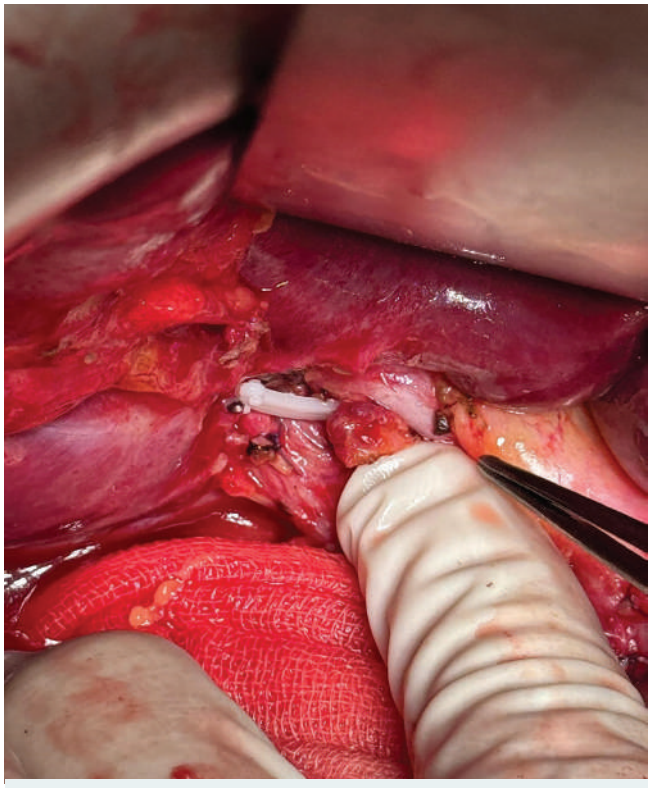


Figure 5. Intraoperative view demonstrating detachment of the cystic duct stump clip with active bile leakage from the open stump.

[P-178]

A jejunal diospyrobezoar causing complete small bowel obstruction in a patient with previous gastrojejunostomy: A case report and review of management

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Objective: Phytobezoars are an uncommon yet clinically significant cause of mechanical small bowel obstruction, accounting for 0.4-4.8% of all cases. In this case report, we aimed to evaluate the diagnosis and surgical management of acute small bowel obstruction caused by a "diospyrobezoar" (persimmon bezoar) in a patient with a history of gastric surgery, in light of current literature.

Material and Methods: In this study, the diagnosis, treatment, and follow-up processes of a 35-year-old female patient who presented with acute mechanical small bowel obstruction and had a history of gastrojejunostomy were retrospectively reviewed. The patient's dietary intake, surgical history, and duration of clinical symptoms were evaluated; physical examination and laboratory findings were recorded. The diagnosis was based on contrast-enhanced abdominal computed tomography (CT) findings, which have high sensitivity in detecting bezoars. For the surgical approach, a laparotomic enterotomy and extraction technique was performed, determined by the degree of bowel dilatation and the consistency of the bezoar.

Results: A 35-year-old female with a history of gastrojejunostomy presented with a 5-day history of complete small bowel obstruction. Focused anamnesis revealed the consumption of two persimmons (Diospyros kaki) 3 days prior to symptoms. Laboratory tests showed leucocytosis and prerenal acute kidney injury. Abdominal CT demonstrated 6 cm proximal bowel dilatation and a pathognomonic "mottled gas sign" in the jejunum, consistent with a phytobezoar. At laparotomy, a firm, impacted diospyrobezoar was identified in the mid-jejunum, 40 cm distal to the Braun's anastomosis. Due to the high risk of mural injury with manual milking, a longitudinal enterotomy was performed for intact bezoar extraction. The enterotomy was closed transversely in two layers. The patient had an uneventful recovery and was discharged on postoperative day 5.

Conclusion: Previous gastric surgery, hypochlorhydria, and impaired motility are primary risk factors for phytobezoar formation. Persimmons, high in tannins, polymerize in acidic environments into hard "diospyrobezoar" masses. CT remains the diagnostic modality of choice for identifying pathognomonic features and obstruction levels. While chemical dissolution may suit partial obstructions, complete obstruction with significant dilatation mandates emergency surgery. In proximal, firm bezoars, enterotomy is preferred over manual milking to prevent perforation. Ultimately, clinicians must maintain a high index of suspicion in post-gastric surgery patients and provide essential dietary counseling regarding high-fiber foods.

Keywords: Diospyrobezoar, small bowel obstruction, gastrojejunostomy

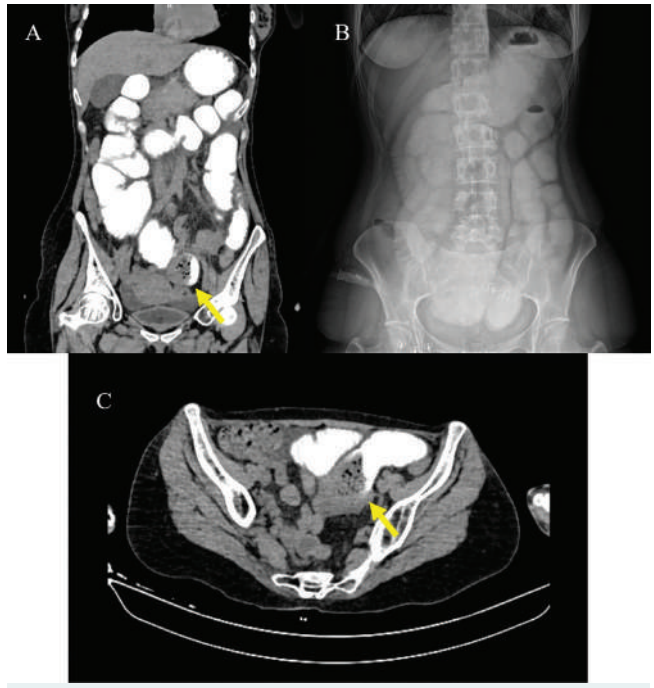


Figure 1. Preoperative imaging findings. (A) and (C) Coronal and axial CT images reveal a well-defined, mottled, gas-filled intraluminal mass within the small bowel (yellow arrows). Significant proximal bowel dilatation is present, consistent with a mechanical intestinal obstruction. (B) Upright abdominal X-ray reveals multiple dilated small bowel loops with a notable absence of distal gas, consistent with a mechanical obstruction.

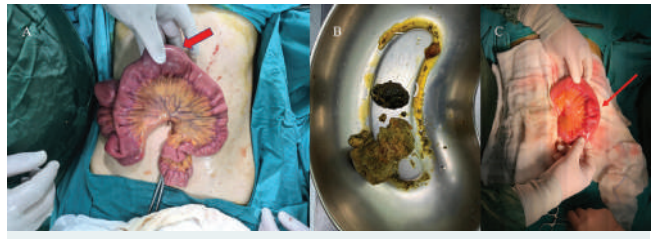


Figure 2. Intraoperative findings. (A) Intraoperative identification of the obstructive point (thick red arrow). (B) Subsequent delivery of the obstructing phytobezoar, a solid concretion composed of undigested persimmon fibers. (C) The longitudinal enterotomy was closed transversely in two layers to prevent luminal narrowing (thin red arrow).

[P-179]

Concurrent abdominal, upper extremity, and neck injuries associated with multiple stab-cut tool injuries: A case report

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Objective: Multiple stab-and-cut injuries are traumatic injuries that can lead to life-threatening bleeding and organ damage within a short period of time, requiring rapid decision-making and a multidisciplinary approach. This case presentation aims to present the diagnosis, treatment, and postoperative management of a patient who was hemodynamically unstable, underwent emergency surgery without preoperative imaging, and had simultaneous abdominal, upper extremity, and neck injuries.

Material and Methods: The literature has examined complex injuries resulting from multiple stab-and-cut injuries; in particular, the diagnostic and therapeutic role of emergency surgical exploration performed without preoperative imaging in hemodynamically unstable patients has been evaluated.

Results: A 57-year-old male patient presented to the emergency department with multiple stab and cut wounds following a suicide attempt. Physical examination revealed approximately 45 stab wounds on the body. Laboratory tests showed WBC: 26,000/µL and lactate: 3.72 mmol/L. Clinical evaluation revealed that the patient was hemodynamically unstable and therefore underwent emergency surgery without preoperative radiological imaging. During emergency surgical exploration; • Multiple tendon, nerve, and major vascular structure injuries in the left upper extremity, • Small intestine, stomach, liver, and colon injuries during abdominal exploration, • Penetrating-cutting instrument injury in the neck regionwere detected. Surgical procedures for abdominal and upper extremity injuries were performed simultaneously. The ear, nose, and throat team was involved in the operation due to a neck injury, and the Plastic Surgery team was involved due to a subtotal amputation of the left wrist. The surgical procedures were completed with the assistance of multidisciplinary teams. The patient was monitored in the intensive care unit during the postoperative period and hemodynamic stabilization was achieved. Further evaluation was performed when bile was observed in the surgical drains during follow-up. Magnetic resonance cholangiopancreatography revealed bile leakage, prompting the patient to undergo endoscopic retrograde cholangiopancreatography and biliary stent placement. Post-procedure drainage was observed to decrease. No other major surgical complications developed in the early postoperative period.

Conclusion: In cases of multiple stab and cut injuries with hemodynamically unstable course, emergency surgical exploration is life-saving even if preoperative imaging cannot be performed. Early diagnosis and management of complications that may develop in the postoperative period, such as bile leakage, using endoscopic methods reduces the need for additional surgery. This case highlights the importance of a multidisciplinary approach and close postoperative follow-up in cases of simultaneous abdominal, extremity, and neck injuries. After completing surgical treatment, the patient was transferred to the psychiatry department for further evaluation and treatment.

Keywords: Cutting-piercing instrument injury, multiple trauma, emergency surgery, bile leakage, multidisciplinary approach



Figure 1. Image of multiple injuries due to suicide in the abdomen. Multiple incisions made with the intent of suicide and the healed state three weeks later can be seen in the image.

[P-180]

Strangulated giant umbilical hernia with limited fecal contamination to the hernia sac: A rare cause of transverse colon perforation

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Objective: Adult umbilical hernias are associated with increased intra-abdominal pressure and impaired abdominal wall integrity, commonly seen in obesity, ascites, chronic cough, heavy and repeated physical strain, multiparity and chronic constipation.

Material and Methods: A 64-year-old male patient presented with abdominal swelling which increased in size since three days along with constipation for four days. Medical history included diabetes, hypertension, morbid obesity, and a sedentary lifestyle. He had been diagnosed with umbilical hernia four years ago, where surgical repair was recommended but declined by the patient. PE revealed a non-reducible giant hernia with tenderness in the supraumbilical region.The patient was hypotensive and tachycardic. Laboratory findings showed leukocytosis with elevated infective marker levels. CT demonstrated herniation of distal transverse colon segments through a 7-cm fascial defect at the umbilical level. Hernia sac reached approximately 22 cm in diameter and contained free fluid up to 14 cm in depth. Colonic loops proximal to hernia sac were dilated with air-fluid levels, and free air within the hernia sac was observed, consistent with perforation. The patient was underwent emergency surgery.

Results: On exploration, free colonic contents were found within the hernia sac, with a strangulation-related perforation of the transverse colon near the hepatic flexure. Severe edema, ischemia, and necrosis were present in the hernia sac, subcutaneous tissue, and anterior fascia. As contamination was limited to the hernia sac, temporary sutures were placed at the perforation site and irrigation was performed prior to entering the abdomen. No macroscopic intra-abdominal contamination was observed; only inflammatory fluid and dilation of the ascending colon were present. Right hemicolectomy and aggressive debridement of necrotic fascia and subcutaneous tissue were performed. Due to poor tissue quality and contamination risk, fascia was closed with interrupted non-absorbable sutures, and the skin was left for secondary healing. Patient developed respiratory failure, mixed acidosis, and oliguria peroperatively, and required mechanical ventilation for three days. Oral intake was resumed on postoperative day five. Secondary skin closure was performed on postoperative day eight. Combined broad-spectrum antibiotics were administered for 21 days. The patient was discharged on postoperative day 21 in stable condition. Histopathology revealed no malignancy.

Conclusion: Giant umbilical hernias can present with rare but life-threatening complications such as colonic perforation confined to the hernia sac. Early surgical intervention, meticulous contamination control, and careful abdominal wall management are crucial. This case highlights the importance of individualized surgical strategies in complex hernia emergencies, especially in patients with significant comorbidities.

Keywords: Hernia, strangulation, sepsis

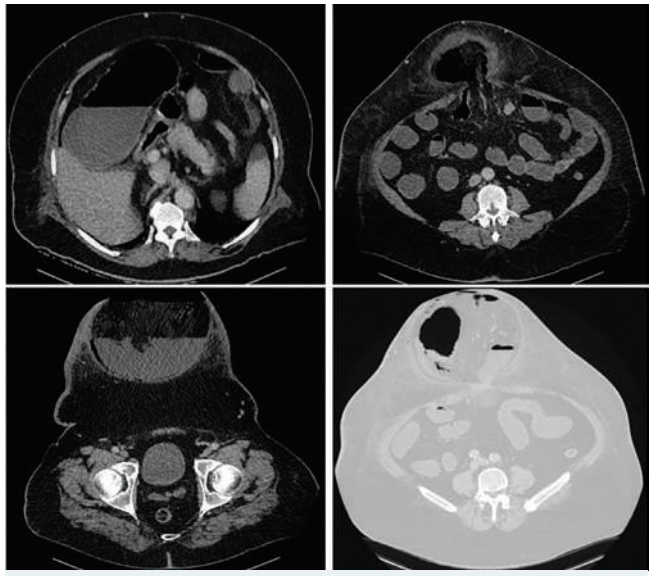


Figure 1. Computed Tomography (CT) images demonstrate herniation of the distal segments of the transverse colon through a defect at the level of the umbilicus, dilatation of the bowel loops proximal to the hernia sac with air–fluid levels, and the presence of free fluid and free air within the hernia sac.



Figure 2. Pre- and intraoperative images of the hernia sac, along with the resection specimen are shown.

[P-181]

Morel-Lavallée lesion following blunt abdominal trauma: A rare case report

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Objective: Although rare, Morel-Lavallée lesions (MLLs) typically occur following blunt trauma and result from the separation of the skin and subcutaneous tissue from the underlying fascial planes. This separation creates a potential space in which hematopoietic and lymphatic fluid accumulates, leading to clinical manifestations such as swelling, pain, fever, and tissue tension. Patients may receive a diagnosis within days of trauma; however, in some cases, symptoms may develop months or even years later, resulting in delayed diagnosis.

Material and Methods: The case was retrospectively evaluated, and management was determined based on the patient's clinical findings and the characteristics of the accumulated fluid.

Results: A 29-year-old male patient presented to the emergency department with fever, localized periumbilical swelling, and pain. Computed tomography revealed a cystic, hypodense fluid collection measuring 9 cm in diameter, located anterior to the rectus abdominis muscle in the anterior abdominal wall. The patient's medical history included a traffic accident (truck collision) one year prior, after which he had been observed in the emergency department for one day due to blunt trauma and subsequently discharged following non-operative management. During the post-traumatic period, it was noted that the patient had presented to the emergency department three times within one year with identical complaints. The MLL was first described in 1853 by the French physician Maurice Morel-Lavallée. This lesion represents a serous fluid collection that develops following closed degloving injuries and, in particular, after surgical procedures involving the pelvis and abdominal regions. Delays in diagnosis and treatment may lead to infection of the cystic cavity. Magnetic resonance imaging is considered the most reliable diagnostic modality. Treatment options include conservative management, percutaneous drainage, sclerosing agent injection, and open surgical debridement. The choice of treatment is guided by the patient's preference, clinical findings, and the characteristics of the accumulated fluid.

Conclusion: MLLs are rare entities that can develop following trauma, with potentially delayed diagnosis, and may present with symptoms even years after the initial injury. Awareness of MLLs is essential for emergency physicians and consulting surgeons to prevent delayed diagnosis and to avoid repeated surgical interventions.

Keywords: Morel-Lavallée, trauma, hematoma

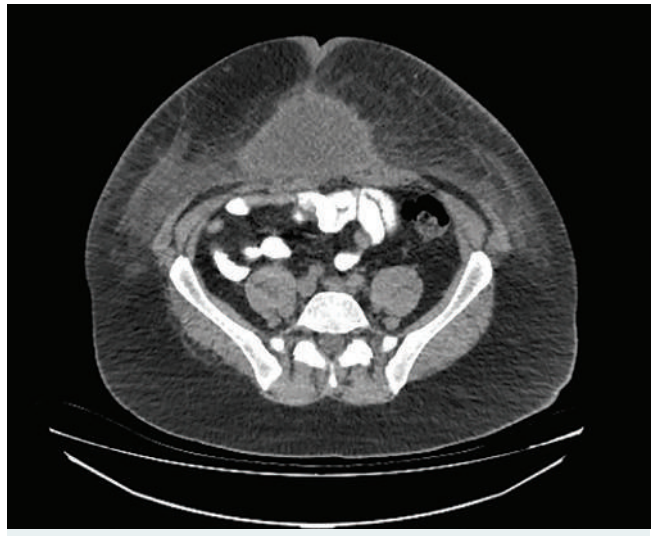


Figure 1. Oral contrast-enhanced CT scan section showing subcutaneous tissue collection.

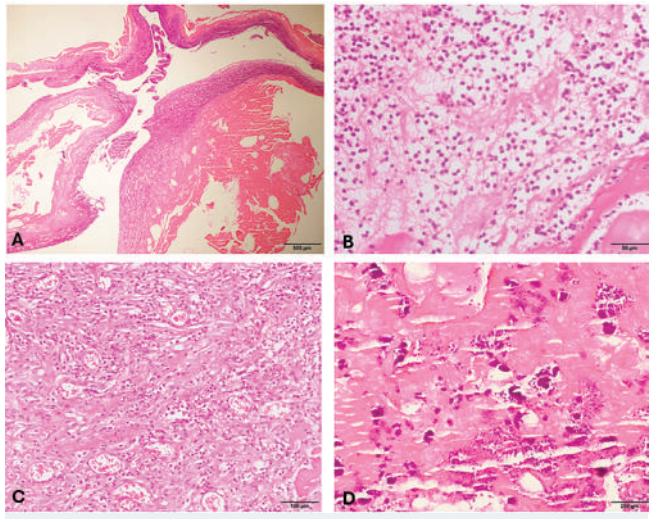


Figure 2. (A and B) Histopathological examination revealed fibrin deposition admixed with acute suppurative inflammatory cell infiltration (H&E X40, X400). (C) Granulation tissue with congested vascular proliferation and mixed inflammatory infiltrates was observed (H&E X200). (D) Focal areas of calcification within fibrotic tissue were identified (H&E X200).

[P-182]

Laparoscopic Meckel's diverticulum resection and hernia repair in an incarcerated Littre hernia: A case report

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Objective: Meckel's diverticulum is the most common congenital anomaly of the gastrointestinal tract, occurring in approximately 2% of the population. Although most cases are asymptomatic, they may present with clinical findings such as bleeding, diverticulitis, and intestinal obstruction. The presence of Meckel's diverticulum within a hernial sac is called Littre's hernia and is a very rare clinical condition. Littre's hernia usually presents with incarcerated or strangulated hernia and is difficult to diagnose in the preoperative period. The diagnosis is usually made during surgical exploration. This study aims to present a case of Meckel's diverticulum detected within a strangulated inguinal hernia and treated with a laparoscopic approach.

Material and Methods: A case of Meckel's diverticulum detected and treated using laparoscopic methods was retrospectively evaluated.

Results: A 30-year-old male patient presented to the emergency department complaining of pain and swelling in his right groin that had persisted for two days. Physical examination revealed an irreducible right inguinal hernia. Ultrasound revealed a herniated bowel loop through a fascial defect, a non-peristaltic appearance, and free fluid within the hernia sac, leading to a preliminary diagnosis of strangulated hernia. The patient underwent surgery. Exploration using the TAPP approach revealed a strangulated Meckel's diverticulum within the indirect inguinal hernia sac. After the diverticulum was reduced into the abdomen, the hernia sac was dissected, and the preperitoneal space was prepared. Subsequently, a 10x15 cm polypropylene mesh was placed and fixed in the preperitoneal space, and the hernia repair was completed by suturing the peritoneal defect. Then, the diverticulum was resected using a laparoscopic linear stapler. Intestinal integrity was preserved during the operation, and no additional resection was required. The patient was discharged on the third day without complications in the postoperative period. Histopathological examination revealed findings consistent with a Meckel's diverticulum without ectopic tissue.

Conclusion: Littre's hernia is a clinical picture that should be kept in mind in the differential diagnosis of incarcerated or strangulated inguinal hernias, despite its rarity. Due to the difficulty of preoperative diagnosis, surgical exploration plays a decisive role in diagnosis and treatment. In the presented case, the strangulated Meckel's diverticulum was safely resected using the TAPP approach, and hernia repair with mesh was successfully performed simultaneously due to the absence of contamination findings. The laparoscopic approach should be considered an effective and safe treatment option in selected cases due to its ability to provide intraabdominal exploration, its minimally invasive nature, and its advantages of rapid postoperative recovery.

Keywords: Littre's hernia, Meckel's diverticulum, laparoscopic hernia repair

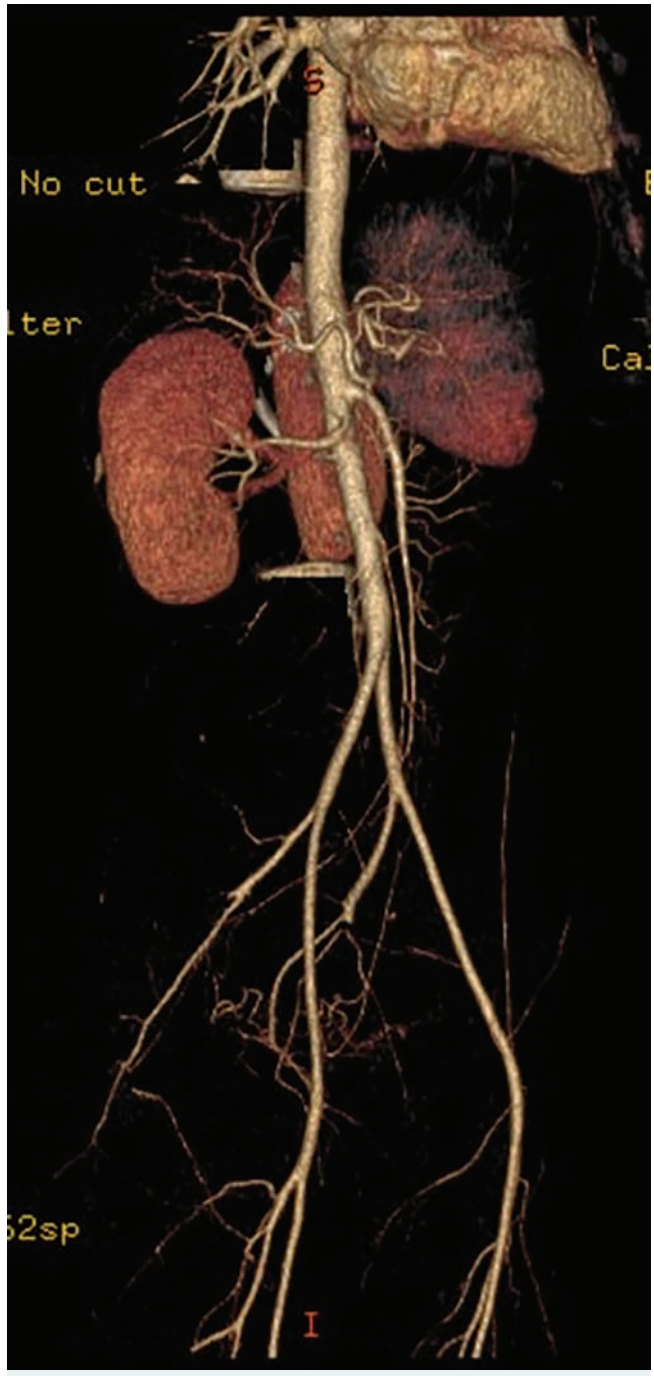


Figure 1. SMA blood flow appears normal.

[P-183]

Superior mesenteric venous thrombosis and small intestine necrosis in a young patient with protein S deficiency: A rare case

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Objective: This case study aims to highlight that protein sodium deficiency, a rare inherited thrombophilia, can lead to superior mesenteric vein (SMV) thrombosis and cause severe intestinal ischemia even under anticoagulation. Protein S deficiency is one of the inherited thrombophilias that disrupt the natural anticoagulant system and is quite rare in the general population. Although it poses a high risk for venous thromboembolic events, its association with mesenteric vein thrombosis has been reported in a limited number of cases in the literature. SMV thrombosis, while rare among the causes of mesenteric ischemia, can lead to serious morbidity and mortality if diagnosis and treatment are delayed. The non-specific nature of clinical findings can lead to delayed diagnosis, especially in young patients.

Material and Methods: A 28-year-old woman presented to the emergency department with abdominal pain. Her history included recurrent abortions, prior deep vein thrombosis, and known protein S deficiency, for which she was receiving regular low-molecular-weight heparin (LMWH). Physical examination revealed lower abdominal tenderness without signs of an acute abdomen. Laboratory tests showed normal lactate dehydrogenase, lactate, and creatine kinase levels. Contrast-enhanced abdominal CT angiography demonstrated normal opacification of the superior mesenteric artery; the main trunk of the SMV was patent, with filling defects consistent with thrombosis in the distal ileal branches.The patient was admitted for observation. Due to clinical progression despite anticoagulation, emergency surgery was performed. Laparoscopic evaluation revealed impaired bowel perfusion, necessitating conversion to laparotomy. A necrotic ileal segment approximately 40 cm in length was identified about 20 cm proximal to the terminal ileum. The affected segment was resected, and a primary ileoileal anastomosis was performed. Therapeutic-dose LMWH was continued postoperatively. Oral intake was initiated on postoperative day 2, and the patient was discharged uneventfully on postoperative day 5.

Results: A significant proportion of SMV thrombosis cases reveal underlying hypercoagulability. Although protein S deficiency is rare in the general population (0.03-0.13%), it poses a significant risk for venous thrombosis. This case is noteworthy because it demonstrates that SMV thrombosis and bowel necrosis can develop even with regular anticoagulation therapy. In young patients with a history of thromboembolic disorders, early imaging, close clinical monitoring, and timely surgical intervention significantly improve the prognosis.

Conclusion: Protein S deficiency is a rare cause of thrombophilia; however, it should be kept in mind that serious SMV thrombosis and intestinal necrosis can develop even under anticoagulation.

Keywords: Superior mesenteric vein thrombosis, protein S deficiency



Figure 1. Image of intraoperative bowel necrosis. A color difference is observed between the necrotic and healthy bowel loops.

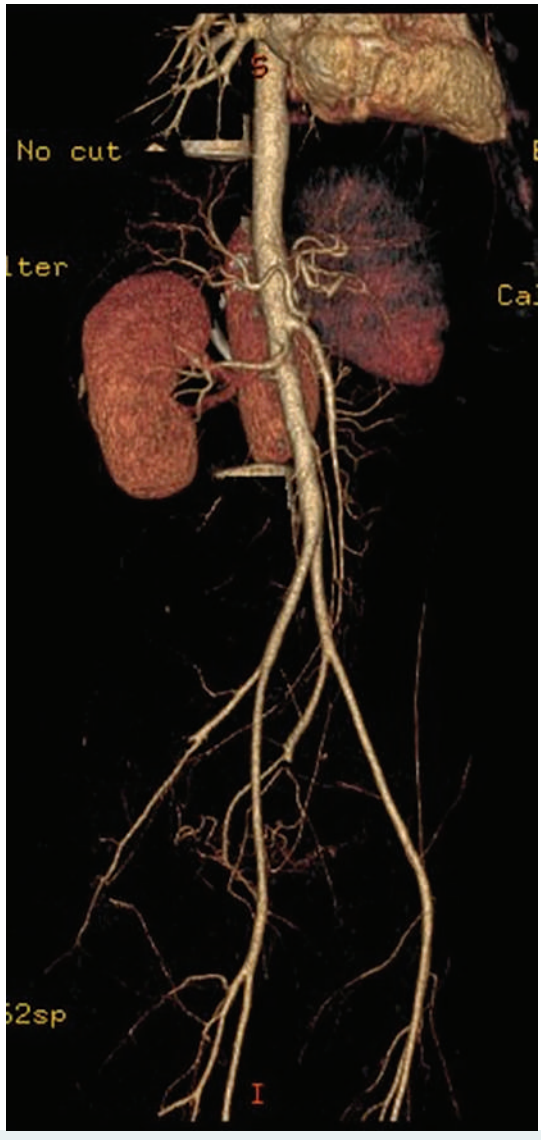


Figure 2. CT angiography image. SMA blood flow appears normal.

[P-184]

Chest compressions as an inadvertent maneuver for gastric detorsion: A rare case of spontaneous reduction during CPR

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Objective: Gastrik volvulus (GV) is a rare surgical emergency characterized by the rotation of the stomach more than 180 degrees around its own axis, posing a risk of vascular ischemia and perforation with high mortality. According to the anatomical axis of rotation, in the mesentero-axial type, the stomach rotates along its short axis (the perpendicular axis connecting the minor and major curvatures). This condition often results in the pylorus rising above the level of the esophagogastric junction and clinically mimics acute pyloric obstruction. The spontaneous resolution of this clinical picture—which usually requires emergency surgical or endoscopic intervention—during resuscitation (CPR) maneuvers is a mechanical phenomenon rarely encountered in the literature.

Material and Methods: A case of mesentero-axial gastric volvulus in an 84-year-old patient.

Results: An 84-year-old female presented with sudden severe epigastric pain, nausea, and inability to vomit for 24 hours. Medical history included hypertension and valvular heart disease. Physical exam showed epigastric tenderness, distention, and tympany. NG tube insertion failed due to resistance at the GE junction, confirming Borchardt's triad. Labs showed creatinine: 4.64 mg/dL and urea: 155 mg/dL, indicating secondary prerenal AKI. CT reported a massively dilated "upside-down stomach" with pylorus and duodenum herniated into the mediastinum, showing mesentero-axial rotation. Emergency endoscopy failed due to mucosal edema and anatomical distortion. During anesthesia induction for surgery, cardiac arrest occurred. After 2 minutes of CPR, spontaneous circulation returned. Upon laparotomy, the stomach—previously irreducible even by endoscopy—was found spontaneously reduced and detorsed due to intrathoracic positive pressure and mechanical maneuvers from chest compressions. Exploration confirmed preserved vascularity and no necrosis. The enlarged esophageal hiatus was repaired with primary sutures. Renal functions normalized rapidly, and the patient was discharged on day 8.

Conclusion: In the management of acute gastric volvulus, the primary goals are to restore the stomach to its anatomical position and prevent vascular damage. In cases where endoscopic interventions fail, surgical exploration is mandatory. The most unique aspect of this case is the unexpected mechanical effect of CPR maneuvers on herniated organs. High positive intrathoracic pressure generated during chest compressions acted as a "milking" maneuver, pushing the stomach trapped in the mediastinum back into the abdominal space and providing spontaneous reduction. Due to this phenomenon, it was observed peroperatively that the stomach was viable and the torsion had resolved. In conclusion, although perioperative mechanical events can instantaneously change the anatomical picture, surgical correction of the hiatal defect (crural repair) remains the mainstay of treatment to prevent recurrence.

Keywords: Gastric volvulus, borchardt triad, cardiopulmonary resuscitation



Figure 1. Sagittal CT scan showing herniation and rotation of the stomach into the mediastinum (red arrow).

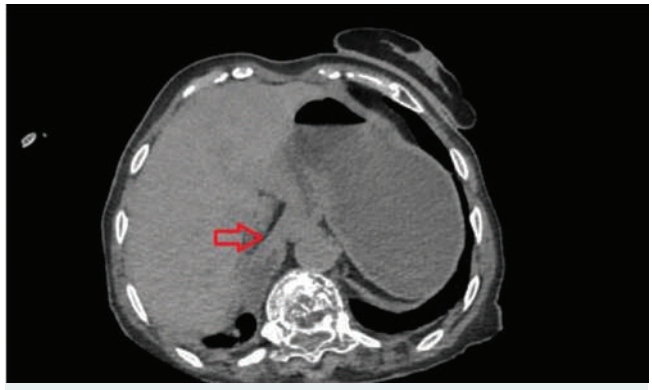


Figure 2. Axial CT scan showing herniation and rotation of the stomach into the mediastinum (red arrow).

[P-185]

A rare cause of acute abdominal disease; transmesenteric internal hernia

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Objective: Internal herniation is a relatively rare cause of acute abdominal pain. Its incidence is reported in the literature as 0.2-0.9%. Internal herniation is a difficult pathology to diagnose due to the lack of specific physical examination and laboratory findings. Subtypes of internal herniation include paraduodenal, foramen of Winslow, perisigmoid, transmesenteric, and transomental. This study aims to discuss the diagnostic difficulties and clinical approach to internal herniation pathology, accompanied by a case of transmesenteric subtype internal herniation in a patient with no prior history of intra-abdominal surgery.

Material and Methods: The diagnosis and treatment process of a 69-year-old male patient who presented to our clinic with complaints of inability to pass gas or stool and generalized abdominal pain for three days was evaluated.

Results:s A 69-year-old male patient presented with complaints of inability to pass gas or stool and abdominal pain for 3 days. His medical history revealed no other illnesses or previous surgeries. Physical examination revealed guarding, rebound tenderness, and tenderness. Vital signs: Temperature 36.5 °C, blood pressure 120/70 mmHg, pulse 83/min, and blood oxygen saturation (SpO_2) measured at 96%. Laboratory findings were: WBC 12.5 x 10^3/µL, CRP 1 mg/L, HGB 14 g/dL. A plain abdominal X-ray showed four air-fluid levels. An oral+iv-enhanced contrast abdomen CT scan was performed. The imaging revealed that the orally administered contrast medium did not reach the cecum and that there was dilation in the small bowel loops reaching a diameter of 4 cm. An emergency laparotomy was decided upon. Exploration revealed a herniation of the jejunal bowel loop through a 4 cm defect in the ileal mesentery, 50 cm proximal to the ileocecal valve, disrupting the continuity of bowel passage. The herniated segment was removed through the defect. No ischemia, infarction, or perforation was detected in the bowel. The mesenteric defect causing the internal herniation was repaired with primary simple sutures. No other pathology was found during the operation. Oral intake was gradually opened 24 hours after the operation, and the patient was discharged on the 4th postoperative day.

Conclusion: Internal herniation is a rare but significant cause of acute abdomen in patients. The lack of specific physical examination and laboratory findings makes diagnosis difficult. Internal herniation should always be considered in cases of acute abdomen with inconsistent clinical and laboratory findings. Early surgical intervention is vital in reducing morbidity and mortality, and the decision for laparotomy should not be delayed.

Keywords: Acute abdomen, internal herniation, transmesenteric



Figure 1. Transmesenteric hernia defect. A segment of the jejunal bowel herniated through a 4 cm defect in the ileal mesentery, approximately 50 cm proximal to the ileocecal valve.

[P-186]

Metabolic crisis in glutaric aciduria type II initially suspected as gastrointestinal perforation

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Objective: Glutaric aciduria type II (GAII), also known as multiple acyl-CoA dehydrogenase deficiency, is a rare inherited metabolic disorder characterized by impaired mitochondrial fatty acid and amino acid oxidation. Adult-onset or long-term asymptomatic cases may present with clinical manifestations mimicking surgical emergencies during periods of acute metabolic decompensation.

Material and Methods: A 25-year-old male with a childhood diagnosis of GAII had remained asymptomatic for approximately ten years without regular follow-up or pharmacological treatment. He presented with sudden-onset severe abdominal pain, nausea, and vomiting following a one-week history of dental infection treated with amoxicillin-clavulanate and non-steroidal anti-inflammatory drugs. Laboratory tests showed increased white blood cell count and eleveated C-reactive protein levels. Abdominal computed tomography performed at an outside institution revealed free air and fluid suggestive of gastric perforation. Consequently, the patient underwent emergency exploratory laparotomy.

Results: Intraoperative evaluation revealed no evidence of gastrointestinal perforation or other surgical pathology. During and after surgery, the patient developed profound metabolic disturbances, including severe high-anion-gap metabolic acidosis with arterial pH as low as 6.08, marked hyperlactatemia (maximum 11.8 mmol/L), hypoglycemia, hyperkalemia, and disseminated intravascular coagulation. Postoperatively, he required mechanical ventilation, vasopressor support, intensive bicarbonate infusion, and renal replacement therapy. The metabolic crisis was attributed to GAII, and treatment with high-dose riboflavin, carnitine supplementation, and continuous glucose infusion was initiated while lipid-containing solutions were avoided. Following targeted metabolic therapy, metabolic parameters gradually improved, and the patient achieved clinical stabilization. He was transferred to the ward and discharged on postoperative day 8.

Conclusion: This case demonstrates that GAII in adulthood may mimic an acute abdomen and that severe metabolic decompensation may be misinterpreted as surgical pathology. In patients presenting with acute abdomen accompanied by severe metabolic acidosis, hypoglycemia, and hyperlactatemia—particularly those with known or suspected metabolic disorders—metabolic crisis must be considered in the differential diagnosis. Early recognition and appropriate metabolic management are crucial to prevent unnecessary surgical interventions and serious morbidity.

Keywords: Metabolic crisis, negative laparatomy, glutaric aciduria type 2

[P-190]

Cyst of the canal of nuck treated with laparoscopic TEP: A case report

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Objective: Although inguinal and femoral hernias are the most common causes of palpable groin masses in women, a cyst of the canal of nuck is often overlooked because of its rarity. This cyst develops due to incomplete obliteration of the processus vaginalis during fetal life and may extend along the inguinal canal into the labium majus. Clinical findings are usually non-specific, and physical examination or ultrasonography may not provide a definitive diagnosis. In suspected cases, computed tomography (CT) or magnetic resonance imaging (MRI) helps define the lesion's location and confirm its cystic nature. Surgical excision is the standard treatment, with laparoscopic approaches considered safe and effective.

Material and Methods: A 41-year-old woman presented with left groin swelling. She had no comorbidities or prior surgical history. Physical examination revealed a palpable, non-reducible mass in the left inguinal region without a cough impulse. Due to persistent suspicion, contrast-enhanced abdominal and pelvic CT demonstrated a 7×3 cm cystic lesion extending from the left inguinal canal toward the labium majus. Based on its location and imaging characteristics, the findings were consistent with a cyst of the canal of nuck. No additional intra-abdominal pathology was identified (Figure 1). Surgery was performed using a laparoscopic totally extraperitoneal (TEP) approach. After entering the preperitoneal space, a cystic lesion in the left inguinal canal was identified, dissected in the preperitoneal plane, and reduced. After evaluation of the inguinal anatomy, a synthetic mesh was placed in the preperitoneal space to cover the myopectineal orifice and secured in position. No intraoperative complications occurred (Figure 2).

Results: Surgical treatment is recommended to relieve symptoms and prevent potential complications. Although open surgical methods have long been used, laparoscopic approaches offer advantages such as better anatomical visualization, detection of concomitant hernias, less postoperative pain, and faster recovery. The totally extraperitoneal (TEP) approach, in particular, has been reported as a safe method due to preservation of peritoneal integrity and low complication rates. In the present case, the lesion was successfully treated using the laparoscopic TEP approach, with no early complications or recurrence observed.

Conclusion: Cyst of the canal of nuck is a rare but important entity in the differential diagnosis of groin masses in female patients. Advanced imaging modalities play a decisive role in diagnosis when clinical suspicion persists. The laparoscopic TEP approach may be considered a safe and effective surgical option in appropriately selected patients.

Keywords: Nuck, TEP, laparoscopy

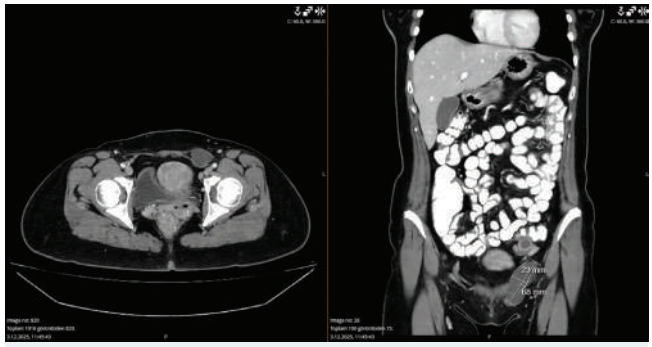


Figure 1. Preoperative computed tomography image of nuck canal cyst.

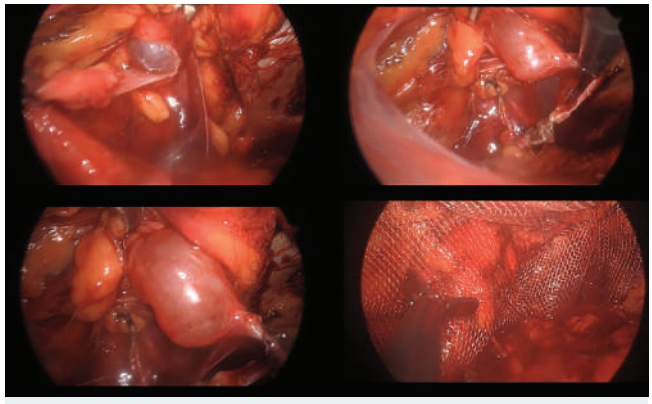


Figure 2. Intraoperative image.

[P-192]

Delayed multidisciplinary reconstruction of cervical esophageal transection following thyroidectomy: A case report

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Objective: Esophageal perforation is a rare but life-threatening surgical emergency associated with high morbidity and mortality. Although iatrogenic perforations most commonly occur during endoscopic procedures, they may rarely develop during cervical surgical interventions. Complete cervical esophageal transection following thyroidectomy has been reported only in a limited number of cases in the literature and, when not recognized early, may lead to mediastinal sepsis and the need for complex reconstructive surgery. In this study, we present the delayed multidisciplinary reconstruction of a cervical esophageal transection that developed after thyroidectomy at an external center, where primary repair had failed.

Material and Methods: A 38-year-old female patient underwent total thyroidectomy and neck dissection at an external center due to thyroid carcinoma. A cervical esophageal injury that occurred intraoperatively was recognized in the early postoperative period, and the patient was reoperated for primary repair and drainage. However, clinical follow-up revealed failure of the repair. Surgical exploration demonstrated complete transection of the cervical esophagus at the level of the hypopharynx-pharyngoesophageal junction, along with left recurrent laryngeal nerve injury. A proximal esophagostomy and feeding jejunostomy were subsequently performed. The patient was referred to our center for definitive reconstruction. Following multidisciplinary evaluation, partial esophagectomy and delayed reconstruction were performed using combined thoracoscopic and laparoscopic approaches. The thoracic and abdominal esophagus were mobilized, the stomach was advanced into the mediastinum, and a tension-free pharyngoesophagostomy was constructed at the cervical level.

Results: Postoperatively, the patient was monitored briefly in the intensive care unit and then transferred to the surgical ward. Enteral nutrition was initiated via jejunostomy, and gradual transition to oral intake was achieved. No anastomotic leak, mediastinal infection, or reoperation-requiring complication was observed during follow-up. After discharge, partial dysphagia was noted during outpatient follow-up. Endoscopic evaluation revealed a partial anastomotic stricture. The patient underwent two sessions of endoscopic dilatation, after which no further complications were observed. Contrast-enhanced sagittal CT imaging of the neck and upper thorax demonstrates a proximal cervical esophagostomy. The distal cervical esophageal segment is closed using a linear stapler, with interruption of esophageal continuity. A clear separation between the proximal and distal segments is observed.

Conclusion: Cervical esophageal transection following thyroidectomy is a rare but life-threatening complication. In cases where primary repair fails, delayed reconstruction performed at experienced centers using a multidisciplinary approach can achieve favorable clinical and functional outcomes. Appropriate surgical timing, institutional expertise, and coordinated team management play critical roles in treatment success.

Keywords: Cervical esophageal transection, thyroidectomy complication, delayed reconstruction



Figure 1. Cervical esophageal transection following thyroidectomy: computed tomography imaging of proximal esophagostomy and stapled distal esophageal closure.

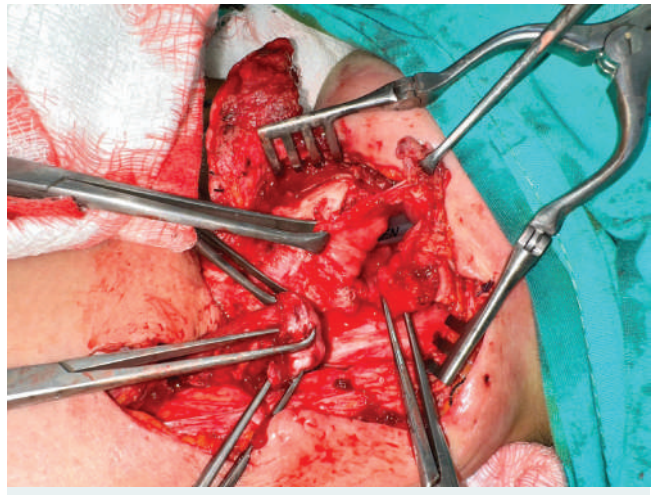


Figure 2. Intraoperative cervical exploration demonstrates loss of esophageal continuity, with the proximal esophageal segment remaining open. The distal cervical esophageal segment is noted to have been previously closed using a linear stapler. A clear gap is present between the proximal and distal segments.

[P-193]

Conservative management of a cecal perforation occurring during colonoscopic endoscopic submucosal dissection (ESD): A case report

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Objective: Endoscopic submucosal dissection (ESD) is an advanced endoscopic technique that enables en bloc resection of broad-based and superficial neoplastic lesions in the colorectal system. Perforation during colorectal ESD is a significant complication, particularly in the cecum, due to the thin structure of the colonic wall. Perforation rates in the literature have been reported to range between 4-10%. Perforations that are recognized early and closed during the procedure can often be successfully managed with conservative treatment. In this case, a cecal perforation that developed during the procedure was managed with endoscopic clipping and a conservative approach, resulting in recovery without the need for surgery.

Material and Methods: A 67-year-old female patient was evaluated with screening colonoscopy due to a positive fecal occult blood test. During colonoscopy, a 2.5×1 cm broad-based vegetative polyp was detected on a mucosal fold at the cecal base, located between the appendiceal internal orifice and the ileocecal valve. The polyp was removed en bloc by ESD. During the procedure, a cecal perforation occurred and the mucosal defect was closed using endoclips. Following the procedure, an oral and intravenous contrast-enhanced abdominal CT scan was performed. Widespread free intraperitoneal air was detected; however, no contrast extralumination was observed. On abdominal examination, distension and tenderness were present, but there were no signs of an acute abdomen, and vital signs were stable. Therefore, conservative management was planned: oral intake was discontinued and broad-spectrum intravenous antibiotics were initiated.

Results: During inpatient follow-up, the patient's abdominal tenderness decreased and she began to tolerate oral intake. As abdominal distension persisted, intraperitoneal air was evacuated using a 16 Fr intravenous catheter inserted at the level of the umbilicus, after which the distension regressed. Vital signs remained stable throughout follow-up and no complications developed. As the patient's general condition was good and oral intake was tolerated, she was discharged without any problems.

Conclusion: Cecal perforations that occur during colonoscopic ESD can be safely and effectively managed with conservative treatment when recognized during the procedure and closed with endoscopic clips. The presence of widespread pneumoperitoneum alone does not constitute an absolute indication for surgery. A conservative approach may be applied in patients without contrast extravasation, who are hemodynamically stable, and who do not exhibit signs of an acute abdomen. This case demonstrates that colon perforations can be managed without surgery through appropriate patient selection and close clinical follow-up.

Keywords: ESD, cecal perforation, conservative management

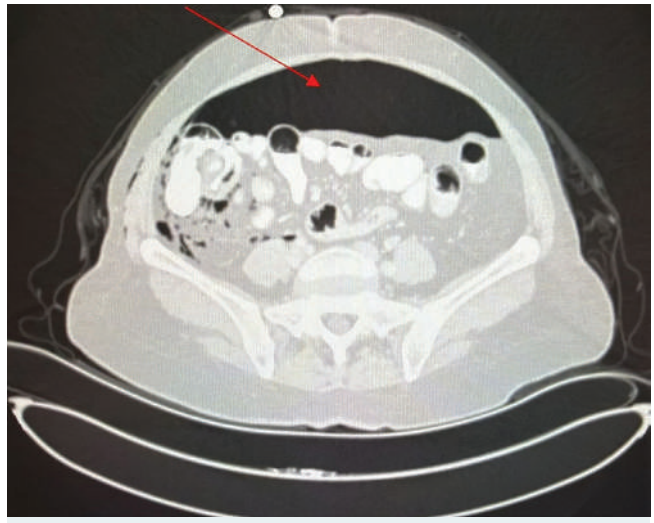


Figure 1. Computed tomography scan after the endoscopic submucosal dissection. (Red arrow) free air in the abdomen.

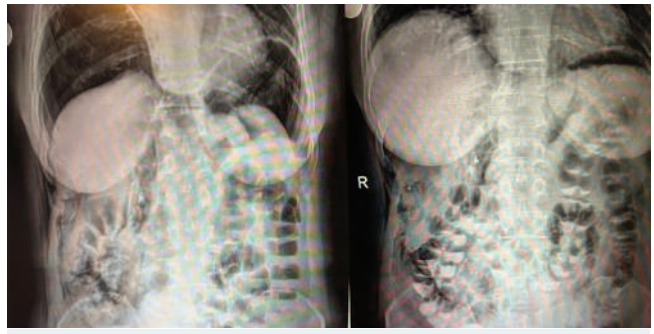


Figure 2. (A) Post-procedure upright abdominal radiograph, (B) Upright abdominal radiograph taken 1st and 3rd days.

[P-199]

Surgical management of fibrosis-related gastric obstruction in gastric lymphoma with complete response to therapy

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Objective: Primary gastric lymphomas account for only 3-5% of all gastric malignancies, and chemotherapy constitutes the mainstay of treatment. Surgical management in gastric lymphomas is reserved for patients who develop complications. In this case, we aimed to present the surgical management of gastric outlet obstruction caused by fibrotic pyloric stenosis that developed despite achieving a complete hematologic response after systemic therapy.

Material and Methods: A 39-year-old male patient presented to the internal medicine outpatient clinic with complaints of night sweats, weight loss, and epigastric pain. Upper gastrointestinal endoscopy revealed a nearly circumferential ulcerated lesion involving the distal greater curvature of the corpus and extending into the antrum (Figure 1). Biopsy of the lesion was consistent with B-cell non-Hodgkin lymphoma. Systemic therapy with rituximab, R-bendamustine, and R-CHOP was initiated.The patient's nausea and vomiting progressively worsened. Post-chemotherapy upper gastrointestinal endoscopy demonstrated edema and irregularity around the pylorus, and the pylorus could not be traversed (Figure 2). Biopsy specimens obtained from this area were interpreted as fibrosis secondary to chemotherapy. The patient's nausea and vomiting continued to increase. A contrast study with water-soluble contrast material showed complete gastric obstruction (Figure 3). As the patient was not suitable for percutaneous endoscopic gastrostomy, distal gastrectomy with Roux-en-Y gastrojejunostomy was performed. Histopathological examination of the gastrectomy specimen revealed no residual lymphoma; however, extensive fibrosis was observed. The patient tolerated oral intake in the postoperative period and was discharged uneventfully on postoperative day six. At the third postoperative month follow-up, the patient maintained a complete response in terms of lymphoma and had no nutritional problems.

Results: The role of surgery in gastric lymphoma is limited. Surgical intervention may be required only in cases of perforation, bleeding, obstruction, or treatment-resistant disease. Fibrotic pyloric stenosis following chemotherapy is a rare complication. This case is noteworthy because surgical intervention was required due to obstruction despite a complete response to systemic therapy.

Conclusion: Even in cases of primary gastric lymphoma with a complete response to systemic therapy, fibrosis-related gastric outlet obstruction may rarely develop. Therefore, in patients presenting with vomiting and obstructive symptoms after chemotherapy, not only residual disease but also treatment-related fibrotic stenosis should be considered in the differential diagnosis. In appropriate cases, surgical management is a safe and effective treatment option.

Keywords: Gastric outlet, lymphoma, surgery

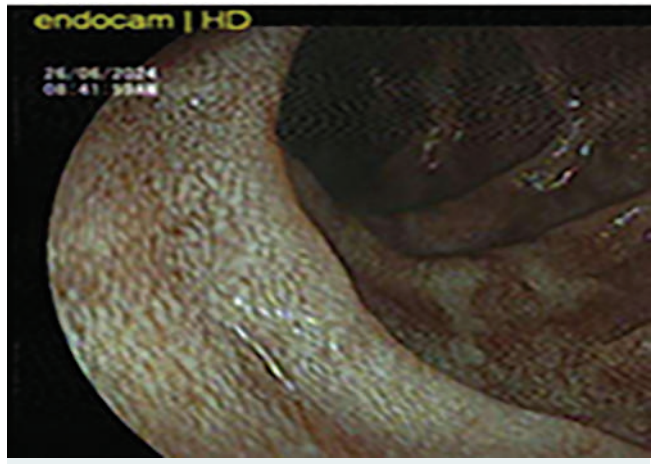


Figure 1.

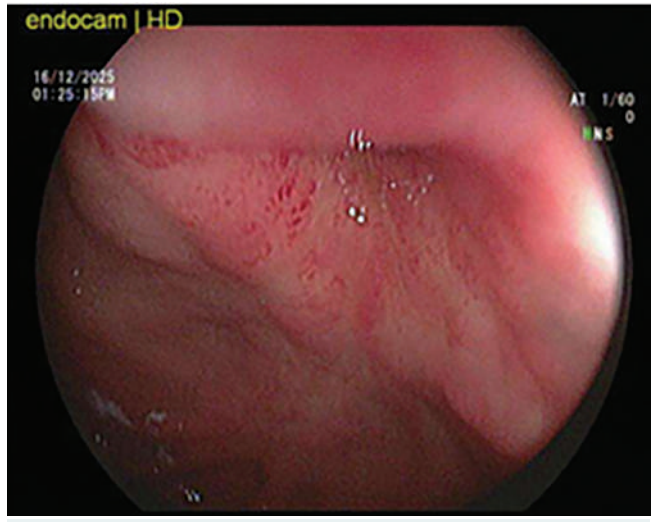


Figure 2.

[P-200]

Multivessel mesenteric artery involvement in a young age: A case report of chronic mesenteric ischemia

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Objective: Chronic mesenteric ischemia is a rare but serious cause of abdominal pain. Advanced age, atherosclerotic disease, diabetes mellitus, hypercoagulable states, and smoking are recognized risk factors. We present a young male patient with no known risk factors other than a long-standing history of cigarette smoking.

Material and Methods: A 44-year-old male patient with a 30 pack-year smoking history presented with postprandial abdominal pain, vomiting, and decreased oral intake that had persisted for four years and led to recurrent hospital admissions. He had experienced an unintentional weight loss of 10 kg over the last five months.

Results: Physical examination revealed epigastric tenderness without signs of an acute abdomen. Contrast-enhanced abdominal CT angiography demonstrated significant stenosis of approximately 2 cm in length beginning at the origin of the celiac trunk, followed by distal occlusion. The common hepatic artery and splenic artery were not visualized; arterial perfusion of the liver and spleen was maintained via collateral circulation. The left gastric artery origin appeared stenotic with post-stenotic dilatation distally. The superior mesenteric artery was not visualized. The inferior mesenteric artery showed marked proximal stenosis extending approximately 3 cm from its origin, with post-stenotic dilatation. The small bowel loops were observed to be supplied through extensive collateral circulation via the inferior mesenteric artery. The patient was referred to interventional radiology for advanced endovascular treatment.

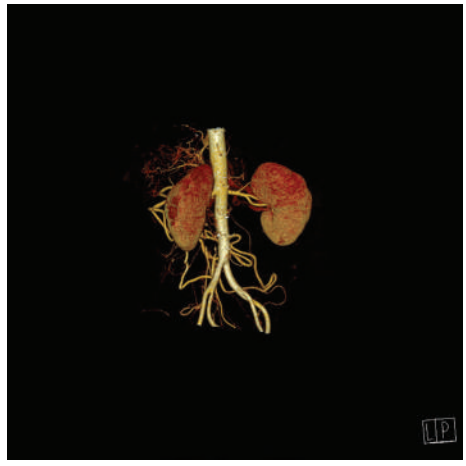
Conclusion: Chronic mesenteric ischemia involving all three major mesenteric vessels at a young age is rare. In young patients presenting with longstanding postprandial abdominal pain and weight loss, particularly those with a significant smoking history, mesenteric ischemia should be considered in the differential diagnosis. In our patient, the presence of well-developed collateral circulation masked the clinical figure and contributed to delayed diagnosis, while simultaneously preserving intestinal perfusion and preventing the need for bowel resection. Early diagnosis with appropriate imaging modalities is crucial to prevent irreversible intestinal damage.

Keywords: Chronic mesenteric ischemia, smoker, young age



Figure 1. Sagittal section of contrast-enhaced abdomen CT angiography. 3D reconstructed CT angiography.

CT: Computed tomography.



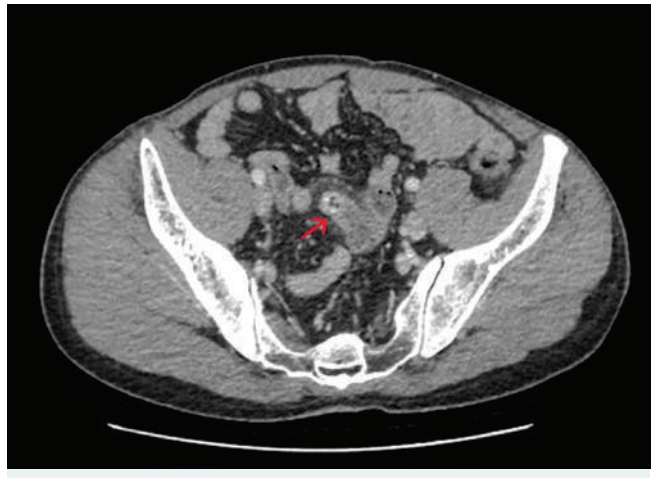


Figure 2. İleal anslardan kaynakladığı düşünülen, kör sonlanan intestinal ans görülmekte. Çevre yağ dokudaki enflamatuvar değişiklikler dikkat çekiyor. Laparoskopik eksplorasyon görüntüleri.

[P-202]

Meckel's diverticulum perforation, laparoscopic diverticulectomy

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Objective: Meckel's diverticulum is the most common congenital anomaly of the gastrointestinal tract. Its incidence is approximately 2%. This diverticulum originates from a remnant of the omphalomesenteric duct. It may be asymptomatic, but it can also lead to clinical conditions such as bleeding, intussusception, volvulus, intestinal obstruction, and perforation. Surgical intervention is required for symptomatic diverticula. Open or laparoscopic surgical approaches can be used for treatment. There is an increasing number of studies in the literature demonstrating the success of laparoscopic treatment. In this case presentation, we aim to present the treatment of a patient who presented to the emergency department with acute symptoms and was diagnosed with Meckel's diverticulitis.

Material and Methods: The patient's clinical observation notes, laboratory parameters, and imaging findings were reviewed. Images from the video recordings of the surgery were used.

Results: A 38-year-old male patient presented to the emergency department with abdominal pain in the umbilical region that had been present for a 48-hour period. A physical examination was performed, which revealed tenderness in the right lower quadrant. The WBC count was 7600/μL, and the CRP was 58 mg/L. Abdominal computed tomography revealed the presence of a blind-ended intestinal loop of approximately 2.5 cm in length, associated with the ileal and located at the pelvic inlet level. Additionally, contamination was observed in the surrounding mesentery. Radiological analysis revealed that the appendix appeared to be normal. Laparoscopic exploration was planned. A 10 mm camera port was inserted infraumbilically. A 12 mm port in the lower left quadrant and a 5 mm port in the suprapubic region were used. During exploration, a segment consistent with Meckel's diverticulitis was observed in the distal ileum, and perforation was seen at the distal end. The specimen was isolated from the surrounding mesentery, and laparoscopic diverticulectomy was performed using stapler. A drain was inserted into the pelvis. The surgical procedure was successfully completed. On the first day postoperatively, oral fluid intake was initiated and gradually increased. On the fourth day, the drain was removed, and the patient was discharged. The pathology findings were consistent with Meckel's diverticulum, and no evidence of malignancy was detected.

Conclusion: With the increase in laparoscopic experience in surgery and the development of instruments, the use of laparoscopy in emergency cases is also increasing. There may be reservations about the use of laparoscopy, especially in emergency cases where small bowel-related pathology is suspected. Selecting the appropriate patient is important in making this decision.

Keywords: Laparoscopic emergency surgery, Meckel's diverticulum

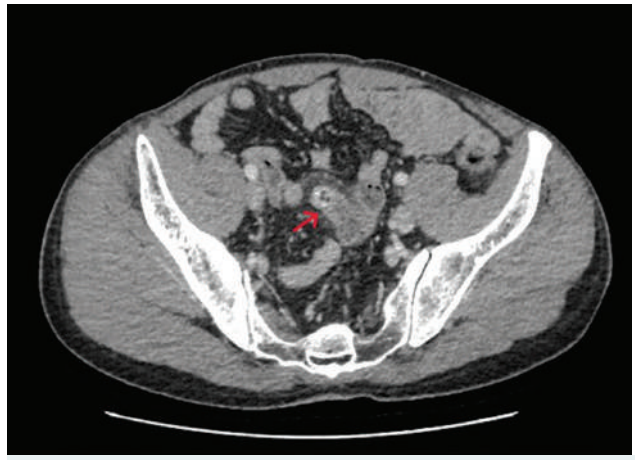


Figure 1. Abdominal CT scan. An intestinal loop with a blind end is observed, thought to originate from ileal loops. Inflammatory changes in the surrounding adipose tissue are also of note. Laparoscopic exploration images.

CT: Computed tomography.

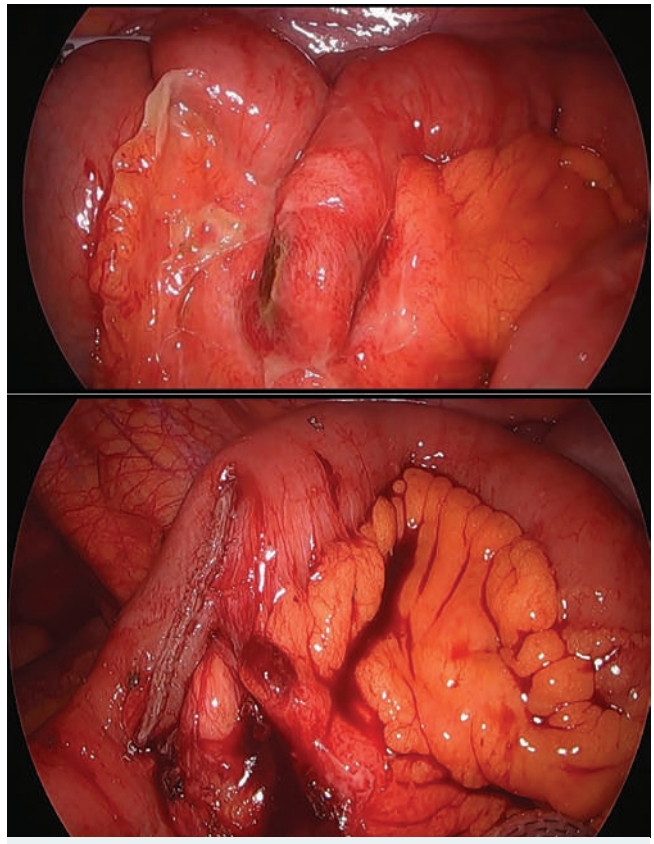


Figure 2. Meckel's diverticulum with necrosis and perforation observed at the distal end (above). It is seen that the diverticulum originates from the antimesenteric surface and that the inflammation is confined to the ileal mesentery. Ileal loop after diverticulectomy (below).

[P-203]

Enterobacter cloacae-associated necrotizing fasciitis following morsus insecti: Importance of early diagnosis and aggressive surgical debridement

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Objective: Necrotizing fasciitis (NF) is a rapidly progressive soft tissue infection with high mortality that develops following disruption of the superficial skin barrier and spreads along fascial planes. Minor skin entry lesions, particularly insect bites (morsus insecti), may serve as a portal of entry for infection. NF following insect bites is rare in the literature and is most commonly associated with Gram-positive pathogens; however, Gram-negative organisms may also be implicated. This study aimed to present a case of *Enterobacter cloacae*-associated NF following morsus insecti and to emphasize the critical role of early diagnosis and aggressive surgical debridement.

Material and Methods: Clinical, laboratory, imaging, surgical, and microbiological data of a 55-year-old female patient presenting with soft tissue infection after an insect bite were retrospectively evaluated. The patient underwent emergency surgical exploration and debridement with a preliminary diagnosis of NF. Deep tissue samples were obtained for culture, and broad-spectrum antibiotic therapy was initiated. The clinical course, need for repeated debridements, and reconstructive management were analyzed.

Results: The patient reported an insect bite in a rural area two days before admission. The lesion initially appeared as a small erythematous papule but rapidly enlarged despite drainage at an outside center, and septic progression prompted referral. Physical examination revealed extensive edema, hyperemia, and ecchymotic areas extending from the anterior abdominal wall to the right lumbar region. Fever (38.5 °C) and tachycardia were present. Laboratory tests showed leukocytosis, elevated C-reactive protein, and hyponatremia; the LRINEC score was 8. Computed tomography demonstrated fascial thickening and fluid collections consistent with fasciitis. Surgical exploration revealed typical NF findings, and extensive debridement was performed. Deep tissue culture grew Enterobacter cloacae. During follow-up, seven additional debridements were required. After infection control, the defect was closed with a split-thickness skin graft. The patient was discharged in good condition with no recurrence during follow-up.

Conclusion: NF should be considered a potential diagnosis in patients presenting with pain and erythema following morsus insecti. Disproportionate pain and rapid progression are key early warning signs. Early diagnosis and aggressive surgical debridement remain the most important determinants of prognosis in NF. Awareness of this rare Gram-negative etiology may prevent diagnostic delay and reduce mortality.

Keywords: Necrotizing fasciitis, insect bite, *Enterobacter cloacae*



Figure 1. Necrotizing fasciitis area and VAC application. Preoperative necrotizing fasciitis area and post-debridement defect treated with VAC.

VAC: Vacuum-assisted closure.



Figure 2. (A) Non-infected granulation tissue and skin graft application. (B) Granulation tissue after serial debridements and VAC therapy, and 3 month postoperative appearance after skin grafting.

VAC: Vacuum-assisted closure.

[P-204]

Rives-stoppa repair with Madrid modification in the treatment of incarcerated incisional hernia: Case report

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Objective: Emergency abdominal wall hernia repair remains challenging due to the absence of adequate preoperative optimization and the frequent presence of bowel obstruction or ischemia. In contaminated or potentially contaminated fields, many surgeons avoid mesh placement or prefer onlay repair techniques because of concerns regarding infection. However, sublay (retromuscular) repair has demonstrated superior long-term outcomes in elective settings. In the Madrid modification of the Rives-Stoppa technique, subxiphoid dissection is performed in the preperitoneal plane rather than directly over the posterior rectus sheath, reducing the risk of injury to the neurovascular bundles or pleura. We present a case of incarcerated incisional hernia with multiple previous onlay repairs, treated with emergency laparotomy and retromuscular mesh repair using the Madrid modification of the Rives-Stoppa technique.

Material and Methods: A case of incarcerated incisional hernia treated with the Madrid Modification of Rives-Stoppa repair will be presented.

Results: A 43-year-old male (BMI 31.8 kg/m^2) with a history of umbilical and incisional hernia repairs performed with the onlay technique presented with a midline incarcerated incisional hernia (EHS classification M2-4 W2). Preoperative computed tomography demonstrated a 55 mm fascial defect. The patient had mechanical bowel obstruction secondary to incarceration. Emergency exploration revealed multiple "Swiss cheese-like" midline defects and incarcerated small bowel loops with ischemic changes. After adhesiolysis, a 20 cm ischemic ileal segment located 70 cm proximal to the ileocecal valve, unresponsive to tactile stimulation, was resected, followed by side-to-side anastomosis. For hernia repair, the posterior rectus sheath was incised lateral to the linea alba. From the xiphoid process extending 6-7 cm caudally, the sheath was opened longitudinally and the retrorectus space was dissected laterally until the neurovascular bundles were identified. At 6 cm caudal to the xiphoid, the posterior sheath was transected transversely and the preperitoneal plane was entered. Subxiphoid dissection continued until visualization of the diaphragm's central tendon, allowing complete development of the retrorectus plane. The posterior sheath was closed with USP 2/0 PDS sutures. A 10×30 cm mesh was placed in the retrorectus space, and the anterior fascia was closed primarily. Postoperatively, the patient developed transient paralytic ileus and superficial surgical site infection not requiring invasive treatment. He was discharged on postoperative day 11. At two months, no recurrence or wound complications were observed.

Conclusion: Retromuscular repair using the Madrid modification of the Rives-Stoppa technique can be safely performed in selected emergency cases. Subxiphoid preperitoneal dissection provides technical advantages by protecting midline neurovascular structures while enabling durable mesh reinforcement.

Keywords: Incisional hernia, Rives-stoppa repair, sublay repair

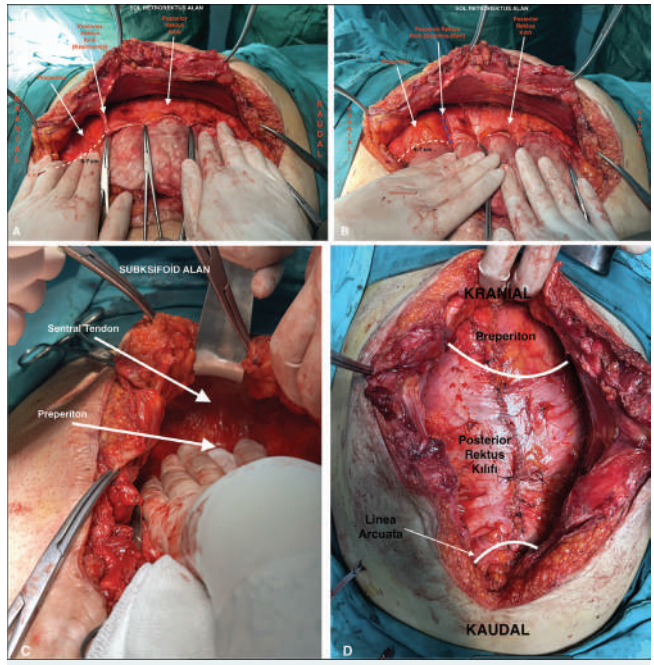


Figure 1. Retrorectus, subxiphoid dissection in Madrid modification.

[P-208]

Intraoperative fascial traction after prehabilitation in giant incisional hernia treatment: A case report

Ebubekir Korucuk[1], Mehmet Avcı[1], Volkan Sayur[1], Egemen Öztürk[2], Taylan Özgür Sezer[1]

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[2]*Department of Radiology, Ege University Hospital, İzmir*

Objective: In giant hernias primary repair is challenging because of loss of domain (LOD). While preoperative techniques like botulinum toxin A (BTA) and progressive pneumoperitoneum are used to reduce LOD, Intraoperative fascial traction (IFT) has recently gained popularity. We present a case managed with BTA followed by IFT and transversus abdominis release (TAR).

Material and Methods: A patient with a Carbonell index <2 and LOD >25% received preoperative BTA. A total of 300 U of BTA (Botox®, Allergan) diluted in 150 cc saline was injected into the lateral abdominal muscles at three points bilaterally under ultrasound guidance. IFT was performed using the Fasciotens® device.

Results: A 36-year-old male (BMI 30.8 kg/m^2) presented with a giant midline incisional hernia. Preoperative CT showed a defect width of 210 mm, an initial LOD of 45%, and a Carbonell index of 0.45. Thirty days post-BTA, the defect width was 190 mm, LOD 33%, and the Carbonell index 0.58. Surgery was performed 38 days after BTA. Following bilateral TAR, the anterior fascia could be approximated manually only to a gap of 8 cm. Consequently, IFT was applied for 30 minutes. Two 30x30 cm polypropylene meshes were placed in the retromuscular space, and the fascia was closed completely without tension. The patient was discharged on day 5 with no complications. On postoperative day 30, there was no complication and recurrence.

Conclusion: The combination of BTA & IFT eliminated the need for bridging or anterior component separation, enabling tension-free fascial closure. This multimodal approach is an effective strategy for managing complex abdominal wall hernias.

Keywords: Complex abdominal wall hernias, intraoperative fascial traction, transverse abdominis release



Figure 1. Preoperative vs. postoperative, intraoperative fascial traction.

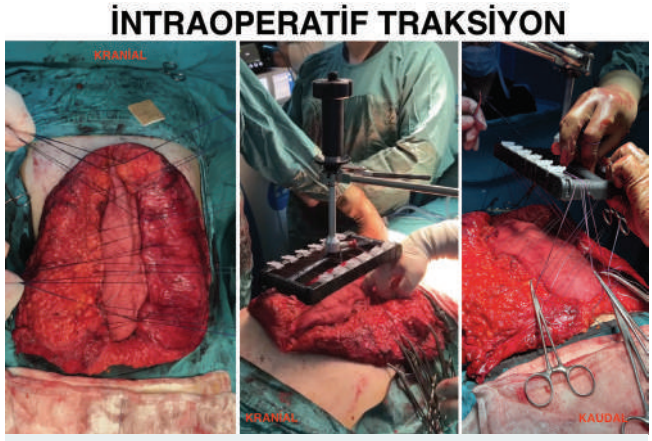


Figure 2. Intraoperatif traksiyon.

[P-234]

Videoscopic subcutaneous mastectomy with immediate implant reconstruction: A case report

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Objective: Although breast-conserving surgery is the preferred approach in the surgical management of breast cancer, mastectomy remains necessary in a substantial number of patients. Advances in oncoplastic surgery have introduced reconstructive options and nipple-areola-skin-sparing techniques for patients requiring mastectomy. Compared with conventional mastectomy, these approaches provide improved cosmetic outcomes and better quality of life. To further optimize cosmetic results, minimally invasive surgical techniques—particularly endoscopy-assisted subcutaneous mastectomy—have recently been incorporated into breast surgery practice. In this report, we present a case of videoscopic subcutaneous mastectomy with immediate implant-based reconstruction performed in our clinic.

Material and Methods: A patient who had previously undergone two breast-conserving surgeries in 2016 and 2023 at an outside center for triple-negative invasive ductal carcinoma located in different quadrants of the right breast presented with a third recurrence. Subcutaneous mastectomy with implant-based reconstruction was planned. A 3-cm skin incision was made approximately 4 cm lateral to the areola. After adequate subcutaneous dissection, a GelPOINT Mini Advanced Access Platform was inserted. Three 5-mm trocars were introduced through the platform, and a 5 mm 30° endoscopic camera was used. The breast tissue was dissected from the subcutaneous plane and over the pectoral fascia and removed through the incision. Immediate reconstruction was performed in the same session using a 460 cc round implant and titanium mesh in a prepectoral plane. A Voyant Maryland energy device was utilized for dissection.

Results: The procedure was completed without intraoperative complications. The postoperative course was uneventful, and the patient was discharged in good condition on postoperative day three. No early postoperative complications were observed.

Conclusion: Videoscopic subcutaneous mastectomy offers several advantages, including its minimally invasive nature, the ability to prepare healthier skin flaps without excessive traction, favorable cosmetic outcomes, and reduced sensory loss. However, a longer operative time during the early phase of the learning curve may be considered a limitation. With appropriate patient selection and surgical expertise, this technique appears to be a safe and effective alternative in selected cases.

Keywords: Implant reconstruction, minimally invasive, videoscopic subcutaneous mastectomy



Figure 1. Intraoperative view of videoscopic subcutaneous mastectomy.

[P-235]

Management of iatrogenic appendiceal perforation in a patient with a history of antegrade continence enema (ACE) procedure: A case report

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Objective: The antegrade continence enema (ACE) procedure is a surgical technique used for the management of bowel dysfunction associated with conditions such as Hirschsprung disease, myelomeningocele, spina bifida, quadriplegia, as well as idiopathic chronic constipation and fecal incontinence. It is primarily indicated in patients whose symptoms are refractory to conventional medical treatments. The main objective of the procedure is to achieve effective bowel evacuation by enabling antegrade colonic irrigation from the proximal to the distal colon. The ACE technique is based on mobilization of the appendix and its exteriorization as a stoma, referred to as an appendicostomy, usually positioned at the umbilicus or an appropriate abdominal quadrant. Lavage solutions administered through this channel create an antegrade flow within the colon, facilitating colonic cleansing. This method allows patients to control their defecation process, resulting in significant improvements in quality of life and social integration. Nevertheless, several complications have been reported, including stomal stenosis, leakage, channel obliteration, stomal prolapse, infection, bleeding, and perforation.

Material and Methods: A 27-year-old male patient who had undergone an ACE procedure at the age of seven due to Hirschsprung disease presented to the emergency department with severe abdominal pain following enema administration via the appendicostomy. Physical examination revealed diffuse abdominal tenderness and rebound tenderness in all four quadrants. Emergency imaging demonstrated diffuse intraperitoneal free fluid and free air, findings highly suggestive of intestinal perforation. Based on these findings, an urgent exploratory laparotomy was undertaken. During surgical exploration, approximately 200 mL of free intraperitoneal fluid was identified. All hollow visceral organs were systematically examined, yet no obvious perforation site was initially detected. Subsequently, methylene blue was administered through the umbilical ACE access. Extravasation of methylene blue was observed approximately two centimeters proximal to the appendicostomy, confirming the site of perforation. The appendicostomy was dismantled, and an appendectomy was performed.

Results: During the postoperative follow-up, the patient remained hemodynamically stable, exhibited no pathological drainage, and tolerated oral intake. Spontaneous passage of flatus and stool was observed. With normalization of clinical and laboratory parameters, the patient was discharged in good condition on postoperative day five, without complications observed.

Conclusion: The ACE procedure is relatively rare and is most often performed during childhood when suitable indications are present. Iatrogenic injuries occurring during lavage administration, as observed in the present case, represent one of the more common complications. In the majority of patients, these complications can be managed effectively with a simple appendectomy, leading to favorable clinical outcomes.

Keywords: ACE procedure, appendicostomy, perforation



Figure 1. CT imaging showing free intraperitoneal air and the appendicostomy.

CT: Computed tomography.

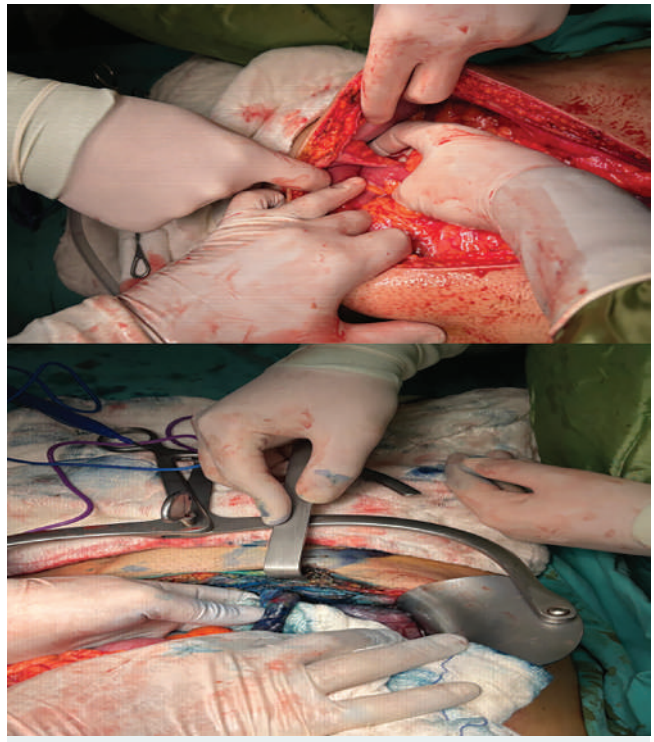


Figure 2. Extravasation of methylene blue administered through the appendicostomy.

[P-236]

Delayed breast reconstruction after mastectomy with lattisimus dorsi FLAP: Case report

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Objective: Breast cancer most commonly occurs between the ages of 50 and 69, but 5-7% of breast cancers are detected in women under 40. This highlights the importance of diagnosis and treatment management in younger breast cancer patients, given their longer life expectancy. Our case presentation aims to describe a 35-year-old patient who underwent mastectomy due to breast cancer and had late-stage reconstruction using a lattissimus dorsi flap.

Material and Methods: Case report.

Results: A 35-year-old female patient had a history of mastectomy and sentinel lymph node biopsy (SLNB) 3 years prior due to a 5 cm mucinous carcinoma in the right breast. She received adjuvant radiotherapy in the postoperative period. She presented at the 2nd postoperative year with no recurrence or metastasis detected and no additional adjuvant treatment planned. Since she had undergone mastectomy, a submuscular expander was initially placed. At 6 months postoperatively, due to insufficient skin width, reconstruction with a lattisimus dorsi flap and implant was planned. Because SLNB was performed during the first surgery, CT angiography was performed to evaluate the axillary region and the integrity of the lattisimus dorsi pedicle. No pathology was detected. Therefore, reconstruction with a lattisimus dorsi muscle-skin flap and implant was performed (Figures 1, 2). No pathology was detected during postoperative follow-up.

Conclusion: Oncoplastic surgery can currently be performed concurrently with mastectomy in suitable patients. However, late-stage reconstruction is also possible in patients for whom this is not feasible. In patients planned for this procedure, careful preoperative and multidisciplinary evaluation is crucial for the success of the surgery.

Keywords: Breast cancer, reconstruction, lattisimus dorsi flap

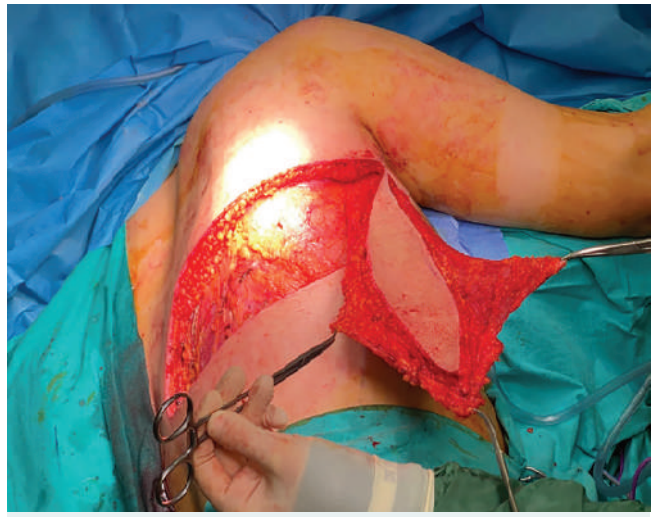


Figure 1. Prepared lattisimus dorsi muscle and skin flap.



Figure 2. Early postoperative image.

[P-237]

Papillary thyroid carcinoma associated with giant parathyroid adenoma: A case report introduction

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Objective: Primary hyperparathyroidism is a common endocrine disorder, most frequently caused by a parathyroid adenoma and characterized by hypercalcemia. Giant parathyroid adenomas are rare and are usually diagnosed with marked biochemical abnormalities. The coexistence of parathyroid adenoma and thyroid malignancy is a clinically important condition that requires careful evaluation. In this report, we present a case of a patient who underwent surgery for a giant parathyroid adenoma and was concomitantly diagnosed with papillary thyroid carcinoma.

Material and Methods: A fifty-year-old male patient was evaluated due to hypercalcemia and elevated parathyroid hormone (PTH) levels detected during routine examinations. Laboratory analysis revealed a serum calcium level of 12 mg/dL and a PTH level of 274 ng/L. Parathyroid scintigraphy demonstrated uptake consistent with a right inferior parathyroid adenoma. Neck ultrasonography showed a 1×1.2 cm solid nodule in the right thyroid lobe. Fine-needle aspiration biopsy was reported as benign. Neck and thoracic computed tomography revealed a 25×30 mm mass lesion in the right parathyroid region. The patient was scheduled for surgery.

Results: During surgery, a giant parathyroid adenoma weighing 13 grams and measuring 5.5×3×2 cm was excised. Right thyroid lobectomy was performed to allow complete removal of the parathyroid tissue. Histopathological examination confirmed the diagnosis of parathyroid adenoma. The thyroid lobectomy specimen revealed a 0.9 cm unifocal, classical-type papillary thyroid carcinoma. Surgical margins were negative, and no lymphovascular or perineural invasion was observed. Postoperatively, the patient was evaluated by general surgery and endocrinology departments, and completion thyroidectomy was not recommended.

Conclusion: Associated thyroid pathologies may be overlooked in cases of giant parathyroid adenoma. Therefore, careful evaluation of the thyroid gland is essential in patients undergoing surgery for primary hyperparathyroidism. Concomitantly detected papillary thyroid carcinomas may directly influence surgical strategy and follow-up planning. A multidisciplinary approach is crucial for optimal patient management.

Keywords: Primary hyperparathyroidism, giant parathyroid adenoma, papillary thyroid carcinoma, parathyroidectomy, thyroid malignancy

Table 1. Right thyroid; lobectomy

Papillary thyroid carcinoma, classic subtype
Tumor location: mid-pole
Tumor size: 0.9 cm
Tumor focality: unifocal
Lymphovascular invasion: not identified
Perineural invasion: not identified
Extrathyroidal extension: not identified
Surgical margins: negative

Table 2. Blood test result

Test	Results	Reference range	Unit
ALP	154	40-130	U/L
İron (serum)	56.76	33-193	µg/dL
Calcium	12.0	8.6-10.0	mg/dL
Phosphorus	3.29	2.5-4.5	mg/dL
Urea	32.4	16.6-48.5	mg/dL
Creatinine	1.21	0.70-1.20	mg/dL
PTH	274	15-65	bg/dL
25-hydroxy vitamine D	7.73	30-100	µg/dL
Calcium (spot urine)	21.38	0.9-37.9	mg/dL

ALP: Alkaline phosphatase, PTH: Parathyroid hormone.

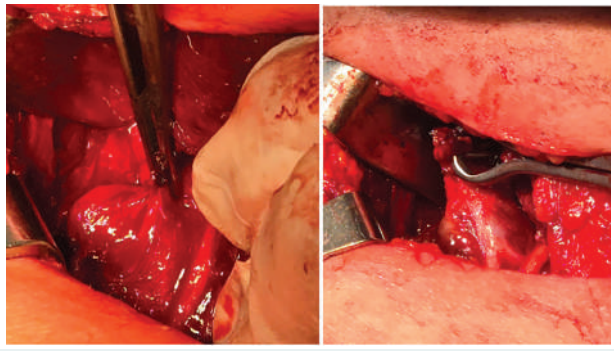


Figure 1. Peroperative imaging, preoperative radiologic imaging.



Figure 2. In neck and thorax CT perfomed 25x30 mm nodular lesion in right parathyroid lodge ehind the thyroid tissue.

CT: Computed tomography.



Figure 3. Pathological findings.

[P-238]

Rare coexistence of papillary and medullary thyroid carcinomas in a patient with Graves' disease

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Objective: Graves' disease (GD) is a common cause of hyperthyroidism and is occasionally associated with thyroid malignancies, particularly papillary thyroid carcinoma (PTC). Medullary thyroid carcinoma (MTC) rarely coexists with GD. The synchronous occurrence of multiple distinct thyroid carcinoma subtypes in a single patient is extremely uncommon.

Material and Methods: In this study, the clinical, laboratory, and imaging findings of a patient who underwent total thyroidectomy for GD were retrospectively analyzed. The surgical specimen was subjected to detailed histopathological and immunohistochemical examination, and tumor subtypes were classified according to established pathological criteria. Postoperative follow-up included clinical assessment and measurement of serum calcitonin and carcinoembryonic antigen (CEA) levels.

Results: A 36-year-old female with GD underwent total thyroidectomy. Preoperative ultrasound revealed multiple benign-appearing nodules (TI-RADS 2). Histopathology unexpectedly revealed three distinct malignancies: Well-differentiated high-grade thyroid carcinoma (7 mm, right lobe), classic PTC (4.8×2×2 mm, left lobe), and bilateral MTC (2 mm right, 4 mm left). Immunohistochemistry confirmed the distinct tumor subtypes. Postoperative recovery was uneventful, and the patient was discharged on the first day. Levothyroxine therapy was initiated. At 2-year follow-up, the patient remains disease-free with negative CEA and calcitonin levels. This case underscores that GD may coexist with multiple, histologically distinct thyroid malignancies, even when imaging suggests benign disease. The incidental detection of PTC, well-differentiated carcinoma, and MTC highlights the importance of thorough histopathological examination and consideration of total thyroidectomy, particularly in endemic regions. Postoperative follow-up must include surveillance for MTC via calcitonin and CEA monitoring.

Conclusion: Clinicians should be aware that GD does not exclude the presence of multiple thyroid cancers. Comprehensive surgical and pathological evaluation ensures accurate diagnosis and guides appropriate postoperative management.

Keywords: Graves' disease, papillary thyroid carcinoma, medullary thyroid carcinoma

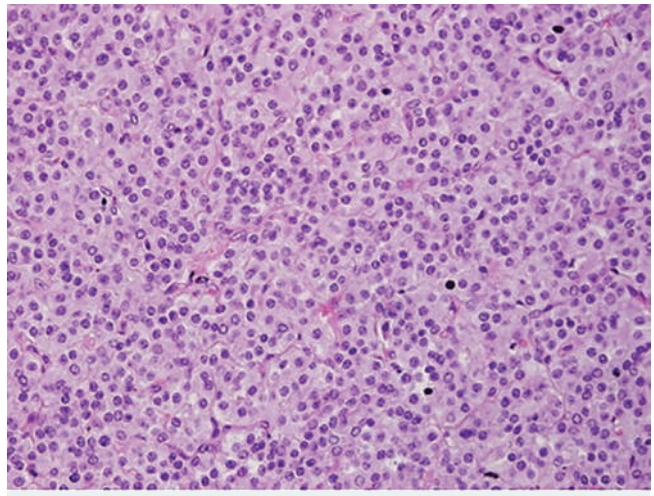


Figure 1. Papillary thyroid carcinoma.

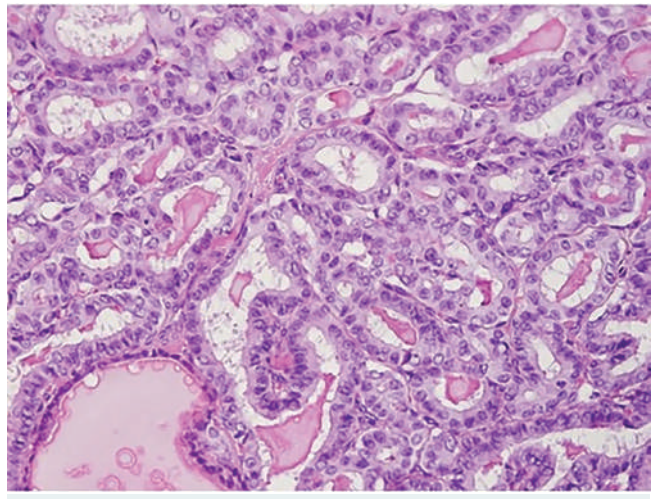


Figure 2. Medullary thyroid carcinoma.

[P-239]

Intraperitoneal migration of hepatic hydatid cyst with intact daughter cysts: Case report and systematic review translate to Turkish

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Objective: Intraperitoneal "delivery" of an intact hepatic hydatid endocyst—also termed spontaneous exovesiculation or hydatid delivery—is an exceptionally rare complication of cystic echinococcosis. Because the laminated (germinative) membrane remains unbroken, the presentation may be deceptively indolent and lacks the dramatic anaphylaxis and diffuse peritoneal seeding seen with frank rupture. We report a contemporary case and summarise the available evidence through a PRISMA 2020-compliant systematic review.

Material and Methods: PubMed, Embase, Web of Science and Google Scholar were searched from inception to December 2025. We included peer-reviewed reports of hepatic hydatid cysts in which the pericyst failed but the endocyst migrated intraperitoneally intact; cases with spillage/disseminated peritoneal hydatidosis or alveolar echinococcosis were excluded. Of 38 records screened, 11 published cases (1998-2023) met inclusion criteria; together with the present case, 12 cases were analysed. Most originated from the right lobe and gravitated to the pelvis (approximately 5-20 cm). Across reports, anaphylaxis and secondary peritoneal implantation were not observed, and surgical management was uniformly curative with no reported mortality or recurrence.

Results: A 67-year-old woman with hypertension and advanced chronic kidney disease was found to have multiple hepatic cysts. Initial indirect haemagglutination assay (IHA) was negative (31.01.2025), and the lesions were followed as presumed benign. A CT scan dated 25.09.2025 demonstrated hepatic cysts but no pelvic lesion. In December 2025, a new cystic pelvic mass was detected during gynaecological follow-up. Repeat serology became strongly positive (IHA 1:2560). MRI on 10.12.2025 demonstrated a cystic lesion in the pouch of Douglas with a classic "water-lily" sign, alongside a collapsed hepatic cyst cavity, consistent with intraperitoneal migration of an intact daughter cyst. Albendazole was initiated and surgery was performed on 26.12.2025. Laparoscopic exploration was converted to open laparotomy due to dense adhesions. An intact free hydatid cyst adherent to the ileum was removed en bloc with a short ileal segment followed by primary anastomosis. Concomitant hepatic cyst cavities were unroofed, evacuated, irrigated with scolicidal solution, and obliterated with omentoplasty. Recovery was uneventful, and no recurrence was observed at 2-month follow-up under antiparasitic therapy.

Conclusion: In endemic settings, the combination of a new pelvic cyst and a collapsing hepatic cyst cavity should prompt consideration of intact hydatid migration, even with previously negative serology. Early definitive surgery, meticulous anti-spillage technique, and adjunct albendazole appear to confer excellent outcomes.

Keywords: Cystic echinococcosis, hydatid cyst, intraperitoneal migration

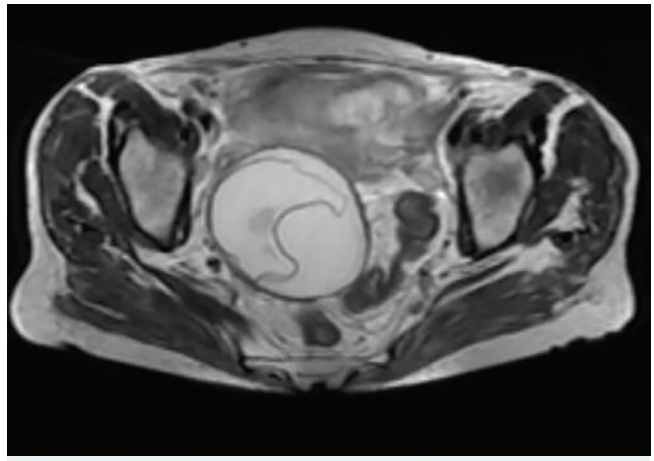


Figure 1. MRI image of hydatid cyst in the pouch of Douglas.

The cyst is seen as a rounded, well-defined fluid-filled structure situated between the uterus and the rectum in the cul-de-sac. It measures approximately 5 cm and has a multilayered appearance: note the detached parasitic membrane floating within the cyst (thin wavy hypointense line inside the cyst), a hallmark of hydatid cyst (sometimes referred to as the "water-lily sign"). The cyst exerts pressure on the uterus anteriorly and the rectosigmoid posteriorly. There is a mild rim of inflammatory reaction around the cyst, but no daughter cysts are obvious in the pelvis. This MRI conclusively demonstrates the secondary pelvic hydatid cyst that developed after the hepatic cyst rupture - a migration of hydatid elements leading to a new cyst implantation in the pelvic peritoneum peroperative view, *in situ*.

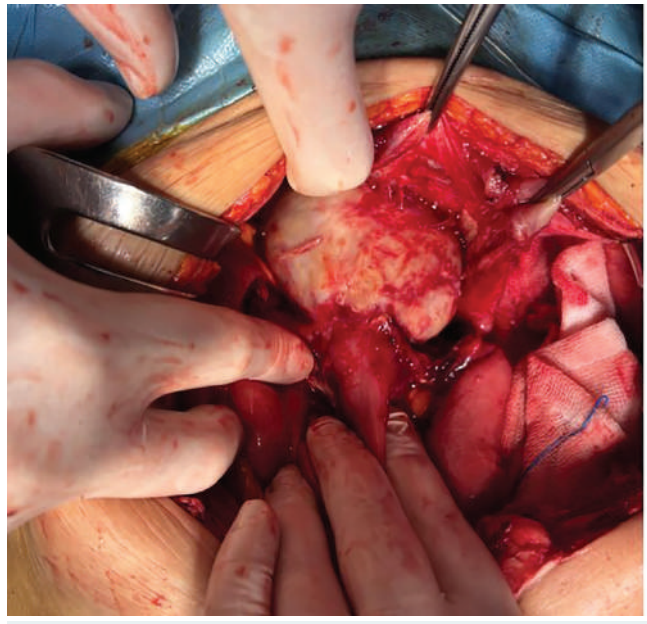


Figure 2. Intact pelvic hydatid cyst occupying the pouch of Douglas.

Table 1. Published cases of intraperitoneal migration of an intact hepatic hydatid cyst, with key features and outcomes

Case (year)	Age/sex	Liver cyst location	Cyst size	Migrated cyst location	Presentation	Management	Outcome
Arslan et al. (1998)	20 M	Left lobe (inferior surface)	~20 cm	Free in pelvis (causing bladder compression, ureteral obstruction)	Acute intestinal obstruction (bilateral hydronephrosis, uremia)	Laparotomy; intact cyst removal; hepatic pericyst left *in situ*	Recovered (no recurrence)
Sharma & Gupta (2000)	43 M	Left lobe	~20 cm	Free in peritoneum (pelvic)	Acute abdomen with peritoneal signs	Laparotomy; cyst excision; peritoneal washout	Recovered (no recurrence)
Karakaya et al. (2007)	35 F	Right lobe	~5 cm	Free in peritoneum (pelvis)	Mild abdominal pain only	Laparotomy; cyst removal	Recovered
Acer/Karnak et al. (2008)	10 F	Right lobe	~10 cm	Free in pelvis (POD)	Acute abdomen (sudden RUQ pain)	Laparotomy; cyst removal; liver repair	Recovered
Kahraman et al. (2016)	27 M	Right lobe	8 cm	Mobile in peritoneal cavity	Acute localized abdominal pain	Laparotomy; cystectomy; partial pericystectomy	Recovered
Idrissa et al. (2017)	6 M	Right lobe (segment VI)	7×5 cm	Free in pelvis (POD)	Acute pelvic pain & distension	Laparotomy; intact cyst removal; peritoneal lavage	Recovered
Ashebir et al. (2019)	25 F	Left lobe (with bile leak)	13×15 cm	Free in pelvis	Acute peritonitis (generalized pain, fever)	Laparotomy; cyst removal; lavage; omentoplasty	Recovered (albendazole given)
Markov et al. (2019)	30 M	Right lobe (+ small left lobe cysts)	10×13 cm	Free in lower abdomen (above bladder)	Subacute abdominal pain; mild hemoperitoneum	Laparotomy; cyst removal; plus aspiration of remaining liver cysts	Recovered (albendazole given)
Mehri et al. (2021)	85 M	Right & left lobes (multiple cysts)	10×13 cm	Free in pelvis (over bladder dome)	Dull generalized abdominal pain (chronic hydatidosis)	Laparotomy; intact cyst excision; drainage of liver cysts	Recovered (albendazole given)
Baccouch et al. (2021)	63 F	Left lobe (segment IV)	12×6 cm	Free in pelvis (POD)	2 months RUQ pain, acute exacerbation	Urgent laparotomy; hepatic pericyst resection; intact cyst removal	Recovered (no recurrence at 7 mo)
Ben Salem et al. (2023)	77 F	Left lobe	~10 cm	Free in peritoneum (bilobed cyst)	Acute RUQ pain (no trauma)	Laparotomy; intact cystectomy; partial pericystectomy	Recovered (albendazole 2 mo)
Present Case (2025)	67 F	Right lobe (segment VI; plus cysts in III, VII)	~7 cm (daughter cyst)	Free in pelvis (POD)	Chronic pelvic mass & pain (silent liver rupture)	Laparoscopy (converted to open); cyst resection with adherent ileal segment; liver cysts unroofed & omentoplasty	Recovered (albendazole given)

RUQ: Right upper quadrant, POD: Pouch of Douglas.

[P-240]

Mechanical ileus secondary to intestinal amyloidosis: A rare case report

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Objective: Amyloidosis is a heterogeneous disease characterized by extracellular deposition of misfolded protein fibrils in various organs. Although gastrointestinal involvement is rare, it may cause abdominal symptoms and motility disorders. Small bowel involvement due to submucosal and vascular amyloid deposition can lead to luminal narrowing and ileus. Only a few cases of mechanical obstruction secondary to intestinal amyloidosis have been reported.

Material and Methods: A 58-year-old woman presented with six days of abdominal pain, distension, nausea, vomiting, absence of flatus and stool, and syncope. Her history included hypertension. Physical examination showed a distended abdomen with diffuse tenderness and decreased bowel sounds, while laboratory tests revealed leukocytosis. Contrast-enhanced CT demonstrated marked jejunal distension with symmetrical wall thickening and partial asymmetry at the transition point. Wall thickening up to 1 cm was also observed in the ileal loops. The colon appeared collapsed, with mesenteric fat stranding and mild pelvic free fluid.Additionally, a suspicious 2.5 cm hypodense hepatic lesion and a 4 cm pathological right axillary lymphadenopathy were detected, suggesting metastatic malignancy. Emergency surgery revealed marked small bowel wall thickening and congestion. Approximately 100 cm of mechanically obstructed small intestine was resected starting 40 cm distal to the ligament of Treitz, followed by end-to-end anastomosis. Histopathology showed widespread amyloid deposits in the mesenteric tissue and intestinal wall, consistent with intestinal amyloidosis. The patient was followed for 20 days postoperatively and referred for systemic evaluation.

Results: Although gastrointestinal amyloidosis is rare, it can lead to serious complications. Amyloid deposition in the bowel wall causes rigidity, motility disturbances, and luminal narrowing, while vascular involvement may contribute to ischemia. Radiological findings are non-specific and often mimic malignant disease, as observed in our case.Treatment depends on clinical presentation. While supportive therapy may be sufficient in mild cases, surgical resection is required in patients who develop mechanical obstruction. Multidisciplinary evaluation is essential to assess systemic involvement.

Conclusion: Although intestinal amyloidosis is rare, it may present with serious surgical emergencies such as mechanical ileus. As it can radiologically mimic malignancy, it should be considered in the differential diagnosis. Definitive diagnosis is established by histopathological examination, and surgical resection is necessary in cases with obstruction.

Keywords: Amyloid accumulation, intestinal amiloidozis, mechanical obstruction



Figure 1. Macroscopic appearance of the resected small bowel segment causing mechanical obstruction secondary to intestinal amyloidosis.

[P-241]

Approach to the patient with superior mesenteric artery syndrome

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Objective: Superior mesenteric artery syndrome (SMAS) is a rare cause of upper gastrointestinal obstruction resulting from compression of the third part of the duodenum between the abdominal aorta and the superior mesenteric artery. Clinical symptoms are often non-specific and require high index of suspicion for diagnosis. This case report shares the successful management of SMAS-related obstruction with surgical bypass in an elderly patient with a history of prolonged oral intake disorder and weight loss.

Material and Methods: A 71-year-old female patient presented with long-standing oral intake disorder, weight loss, nausea, and vomiting. She sought emergency care due to a marked increase in symptoms over the past week and the development of severe oral intake disorder. Physical examination revealed abdominal distension. Computed tomography (CT) of the abdomen showed severe gastric distension extending into the pelvis. A nasogastric tube was inserted, and approximately 4000 cc of bilious contents were drained during the initial decompression. Upper gastrointestinal endoscopy performed to clarify the etiology revealed no significant pathology. However, an average of 1500 cc of bilious drainage continued daily from the nasogastric tube. An abdominal CT scan performed with oral contrast alone showed that the oral contrast progressed to the third portion of the duodenum but did not pass distally. A decision was made to perform surgical exploration with the differential diagnoses of obstruction/mass at the SMAS and Treitz levels.

Results: Intraoperative observation revealed that the SMA was compressing the third portion of the duodenum, causing mechanical obstruction. During surgery, an antecolic Roux-en-Y gastrojejunostomy was performed to restore passage by altering the Treitz anatomy. No complications were observed in the postoperative period. A liquid diet was started on postoperative day 4, and solid food was introduced on postoperative day 6 after the patient tolerated it well. The patient was discharged on postoperative day 8 with recommendations following an uneventful clinical course.

Conclusion: The absence of significant pathology on endoscopy and the continued high-volume bilious nasogastric drainage, along with contrast retention at the D3 level on oral contrast-enhanced CT, supported the diagnostic approach for SMA. The literature indicates that CT, along with SMA-aorta angle and distance measurement, is considered the gold standard. Conservative treatment aims for weight gain through decompression, postural therapy, and nutritional support. However, in selected cases, the conservative approach may fail, and surgical treatment becomes necessary. At this point, current sources emphasize that conservative treatment may fail and that surgery should not be delayed.

Keywords: Superior mesenteric artery syndrome, nasogastric drainage, vomiting



Figure 1. Contrast-enhanced abdominal tomography.



Figure 2. Contrast-enhanced abdominal tomography.

[P-242]

Case report: Gastric cellular angiofibroma

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Objective: Cellular angiofibroma (CAF) is a rare, generally considered to have a good prognosis, mesenchymal tumor. It is mostly found in the vulvo-vaginal region in women and in the inguino-scrotal region in men. Although extragenital localizations have been reported, there are no documented cases of CAF in the stomach in the literature. In this case presentation, we report a gastric CAF lesion detected in a patient who underwent laparoscopic gastric wedge resection with a preliminary diagnosis of gastrointestinal stromal tumor (GIST) originating from the stomach.

Material and Methods: A 75-year-old man with IgG kappa multiple myeloma was found to have a 2.5 cm submucosal gastric polyp during endoscopy for dyspepsia. Endoscopic ultrasonography showed a heterogeneous, hypoechoic lesion from the muscularis propria, measuring 23x20 mm. Biopsies revealed no diagnostic tissue. CT scan showed a 35x22x16 mm hypodense lesion in the stomach's small curvature, suggestive of GIST, with no metastasis. A type 3 hiatal hernia was also identified. The patient had laparoscopic wedge resection; a 2 cm polyp on the lesser curvature was excised. The hiatal defect was repaired with crurorrhaphy, mesh, and Toupet fundoplication.

Results: Pathology showed a 4x2.3x2.5 cm homogeneous, lobulated tumor 3 mm from the margin, consistent with CAF. Immunohistochemistry: Actin, desmin, h-Caldesmon, calponin negative; CD34, CD117 positive; DOG1, S100 negative; Ki-67 <10%; PR positive; SDH-B preserved.

Conclusion: CAF generally shows a good prognosis when excised with negative margins. To date, no studies reporting metastasis have been published in the literature. Nevertheless, cases of recurrence after excision with negative margins have been reported. Therefore, follow-up is important. In our case, the lesion was localized on the lesser curvature of the stomach and was identified as a subepithelial lesion, mimicking GIST on both CT and endoscopic imaging. In our case, DOG1 was negative, SDH-B was preserved, and CKIT was negative, but positive in mast cells. No signs of recurrence were observed during postoperative follow-up.

Keywords: Cellular angiofibroma, subepithelial lesion, gastric

[P-243]

Surgical management of superior mesenteric artery syndrome: A case series of 5 patients including a rare malignancy association

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Objective: Superior mesenteric artery syndrome (SMAS), also known as Wilkie's syndrome, is a rare cause of upper gastrointestinal obstruction characterized by the extrinsic compression of the third portion of the duodenum between the abdominal aorta and the superior mesenteric artery. Pathologically, defined by a significant reduction in the aortomesenteric angle (AMA) to below 25° (from a physiological mean of approximately 38°) and a decrease in the aortomesenteric distance (AMD) to less than 10 mm.

Material and Methods: This retrospective case series evaluated five patients surgically treated with a preliminary diagnosis of SMAS at a single center. Demographic characteristics, clinical presentation, radiological findings (AMA, AMD), surgical techniques, and postoperative outcomes were assessed.

Results: The study included five patients (3 females, 2 males) aged 19-45 years (mean age 29.6 years). All presented with gastrointestinal obstruction symptoms, including nausea, vomiting, abdominal pain, weight loss, and postprandial exacerbation. Postprandial nausea and vomiting were present in all cases; three also had preprandial nausea. Computed tomography (CT) confirmed SMAS, demonstrating an AMA of 14°-20.7° and a maximum AMD of 6 mm. Surgical management consisted of laparoscopic Strong's procedure (n=1), laparoscopic Roux-en-Y duodenojejunostomy (n=1), resection with duodenojejunostomy (n=1), laparoscopic side-to-side duodenojejunostomy (n=1), and combined laparoscopic Strong's procedure and duodenojejunostomy (n=1). One patient had concomitant Nutcracker syndrome. In another patient with a preoperative diagnosis of SMAS, an intraoperative malignant epithelial tumor was detected. Case 1: A 19-year-old female with a 5-year history of postprandial pain and vomiting, and recent hematuria, had a BMI of 15.22 kg/m². Imaging showed an AMA of 16° and AMD of 4 mm, with left renal vein compression consistent with Nutcracker syndrome. Laparoscopic duodenojejunostomy was performed. Case 2: a 38-year-old female with valvular heart disease presented with intermittent nausea and vomiting for one year and minimal weight loss (2.5 kg). CT demonstrated an AMA of 19° and AMD of 5.3 mm. Intraoperatively, a proximal jejunal mass not detected on preoperative imaging was identified; resection of the distal duodenum and proximal jejunum with side-to-side duodenojejunostomy was performed. Histopathology revealed adenocarcinoma with focal squamous differentiation, serosal invasion, and three metastatic lymph nodes (pT4N2).

Conclusion: SMAS should be considered in patients with rapid weight loss and upper gastrointestinal obstruction symptoms. Laparoscopic duodenojejunostomy remains the standard treatment, a single anastomosis is generally sufficient and Roux-en-Y diversion is usually unnecessary. Strong's procedure with Treitz ligament repositioning may be considered in selected cases. Even when radiologic criteria for SMAS are met, alternative causes, including malignancy, must be excluded.

Keywords: Wilkie syndrome, nutcracker, superior mesenteric artery syndrome

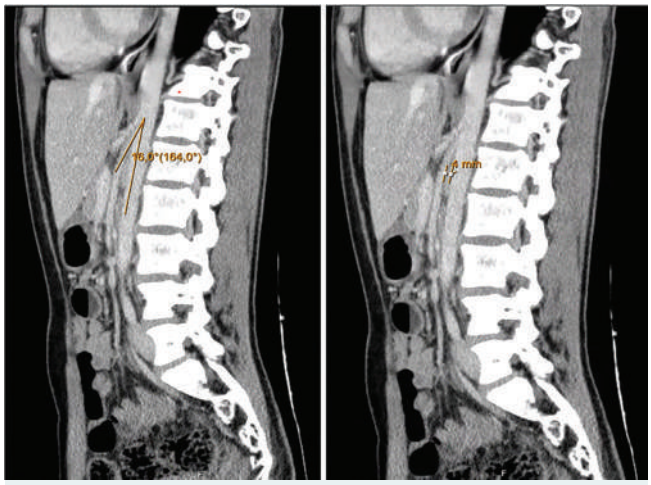


Figure 1. SMA syndrome; aortamesenteric angle and distance.

SMA: Superior mesenteric artery.



Figure 2. Nutcracker syndrome; left renal vein compression by the SMA.

SMA: Superior mesenteric artery.

[P-244]

Perforated jejunal adenocarcinoma arising in jejunal diverticulitis: A rare case report

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Objective: Jejunal diverticulosis is a rare pathology of the intestine, affecting elderly patients and usually remaining asymptomatic. However, it may lead to complications such as diverticulitis, perforation, bleeding, and obstruction. The diagnosis of acute jejunal diverticulitis is challenging due to non-specific onset and the limited sensitivity of imaging modalities, and it is often established during surgery. Small bowel adenocarcinomas account for only 1-3% of gastrointestinal malignancies, with jejunal localization being particularly rare. Adenocarcinoma arising from a jejunal diverticulum is exceedingly uncommon and presents with perforation or acute abdomen leading to delays in diagnosis and treatment. In this report, we present a rare case of jejunal adenocarcinoma presenting with diverticulitis and perforation, discussed in light of the current literature.

Material and Methods: This study is a case report of a patient presenting with acute abdomen and evaluated with a preliminary diagnosis of gastrointestinal perforation. Clinical findings, laboratory parameters, and radiological imaging (computed tomography) were reviewed. Intraoperative findings were recorded during surgery. Specimens were evaluated histopathologically and immunohistochemically.

Results: An 89-year-old male presented with a 10-day history of abdominal pain, worsening over the last two days, accompanied by oral intolerance and clinical deterioration. Associated symptoms included nausea, vomiting, and fever. Patient history included congestive heart failure, atrial fibrillation, hypertension, and type 2 diabetes mellitus. On admission, blood pressure was 90/50 mmHg, respiratory rate was 30/min, body temperature was 39 °C, and heart rate ranged 100-110 beats/min. Physical examination revealed generalized abdominal tenderness, rebound and signs of peritoneal irritation. Laboratory tests showed a CRP level of 350 mg/L and a leukocyte count of 23,000/mm^3. Computed tomography demonstrated diffuse free fluid and air throughout the abdomen (Figure 1). Emergency surgery was planned. Empirical intravenous piperacillin-tazobactam was administered. Exploration revealed generalized fecal peritonitis, a 7×7 cm tumoral mass in the cecum, and perforated jejunal diverticulum located 20 cm distal to the ligament of Treitz (Figure 2). Segmental small bowel resection with side-to-side anisoperistaltic stapled anastomosis was performed. Right hemicolectomy and end ileostomy were carried out for tumoral mass. The patient was under high-dose inotropic support postoperatively. Patient died on postoperative day 3 due to septic shock-related multiple organ dysfunction syndrome. Histopathology revealed moderately differentiated adenocarcinoma in both the cecum and the jejunal diverticulum.

Conclusion: Jejunal diverticulosis should be considered in cases of unexplained small bowel obstruction or perforation. In the presence of diverticulosis-associated masses detected intraoperatively, the possibility of malignancy should not be overlooked, and surgical resection should be performed with oncological principles.

Keywords: Acute abdomen, jejunal diverticulum, jejunal perforation, rare case, small bowel adenocarcinoma

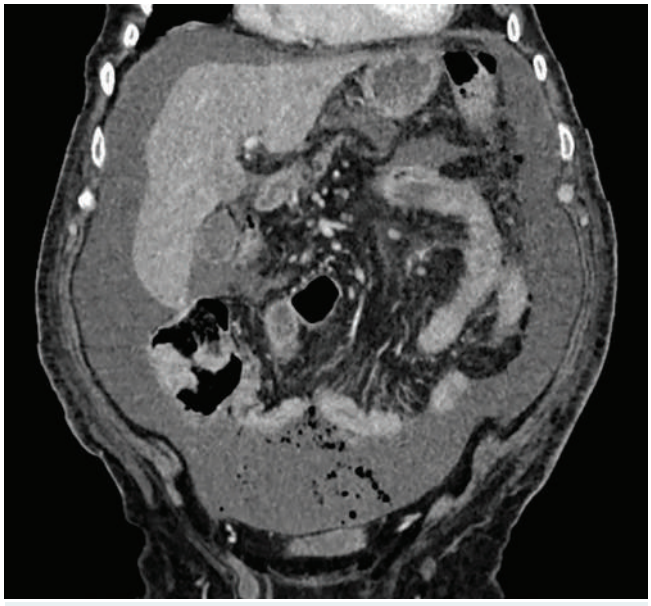


Figure 1. Preoperative CT.

CT: Computed tomography.

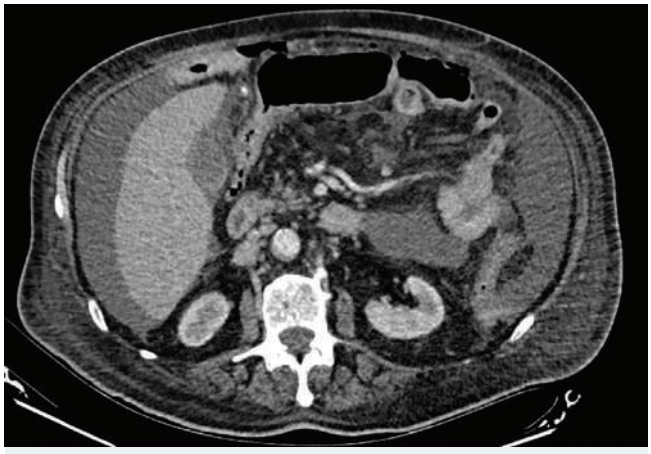


Figure 2. Preoperative CT.

CT: Computed tomography.

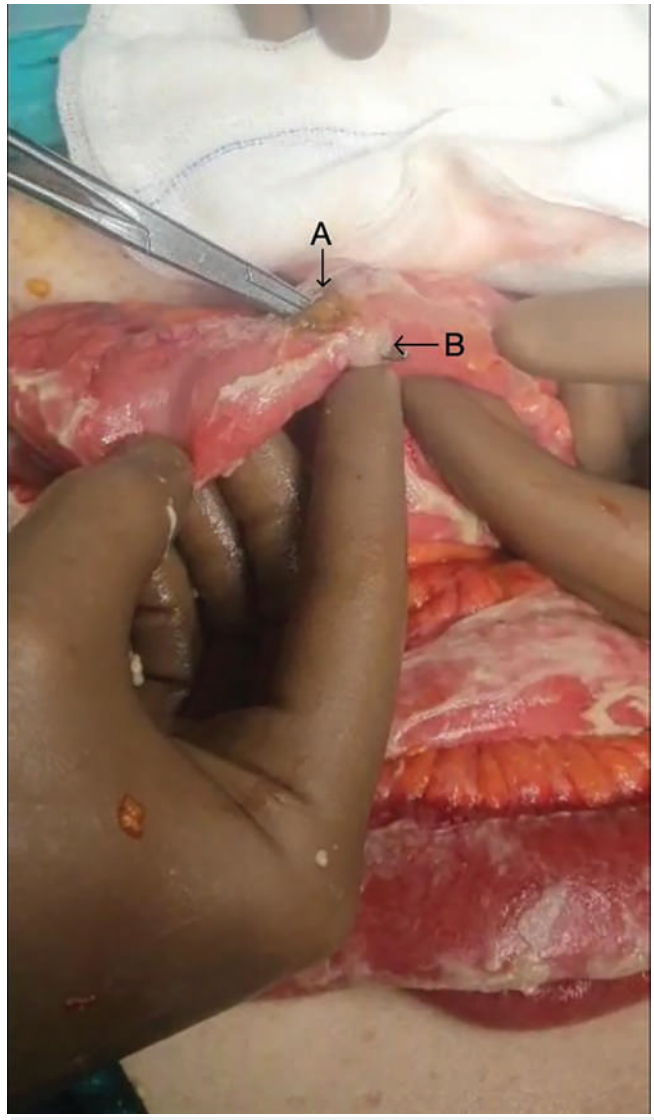


Figure 3. A: Intraoperatively identified perforated segment B: jejunal diverticulitis.

[P-245]

Spontaneous adrenal hematoma presenting with abdominal pain in an elderly patient and complicated by delayed adrenal insufficiency: A case report

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Objective: Spontaneous adrenal hemorrhage (adrenal hematoma) is a rare but potentially life-threatening condition associated with significant morbidity and mortality. It often presents with non-specific symptoms such as abdominal or flank pain, nausea, and fatigue, leading to delayed diagnosis. Reported etiologies include trauma, sepsis, coagulopathies, anticoagulant use, and underlying adrenal lesions, with increased risk in elderly patients due to comorbidities. Despite its rich arterial supply, the adrenal gland has limited venous drainage, predisposing it to hemorrhage under stress conditions. Computed tomography (CT) is the primary diagnostic modality. Conservative management is generally sufficient in hemodynamically stable patients without evidence of active bleeding. Recent reports have highlighted an association between spontaneous adrenal hemorrhage and direct oral anticoagulant (DOAC) therapy.

Material and Methods: An 80-year-old woman presented with a two-day history of diffuse abdominal pain. Her medical history included hypertension, diabetes mellitus, chronic kidney disease, and a prior ischemic cerebrovascular event. She was receiving rivaroxaban therapy. Physical examination revealed stable vital signs and a benign abdominal examination. Non-contrast CT performed at an outside facility demonstrated a large hematoma involving the left adrenal gland and perirenal region. The patient was admitted with a diagnosis of spontaneous adrenal hematoma and managed conservatively.

Results: Hemoglobin level decreased from 12 g/dL at initial presentation to 9 g/dL on admission but remained stable on serial measurements. Contrast-enhanced CT showed no evidence of active contrast extravasation, and the hematoma measured up to 8×15 cm. On hospital day eight, the patient developed acute mental status changes, hypotension, and tachycardia. Hemoglobin levels remained stable, and follow-up imaging showed no progression of hemorrhage. Endocrinology consultation raised suspicion for adrenal insufficiency secondary to adrenal hematoma. Intravenous hydrocortisone therapy was initiated, resulting in rapid clinical improvement. The patient was transferred from the intensive care unit back to the ward and subsequently discharged in good condition.

Conclusion: Spontaneous adrenal hematoma is a rare and diagnostically challenging cause of abdominal pain, particularly in elderly patients receiving anticoagulant therapy. Conservative management is safe and effective in hemodynamically stable patients, even in cases of large hematomas. However, clinicians should remain vigilant for delayed adrenal insufficiency. Prompt recognition and early corticosteroid replacement therapy are critical and may be life-saving.

Keywords: Adrenal hemorrhage, adrenal insufficiency, conservative management, direct oral anticoagulants (DOACS), spontaneous adrenal hematoma

[P-246]

Superficial abdominal venous thrombophlebitis: A rare clinical case

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Objective: Superficial thrombophlebitis most commonly affects the veins of the lower extremities, particularly the great saphenous vein. However, superficial abdominal veins—such as the thoracoepigastric and superior epigastric veins—are rarely involved. This condition is also described in the literature as abdominal Mondor disease. First reported by Mondor in 1939, it was most frequently described in the veins of the chest wall, whereas involvement of the abdominal wall is exceedingly rare. Risk factors include local trauma, surgical interventions, infection, malignancy, and hypercoagulable states. Clinically, it may present as a painful, cord-like lesion and can be misdiagnosed as an abdominal abscess, hernia, or intra-abdominal pathology. In this report, we present a case of superficial abdominal vein thrombophlebitis that developed following minor trauma.

Material and Methods: The clinical evaluation, laboratory tests, and imaging findings of a patient presenting with pain and swelling in the left upper quadrant were retrospectively reviewed. Superficial soft tissue and Doppler ultrasonography were used for diagnostic purposes. The treatment approach and short-term clinical course were also evaluated.

Results: A 51-year-old female patient presented to our outpatient clinic with complaints of pain and swelling in the left upper quadrant that developed after minor trauma caused by a branch strike approximately one week earlier. Her medical history was significant for hypertension and chronic hepatitis B infection, and she was receiving antiviral therapy (Viratt®). Physical examination: A linear, cord-like subcutaneous lesion with tenderness on palpation was detected in the left upper quadrant. No erythema or fluctuation was observed. Laboratory findings: hematological and biochemical parameters were within normal limits. Ultrasonography: Superficial soft tissue ultrasonography revealed a non-compressible millimetric superficial venous structure with increased surrounding echogenicity in the left upper quadrant, consistent with thrombophlebitis. No extension into the deep venous system was observed. Treatment and follow-up: Conservative treatment including non-steroidal anti-inflammatory drugs, local warm application, and rest was initiated. Anticoagulation therapy was not considered necessary. At the one-week follow-up, clinical findings had markedly regressed.

Conclusion: Superficial abdominal vein thrombophlebitis is a rare condition that can easily be misdiagnosed. It should be considered in the differential diagnosis, particularly in patients presenting with a cord-like lesion and a history of trauma. Doppler ultrasonography is indispensable for diagnosis. Most cases resolve uneventfully with conservative treatment.

Keywords: Abdominal Mondor disease, superficial venous thrombophlebitis, abdominal wall, minor trauma, Doppler ultrasonography

[P-247]

Giant infected thyroid mass complicated by vascular injury: A surgical challenge

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Objective: Thyroid gland pathologies are common diseases, but giant thyroid masses complicated by infection, skin penetration, and major vascular involvement are rare today. Large goiters or malignant thyroid lesions can lead to complications such as airway obstruction, vascular injury, and life-threatening postoperative neck hematoma. Here, we present a complex case of a patient who presented to the emergency department with necrosis and bleeding in a neck mass, underwent surgery for a giant thyroid mass.

Material and Methods: An 85-year-old female patient presented with a progressively growing and bleeding mass in the anterior neck region. Her medical history included hypothyroidism. A computed tomography scan of the neck revealed a mass lesion approximately 83×107 mm, extending anteriorly into the subcutaneous tissue and skin. The lesion contained scattered air densities and calcified foci. These findings were considered consistent with an abscess collection associated with malignancy.

Results: The patient underwent surgery for total thyroidectomy. The cystic components of the thyroid gland had penetrated the skin and showed significant inflammatory adhesions to surrounding tissues. During dissection of the right lobe of the thyroid, the internal jugular vein was injured due to the fragility of the tissues. The injury was primarily repaired. The parathyroid glands were preserved. Recurrent laryngeal nerve monitoring was performed intraoperatively. Total thyroidectomy was completed. In early postoperative period, the patient developed acute cervical swelling. Due to the patient's tracheotomy, airway security was ensured, and neck exploration was decided. Approximately 100 cc hematoma was drained. There was no active arterial or venous bleeding focus. Minimal leakage between tissue planes was controlled with electrocautery. The tracheotomy opening was repaired, and the patient was admitted to the intensive care unit.

Conclusion: In this case, despite successful vascular repair, the development of a postoperative hematoma without the detection of an active bleeding focus highlights the importance of diffuse capillary leakage in inflamed surgical areas. This case emphasizes the importance of careful dissection in infected and malignant thyroid diseases, being alert to the risk of tracheomalacia due to compression of giant thyroid masses, being prepared for vascular repair, close postoperative monitoring in high-risk patients, and the decision for early surgical re-exploration. Successful management was achieved through timely vascular repair, careful postoperative monitoring, and early re-exploration. Awareness of potential complications in such complex thyroid surgeries will improve surgical outcomes.

Keywords: Giant thyroid lesion, emergancy surgery, bleeding



Figure 1. An 85-year-old female patient presented with a progressively growing mass and bleeding in the anterior neck region.

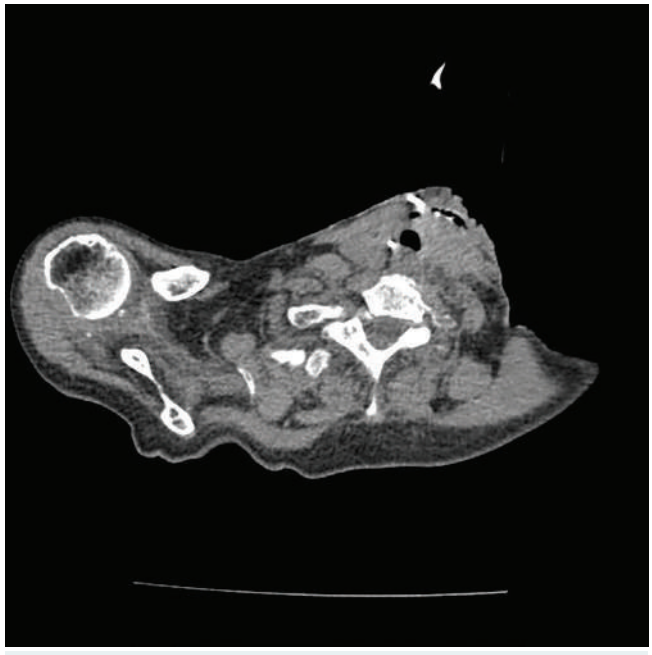


Figure 2. A contrast-enhanced neck computed tomography scan revealed a mass lesion approximately 83×107 mm in size, filling the thyroid gland lodge and extending anteriorly to the subcutaneous tissue and skin. The lesion contained scattered air densities and calcified foci. These findings were onsidered consistent with an abscess collection accompanying malignancy.

[P-248]

A rare cause of necrotizing fasciitis: Vaginal perforation

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Objective: Necrotizing fasciitis (NF) is a rare but life-threatening soft tissue infection affecting the skin, subcutaneous tissues, and fascia, characterized by rapid progression and high mortality. Early diagnosis and aggressive surgical treatment are critical for prognosis. This poster presents a case of extensive NF extending from the vagina to the subcostal space of the anterior abdominal wall, requiring repeated debridement.

Material and Methods: A 46-year-old female patient presented to our emergency department with pain and tenderness in the suprapubic area. Initial assessment revealed a moderate to good general condition and stable vital signs. Redness and foul-smelling discharge were present in the suprapubic area. History indicated that an abscess had been drained from this area a few days prior. Physical examination revealed tenderness in the suprapubic region and an opening approximately 4 cm in size. Digital examination showed that this opening extended from the anterior vaginal wall to the urethra. The urethra was assessed as intact. The patient showed elevated infectious markers and decreased albumin (WBC: 18.5 K/uL, Hgb: 13 g/dL, alb: 2.4 g/dL, CRP: 580 mg/L, proc: 2.03 ug/L). Computed tomography revealed subcutaneous emphysema starting in the suprapubic region, continuing under the skin along the muscle planes of the left lateral abdominal wall, and extending posteriorly into the lumbar region, along with accompanying increased density in the subcutaneous fatty planes. This appearance did not extend into the intra-abdominal area but did extend into the left inguinal region.

Results: The patient was found to have a fasciitis area extending from the left femoral head to the left subcostal space. After obtaining culture and pathology samples, the necrotic areas were debrided.In the postoperative period, the patient was empirically started on vancomycin/meropenem/metronidazole and frequent daily debridement and dressing changes were performed. Coryneform bacilli were cultured from the patient's blood. No growth was detected in cultures taken from the debrided areas. During this time, electrolyte imbalances and low albumin levels were treated with appropriate replacements. After the progression of necrosis was halted with frequent debridement and dressing changes, the patient was referred to plastic reconstructive and aesthetic surgery for appropriate flap surgery due to the very large area debrided. During follow-up with our team, a reduction in the size of the wound was observed.

Conclusion: This case highlights the rare but aggressive course of necrotizing fasciitis and the critical importance of early, repeated surgical debridement in treatment. A multidisciplinary approach and close follow-up improve patient survival.

Keywords: Necrotizing fasciitis, abdominal wall, repeated debridement



Figure 1. The patient, who underwent surgery with a diagnosis of necrotizing fasciitis, was found to have a fasciitis area extending from the level of the left femoral head to the left subcostal space.



Figure 2. After the progression of necrosis was halted with frequent debridement and dressing changes, the patient was referred to plastic reconstructive and aesthetic surgery for appropriate flap surgery due to the very large area of debridement performed.

[P-249]

A rare cause of acute mechanical intestinal obstruction: A case of ileocecal endometriosis

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Objective: Mechanical intestinal obstruction is a common cause of acute abdomen. However, intestinal endometriosis represents a rare etiological factor, particularly in women of reproductive age. Although endometriosis is predominantly confined to the pelvic organs, gastrointestinal involvement is less frequent, and terminal ileal or cecal localization may rarely present with obstructive symptoms. Herein, we report a case of cecal endometriosis presenting with acute mechanical intestinal obstruction, in which a scirrhous cecal mass was detected intraoperatively.

Material and Methods: A 40-year-old woman was admitted to the emergency department with nausea, vomiting, and abdominal pain, accompanied by the absence of flatus and stool passage. She was hospitalized with a preliminary diagnosis of mechanical bowel obstruction. Her past surgical history was remarkable only for a previous cesarean section. Due to the lack of clinical improvement under conservative management, diagnostic laparotomy was performed.

Results: Abdominal computed tomography demonstrated dilated bowel loops, diffuse air-fluid levels, and an image suggestive of nested bowel segments at the medial aspect of the cecum, raising suspicion of a cecal mass. Intraoperative exploration revealed endometriotic implants on the left ovary and peritoneal surfaces. Multiple lymphadenopathies were observed in the colonic mesentery. A well-demarcated polypoid mass causing obstruction was identified in the cecum, with marked dilatation of the proximal small bowel loops. In addition, a 15-cm segment of the terminal ileum exhibited cobblestone-like suspicious areas and luminal narrowing. The patient was also noted to have previously undergone appendectomy. An ileocecal valve resection was performed, and the specimen was sent for frozen section analysis, which reported the lesion as an endometrioma. Final histopathological evaluation revealed no evidence of inflammatory bowel disease; instead, the ulcerated areas were interpreted as subacute ischemic changes secondary to intussusception caused by endometriotic foci. The postoperative course was uneventful, and the patient was discharged on postoperative day 7.

Conclusion: Endometriosis is a common condition with a challenging diagnosis. Intestinal endometriosis should be considered a rare yet clinically significant cause of mechanical bowel obstruction in young female patients. When presenting as a scirrhous cecal mass, it may mimic malignancy or inflammatory bowel disease, making intraoperative pathological assessment essential for guiding surgical decision-making. In this case, endometriotic implantation in the ileocecal region, possibly related to the patient's previous cesarean section accompanied by appendectomy, was considered to have contributed to the pathogenesis of obstruction. Early recognition and timely surgical resection are crucial for achieving favorable clinical outcomes.

Keywords: Endometriosis, mechanical bowel obstruction, ileocecal resection



Figure 1. Macroscopic appearance of the ileocecal resection specimen; marked mural thickening and luminal narrowing are observed in the ileocecal region.



Figure 2. Macroscopic appearance of the ileocecal segment during intraoperative frozen-section evaluation; after sectioning of the bowel wall, a nodular lesion causing mural thickening is observed.

[P-250]

Gastrointestinal perforation due to foreign body

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Objective: Foreign body ingestion is more commonly encountered in the pediatric population; however, it also represents an important cause of emergency department admissions in adults. Ingestion may occur intentionally, such as in cases of self-harm or suicide attempts, although the majority of cases are accidental. In most instances, ingested foreign bodies pass through the gastrointestinal tract spontaneously. Nevertheless, perforation, bleeding, mechanical obstruction, impaction within the gastrointestinal tract, and chemical toxicity are among the most frequent complications. The size, shape, and material composition are considered the primary determinants of complication risk. To date, there is no clear evidence in the literature supporting patient-specific characteristics as independent risk factors.

Results: A 64-year-old female patient presented to the emergency department with abdominal pain and fever. Physical examination revealed abdominal guarding and rebound tenderness. A midline surgical scar and an incisional hernia were also noted. The patient had a history of endoscopic retrograde cholangiopancreatography (ERCP) and cholecystectomy. Review of the most recent ERCP report indicated distal migration of a biliary stent. Abdominal computed tomography performed in the emergency setting demonstrated small bowel loops within the hernia sac, along with free fluid and free air. The patient underwent emergency surgery with a preliminary diagnosis of acute abdomen. Intraoperative exploration revealed that the biliary stent had perforated the bowel wall within the herniated small bowel segment and had migrated extraluminally. A 44-year-old male patient presented with pain and swelling in the inguinal region. Physical examination demonstrated an incarcerated inguinal hernia, and ultrasonography raised suspicion for strangulation, prompting emergency surgical intervention. During exploration, a wooden toothpick was identified within the small bowel loop contained in the hernia sac, perforating the bowel wall from the mesenteric side and extending beyond the lumen. The patient reported no history suggestive of foreign body ingestion.

Conclusion: Although foreign body ingestion is relatively uncommon in adults, it may present with atypical clinical manifestations and lead to severe complications. Sharp, pointed, foreign bodies carry a substantial risk of gastrointestinal perforation. A notable challenge in such cases is the frequent absence of a clear history of ingestion, which may delay diagnosis and treatment. The presence of gastrointestinal segments within a hernia sac may represent a potential facilitating factor for perforation and other complications related to foreign bodies. While imaging modalities play a critical role in diagnosis, definitive diagnosis may often require surgical exploration. Further studies are needed to better explain the underlying pathophysiology and associated risk factors.

Keywords: Foreign body, gastrointestinal system, perforation

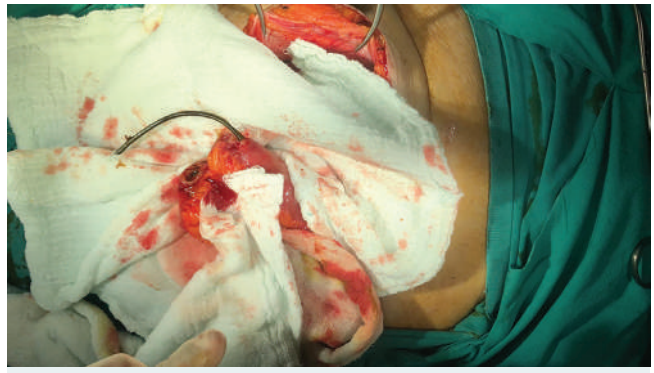


Figure 1. Biliary stent perforation.



Figure 2. Foreign body (toothpick) perforation.

[P-251]

De Garengeot hernia: An uncommon presentation of acute appendicitis

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Objective: De Garengeot hernia occurs in 0.5-1% of femoral hernia cases and is defined by the presence of the vermiform appendix within the femoral hernia sac. This emergency condition is typically diagnosed intraoperatively.

Material and Methods: This is a case presentation of De Garengeot hernia.

Results: A 76-year-old woman presented with a three-day history of pain and swelling in the right groin. Physical examination revealed an erythematous, edematous, and tender femoral mass. Laboratory investigations demonstrated leukocytosis and elevated C-reactive protein levels. Abdominal computed tomography confirmed the presence of the appendix within the right femoral hernia sac, accompanied by loculated fluid and inflammatory changes. Open femoral exploration identified the distal appendix incarcerated in the femoral ring, without evidence of perforation or abscess (Figure 1). Due to limited inflammation, mesh hernia repair and appendectomy were performed.

Conclusion: De Garengeot hernia remains challenging to diagnose. Preoperative computed tomography is essential for accurate identification and effective surgical planning. Early recognition and prompt surgical intervention are critical to achieving optimal patient outcomes.

Keywords: Femoral hernia, appendicitis

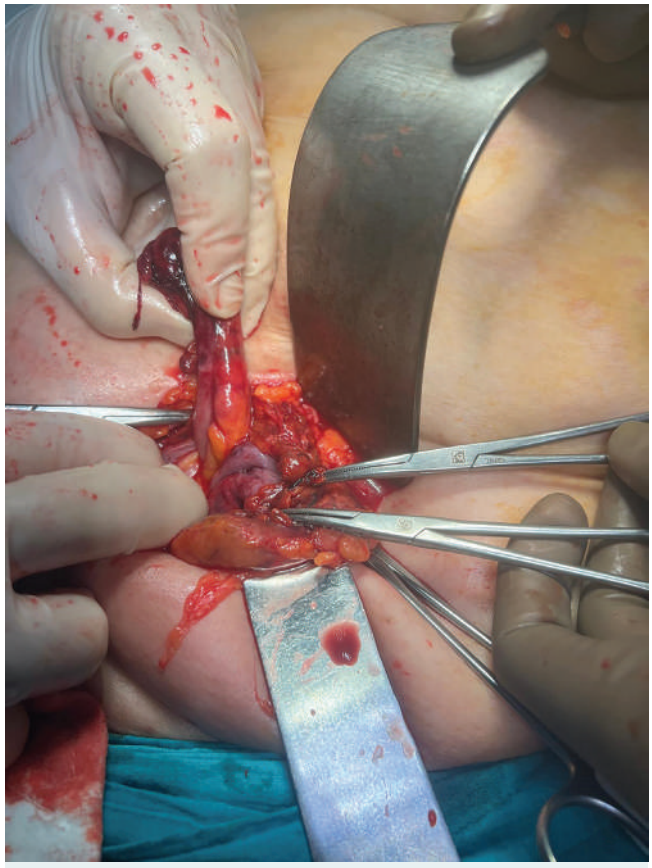


Figure 1. Intraoperative view of an appendicitis showing gangrene symptoms.

[P-252]

Migrated gastric balloon causing small bowel obstruction: Surgical milking and endoscopic extraction

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Objective: Obesity has become one of the most prevalent global health issues today. The quest to reduce morbidity in treatment has highlighted minimally invasive methods, which are more frequently preferred by patients. Among these methods, intragastric balloon (IGB) application holds a significant place. Although it has a safe profile, like every medical procedure, IGB application carries certain risks of complications. Spontaneous deflation of the balloon or migration to the small intestine due to volume loss is a serious condition that can lead to acute mechanical intestinal obstruction. In this study, we present our combined surgical and endoscopic management technique aimed at minimizing morbidity by avoiding enterotomy in a case of ileus caused by a migrated gastric balloon.

Material and Methods: A supraumbilical median laparotomy was performed under general anesthesia on a patient diagnosed with mechanical ileus. During surgical exploration, a mobile foreign body causing complete lumen obstruction was palpated approximately 60 cm distal to the ligament of Treitz. No ischemia or perforation was observed in the relevant bowel segments. Through a "Retrograde Milking" maneuver performed by the surgical team, the foreign body was manually pushed back proximally from the jejunum. Simultaneously, the duodenal lumen was visualized via gastroscopy; the balloon was grasped at the level of the bulb using endoscopic tripod forceps and extracted, thus terminating the procedure.

Results: A 43-year-old female, who had undergone IGB placement for weight loss 3 months prior, presented with abdominal pain, nausea, and vomiting lasting 8 days. Although she had visited emergency services previously, no diagnosis was made. Physical examination revealed abdominal distension and tenderness. Computed tomography confirmed mechanical ileus caused by a foreign body obstructing the small bowel lumen.

Conclusion: In patients with a history of gastric balloon, the risk of migration should be considered in the presence of abdominal pain and vomiting, even if the balloon appears to be in place. It is not essential for the balloon to rupture; loss of turgor and volume can also cause passage through the pylorus and subsequent small bowel obstruction. Preserving bowel integrity is essential in surgical treatment. The surgical retrograde milking and endoscopic extraction method we applied, as opposed to traditional enterotomy (bowel incision), is a safe and effective hybrid option that eliminates the risk of anastomotic leak and infection while shortening the length of hospital stay.

Keywords: Gastric balloon, ileus

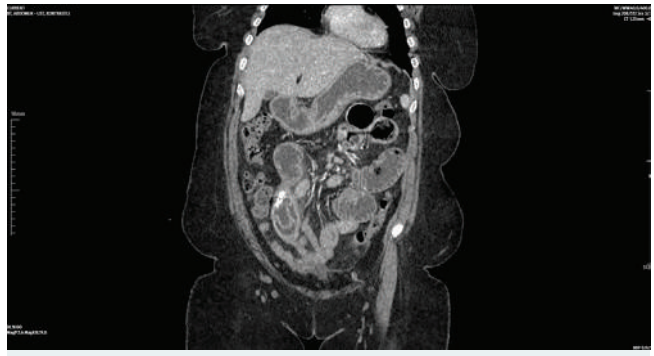


Figure 1. Computed tomography.

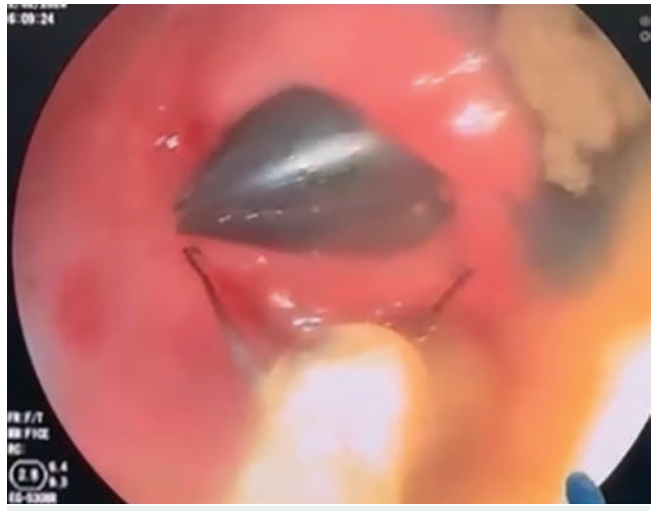


Figure 2. Endoscopic extraction.

[P-253]

Spontaneous rectus sheath hematoma: A case report

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Objective: Rectus sheath hematoma is a rare but clinically significant condition characterized by the accumulation of blood within the rectus sheath due to injury of the epigastric vessels or rectus muscle fibers, and it may mimic an acute abdomen. The most commonly associated factors include anticoagulation therapy, trauma, iatrogenic causes, and conditions that increase sudden abdominal muscle contraction; however, it may also develop spontaneously in patients without medication use. Contrast-enhanced CT provides high diagnostic accuracy by demonstrating the exact localization of the hematoma, its extent, and signs of active bleeding.

Material and Methods: Following is a case ropert regarding spontaneous rectus sheath hematoma.

Results: A 76-year-old male patient with no known comorbidities and no history of anticoagulant use presented to the emergency department with abdominal pain that had started the same day. Physical examination revealed tenderness and a palpable firm mass in the right upper quadrant of the abdomen. Ecchymosis was observed on the abdominal wall (Figure 1). Contrast-enhanced abdominal CT revealed a collection measuring approximately 90×48×92 mm within the right rectus abdominis muscle, consistent with a hematoma, and hyperdense areas within the collection suggestive of active extravasation (Figure 2). The patient was hospitalized for observation and treatment. During follow-up, his general condition remained stable, and he had adequate oral intake. Serial monitoring showed no decrease in hemoglobin levels. Control ultrasonography demonstrated no increase in the size of the hematoma. The patient was discharged on hospital day 5 with a stable clinical course.

Conclusion: Rectus sheath hematoma is an important differential diagnosis of acute abdominal pain in elderly patients, even in the absence of anticoagulant use. Contrast-enhanced CT plays a critical role in diagnosis. In hemodynamically stable patients without hemoglobin decline and without radiological progression, conservative management with close follow-up may be successful; in cases of instability or ongoing bleeding, endovascular embolization is an effective option. Conservative follow-up is often sufficient in stable cases, whereas embolization is prioritized in ongoing bleeding.

Keywords: Rectus sheath hematoma, spontaneous, acute abdomen, elderly

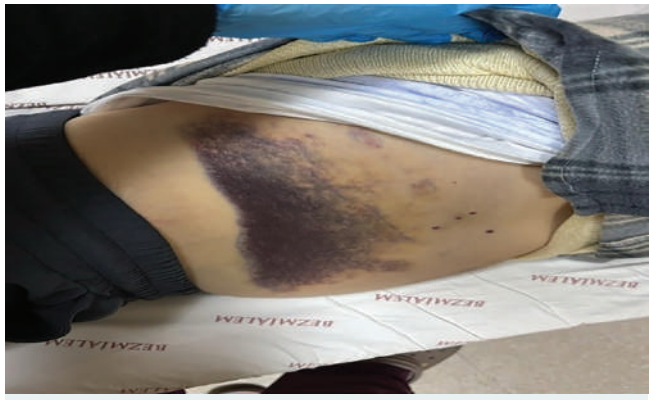


Figure 1.



Figure 2.

[P-254]

Aortoenteric fistula secondary to endovascular graft infection: Surgical management of a rare complication

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Objective: Fistulas between the aorta and surrounding organs are extremely rare; however, they can be fatal if not promptly recognized and treated. Primary aortoenteric fistula is a rare cause of gastrointestinal hemorrhage. Without treatment, the survival rate is 70% within the first 6 hours, dropping to 50% after 24 hours. Its classic triad consists of abdominal pain, gastrointestinal hemorrhage, and a pulsatile abdominal mass. This triad is observed in only 10-23% of cases. Secondary aortoenteric fistula (SAEF) is a rare but potentially fatal complication of aortic reconstructive surgery. The incidence of SAEF has increased as a result of advances in vascular surgery and aggressive surgical treatments.

Material and Methods: Surgical management and follow-up: Operation: The patient underwent surgery with a diagnosis of aortobiiliac graft infection. Erosion of the duodenum wall by the graft was observed. Procedure: Excision of the infected graft, new graft anastomosis (*in situ* reconstruction), duodenal resection, and gastrojejunostomy were performed. Outcome: After postoperative intensive care follow-up, the patient was transferred to the ward on day 5. During an endoscopy planned due to vomiting that developed on day 14, cardiac arrest occurred following sedation, and the patient died.

Results: Patient: 68-year-old male. Chief complaint: Fever of 38.6 °C and hematochezia. Medical history: Emergency EVAR due to ruptured abdominal aortic aneurysm 7 years ago. Embolectomy 3 years ago. Under follow-up for suspected graft infection due to recurrent febrile episodes. Diagnostic findings: Laboratory: Leukocytosis (17,000/mm³) and elevated CRP. Computed tomography: Diffuse thickening of the graft wall, air densities, and obliteration of the fat planes between the duodenum and the graft. Endoscopy: Migration of the graft into the duodenum was observed.

Conclusion: The operative and postoperative mortality rates of SAEF are extremely high, averaging around 50-60%. Various surgical strategies have been reported for the management of SAEF. Typical treatment consists of graft excision, debridement of infected tissues, revascularization, and repair of the intestinal fistula. In recent years, endovascular treatment has also gained prominence. In conclusion, SAEF should be the primary suspicion in any patient with a history of aortic reconstructive surgery presenting with gastrointestinal hemorrhage, abdominal pain, and sepsis; the diagnosis must be confirmed as soon as possible. Even in the absence of abdominal pain and sepsis, it is crucial to promptly determine whether the bleeding is caused by SAEF in patients with a history of aortic grafting. Contrast-enhanced abdominal CT and upper gastrointestinal endoscopy can provide a rapid and effective diagnosis. Early diagnosis and timely surgical intervention are life-saving for this patient group.

Keywords: Aortoenteric fistula, complication, surgery

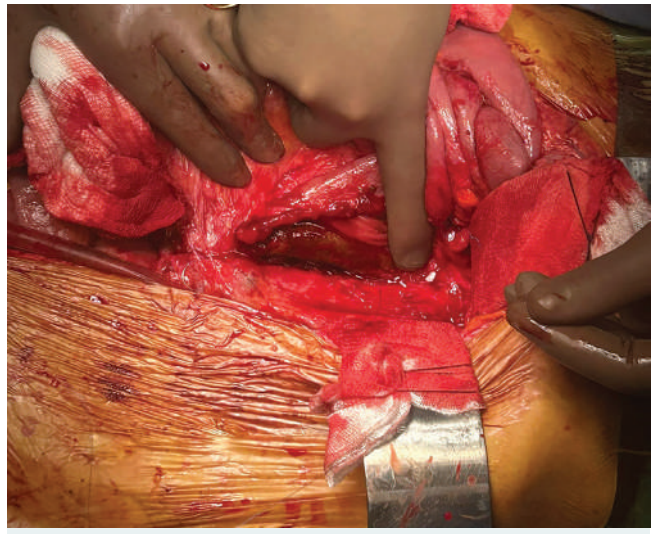


Figure 1. Intraoperative view showing the area where the graft eroded the duodenal wall and penetrated into the lumen.

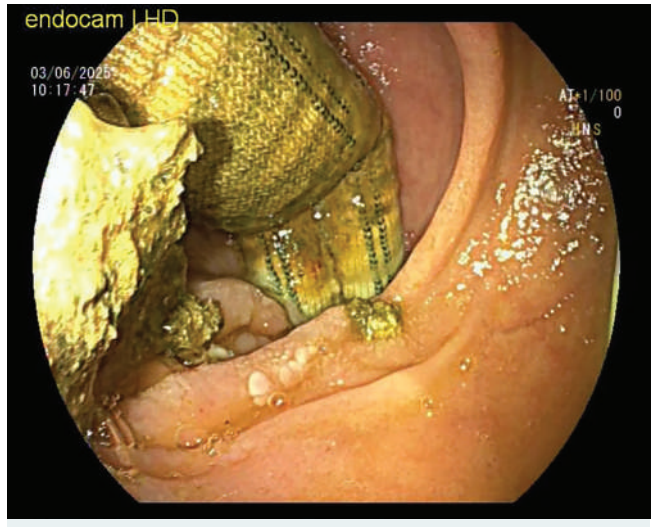


Figure 2. Graft migration into the duodenum observed in upper gastrointestinal endoscopy.

[P-255]

Recurrent psoas abscess

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Objective: Psoas abscess's a rare clinical condition, can lead to serious morbidity and mortality if not diagnosed and treated promptly. It's formed by collection of purulent fluid in the iliopsoas muscle. The infection may originate primarily from distant focus via the hematogenous route or develop secondarily as a result of direct spread from adjacent anatomical structures. The incidence has increased with development of imaging techniques, CT and MRI playing important role in this process. Our article aims to discuss diagnostic process, etiological causes, treatment approaches and mechanisms of recurrence based on a case of recurrent psoas abscess.

Material and Methods: Case report.

Results: 62-year-old woman developed recurrent right retroperitoneal abscess first detected in 2019, measuring 113×116 mm and initially treated with percutaneous drainage and antibiotics. After 15-day hospitalization, she was followed as an outpatient. One month later, 5 cm abscess recurred at same site, enlarged to 8 cm within six months, and required repeat drainage. Despite negative cultures and improvement in infection markers, abscesses continued to recur over subsequent years. Two years later, she presented with right-sided pain and 8.5 cm abscess, treated with drainage and antibiotics. One year later, MRI showed 10 cm abscess. Multiple additional drainages and antibiotic courses within a year failed to achieve durable resolution. In 2025, she presented to the ER with similar symptoms and underwent laparotomy. Exploration revealed a retrocecal appendix tip within the psoas muscle beneath migrated omental adhesions. Appendectomy, abscess drainage, and debridement were performed. The postoperative course was uneventful. She was discharged.

Conclusion: Psoas abscess is a rare clinical condition, can lead to serious complications if not diagnosed and treated promptly. Determining the etiology in recurrent cases is important for treatment success. In this case, despite repeated percutaneous drainage and antibiotherapy, the abscesses couldn't be controlled; surgical exploration revealed that the infection was associated with retrocecal appendicitis. Retrocecal appendicitis can be overlooked due to the absence of classic symptoms and difficulty in diagnosis by imaging. Due to its proximity to the psoas muscle, it can cause recurrent abscesses. This case emphasizes the need to investigate secondary causes with atypical anatomical localizations in cases of recurrent psoas abscesses with negative cultures and lack of response to treatment. It also demonstrates that surgery can be both diagnostic and therapeutic when conservative approaches fail. Treating patients who absolutely require surgery with non-surgical methods and delaying necessary surgical intervention leads to repeated patient visits, increased treatment costs and patient suffering.

Keywords: Appendicitis, psoas abscess, recurrent

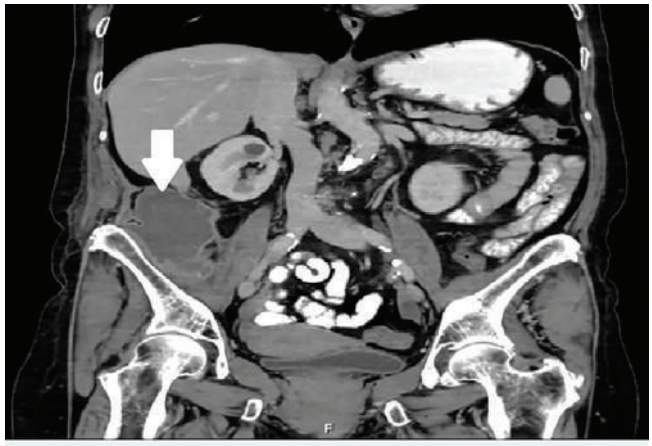


Figure 1. Image 1- CT imaging. Right iliopsoas abscess.

[P-256]

Gastric perforastion secondary to strangulated hiatal hernia: A rare case report

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Objective: Hiatal hernias are commonly encountered in clinical practice; however, strangulation and subsequent gastric ischemia with perforation are rare but life-threatening conditions associated with high morbidity and mortality. Clinical presentation is often nons-pecific, typically including epigastric pain, nausea, and vomiting, which may delay diagnosis. In some cases, patients may present with signs of an acute abdomen. The presence of mediastinal free air on imaging is usually suggestive of esophageal perforation, yet in rare instances it may also indicate gastric perforation secondary to a strangulated hiatal hernia. Therefore, careful correlation of clinical and radiological findings is crucial for timely surgical intervention.

Material and Methods: A patient presenting to the emergency department on the 24th with sudden-onset epigastric pain, nausea, and vomiting was evaluated. Physical examination findings were consistent with an acute abdomen, demonstrating diffuse abdominal tenderness, guarding, and rebound tenderness. Laboratory investigations revealed leukocytosis. Contrast-enhanced thoracic and abdominal computed tomography (CT) was performed. Based on clinical and radiological findings, the patient was taken to emergency surgery. Intraoperative exploration guided the decision for resection and gastrointestinal reconstruction.

Results: Contrast-enhanced thoracoabdominal CT demonstrated prominent mediastinal free air along with intra-abdominal free air and free fluid. Herniation of the gastric fundus into the thoracic cavity and thickening of the gastric wall were also observed. During surgery, severe ischemic changes were noted in the herniated gastric segment. A 6×3 cm perforation with extensive necrosis on the anterior wall of the gastric fundus was identified. Due to the wide necrotic area and the unsuitability of primary repair, a total gastrectomy with Roux-en-Y esophagojejunostomy reconstruction was performed. No major postoperative complications occurred.

Conclusion: Although rare, strangulated hiatal hernias may lead to life-threatening complications such as gastric ischemia and perforation. The coexistence of mediastinal free air with intra-abdominal free air and fluid should strongly raise suspicion for gastric perforation. Early diagnosis, prompt surgical decision-making, and appropriate resection with reconstruction significantly improve patient outcomes. In this case, the postoperative course was uneventful, and the patient was discharged on postoperative day seven. This report highlights the importance of considering gastric perforation secondary to strangulated hiatal hernia in the differential diagnosis when mediastinal free air is detected.

Keywords: Strangulated hiatal hernia, gastric perforation, mediastinal free air

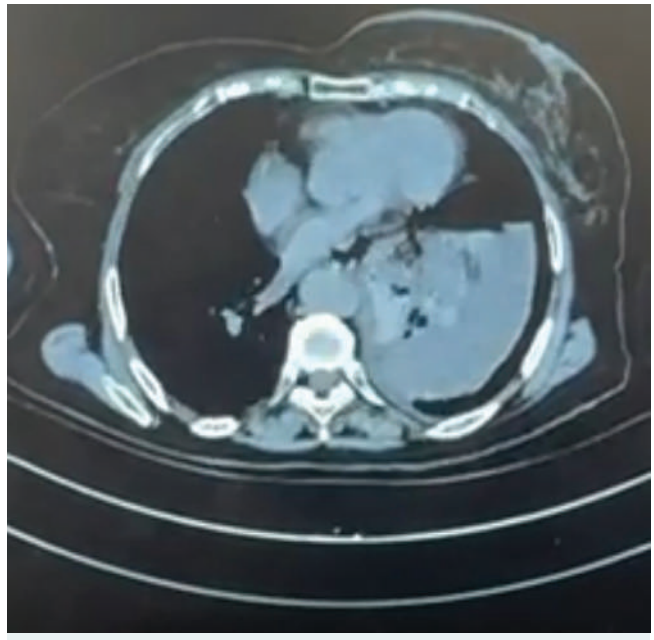


Figure 1. CT image; hiatal hernia and mediastinal free air and fluid.

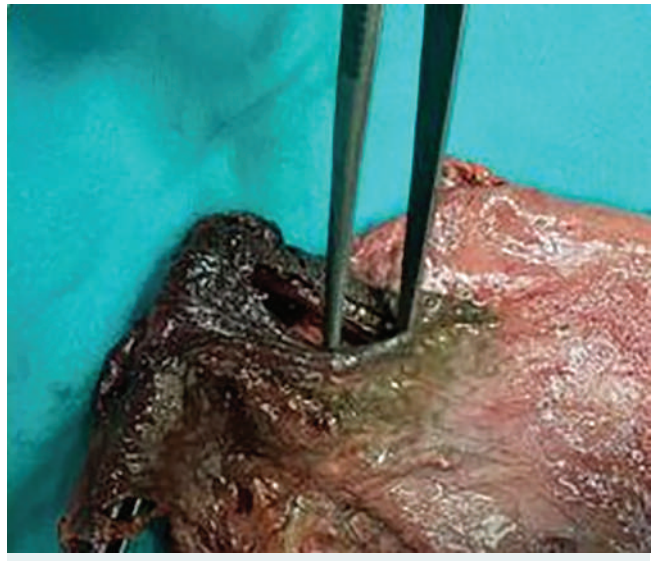


Figure 2. Image of the specimen; perforation focus on the gastric fundus with extensive necrosis.

[P-257]

Abdominal evisceration and multiple organ injuries secondary to shotgun trauma: A damage control surgery approach

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Objective: Firearm injuries, particularly shotgun-related trauma, represent severe clinical entities due to the wide dispersion of pellets and the extensive tissue destruction they may cause. Such injuries frequently result in multiple organ damage. In penetrating abdominal trauma, hemodynamic status is the primary determinant of surgical strategy. In the presence of hemodynamic instability or ongoing hemorrhage, damage control surgery (DCS) is widely accepted as an effective staged approach aimed at reducing mortality. This study presents the management of abdominal evisceration and multiple organ injuries secondary to shotgun trauma using a DCS strategy.

Material and Methods: A 22-year-old male was admitted to the emergency department following a shotgun injury. On initial evaluation, he was conscious, cooperative, and oriented, with a Glasgow Coma scale score of 15. His arterial blood pressure was 100/53 mmHg. Physical examination revealed a midline abdominal wall defect above the umbilicus with evisceration of the stomach and intestinal segments. Contrast-enhanced abdominal computed tomography demonstrated multiple metallic pellet fragments in the vicinity of the liver, spleen, and stomach, along with diffuse hemoperitoneum and free intraperitoneal air. The patient was diagnosed with penetrating abdominal trauma and was taken emergently to the operating room.

Results: Exploratory laparotomy revealed approximately 1000 mL of hemorrhagic fluid within the abdominal cavity. A 10 cm actively bleeding laceration was identified in segment IV of the liver, and a pellet fragment was removed. A 0.5 cm perforation on the anterior wall of the gastric corpus was repaired primarily in two layers. No additional intra-abdominal organ injuries were detected. Due to persistent oozing from the hepatic laceration, perihepatic packing and temporary abdominal closure were performed as part of a damage control strategy. A planned second-look operation 48 hours later demonstrated no active bleeding or bile leakage. Definitive repair was completed with topical hemostatic application, omentopexy, and suturing of the liver laceration. The patient was monitored in the intensive care unit postoperatively and was discharged uneventfully on postoperative day 19.

Conclusion: In shotgun-related penetrating abdominal trauma, rapid surgical intervention and appropriate patient selection are crucial. In patients at risk of ongoing hemorrhage and physiological deterioration, DCS represents a safe and effective treatment strategy. This case highlights the importance of a staged surgical approach in achieving favorable clinical outcomes in complex multi-organ injuries.

Keywords: Firearm injury, penetrating abdominal trauma, damage control surgery



Figure 1. Evisceration of the stomach and intestinal segments through a midline abdominal wall defect above the umbilicus.

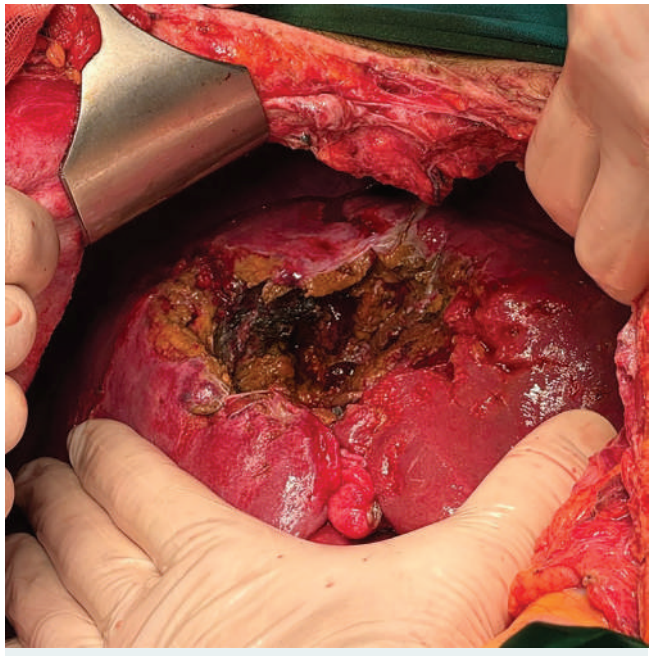


Figure 2. Approximately 10 cm actively bleeding laceration in segment IV of the liver.

[P-260]

Perforation secondary to incarceration of an umbilical Littre's hernia: A rare case

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Objective: Meckel diverticulum is a congenital anomaly resulting from the persistence of the vitelline duct and is usually asymptomatic. The most common complications include mechanical intestinal obstruction, bleeding, perforation, and diverticulitis. The presence of a Meckel diverticulum within any hernia sac is defined as a Littre's hernia. Littre's hernia is most frequently observed in the inguinal region, whereas umbilical localization with perforation secondary to incarceration is extremely rare. In this report, we present a case of perforation caused by incarceration of an umbilical Littre's hernia.

Material and Methods: An 18-year-old male patient was admitted to the emergency department with a one-day history of abdominal pain. Physical examination revealed tenderness in the umbilical region without guarding or rebound tenderness. Computed tomography demonstrated a 28×12 mm blind-ending tubular structure adjacent to the ileal loops at the level of the umbilicus. A 9 mm peripherally enhancing collection consistent with an abscess was observed in the surrounding area. Heterogeneity in the adjacent fatty tissue and millimetric air densities were also noted. These findings were suggestive of a perforated Meckel diverticulum. The patient was taken to emergency surgery.

Results: The procedure was initially started laparoscopically; however, conversion to laparotomy was required after identifying a Meckel diverticulum adherent to the umbilical hernia sac. A perforated Meckel diverticulum secondary to incarceration within the umbilical hernia sac was detected. A localized abscess formation was present around the perforation site. Diverticulectomy was performed using a surgical stapler, and simultaneous mesh-free umbilical hernia repair was carried out. Following appropriate medical management, the patient was discharged uneventfully on postoperative day six. Histopathological examination confirmed the diagnosis of Meckel diverticulum.

Conclusion: In patients presenting with acute abdominal pain accompanied by umbilical tenderness, an umbilical Littre's hernia, although rare, should be considered as a clinically significant differential diagnosis. In the present case, the perforation was noteworthy in that it resulted from incarceration within the umbilical hernia sac rather than from inflammation secondary to ectopic mucosa, which may be associated with Meckel diverticulum. It should be kept in mind that incarceration in umbilically located Littre's hernias may predispose to perforation.

Keywords: Incarceration, Littre's hernia, Meckel's diverticulum

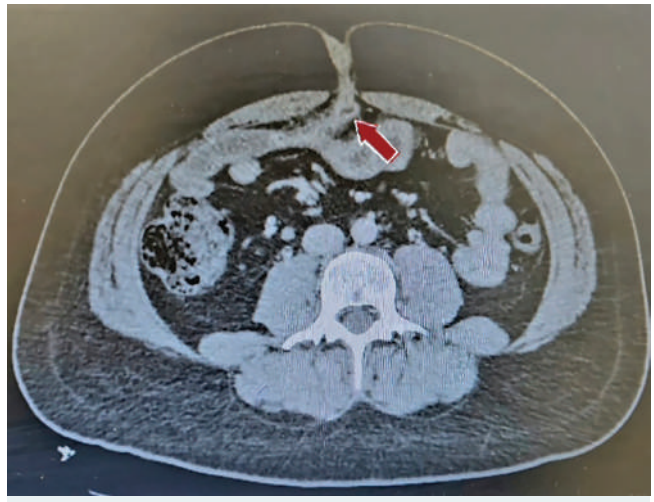


Figure 1. Preoperative abdominal CT. On abdominal CT, a blind-ending tubular structure at the level of the umbilicus with surrounding abscess is observed, consistent with a perforated Meckel's diverticulum.

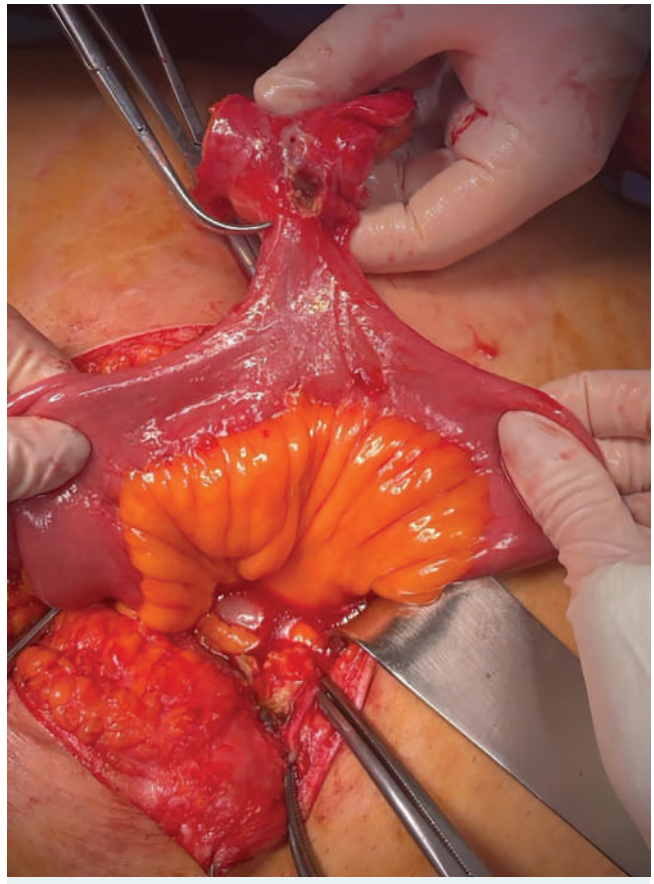


Figure 2. Perforated Meckel's diverticulum-intraoperative view. A perforated Meckel's diverticulum was identified within the umbilical hernia sac during intraoperative evaluation.

[P-261]

Recurrent inguinal hernia with bladder herniation: Laparoscopic TAPP experience

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Objective: Although inguinal hernias are a common pathology in general surgical practice, the presence of the urinary bladder within the hernia sac is a rare clinical condition. In the literature, bladder herniation has been associated with advanced age, male sex, obesity, and a history of recurrent inguinal hernia. A significant proportion of cases may be asymptomatic or may mimic lower urinary tract symptoms, leading to delays in diagnosis. Bladder herniations that are not recognized preoperatively may result in serious complications during surgery, such as bladder injury, urinary leakage, and infection. This risk is further increased in long-standing and recurrent hernias due to disruption of anatomical planes caused by previous surgeries. Although the widespread use of imaging modalities has increased preoperative diagnostic rates, clinical awareness remains crucial. In this case report, we present the diagnostic process and surgical management of bladder herniation in a patient with a long-standing recurrent direct inguinal hernia, treated with a laparoscopic TAPP approach, in light of the literature.

Material and Methods: A 77-year-old male presented with persistent left groin pain and swelling. He had a history of open, non-mesh, tension-free repair performed abroad 40 years ago, with recurrence about 10 years later. The patient reported manually reducing the hernia during urinary urgency. Physical examination revealed a reducible direct hernia and a previous incision scar. Abdominal CT showed herniation of the left anterior bladder into the left inguinal canal, with a stone-density image in the bladder lumen, likely due to residual urine. Laparoscopic TAPP herniorrhaphy was planned.

Results: Intraoperative evaluation confirmed the presence of the bladder within the hernia sac. Following careful dissection, the bladder was safely reduced, and an anatomical mesh was placed in the left inguinal region. Laparoscopic TAPP herniorrhaphy was successfully completed. No intraoperative or postoperative complications occurred. The patient was discharged uneventfully on the second postoperative day.

Conclusion: Bladder herniation should always be considered in the differential diagnosis of long-standing and recurrent inguinal hernias. Preoperative computed tomography is of critical importance for establishing the diagnosis and determining the surgical strategy. The laparoscopic TAPP approach is an effective and safe surgical option in recurrent inguinal hernias, as it provides a wide field of view, allows better evaluation of anatomical structures, and enables safe reduction of the bladder. This case demonstrates that recurrent inguinal hernias with bladder herniation can be successfully managed with appropriate preoperative assessment and meticulous laparoscopic dissection.

Keywords: Bladder herniation, hernia, recurrent inguinal hernia, TAPP

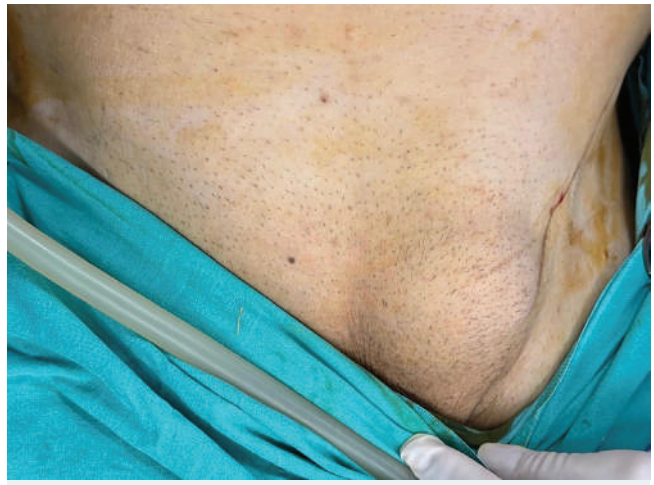


Figure 1. Preoperative physical examination. Physical examination image of a recurrent left inguinal hernia.

CT: Computed tomography.

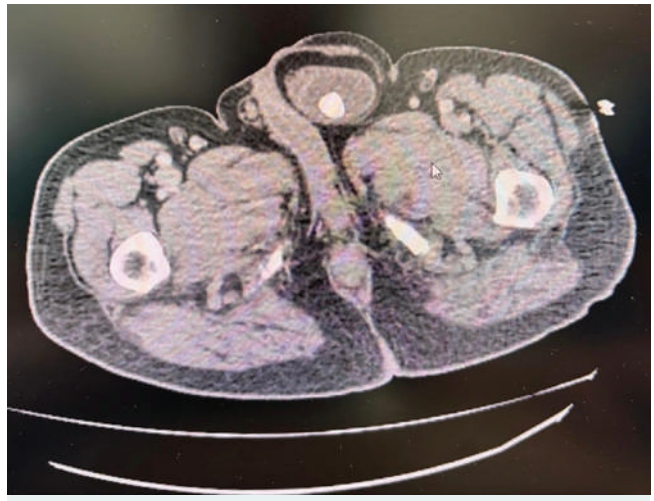


Figure 2. Preoperative abdominal CT. Herniation of the left anterior portion of the bladder into the left inguinal canal on abdominal CT, with a stone-density observed within the bladder lumen.

CT: Computed tomography.

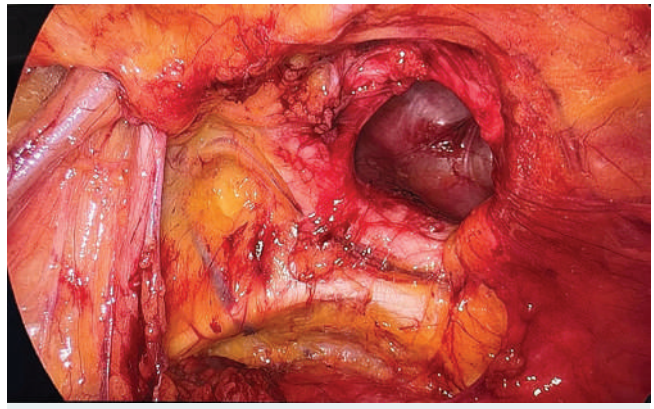


Figure 3. Intraoperative laparoscopic view. Intraoperative laparoscopic hernia defect.

[P-263]

Localized Boerhaave syndrome with spontaneous drainage via fistula to the gastric: A rare case

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Objective: Boerhaave syndrome is a rare clinical entity with high mortality, characterized by a full-thickness rupture of the esophagus, most commonly occurring after severe vomiting. In most cases, free perforation leads to mediastinitis and sepsis, whereas in some cases, a more subtle and atypical clinical course may occur due to localized perforation. The development of a mediastinal abscess following localized perforation and its spontaneous drainage into the stomach through fistulization is an extremely rare condition reported in the literature. In this study, we present a case that was initially evaluated with a preliminary diagnosis of subileus but was ultimately diagnosed as localized Boerhaave syndrome, demonstrating spontaneous drainage into the stomach via fistulization on endoscopic examination

Material and Methods: The clinical evaluation, laboratory findings, radiological imaging, and upper gastrointestinal endoscopy performed under emergency conditions of the patient who presented with epigastric pain, nausea, vomiting, and rapid weight loss were retrospectively reviewed. The clinical course, administered treatment, and referral process were analyzed in detail.

Results: A 33-year-old female patient with no known comorbidities presented with nausea, intermittent vomiting, epigastric pain, and approximately 10 kg of unintentional weight loss over the preceding week. Her medical history revealed a single episode of sudden-onset, painful vomiting 3-4 months earlier. Physical examination showed mild diffuse abdominal tenderness without guarding, rebound tenderness, or fever. Laboratory tests demonstrated a CRP level of 84 mg/L and a WBC count of 8.5×10^9/L, which decreased to 73 mg/L and 8×10^9/L, respectively, after seven hours. Contrast-enhanced abdominal CT revealed findings consistent with subileus. Due to significant weight loss and persistent symptoms, emergency upper gastrointestinal endoscopy was performed, demonstrating a pouch-like appearance in the distal esophagus, a fistulous opening into the stomach, and purulent material spontaneously draining through the fistula. These findings were consistent with localized distal esophageal perforation (contained Boerhaave syndrome) with fistulization into the stomach. Oral intake was discontinued, intravenous antibiotics and proton pump inhibitor therapy were initiated, and the patient was referred to a tertiary care center for further evaluation.

Conclusion: This case demonstrates that early gastroscopy can be diagnostic in patients initially evaluated with a preliminary diagnosis of subileus but presenting with significant weight loss and persistent vomiting. Since atypical and localized esophageal perforations may lead to serious morbidity and mortality when diagnosis is delayed, esophageal perforation should always be considered in the differential diagnosis, particularly in the presence of clinical-radiological discordance.

Keywords: Boerhaave syndrome, gastroesophageal fistula, spontaneous drainage

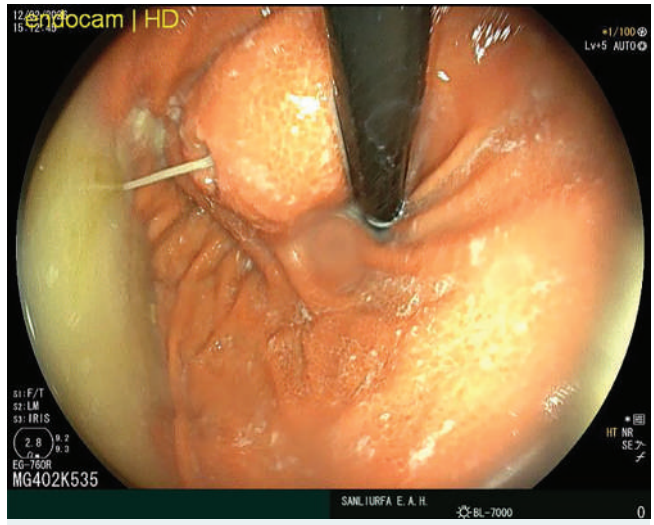


Figure 1. Gastric fistula.

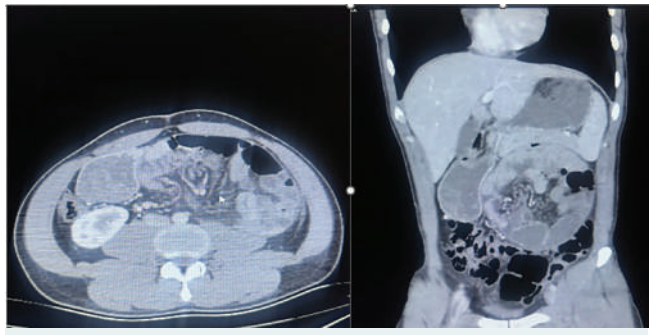


Figure 2. Hernia defect area. CT scan showing internal herniation.

CT: Computed tomography.

[P-265]

Acute small bowel obstruction caused by left paraduodenal hernia: A case report

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Objective: Paraduodenal hernias are the most common type of congenital internal hernias resulting from anomalies in midgut rotation and fixation. Left paraduodenal hernias account for approximately 70-75% of cases and often present with non-specific symptoms or remain asymptomatic for long periods. However, they may initially manifest with acute small bowel obstruction or other serious complications. In patients without prior abdominal surgery and unexplained small bowel obstruction, left paraduodenal hernia should be considered in the differential diagnosis. Contrast-enhanced computed tomography is the gold standard for diagnosis, and early surgical intervention is crucial to prevent complications. This report presents a rare case of left paraduodenal hernia presenting with acute small bowel obstruction.

Material and Methods: Case a 27-year-old male patient presented to the emergency department with intermittent abdominal pain lasting for two weeks. He had no significant past medical history and no previous history of abdominal surgery. Physical examination revealed diffuse abdominal tenderness without guarding or rebound tenderness. Digital rectal examination showed stool contamination and diarrheal discharge. Biochemical parameters were within normal limits, and complete blood count revealed leukocytosis with a white blood cell count of 11,000/mm³.

Results: A contrast-enhanced abdominal computed tomography scan performed in the emergency department demonstrated clustered small bowel loops with mesenteric edema in the left quadrant, suggestive of internal herniation, along with free pelvic fluid (Figure 1). Based on the clinical and laboratory findings, the patient underwent emergency surgery. Intraoperatively, the entire small bowel up to the terminal ileum was found herniated into a sac adjacent to the duodenum (Figure 2). The bowel loops were reduced, and the defect was closed without causing luminal narrowing (Figure 3). Oral intake was initiated on postoperative day 1 and advanced as tolerated. The patient was discharged in good condition on postoperative day 4 after the return of bowel function.

Conclusion: The literature indicates that left paraduodenal hernia is the most common form of internal hernia and that diagnosis is often delayed due to non-specific clinical findings. In young adults without a history of abdominal surgery presenting with unexplained abdominal pain or small bowel obstruction, left paraduodenal hernia should be considered in the differential diagnosis. Contrast-enhanced computed tomography is the gold standard for diagnosis, and early surgical intervention can prevent serious complications such as strangulation and bowel ischemia. In the present case, early surgical management resulted in a favorable outcome without postoperative complications.

Keywords: Small bowel, paraduodenal hernia, internal hernia

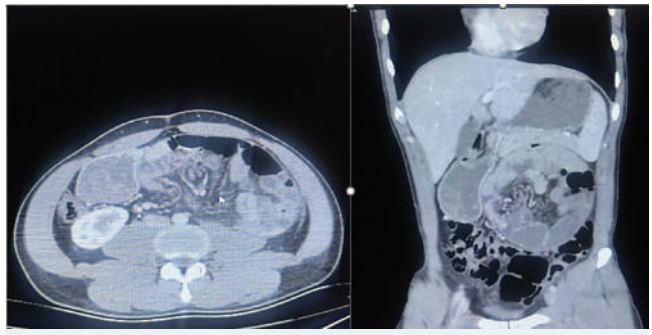


Figure 1. Abdominal CT scan. CT image of internal herniation.

CT: Computed tomography.

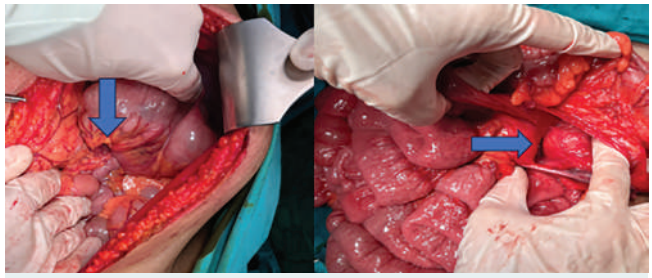


Figure 2. Hernia defect. Arrow in the first image: The sac from which the small bowel loops emerged Arrow in the second image: The wide defect observed after complete reduction of the small bowel loops from the sac.

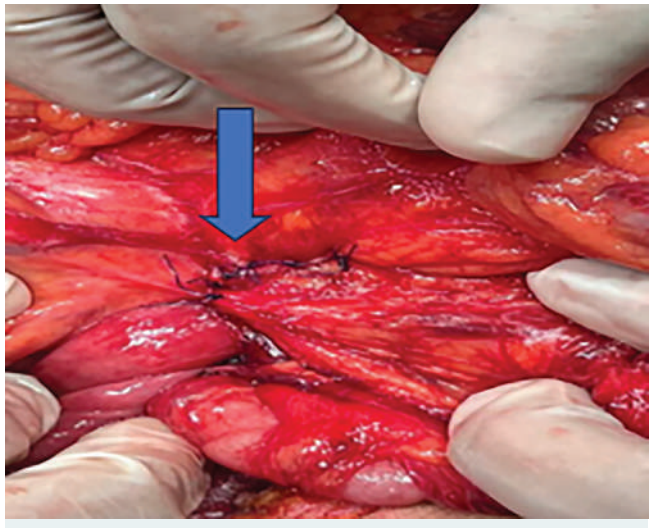


Figure 3. Repair of the defect. Closure of the large defect area.

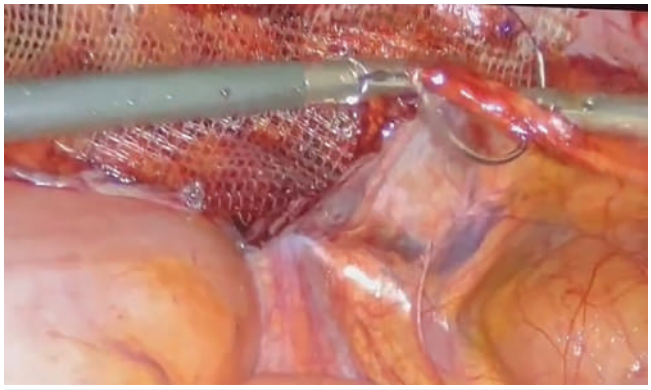


Figure 4. During peritoneal suturing.

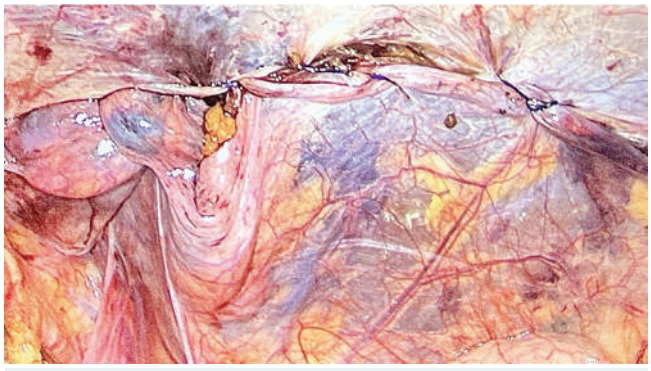


Figure 5. End of peritoneal closure.

[P-267]

Superficial abdominal vein thrombophlebitis – a rare clinical case

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Objective: Superficial thrombophlebitis most commonly affects the veins of the lower extremities, particularly the great saphenous vein. However, superficial abdominal veins—such as the thoracoepigastric and superior epigastric veins—are rarely involved. This condition is also described in the literature as abdominal Mondor disease. First reported by Mondor in 1939, it was most frequently described in the veins of the chest wall, whereas involvement of the abdominal wall is exceedingly rare. Risk factors include local trauma, surgical interventions, infection, malignancy, and hypercoagulable states. Clinically, it may present as a painful, cord-like lesion and can be misdiagnosed as an abdominal abscess, hernia, or intra-abdominal pathology. In this report, we present a case of superficial abdominal vein thrombophlebitis that developed following minor trauma.

Material and Methods: Case presentation.

Results: A 51-year-old female patient presented to our outpatient clinic with complaints of pain and swelling in the left upper quadrant that developed after minor trauma caused by a branch strike approximately one week earlier. Her medical history was significant for hypertension and chronic hepatitis B infection, and she was receiving antiviral therapy (Viratt®). Physical examination: A linear, cord-like subcutaneous lesion with tenderness on palpation was detected in the left upper quadrant. No erythema or fluctuation was observed. Laboratory findings: Hematological and biochemical parameters were within normal limits. Ultrasonography: Superficial soft tissue ultrasonography revealed a non-compressible millimetric superficial venous structure with increased surrounding echogenicity in the left upper quadrant, consistent with thrombophlebitis. No extension into the deep venous system was observed. Treatment and follow-up: Conservative treatment including nonsteroidal anti-inflammatory drugs, local warm application, and rest was initiated. Anticoagulation therapy was not considered necessary. At the one-week follow-up, clinical findings had markedly regressed.

Conclusion: Superficial abdominal vein thrombophlebitis is a rare condition that can easily be misdiagnosed. It should be considered in the differential diagnosis, particularly in patients presenting with a cord-like lesion and a history of trauma. Doppler ultrasonography is indispensable for diagnosis. Most cases resolve uneventfully with conservative treatment.

Keywords: Superficial thrombophlebitis, abdominal wall, Mondor disease, minor trauma, Doppler ultrasonography

[P-268]

Giant inguinal hernia containing stomach, small and large bowel: A rare case report

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Objective: Inguinal hernias are among the common causes of emergency department admissions. Today, many different surgical approaches have been defined for inguinal hernia repair. The most commonly herniated abdominal structures are the omentum and small intestine. In long-standing and large indirect hernias, herniation of organs such as the colon, bladder, ovary, spleen, and rarely the stomach has been reported.

Material and Methods: A 75-year-old male patient with a history of inguinal hernia for approximately 30 years presented to the emergency department with complaints of nausea and vomiting lasting for three days. Computed tomography (CT) performed in the emergency department revealed herniation of a portion of the stomach together with small and large bowel loops within the hernia sac. The patient was taken to emergency surgery with a diagnosis of incarcerated hernia.

Results: Exploration revealed that the gastric antrum, all small bowel loops starting from the mid-jejunum, the cecum, and the sigmoid colon had herniated through an approximately 6 cm defect in the inguinal region. After adhesions within the hernia sac were dissected, the contents were reduced into the abdominal cavity. A serosal injury of the stomach secondary to herniation was detected and repaired primarily. The hernia defect was repaired using mesh with a preperitoneal approach.

Conclusion: The number of reported cases in the literature describing the presence of the stomach within the inguinal hernia sac is quite limited, and gastric injury related to herniation has been reported in only 10 of these cases. To date, only one case has been reported from Türkiye. In long-standing and incarcerated inguinal hernias, CT imaging is an important diagnostic tool for evaluating herniated organs and possible complications. Although conservative management may be possible in selected cases, surgical treatment is required in most patients.

Keywords: Inguinal hernia, gastric herniation, incarcerated hernia, computed tomography

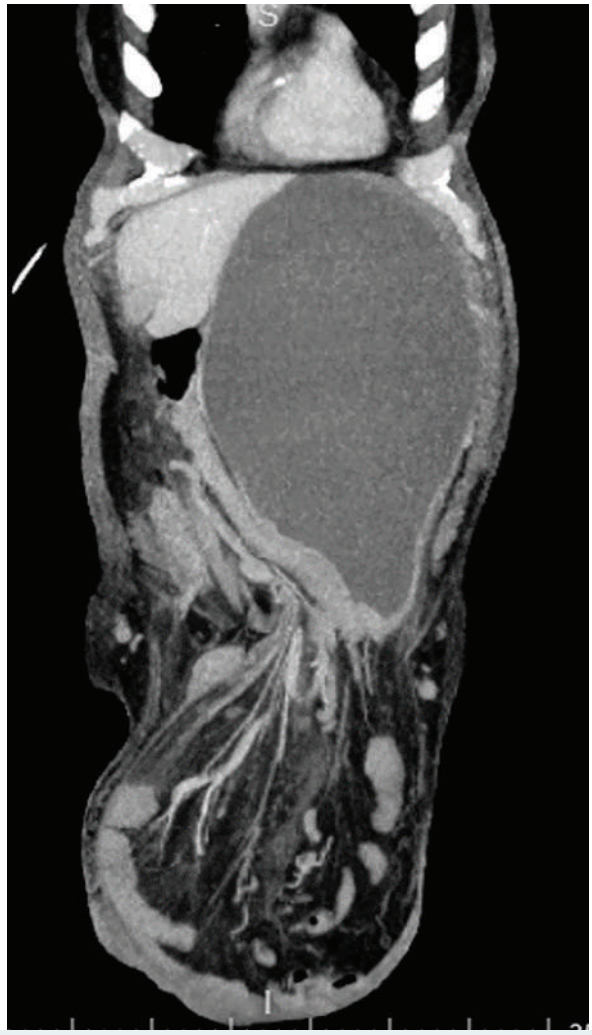


Figure 1. CT image.

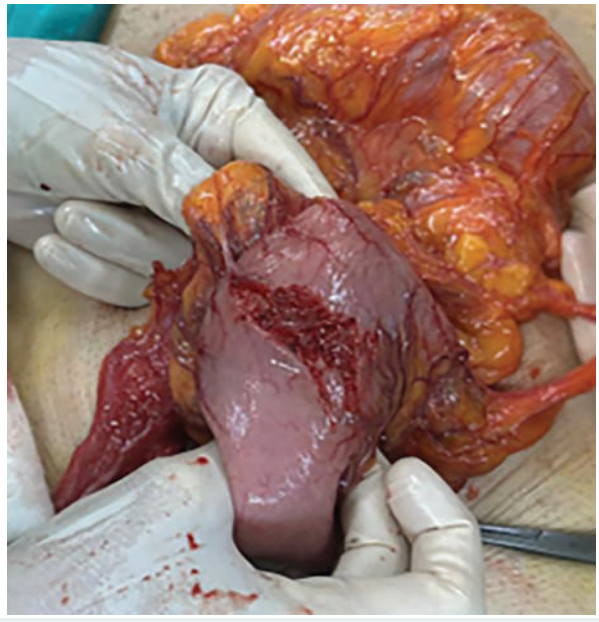


Figure 2. Stomach injury.

[P-269]

Recurrent severe foul-smelling diarrhea after Roux-en-Y gastric bypass with reproducible response to an antiparasitic herbal combination a case report

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Objective: Foul-smelling diarrhea after Roux-en-Y gastric bypass (RYGB) is frequently attributed to fat malabsorption, bile acid–related diarrhea, or postoperative microbiota changes. However, early-onset, socially disabling malodor with nocturnal symptoms may suggest additional etiologies. This case highlights a reproducible dechallenge–rechallenge response to an over-the-counter herbal combination with traditionally antiparasitic components, raising the possibility of an infectious or parasitic contribution in selected post-RYGB patients.

Material and Methods: Clinical data were obtained from structured patient interview focused on bariatric timeline, stool characteristics, associated gastrointestinal symptoms, exposure risks, and patient-reported outcomes. The temporal relationship between symptom onset and interventions was documented. The patient had undergone sleeve gastrectomy in February 2010, followed by weight regain after four years. RYGB was performed in September 2025. No stool microscopy, antigen testing, or polymerase chain reaction panel had been performed at the time of symptom onset. The patient self-initiated a short course of three products used concurrently. Clove capsules (*Eugenia caryophyllata*). Green black walnut hull tincture (*Juglans nigra*). A wormwood-containing blend (*Artemisia absinthium*).

Results: Two weeks after RYGB, the 56 years old patient developed constant, highly distressing stool malodor described as a mixture of rotten and sulfuric smell, particularly worse after meals. She reported watery, pale stools with marked oiliness, 7 to 9 bowel movements daily, relief after defecation, abdominal bloating, and nocturnal diarrhea. Dysphagia was also reported. The symptom had never occurred after sleeve gastrectomy despite prior weight loss and subsequent weight regain. Dietary measures provided minimal benefit. The patient had household exposure to three cats for five years and traveled to Saudi Arabia for Umrah one week after the bypass operation. After starting the herbal combination, she reported complete resolution of malodor and diarrhea within days. Symptoms recurred after discontinuation with lower intensity and resolved again promptly after re-challenge, reproducing the initial effect. The condition had caused severe stress, avoidance behavior, and significant impairment of social and working life, all of which improved after symptom resolution.

Conclusion: This case suggests that, beyond malabsorption, infectious or parasitic contributors should be considered in severe, early-onset, persistent malodorous diarrhea after RYGB, especially when a reproducible response to antiparasitic exposure is observed. Systematic stool testing and targeted evaluation may prevent prolonged morbidity and guide appropriate therapy.

Keywords: Bariatric surgery complications, foul-smelling diarrhea, Roux-en-Y gastric bypass

[P-270]

Brachial artery aneurysm secondary to a hemodialysis arteriovenous fistula: A case report

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Objective: Arteriovenous fistulas (AVFs) created for hemodialysis (HD) may cause rare but clinically significant complications due to long-term high-flow-related hemodynamic stress on the arterial system. In this report, we present the surgical management of a brachial artery aneurysm secondary to a previously created and subsequently closed left brachiocephalic AVF following renal transplantation.

Material and Methods: The patient's medical records, clinical data, and imaging findings were retrospectively reviewed. Demographic characteristics, medical history, previous hemodialysis AVF, renal transplantation details, clinical presentation, and surgical course were evaluated. Preoperative physical examination and imaging studies were used to determine the location and size of the brachial artery aneurysm. The surgical procedure was performed under elective conditions. Surgical technique, intraoperative findings, vascular reconstruction method, and early postoperative outcomes were analyzed. Postoperative anastomotic patency and distal limb perfusion were assessed by clinical examination and duplex ultrasound.

Results: A 65-year-old male patient presented with pain and a palpable pulsatile mass in the left upper extremity. His medical history included a left brachiocephalic arteriovenous fistula created for HD and a cadaveric renal transplantation performed in 2015. The AVF had been closed after successful renal transplantation. Physical examination and imaging studies revealed an aneurysmal dilation measuring approximately 2×2 cm at the level of the left brachial artery. The patient underwent elective surgery. Intraoperatively, a brachial artery aneurysm was confirmed, and aneurysm resection was performed. Arterial continuity was restored with an end-to-end brachial artery anastomosis. In the postoperative period, the anastomosis was patent. Due to the development of a surgical site hematoma, hematoma drainage and surgical hemostasis were performed. Distal pulses remained palpable during follow-up, and no additional vascular complications were observed. The patient was discharged in stable condition on postoperative day three.

Conclusion: Although rare, upper extremity arterial aneurysms should be considered in patients with a history of HD arteriovenous fistula creation and closure after renal transplantation. In suitable cases, aneurysm resection with primary end-to-end anastomosis represents a safe and effective surgical treatment option. Early diagnosis and timely surgical intervention are crucial to prevent potential rupture and thromboembolic complications.

Keywords: Arteriovenous fistula, brachial artery aneurysm, renal transplantation, end-to-end anastomosis

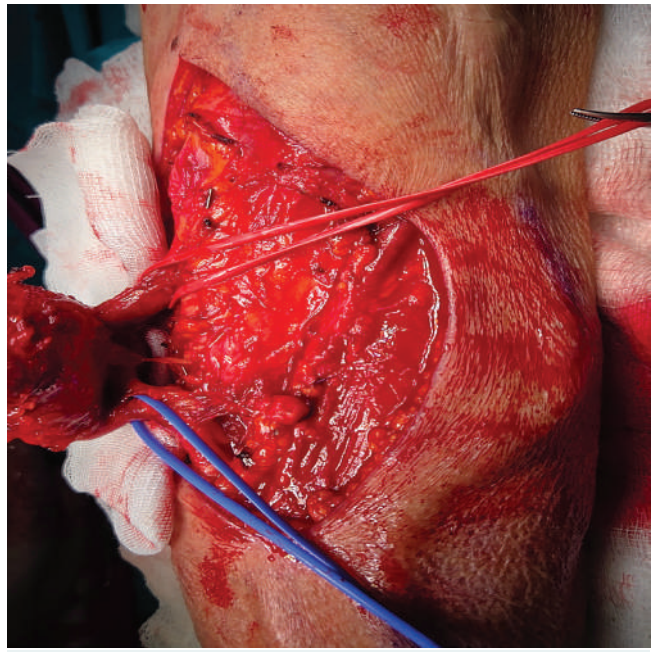


Figure 1. Isolated brachial artery and arterial aneurysm.

[P-271]

Large and vascular mass in the rectus abdominis muscle of a young male patient: A case of intramuscular angioma

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Objective: Abdominal wall tumors constitute a rare subgroup of soft tissue tumors. Lesions originating from the rectus abdominis muscle are particularly infrequent. Masses seen in this region include desmoid tumors, soft tissue sarcomas, and vascular lesions. Intramuscular angiomas belong to the group of benign vascular tumors and constitute less than 1% of all hemangiomas. They are usually seen in young adults and most often occur in the extremities; abdominal wall localization is quite rare. When they are large and have a dense vascular structure, they can mimic malignancy. Their etiology is still unknown 1. Pathogenic somatic mutations in the *MAP2K1* and *KRAS* genes have been identified in a subset of cases that overlap with mutations found in arteriovenous malformations.

Material and Methods: A 35-year-old male patient presented with a palpable mass in the right lower-middle quadrant. He had no history of trauma, anticoagulant use, or systemic disease. Physical examination revealed a deep-seated mass, approximately 8-10 cm in diameter, with restricted mobility, located at the level of the right rectus abdominis muscle. Laboratory findings were within normal limits.

Results: CT scan revealed: • Within the right rectus abdominis muscle • Approximately 73×78 mm in size • Showing heterogeneous signal characteristics • A solid mass expanding along the muscle • Significant contrast enhancement • Dilated tubular venous structures in the inferior section. Radiologically, a distinction could not be made between low-grade sarcoma and vascular malformation. Further evaluation was recommended due to the vascular character. No malignancy was detected in the initial core biopsy samples. Histopathological examination after surgical excision revealed: • Proliferation between striated muscle fibers • Dilated vascular channels the lesion was reported as an intramuscular angioma. No evidence of malignancy was found.

Conclusion: Intramuscular angiomas are rare and often misdiagnosed. Their large size, rapid growth, and dense vascularity may raise suspicion of malignancy. Abdominal wall localization is quite rare, and there are a limited number of cases in the literature. Especially in lesions ≥5 cm and with significant vascularity: Tru-cut biopsy is prone to sampling error. They may be radiologically confused with sarcoma.The vascular structure should be carefully evaluated before surgical planning. Complete surgical excision is curative, but incomplete excision may lead to local recurrence. While malignancy is primarily considered in the presence of a large, vascular mass in the rectus abdominis muscle, intramuscular angioma must be included in the differential diagnosis. In cases with imaging-pathology discrepancies, a multidisciplinary approach and careful surgical planning are critically important.

Keywords: Rectus abdominis, abdominal wall tumor, intramuscular angioma



Figure 1. Reoparative CT scan.

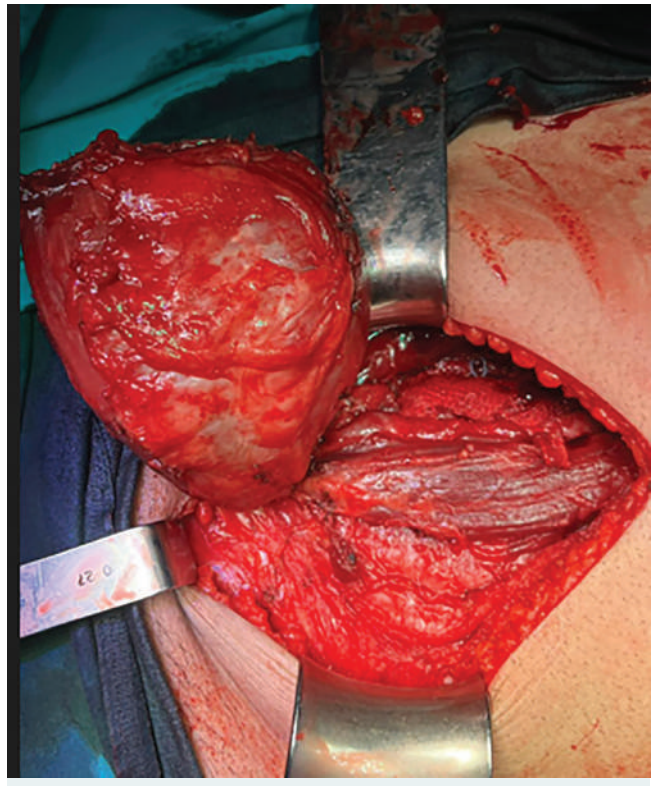


Figure 2. Intraoperative rectus mass.

[P-274]

Small cell neuroendocrine carcinoma of the breast: Experience of two cases following neoadjuvant therapy

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Objective: Primary neuroendocrine carcinomas (NEC) of the breast are exceptionally rare, accounting for less than 0.1% of all mammary malignancies. According to the 2019 WHO classification, the small cell subtype is characterized by high proliferative activity and an aggressive clinical course. To diagnose primary breast NEC, other organ metastases must be ruled out. Due to the paucity of reported cases in the literature, data regarding definitive therapeutic strategies remain limited. This study presents the clinical and histopathological characteristics of two rare cases referred for surgery following neoadjuvant chemotherapy (NAC).

Material and Methods: A retrospective analysis was conducted on two female patients diagnosed with small cell NEC via biopsy between 2023 and 2024. Systemic staging was performed in both patients using positron emission tomography-computed tomography. The pathological responses of patients who underwent curative surgery after NAC, as decided by a multidisciplinary council, were evaluated using the Residual Cancer Burden (RCB) score.

Results: Case 1: A 45-year-old female patient presented with a 10.5 cm mass in the right breast and metastatic axillary lymph nodes. Tru-cut biopsy was reported as Grade 3 small cell NEC (ER-/PR-/HER2- (triple negative), Ki-67 100%). Clinical and radiological regression was observed after NAC. Right subcutaneous mastectomy, sentinel lymph node biopsy (SLNB), and axillary dissection were performed. Pathology revealed a 1.1 cm residual tumour focus (triple negative, Ki-67 4%), metastasis in 2/12 lymph nodes, and extranodal spread (ypT1cN1a, RCB-III). Case 2: A 50-year-old female patient presented with a 2.7 cm mass in the left breast. Tru-cut biopsy was reported as Grade 3 small cell NEC (ER-/PR 50% positive/HER2-, Ki-67 90%). Clinical and radiological regression was observed after NAC. Left simple mastectomy and SLNB were performed. Pathology revealed a 0.5 cm residual tumour focus (triple negative, Ki-67 40%). No lymph node metastasis was detected (ypT1aN0, RCB-I). Patients are being followed up with disease-free survival for an average of 18 months.

Conclusion: Breast NECs may exhibit different clinical behaviour and treatment responses depending on their histological subtypes and immunophenotypes. While most primary breast NECs in the literature exhibit high ER and PR expression, the small cell subtype is generally triple negative. The dramatic decrease in the Ki-67 index after NAC is considered a strong predictor of chemosensitivity and survival prognosis. In these rare and aggressive cases, despite the heterogeneous pathological response, the combination of neoadjuvant therapies planned with a multidisciplinary approach and surgery is critical for local control and survival.

Keywords: Breast cancer, small cell neuroendocrine tumor, triple negative



Figure 1. A Meckel's diverticulum that cannot be reduced laparoscopically, with a lipomatous lesion at its tip.

[P-277]

A rare cause of adult intestinal intussusception: Meckel's diverticulum

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Objective: Meckel's diverticulum is one of the most common gastrointestinal tract anomalies, with an estimated prevalence of approximately 2% in the general population. In adults with symptomatic Meckel's diverticulum, obstruction occurs in 35.6% of cases, gastrointestinal bleeding in 27.3%, and inflammation in 29.4%. Imaging studies commonly reveal intestinal loop distension and intussusception, followed by free fluid, edematous thickening, and cystic lesions. Symptoms and imaging findings are not specific to Meckel's diverticulum, which poses a diagnostic challenge as other etiologies of acute abdomen must be considered. Therefore, diagnostic laparoscopy and intraoperative findings often lead to resection and primary anastomosis.

Material and Methods: A 30-year-old male patient presented to the emergency department with diffuse abdominal pain, mild nausea, and intermittent hematochezia. The patient had a history of intermittent chronic pain for six months. Abdominal ultrasound and laboratory tests performed in the emergency department were within normal limits. Abdominal computed tomography revealed an approximately 6 cm segment in the right lower quadrant with telescoping of intestinal loops consistent with intussusception. The patient showed no clinical signs of acute intestinal complications, and elective surgery was planned.

Results: The surgical procedure was performed under general anesthesia via videolaparoscopy. The intussuscepted small bowel loops were laparoscopically reduced. The segment containing the diverticulum could not be separated laparoscopically and was exteriorized through the trocar site. Meckel's diverticulum with a lipomatous lesion at its tip was identified. Resection and end-to-end anastomosis were performed. The postoperative period was uneventful, and pathology confirmed Meckel's diverticulum with a benign lipomatous lesion at the tip.

Conclusion: This report presents a case of intestinal intussusception secondary to invagination of Meckel's diverticulum. Considering that Meckel's diverticulum is a common intestinal malformation, this etiology should be considered an important differential diagnosis in patients presenting with abdominal complaints. Diagnostic laparoscopy and laparoscopic reduction of the intussuscepted bowel segment facilitate surgical management without the need for laparotomy.

Keywords: Meckel's diverticulum, small intestine, intussusception, laparoscopy

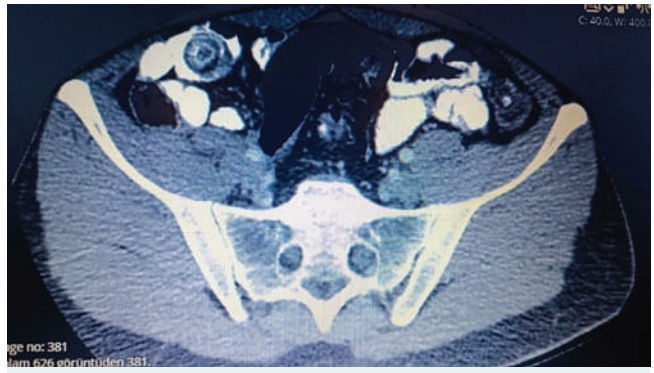


Figure 1. An approximately 6 cm segment of telescoping intestinal loops is observed in the right lower quadrant of the abdomen.



Figure 2. Meckel's diverticulum that could not be reduced laparoscopically, with a lipomatous lesion at its tip.

[P-278]

Acute appendicitis in trocar site herniation

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Objective: Trocar site hernias are rare but clinically significant complications following laparoscopic surgery. The hernia sac most commonly contains the small intestine and omentum, while the appendix is rarely found within the hernia sac. Acute appendicitis developing within the hernia sac has been reported in very limited numbers in the literature. This study presents an elderly female patient with a history of laparoscopic cholecystectomy who was found to have an incarcerated appendix and acute appendicitis within a trocar site hernia.

Material and Methods: 74-year-old female patient with a history of laparoscopic cholecystectomy presented with pain and swelling in the area of an old trocar scar in the inferior umbilicus. Physical examination revealed a lesion approximately 3×3 cm in size in the inferior umbilicus, accompanied by skin hyperemia, consistent with an incarcerated hernia. Laboratory investigations showed elevated acute phase reactants. Ultrasonography was reported as bowel loops and omental fat tissue visible within an approximately 3.5 cm defect consistent with an incarcerated herniation. Urgent surgery was performed. Exploration via a infraumblical incision revealed an incarcerated, edematous, hyperemic appendix within the hernia sac. It was diagnosed as acute appendicitis, and appendectomy was performed. Following excision of the hernia sac, the defect was repaired with prosthetic mesh due to the absence of perforation/contamination. Histopathological examination revealed findings consistent with acute appendicitis. The patient had an uneventful postoperative course and was discharged on the second day.

Results: Trocar site hernias are rare but potentially serious complications after laparoscopic surgery. Most cases develop at trocar insertions ≥10 mm, and failure to close the fascia is a significant risk factor. The presence of the appendix within a port-site hernia is extremely rare in the literature. Trocar site hernia should be considered in the differential diagnosis, especially in elderly patients and those with a history of abdominal surgery, in the presence of a painful, non-reducible mass at the incision site. The appendix's location within the hernia sac and the development of inflammation can be explained by extraluminal compression and impaired vascular circulation. Surgical treatment involves appendectomy along with hernia repair, and in appropriate cases, mesh use can reduce recurrence.

Conclusion: The presence of the appendix within a trocar site hernia and the resulting development of acute appendicitis is extremely rare. In patients presenting with pain at the incision site and a suspected incarceration mass, early imaging and surgical intervention are crucial for preventing complications.

Keywords: Acute appendicitis, hernia, trocar

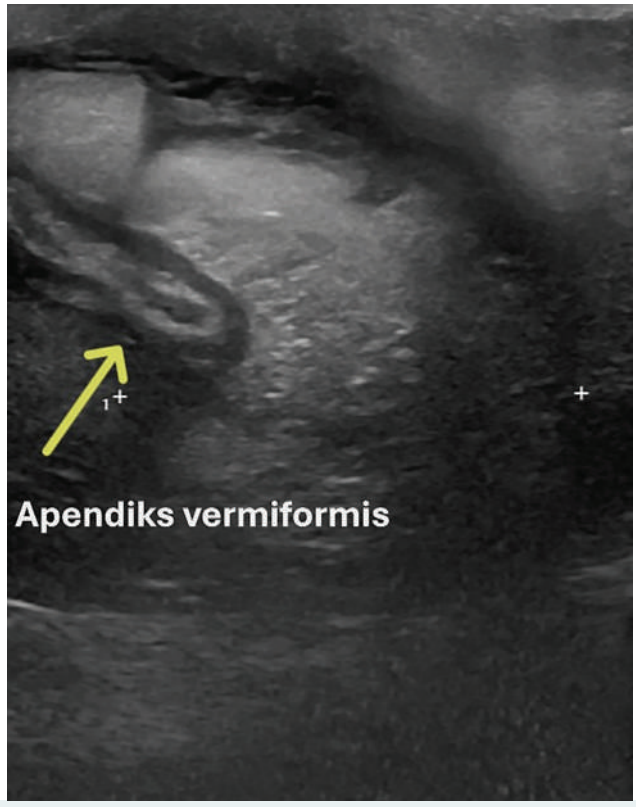


Figure 1. Appendix and bowel loop inside the hernia sac-ultrasonography. The image shows the intestinal loop and appendix within the hernia sac as viewed via ultrasound.



Figure 2. Acute appendicitis in a hernia-peroperative image. The photograph shows tissue consistent with acute appendicitis, which was exposed after the hernia sac was ruptured during surgery.

[P-279]

Chylous ascites following laparoscopic cholecystectomy: Successful management with conservative treatment- a case report

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Objective: Laparoscopic-cholecystectomy is considered the gold-standard-surgical-method in the treatment of symptomatic gallstone-disease. Chylo-ascites is a clinical condition characterized by the accumulation of triglyceride-rich-chylous-fluid originating from the intestinal-lymphatic-system in the peritoneal cavity. The development of chylous-ascites after laparoscopic-cholecystectomy is extremely rare,and only a limited number of case reports exist in the literature. This condition is due to damage to the lymphatic-structures around the hepatoduodenal ligament, portahepatis, and Calot's triangle during surgical dissection. This case report presents a patient who developed chylous-ascites after laparoscopic-cholecystectomy and was successfully treated with short-term total parenteral nutrition (TPN) initiated early, without the need for pharmacological or surgical intervention.

Material and Methods: A 74-year-oldfemale patient was admitted for elective-laparoscopic-cholecystectomy. Her medical history included diabetes mellitus, hypertension, and coronary artery disease. She had undergone endoscopic retrograde cholangiopancreatography (ERCP) one month prior. Laparoscopic-cholecystectomy was performed using the standard-four-trocartechnique, and the surgical procedure was completed without complications. The patient was transferred to the ward with a intra-abdominal drain. Postoperatively, approximately 500 mL of milky-white-fluid was observed draining from the drain. With a preliminary diagnosis of chylous-ascites, triglyceride levels in the drain fluid were measured at 466 mg/dL. Postop 2, the patient's oral intake was stopped, and TPN was initiated. Postop 3 the drain became serous in character. On postoperative days 4, 5 and 6, the drainage volume was observed as 300 mL of serous fluid,while TPN was continued. On postop 7, the drainage volume decreased to 200 mL. Controlled oral intake was initiated on the 8th postoperative day. Drainage continued at approximately 200 mL of serous character until the 11th postoperative day. One week later, minimal drainage was observed, and the drain was removed. No recurrence was detected during the follow-up period.

Results: Chylo-ascites is a complication-resulting from damage to the abdominal-lymphatic-system and is most frequently reported in the postoperative period after retroperitoneal and oncological-surgeries. The diagnosis is confirmed by detecting a triglyceride level above 110 mg/dL in the drainage-fluid. In our case, triglyceride level of 466 mg/dL. Conservative treatment is usually the first step; discontinuation of oral intake, TPN, medium-chain-triglyceride-diet, and somatostatin-analogs are recommended. In some cases, long-term TPN treatment, octreotide-use,or surgical-exploration has been required. In the case reported by Al Ghamdi et al., longer-term conservative treatment and different treatment strategies are included in the literature review for the management of chylousascites. In contrast, in our case,with the early initiation of TPN, the chylous character of the drainage disappeared within five days and progressively decreased. This suggests that early diagnosis and rapid intervention can shorten the treatment process. It is noteworthy that our patient had a recent history of acute pancreatitis and ERCP. It can be considered that peripancreatic inflammation and previous interventions may have affected lymphatic flow in the hepatoduodenal region and increased susceptibility to lymphatic damage during surgery.

Conclusion: Conclusion, although chylosacitis developing after laparoscopic-cholecystectomy is rare,it can be successfully managed with short-term conservative-treatment when diagnosed early. Early-initiation of TPN, in-particular, can reduce need for pharmacological/surgical intervention.

Keywords: Laparoscopy, cholecystectomy, chylous ascites

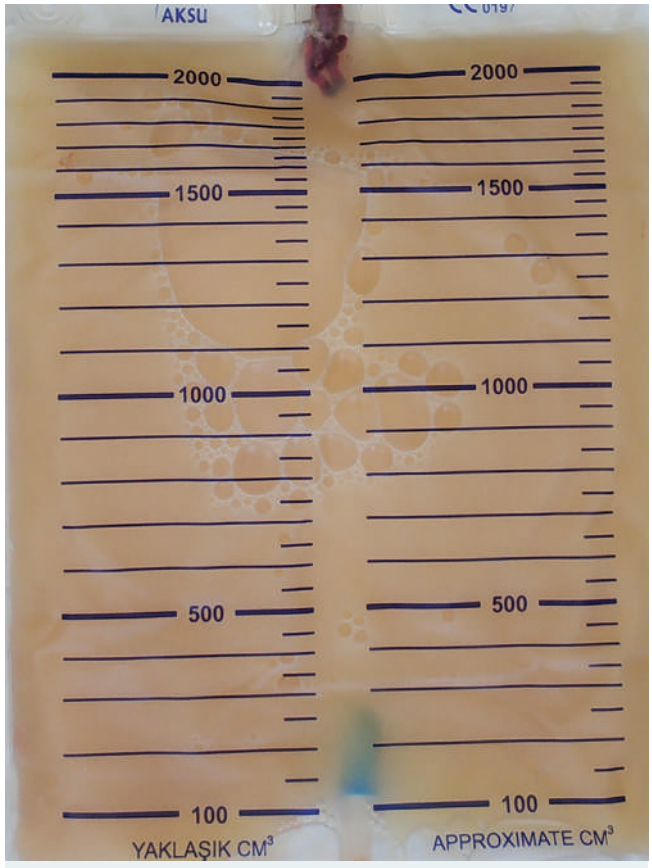


Figure 1. Postoperative 1.

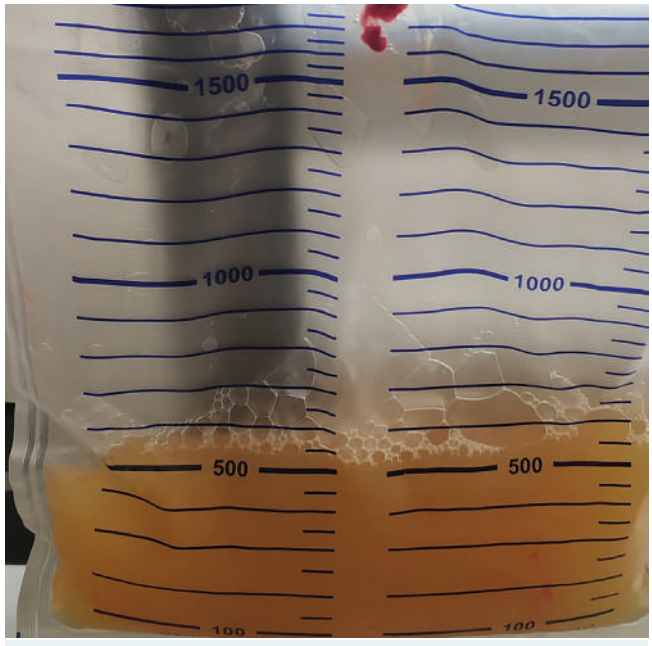


Figure 2. Postoperative 3.

[P-308]

Malignant gastrocolic fistula: Clinical course, surgical intervention, and pathological findings in two acute cases

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Objective: Gastrocolic fistulas represent a rare pathological occurrence, manifesting as fistulous connections between the stomach and the transverse colon. In Western societies, colorectal cancers are most commonly implicated in the etiology of cancer, while in Eastern societies, stomach cancers are typically held responsible. In the contemporary medical context, the implementation of screening programs has led to the ability to detect cases of colon cancer at an early stage, thereby reducing the prevalence of malignant gastrocolic fistulas. This study presents the surgical management of two cases presenting to the emergency department with acute fecal vomiting and abdominal pain, in whom malignant gastrocolic fistulas were identified.

Material and Methods: A retrospective review was conducted of two cases that presented to our clinic's emergency department with complaints of acute abdominal pain and fecal vomiting. The patients were subsequently diagnosed with malignant gastrocolic fistula based on the results of investigations. The patients' demographic data, diagnostic imaging findings (video/photographic documentation), surgical procedures performed, and histopathological results were compiled from hospital records.

Results: Case 1: A 56-year-old male with known synchronous adenocarcinoma of the colon and stomach presented with acute symptoms while awaiting neoadjuvant chemotherapy. Imaging confirmed a gastrocolic fistula. Following stabilization, the patient underwent en bloc resection comprising extended right hemicolectomy, distal gastrectomy, and D2 lymph node dissection. The hepatic flexure tumor had infiltrated the greater curvature of the stomach. Histopathology revealed pT4b colon adenocarcinoma invading the gastric wall, with one metastatic lymph node (pN1a/83) and clear surgical margins. Case 2: A 60-year-old female, treated conservatively for perforated diverticulitis six months prior, presented with abdominal pain and fecaloid vomiting. Imaging revealed a mass at the splenic flexure with a fistula tract. She underwent en bloc resection involving segmental colon resection, gastric wedge resection, and anterior abdominal wall resection. Intraoperatively, the mass invaded the stomach and abdominal wall. Histopathology confirmed pT4b adenocarcinoma, one metastatic lymph node (pN1a/14), and clear surgical margins.

Conclusion: Typically manifesting with chronic diarrhea and weight loss, malignant gastrocolic fistulas can rarely present as acute surgical emergencies. In locally advanced and fistulized tumors, aggressive en bloc surgical approach aiming for R0 resection remains the most effective modality for both cure and palliation.

Keywords: En bloc resection, gastrocolic fistula, colon cancer, multivisceral resection, pT4b

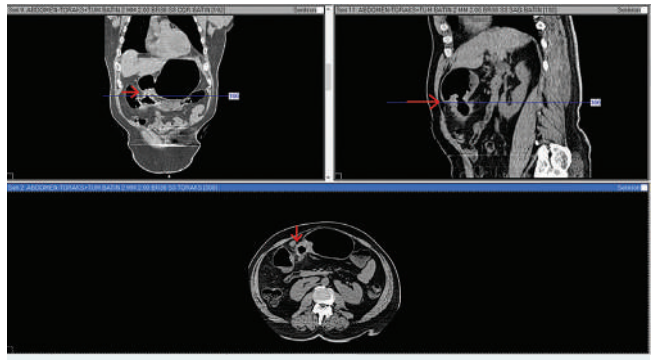


Figure 1. Emergency CT scan for case-1.

CT: Computed tomography.



Figure 2. Endoscopic image for case-1.



Figure 3. Case 1: Tumor image.

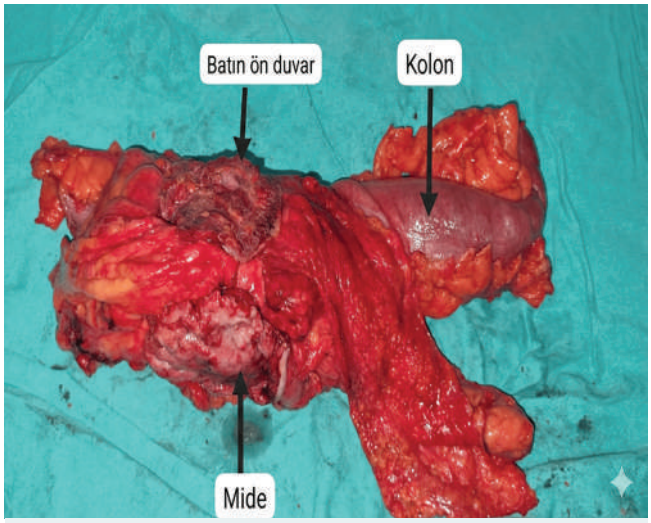


Figure 4. Case 2: Tumor image.

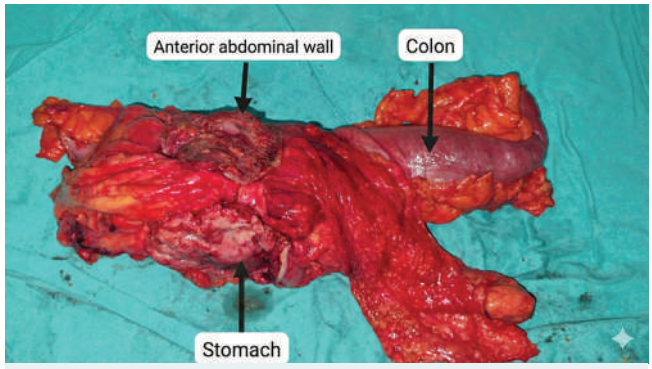


Figure 5. Case 2: Tumor image.

[P-309]

Isolated splenic sarcoidosis mimicking primary splenic angiosarcoma: Radiological misdiagnosis and surgical management

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Objective: Sarcoidosis is a multisystemic non-caseating granulomatous disease of unknown etiology. The disease primarily affects the lungs and mediastinal lymph nodes,while isolated spleen involvement is a relatively uncommon complication (1-5%). Splenic sarcoidosis,when observed radiologically as multiple hypodense nodules in the spleen, can be misinterpreted as malignancies such as lymphoma, metastasis, or primary splenic angiosarcoma. The objective of this study is to present a case that initially raised suspicion of angiosarcoma radiologically, but was subsequently diagnosed with isolated splenic sarcoidosis following splenectomy.

Material and Methods: A 25-year-old male patient presented to our outpatient clinic, reporting a complaint of pain in the left upper quadrant. A thorough review of the patient's medical history did not reveal any additional complaints, such as weight loss, fever, or night sweats, other than the pain being experienced. A physical examination was conducted, yielding no pathological findings. Laboratory tests revealed normal hemogram and biochemistry parameters. A subsequent abdominal computed tomography (CT) scan revealed a hypodense lesion measuring approximately 3.5x4 cm in the spleen, containing calcifications in its periphery and interior. Thoracic CT, performed for systemic screening, revealed a normal appearance of the lung parenchyma and mediastinal lymph nodes. Abdominal magnetic resonance imaging performed for lesion characterization revealed a mass lesion with central cystic areas, appearing hypointense on T2-weighted sequences relative to the spleen parenchyma, and showing peripheral contrast enhancement after intravenous contrast material. Given the inability to exclude lymphoma or vascular malignancy (angiosarcoma) based on the available radiological findings, a decision was made to proceed with surgical intervention. The patient, who was scheduled for elective surgery, received the necessary vaccinations (Pneumococcal, Meningococcal, Hib) two weeks prior to the operation. The patient underwent an open splenectomy for diagnostic and therapeutic purposes and was discharged after a smooth postoperative follow-up.

Results: A macroscopic examination of the excised spleen material revealed numerous white-yellow nodules on the cut surface. The histopathological evaluation revealed no malignancy; however, non-caseating granulomas with epithelioid cells showing a tendency to coalesce were detected in the tissue. No bacilli were observed in the histochemical acid-resistant bacilli staining performed for the differential diagnosis of tuberculosis. The diagnosis of the case was determined to be "isolated splenic sarcoidosis," a determination that was made based on the findings that were available at the time of the diagnosis.

Conclusion: Isolated splenic sarcoidosis is a rare clinical condition that can be misdiagnosed as aggressive malignancies, such as angiosarcoma, due to the absence of specific radiological findings. In instances where imaging methods are inadequate for differential diagnosis and suspicion of malignancy persists, splenectomy is regarded as the gold standard approach for establishing a definitive histopathological diagnosis and providing curative treatment.

Keywords: Angiosarcoma, splenic mass, sarcoidosis, splenectomy

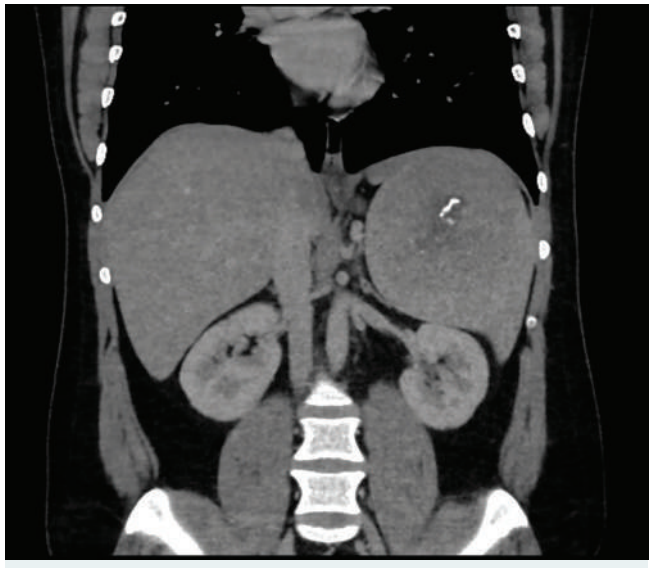


Figure 1. CT scan.

CT: Computed tomography.

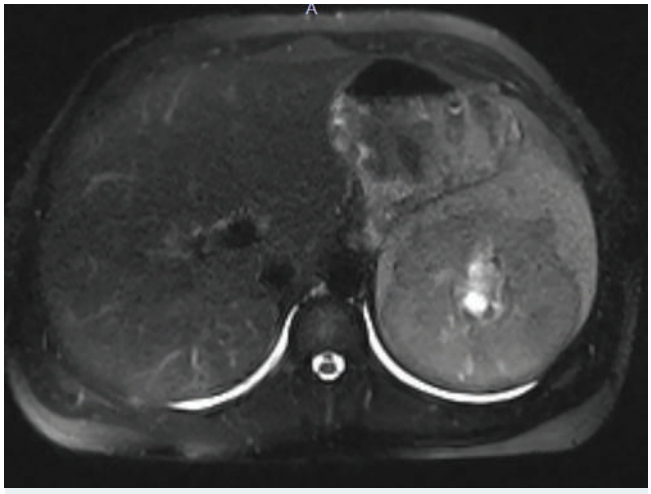


Figure 2. MR scan.

MR: Magnetic resonance.



Figure 4. Patology-X4 HE.

HE: Hematoxylin and eosin.

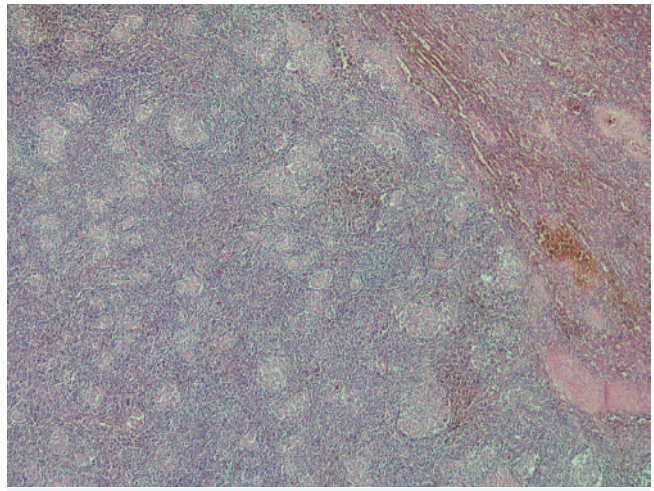


Figure 3. Surgical specimen.

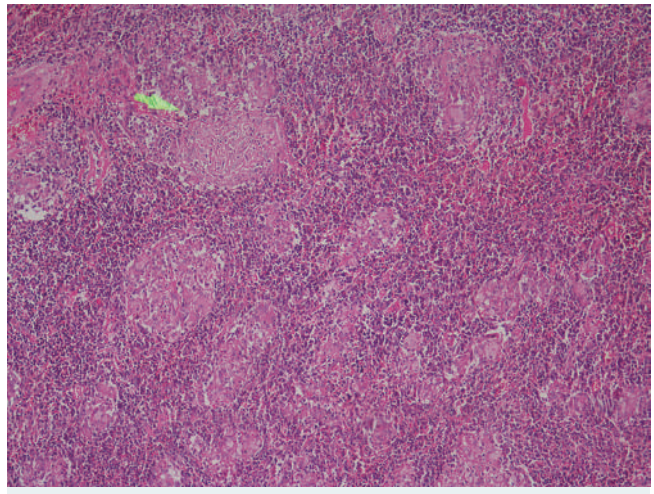


Figure 5. Patology-X10 HE.

HE: Hematoxylin and eosin.

[P-310]

A diagnostic pitfall in colorectal cancer surgery: Hepatic metastasis of uveal melanoma mimicking colorectal liver metastasis

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Objective: Acute appendicitis in elderly populations may serve as a sentinel clinical presentation for underlying right-sided colonic malignancy. Consequently, current literature supports colonic evaluation in selected patients following appendicitis to rule out occult pathology. In patients subsequently diagnosed with colorectal cancer, hepatic lesions identified during the staging process are predominantly interpreted as colorectal metastases, given that the liver is the most common site of spread. This presumption typically dictates surgical strategies, favoring synchronous or sequential resections in resectable cases. However, diagnostic pitfalls exist; limitations in oncologic imaging and the presence of "mimicker" lesions can lead to misclassification, particularly in patients with a history of malignancy. Uveal melanoma is distinct for its specific hepatic tropism and potential for metastatic recurrence many years after primary ocular treatment. This report discusses a rare instance where a presumed colorectal liver metastasis was histopathologically confirmed as late-stage uveal melanoma.

Results: A 68-year-old male presented with acute abdominal pain and generalized peritonitis, undergoing emergency appendectomy for perforated acute appendicitis. While the appendectomy specimen was benign, the patient's age and complicated presentation prompted a postoperative colonoscopy, which revealed a villous mass in the cecum diagnosed as adenocarcinoma. Staging imaging identified a solitary hepatic lesion, radiologically interpreted as a colorectal metastasis. Following multidisciplinary review, the patient underwent simultaneous right hemicolectomy and hepatic metastasectomy with curative intent. Intraoperative exploration showed no further dissemination. Although the colonic specimen confirmed primary adenocarcinoma, histopathological examination of the liver lesion unexpectedly revealed metastatic malignant melanoma. A detailed retrospective review disclosed that the patient had undergone ocular enucleation for uveal melanoma 15 years prior, with no intervening recurrence. The patient was diagnosed with synchronous primary colorectal cancer and late-onset metastatic uveal melanoma.

Conclusion: Not every hepatic lesion detected during colorectal cancer staging represents a colorectal metastasis. Uveal melanoma may clinically and radiologically mimic colorectal dissemination through late-onset hepatic metastases that develop years after primary treatment; this risk is particularly heightened in the presence of synchronous colorectal cancer. A detailed oncologic history and histopathological confirmation are of paramount importance for the prevention of misclassification and the optimization of appropriate multidisciplinary management

Keywords: Uveal melanoma, colorectal cancer, liver metastasis

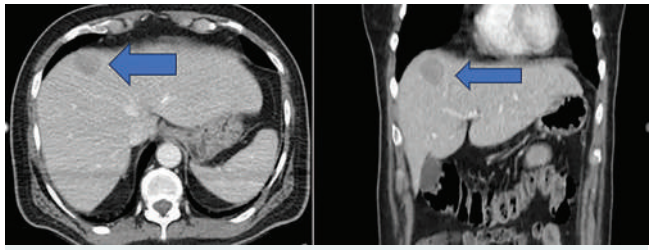


Figure 1. Solitary liver lesion detected on preoperative contrast-enhanced abdominal CT.

CT: Computed tomography.



Figure 2. Intraoperative view during right hemicolectomy.

[P-311]

A rare differential diagnosis in supraclavicular lymph node: Castleman disease or IgG4-related lymphoid proliferation?

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Objective: In supraclavicular lymph node pathology, metastatic solid tumors-particularly lymphoma and lung or thyroid malignancies-are the primary diagnostic considerations. However, viral infections, autoimmune disorders such as Hashimoto thyroiditis and Graves' disease, and rarer entities including Castleman disease (CD) and IgG4-related lymphoid proliferation (IgG4-RLP) should also be considered. Although CD and IgG4-RLP are generally regarded as benign or premalignant conditions, their overlapping histopathological and immunohistochemical features make accurate differentiation crucial, as management and therapeutic approaches differ. This case report presents a rare supraclavicular lymph node lesion and addresses the challenges encountered in the differential diagnosis within a multidisciplinary framework.

Material and Methods: A 39-year-old woman under follow-up for Hashimoto thyroiditis, without active symptoms,was found to have multiple pathological lymph nodes in the right supraclavicular fossa on routine ultrasonography,the largest measuring 36×18mm. Thoracic computed tomography revealed a 35×23 mm pathological lymphadenopathy in the right lower jugular chain-supraclavicular region. PET-CT demonstrated heterogeneous increased FDG uptake in a 17×21 mm lymph node at the same site (SUV_{max}:10.33). Targeted ultrasonography identified conglomerated lymph nodes at right level IV, posterolateral to the jugular vein,considered unrelated to thyroid pathology,and a tru-cut biopsy was performed. Histopathological evaluation revealed atypical lymphoid proliferation;due to suspicion of low-grade lymphoma,complete excision of the lymph node was subsequently performed.

Results: Microscopic examination showed follicular hyperplasia, regressive germinal centers, and focal follicular "twinning" consistent with features of hyaline-vascular type CD. Concentric mantle zone arrangement, perivascular hyalinization, and prominent capsular fibrosis were observed. Interfollicular areas demonstrated sheets of plasma cells and focal storiform fibrosis. Immunohistochemically, plasma cells were highlighted by CD138 and showed polyclonality on kappa and lambda *in situ* hybridization. CD20 and CD3 staining revealed preserved B-and T-cell compartments, while CD21 and CD23 highlighted intact follicular dendritic cell networks. CyclinD1, Bcl-2, CD30, HHV8, and EBV (EBER) were negative. Although focal areas showed an IgG4/IgG ratio exceeding 40%, the overall ratio was approximately 20%. Normal serum IgG4 levels and polyclonal plasma cells precluded a definitive diagnosis of IgG4-RLP.

Conclusion: Rare lymphoid proliferative disorders involving supraclavicular lymph nodes should be carefully considered in the differential diagnosis once malignant processes have been excluded.This case demonstrates that CD and IgG4-RLP may exhibit substantial overlap in histopathological and immunohistochemical features. While excisional biopsy plays a pivotal role in achieving definitive diagnosis and local disease control, pathological evaluation constitutes the cornerstone of a multidisciplinary approach. The integration of clinical findings, laboratory data, and detailed histopathological assessment enables accurate diagnosis and appropriate treatment planning. Systemic steroid therapy is generally effective in IgG4-RLP, whereas CD may require surgical excision or systemic immunomodulatory therapy. This case highlights the importance of close collaboration among surgery, pathology, and hematology disciplines in the management of rare lymphoid proliferations and underscores the critical contribution of excisional biopsy combined with immunohistochemical analysis in the diagnostic process.

Keywords: Castleman disease, IgG4-related lymphoid proliferation, rare lymphoid proliferations

[P-312]

It could not have been worse: Obstructive colonic malignancy on a background of Crohn's disease and a colon diverticulum perforated into the retroperitoneum

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Objective: Chronic inflammation is one of the fundamental mechanisms underlying the development of malignancy. Inflammatory bowel diseases (IBD) are also considered predictive factors for the development of colorectal cancer (CRC). Although the incidence of IBD-associated CRC has decreased with advances in diagnostic and therapeutic processes, its prognosis is known to be worse compared to sporadic CRC. As a result of chronic inflammation and obstruction, increased intraluminal pressure may create a predisposition for the development of diverticular disease of the intestine. Diverticular perforation and/or colonic perforation constitute a not-uncommon surgical emergency. In the present case, we report a patient in whom several colorectal pathologies—each not rare in isolation but seldom encountered simultaneously—coexisted, and we present the emergency surgical intervention performed along with the pathological findings.

Material and Methods: The present study is a case report.

Results: In the present case, we report the emergency surgical intervention performed in a patient in whom several colorectal pathologies—each not uncommon when considered individually but rarely encountered together—coexisted, along with the pathological findings.

Conclusion: CRCs arising in the setting of Crohn's disease are associated with aggressive histopathological features, advanced-stage disease at diagnosis, and poorer prognosis. Perforation is a rare but serious complication of Crohn's disease and is more likely in the presence of concomitant malignancy. Chronic transmural inflammation and tumor-related luminal narrowing predispose the colonic wall to perforation. In emergency settings, surgical management usually involves segmental resection or subtotal colectomy; however, chronic inflammation and poor nutritional status increase surgical morbidity. Because of the high risk of anastomotic leakage in cases with perforation, stoma formation is often preferred over primary anastomosis. Considering the increased risk of malignancy and perforation in Crohn's disease, resection should include the involved segment with its vascular and lymphatic drainage. In patients with suspected infection or high surgical risk, primary anastomosis should be avoided. Further multicenter studies with larger cohorts are needed to better define CRC management in patients with IBD.

Keywords: Chron's disease, divrticulosis, colorectal malignancy, perforation

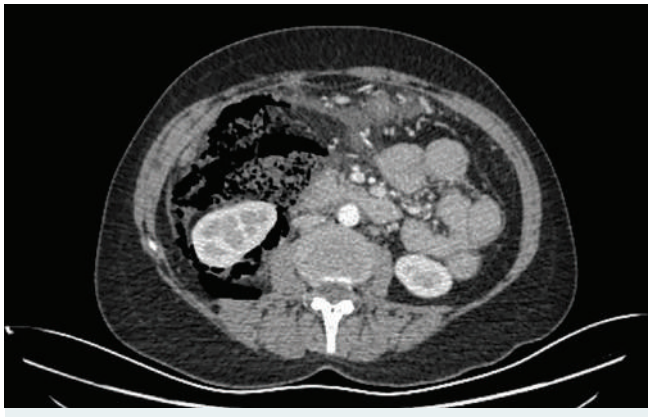


Figure 1. Cross-sectional imaging of retroperitoneal free air.



Figure 2. Extended right hemicolectomy specimen.

TANI

HİSTOPATOLOJİK TİP: ADENOKARSİNOMA
TÜMÖR BOYUTU: 3 X 2 CM
TÜMÖR YERLEŞİMİ: TRANSVERS KOLON
PERİTÜMÖRAL DESMOPLASTİK REAKSİYON: ORTA
PERİTÜMÖRAL LENFOSİTİK İNFİLTRASYON: BELİRGİN
LENFOVASKÜLER İNVAZYON: İZLENMEDİ
PERİNÖRAL İNVAZYON: İZLENMEDİ
TÜMÖR İNVAZYON SEVİYESİ: SUBSEROZAL İNVAZYON (pT3)
CERRAHİ SINIRLAR: İNTAKT
İNVAZYON DERİNLİĞİ: 1 CM
ÜLSERASYON: MEVCUT
NEKROZ: İZLENMEDİ
İNVAZYON SEVİYESİNİN MÜSKÜLARİS PROPRİA YA UZAKLIĞI: 0,1 CM
BENİGN LENF NODU SAYISI: 20 ADET
OMENTUM: KONJESYONE DAMAR YAPILARI İÇEREN LİPOMATÖ DOKULAR
TÜMÖR DIŞI ALANLAR: -PERFORASYON
-DİVERTİKÜL
-İNFLAMATUAR BARSAK HASTALIĞI (CROHN HASTALIĞİ İLE UYUMLU), İLEUM
YAPILAN İŞLEM: SAĞ HEMİKOLEKTOMİ

Figure 3. Pathological examination of the extended right hemicolectomy specimen.

Table 1. Literature comparison table

Study	Design / N	Typical Biology in MCC (MMR/MSI)	LN / Invasion Pattern	Clinical Message (Prognosis / Treatment)	Comparison With Our Case
Scott et al., 2021 (Histopathology; PubMed)	Single-center pathology audit; re-evaluation of 302 "poorly differentiated" CRCs	Majority of MCCs were dMMR; predominantly right colon/cecum localization	Lower LN metastasis and lower vascular invasion tendency compared with PD adenocarcinoma NOS	"MCC is frequently misclassified; MMR staining strengthens diagnosis"	Our case is consistent with right colon involvement + dMMR (MLH1/PMS2 loss) + MSI-H; however, LN (+) and LVI (+) were present → Stage III and high-risk features
Maung et al., 2024 (Open access; single-center series + literature review)	11 cases (2016–2023) + pooled literature data	MLH1/PMS2 loss in 11/11 cases (MSH2/MSH6 preserved)	LVI in 8/11 and PNI in 2/11; literature reports variable LVI/PNI rates	Authors emphasize similar demographic and tumor characteristics; longer follow-up needed for survival outcomes	MLH1/PMS2 loss consistent; LVI (+) consistent with series; PNI (-) closer to favorable profile
Netto, 2025 (Springer; case-based review and evidence summary)	Case-based review; hazard ratios from meta-analyses discussed	Predominance of MMRd MCC and importance of specific risk factors highlighted	Association of LVI and tumor size >7 cm with relapse discussed	Key message: MCC does not always demonstrate uniformly favorable outcomes; some series report lower 5-year OS compared with PDA (MSI-H)	Despite Stage III and LVI (+), our patient remains recurrence-free at 22 months, reinforcing "not all MCCs behave aggressively," while acknowledging existence of high-risk MCC subsets
Gómez-Álvarez et al., 2017 (Medical journal PDF; MSI-related MCC comparisons)	Comparative approach	MSI-associated MCC phenotype discussed	Stage-dependent differences in LVI, tumor size, and clinical course reported	"MCC is not universally advantageous; subgroups exist"	Our case represents the favorable outcome subgroup, but should be interpreted as a selected case due to LVI and LN positivity
Chen et al., 2019 (CRC biomarker practical guide)	Review/practical guideline	Prognostic and therapeutic importance of MSI/MMR testing in CRC	—	Emphasizes the role of dMMR/MSI-H in prognosis and treatment planning, particularly immunotherapy decisions	MMR/MSI reporting is central to the clinical message of our MCC case
Our case (Etlik City Hospital)	Single case	MLH1/PMS2 loss + MSI-H	pT3, pN1a (1/28), LVI (+), PNI (-)	22 months: no recurrence, no mortality	Consistent with literature on dMMR predominance; favorable short-to-mid-term outcome despite Stage III disease supports the prognostic "paradox"

[P-313]

Is poor differentiation always associated with poor prognosis? MSI-H colonic medullary carcinoma: clinical, pathological, and molecular evaluation (case report)

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Objective: Colonic medullary carcinoma is a rare subtype of colorectal cancer and is frequently associated with microsatellite instability (MSI) and loss of mismatch repair (MMR) proteins. Despite exhibiting poor histological differentiation, it has been reported to demonstrate a relatively favorable prognosis compared with conventional colorectal adenocarcinomas due to the prominent presence of tumor-infiltrating lymphocytes (TILs). This study aimed to present the clinical, pathological, and molecular characteristics of a patient diagnosed with colonic medullary carcinoma in the context of the current literature.

Material and Methods: A patient who underwent surgery with a diagnosis of colonic medullary carcinoma was retrospectively evaluated. Demographic data, mode of presentation, preoperative clinical and laboratory findings, surgical procedure, pathological examination results, tumor stage, lymph node status, TIL density, presence of lymphovascular and perineural invasion, as well as MMR immunohistochemical and MSI analyses were assessed. During the postoperative follow-up period, recurrence, metastasis, and mortality were recorded.

Results: The patient was of advanced age and presented with lower gastrointestinal bleeding. Histopathological examination following surgical resection revealed a prominent solid growth pattern, gland-poor architecture, and dense lymphocytic stromal infiltration consistent with medullary carcinoma. TIL density was markedly increased, suggesting the presence of an active immune response within the tumor microenvironment. No metastasis was detected in the dissected lymph nodes, and the absence of lymphovascular and perineural invasion supported limited local tumor aggressiveness. Surgical resection margins were reported as negative. Immunohistochemical analysis demonstrated loss of MLH1 and PMS2 protein expression, a finding consistent with MSI. Molecular analysis confirmed an MSI-H tumor phenotype. The patient received adjuvant chemotherapy, and no local recurrence, distant metastasis, or mortality was observed during a 22-month follow-up period. This clinical course is consistent with the relatively favorable prognosis of medullary carcinoma reported in the literature, despite its poor histological differentiation (Table 1).

Conclusion: Colonic medullary carcinoma is a distinctive colorectal cancer subtype that may lead to inaccurate prognostic assessment due to rarity and aggressive histological appearance. However, studies demonstrate frequent association with MSI-H phenotype and MMR loss, and improved outcomes related to immune cell infiltration.In this case, high TIL density, MLH1/PMS2 loss, nodal negativity, and recurrence-free follow-up support distinct biological behavior compared with conventional adenocarcinomas. These findings emphasize that poor differentiation alone should not indicate unfavorable prognosis.Routine MMR/MSI analysis in medullary morphology tumors is essential for prognostic assessment, individualized adjuvant treatment, and rational follow-up strategies. Accurate recognition and molecular evaluation can directly contribute to surgical clinical decision-making.

Keywords: Colonic medullary carcinoma, MSI-H, mismatch repair protein loss, poorly differentiated colorectal cancer, prognosis, tumor-infiltrating lymphocytes

[P-314]

Superior mesenteric vein injury occurring during right hemicolectomy

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Objective: Mesenteric vascular structures, particularly the superior mesenteric artery and vein, play a fundamental role in intestinal circulation. Although injury to these structures is rare, it carries a risk of massive bleeding and high mortality. Mezocolic dissection performed during right hemicolectomy can lead to serious vascular complications due to working close to central vascular structures. Superior mesenteric vein (SMV) injuries, reported in a limited number of cases in the literature, are generally related to anatomical variations and surgical traction. This case report presents an SMV injury that developed during right hemicolectomy and its management.

Material and Methods: A 76-year-old female patient presented to the general surgery outpatient clinic with complaints of abdominal pain and constipation. Colonoscopy revealed an ulcerative lesion at the hepatic flexure level, narrowing the lumen by approximately 40%. A biopsy was taken. Although the pathological examination reported adenocarcinoma, the patient and her relatives declined surgical treatment. Five months later, a follow-up colonoscopy revealed that the lesion was growing, and a decision was made to proceed with surgical treatment. Right hemicolectomy and mesocolic excision were planned.

Results: The patient was explored under general anesthesia via a midline median incision. Injury to the SMV occurred during mesenteric dissection. Venous bleeding was observed. Manual compression was applied to control the bleeding. With the help of a vascular clamp, proximal and distal control was achieved, and the damaged SMV segment was primarily repaired with non-absorbable prolene sutures. After abdominal irrigation, complete hemostasis was achieved. The operation was concluded with the placement of a drain to monitor the anastomosis line and repair site. The patient was extubated and transferred to the intensive care unit for monitoring. Clexane therapy was initiated at 12 hours postoperatively. Due to hemodynamic stability, the patient was transferred to the general surgery ward on the first postoperative day. No significant decrease was observed in postoperative hemogram follow-ups. The drain was serous in character. The regimen was started on the 4th postoperative day and gradually increased. The patient was discharged on the 9th postoperative day.

Conclusion: SMV injuries are rare during right hemicolectomy but carry a serious risk of morbidity and mortality. Early diagnosis, rapid control of bleeding, and appropriate surgical repair can successfully manage these potentially devastating complications. Thorough knowledge of vascular anatomy, careful mesenteric dissection, and avoidance of excessive traction on venous structures are critical in preventing such injuries.

Keywords: Superior mesenteric vein injury, mesocolic excision, intraoperative complication



Figure 1. Postoperative image of SMV injury developed during right hemicolectomy.

SMV: Superior mesenteric vein.

[P-315]

Isolated splenic metastasis from mucinous adenocarcinoma of the colon located at the splenic flexure: A case report

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Objective: Colorectal cancers most commonly metastasize to the liver and lungs. Mucinous adenocarcinomas may show more aggressive biological behavior and a tendency for peritoneal dissemination. Splenic metastasis in colorectal cancer is rare. This rarity may be explained by the sharp angulation of the splenic artery, the high phagocytic and immunologic activity of the spleen, and its limited lymphatic drainage.

Material and Methods: This study was designed as a single case report. Colonoscopy and biopsy were initially performed. In May 2019, the patient underwent left hemicolectomy, end colostomy, small bowel resection and anastomosis due to invasion, and peritonectomy for thoracic wall invasion. On postoperative day 2, hyperthermic intraperitoneal chemotherapy (mitomycin and carboplatin) was administered. The patient was diagnosed with T4bN0 mucinous adenocarcinoma and received adjuvant chemotherapy (5 cycles of FOLFOX and 1 cycle of FUFA) until January 2020. He was followed in remission. Two years later, Positron emission tomography-computed tomography revealed an 18×22 mm splenic lesion (SUV_{max}: 4.32) suspicious for metastasis. In June 2021, splenectomy and closure of the end colostomy were performed.

Results: A 45-year-old male patient presented with complaints of abdominal pain that began in 2018. Colonoscopy revealed a mass at the level of the splenic flexure. Macroscopic examination of the colectomy specimen demonstrated a malignancy measuring approximately 13×13 cm, consistent with mucinous adenocarcinoma. Pathological evaluation showed T4b disease (invasion of the abdominal wall, left thoracic wall, and small intestine) and N0 status (0/35 lymph nodes). There was no lymphovascular or perineural invasion. An R0 resection was achieved, and no tumor infiltration was observed at the surgical margins. Histopathological and molecular analysis revealed loss of *MLH1* and *PMS2* expression, MSI-H status, *KRAS* mutation, and HER2 negativity. After being followed in remission for two years, follow-up imaging revealed splenic metastasis. The patient underwent splenectomy, and pathological examination demonstrated a 2.5×2.5×2 cm metastatic lesion in the spleen, located approximately 0.1 cm from the surgical margin, consistent with metastatic mucinous adenocarcinoma.

Conclusion: This case is notable for the absence of lymph node metastasis despite T4b disease, mucinous histology, mismatch repair deficiency, and the development of isolated splenic metastasis after curative treatment. Although mucinous tumors typically spread intraperitoneally, this finding suggests a possible hematogenous route. Splenectomy is recommended as both a diagnostic and therapeutic approach in such cases. Although rare, splenic lesions detected during follow-up should be carefully evaluated for metastasis, and splenectomy remains an effective treatment option.

Keywords: Colorectal cancer, splenic metastasis, mucinous adenocarcinoma



Figure 1. Macroscopically, the mass was oval in shape, had a smooth surface and was firm. It measured 3.5 cm in diameter.

[P-316]

Case presentation: Incidentally detected peritoneal loose body in a patient undergoing surgery for Ileus

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Objective: Peritoneal loose bodies are usually asymptomatic and are found incidentally during abdominal surgery. Their size varies. They are generally thought to be caused by torsion and autoamputation of the appendix epiploica. Cases of peritoneal loose bodies larger than 2 cm are rare in the literature. We report the case of a patient who had difficulty in obtaining a diagnosis of tumor ileus.

Material and Methods: A 60-year-old male patient with hypertension and type 2 diabetes presented to our emergency department with abdominal pain and the absence of gas and stool passage for three days. On physical examination, he had generalized tenderness and distension in the abdomen. Rectal examination revealed no fecal contamination. An upright plain abdominal X-ray showed colonic distension but no air-fluid levels. Intravenous contrast abdominopelvic CT scan revealed fecalith at the level of the sigmoid colon and gas and stool distension proximal to this level. Laboratory findings showed no leukocytosis, no electrolyte imbalance, and normal renal function tests. Suspecting ileus due to fecalith, the patient was admitted to the general surgery ward for observation. Following symptomatic treatment and subsequent follow-up, the absence of gas and stool passage led to a planned colonoscopy. The colonoscopy revealed a mass encircling the lumen of the sigmoid colon and obstructing the passage. The patient was then taken to surgery. Anterior resection and anastomosis were performed due to a sigmoid colon mass. During the operation, a mass approximately 3.5 cm in diameter was detected in the peritoneal cavity and sent separately for histopathology.

Results: The mass detected intraoperatively was macroscopically oval-shaped, had a smooth surface, and was firm. Its size was 3.5 cm in diameter. Histopathological evaluation reported this mass as a peritoneal loose body. The patient's postoperative process was uneventful, and they were discharged.

Conclusion: In the case we present, imaging was insufficient to rule out fecaliths, peritoneal loose bodies, and malignant processes that could cause the patient's ileus, and the diagnosis was reached via colonoscopy. We encountered a peritoneal loose body in the patient, whom we operated on for tumor ileus. Peritoneal loose bodies can be confusing when investigating the pathology in a patient. Despite numerous examinations and imaging studies, they can be confused with both malignant and benign causes. Smaller ones are more common, but peritoneal loose body lesions larger than 2 cm are much rarer. The most optimal diagnostic and treatment option is surgery.

Keywords: Peritoneal loose bodies, calcified masses, colon malignancy

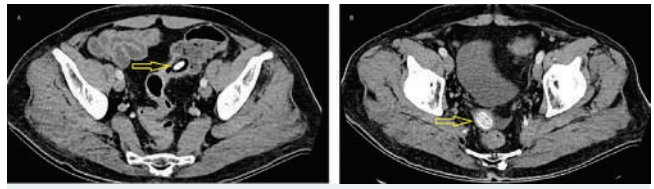


Figure 1. A) Contrast-enhanced abdominal CT scan shows fecalith in the sigmoid colon (arrow). B) Although not mentioned in the CT report, a calcified focus (arrow) was detected in the pelvis in the image.



Figure 2. Macroscopically, the mass was oval-shaped, had a smooth surface, and was hard. Its size was 3.5 cm in diameter.

[P-317]

Rectovaginal fistula after vaginal delivery: Diagnosis and surgical management

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Objective: Vaginal delivery can cause perineal trauma ranging from minor lacerations to obstetric anal sphincter injuries (OASIS) and, rarely, rectal injury leading to rectovaginal fistula (RVF). OASIS is strongly associated with postpartum anal incontinence and reduced quality of life, and reported rates vary by center due to differences in delivery practices and systematic postnatal examination. Although uncommon, RVF is a severe complication characterized by passage of flatus or feces per vagina, causing hygiene problems, infection risk, and psychosocial distress; it may occur even when the sphincter is intact and the perineum appears externally normal. Early, careful assessment is crucial for accurate anatomic diagnosis and appropriate surgical planning.

Material and Methods: A 23-year-old woman with no comorbidities or prior surgery underwent spontaneous vaginal delivery at an outside hospital on December 24 after onset of labor. Postpartum pelvic examination revealed a laceration on the lower posterior vaginal wall. Digital rectal examination raised suspicion of a rectovaginal defect when the examining finger was noted to pass into the vagina, and primary surgical repair was performed. She was referred to our clinic on January 10 due to development of a postoperative RVF. On examination in the lithotomy position, a RVF tract measuring approximately 1-3 cm was identified at the 12 o'clock position. Endorectal ultrasonography revealed disruption of the integrity of the internal anal sphincter and external anal sphincter along a line of approximately 150 degrees in the anterior region. Fecal passage from the anal canal to the vagina was observed in this region. The injury was classified as Type 4 according to the Sultan classification prior to repair. Although it was classified as Type 3c after surgical repair, the clinical presence of a RVF persists. A heterogeneous hyperechoic appearance was observed in the suture area, and these findings were considered to be changes secondary to hematoma or inflammation. In addition, disruption of the perineal body integrity and a distinct defect extending to the puborectal muscle were detected.

Results: Under spinal anesthesia in the lithotomy position, exploration revealed a previously sutured but dehisced ~4-cm rectovaginal defect consistent with Sultan type 4, with intact anal canal mucosa. The defect was closed with full-thickness continuous Vicryl sutures and the rectovaginal septum was reconstructed. Suspected internal and external sphincter fibers were repaired in an overlap fashion to reconstruct the perineal body, and the vaginal repair was completed by the obstetrics-gynecology team in separate planes. Oral intake (regimen 1) was started at postoperative hour 6, and the patient was discharged on postoperative day 5.

Conclusion: The main challenge in postpartum perineal trauma is missed injury in the early period; underdiagnosed OASIS may lead to anal incontinence and pelvic floor dysfunction. Systematic examination, standardized classifications, and—when suspicion persists—objective assessment of sphincter integrity with endoanal/endorectal ultrasonography can guide surgical planning. Although historical management of rectal injuries has emphasized diversion, repair, presacral drainage, and distal washout, selected patients may be successfully treated with primary repair without diversion. Surgical strategy should be individualized according to defect location and size, tissue quality, degree of contamination or infection, and the presence of sphincter injury.

Keywords: Rectovaginal fistula, obstetric anal sphincter injury, perineal trauma

Table 1. Sultan classification of obstetric perineal injuries

Degree	Injury description
Intact	No visible laceration.
First-degree	Limited to the perineal skin only.
Second-degree	Involvement of the perineal muscles; no anal sphincter involvement.
Third-degree	Injury involving the anal sphincter complex: 3a: <50% of EAS thickness involved. 3b: >50% of EAS thickness involved. 3c: Involvement of both EAS and IAS.
Fourth-degree	Injury involving the anal sphincter complex and the anal mucosa.
Rectal buttonhole tear	Isolated rectal buttonhole tear; may be observed with or without a third-degree injury.

EAS: External anal sphincter, IAS: Internal anal sphincter.

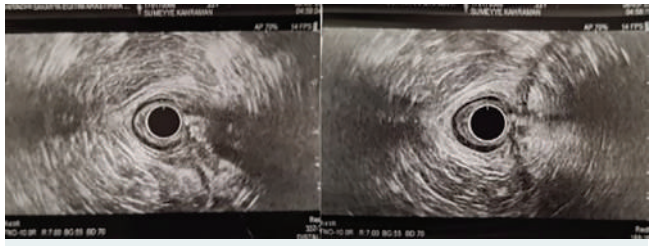


Figure 1. Endorectal ultrasound image compatible with Sultan Type 3c.

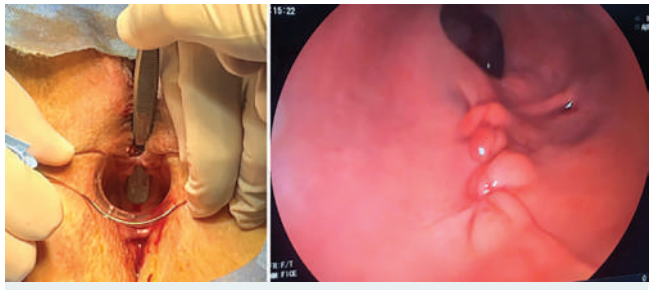


Figure 2. Intraoperatively observed rectovaginal fistula and rectoscopic image at 1-month follow-up.

[P-318]

A rare proctological case: Anal leiomyoma case report

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Objective: Leiomyomas are benign mesenchymal tumors of smooth muscle origin, most commonly found in the uterus, esophagus, and stomach. Perianal localization is quite rare and can often be confused with benign anorectal diseases. This case report presents a 65-year-old male patient who was followed for a long time with a diagnosis of hemorrhoids and was diagnosed with perianal leiomyoma after surgical excision. This case highlights the importance of considering rare tumor lesions in the differential diagnosis of perianal masses.

Material and Methods: A 65-year-old male patient presented to our clinic with a complaint of long-standing swelling in the anal region. Perianal examination in the knee-elbow position revealed a well-defined, non-pedunculated, elastic, and mobile mass approximately 3 centimeters in size, located at the 4-5 o'clock position. Preoperative perianal MRI was planned. The MRI showed a 2x2 cm solid lesion with diffuse homogeneous contrast enhancement and mild diffusion restriction at intermediate T2 intensity, resembling a GIST or leiomyoma. After clinical evaluation, surgical excision was planned for the patient. The mass was carefully dissected from the surrounding tissues and removed in its entirety.

Results: The excised material appeared as an oval-shaped, well-defined, cream-brown mass approximately 4 cm in diameter, with a slightly elastic consistency. A homogeneous solid structure was observed on the cut surface. Immunohistochemical staining was positive for Desmin and SMA, while S100 and DOG1 were partially weakly positive. No staining was observed with CD117. Although Desmin and SMA positivity suggested leiomyoma, the presence of partial DOG1 positivity did not rule out GIST. Pathology was reported as leiomyoma.

Conclusion: Although perianal leiomyomas are rare, they should always be considered in the differential diagnosis of perianal masses. Anal region diseases should also be considered during the preoperative examination.

Keywords: Anal leiomyoma, proctology

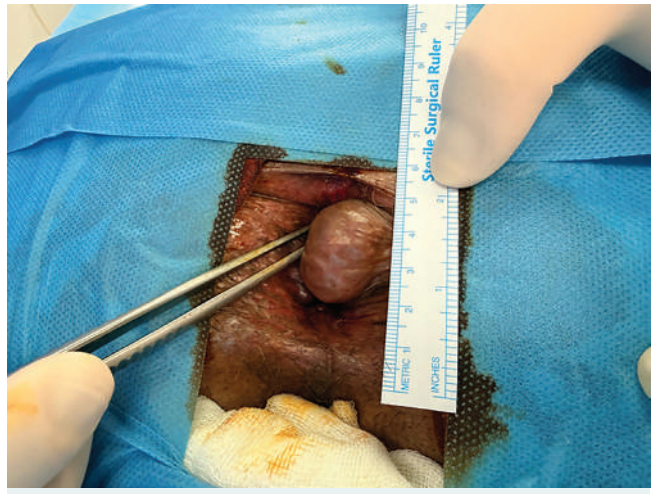


Figure 1. Preoperative image.

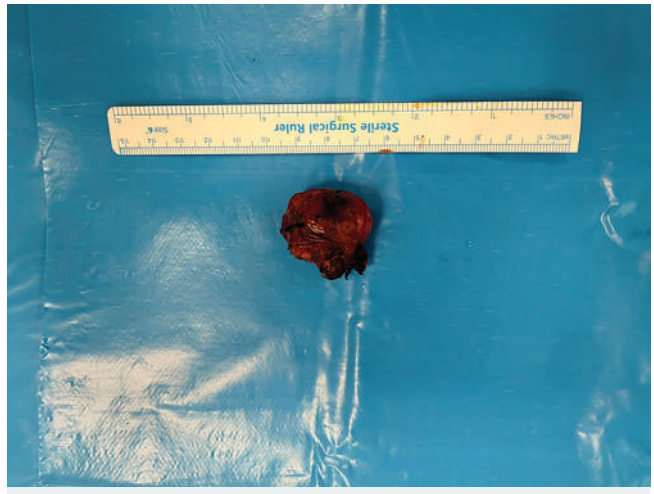


Figure 2. Spesmen.

[P-319]

Perineal scar endometriosis developing in an episiotomy scar: Case report

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Objective: Endometriosis is a chronic inflammatory condition characterized by the presence of functional endometrial glands and stroma outside the uterus. Scar endometriosis is rare and most commonly occurs following obstetric or gynecologic procedures. Perineal endometriosis developing in an episiotomy scar is an uncommon localization and diagnosis is often delayed. This report presents the clinical features, diagnostic process, and surgical management of a case of perineal scar endometriosis arising from an episiotomy scar.

Material and Methods: A 35-year-old woman presented with pain and swelling in the perineal region. She had a history of right mediolateral episiotomy during vaginal delivery in 2008. The patient reported a painful perineal mass for approximately 10 years, with symptoms increasing during menstruation. Physical examination revealed a tender subcutaneous mass adjacent to the episiotomy scar. The lesion was evaluated using ultrasonography and magnetic resonance imaging. Following clinical suspicion, surgical excision was performed and histopathological examination was conducted.

Results: Imaging demonstrated a solid lesion measuring approximately 3×3.5 cm beneath the episiotomy scar. No fistulous connection was identified and perianal fistula was excluded. Based on clinical findings and obstetric surgical history, scar endometriosis was suspected. The lesion was totally excised. Histopathological evaluation revealed endometrial glands and stroma. Immunohistochemistry showed diffuse CD10 positivity in stromal cells and cytokeratin-7 positivity in glandular structures, confirming the diagnosis of endometriosis.

Conclusion: Although rare, perineal endometriosis in an episiotomy scar typically presents with cyclical pain and a palpable mass. It should be considered in the differential diagnosis of perineal masses in patients with a history of obstetric surgery. Clinical suspicion is essential, and imaging supports the diagnosis. Definitive treatment is complete surgical excision with histopathological confirmation.

Keywords: Episiotomy, endometriosis, perineal mass

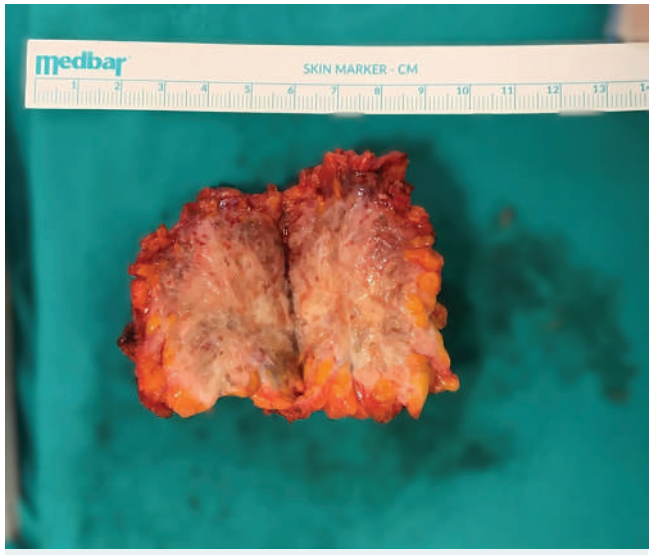


Figure 1. Macroscopic appearance of the excised endometriotic lesion.



Figure 2. Location of perineal endometriosis.

[P-320]

Extramedullary plasmacytoma of the breast mimicking primary breast carcinoma: A case report

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Objective: Multiple myeloma is a systemic plasma cell malignancy that may rarely present with extramedullary involvement. Breast plasmacytoma is extremely uncommon and often mimics primary breast carcinoma. This case highlights breast plasmacytoma as a rare initial manifestation of multiple myeloma and underscores the importance of accurate histopathological diagnosis.

Material and Methods: A 72-year-old woman was evaluated after bilateral suspicious breast masses were detected on routine screening mammography and breast ultrasonography. Imaging revealed irregular, solid, hypervascular lesions classified as BI-RADS 4C and BI-RADS 5, which were newly developed compared with prior examinations, prompting ultrasound-guided tru-cut biopsy. Subsequent PET/CT demonstrated intensely hypermetabolic breast lesions accompanied by widespread lymph node, soft tissue, and skeletal involvement. These findings were consistent with a systemic plasma cell neoplasm exhibiting extensive extramedullary and osseous disease involvement.

Results: Multiple myeloma is a systemic plasma cell malignancy that primarily involves the bone marrow but may rarely present with extramedullary disease. Extramedullary plasmacytoma of the breast is exceedingly rare and is most often reported in patients with known or relapsed multiple myeloma. Presentation as the initial manifestation of multiple myeloma is particularly uncommon. Clinically and radiologically, breast plasmacytomas frequently mimic primary breast carcinoma, representing a significant diagnostic pitfall. Definitive diagnosis relies on histopathological and immunohistochemical evaluation. Following diagnosis, comprehensive systemic assessment is essential to identify underlying multiple myeloma and to ensure timely initiation of appropriate hematologic management.

Conclusion: Extramedullary plasmacytoma of the breast, although rare, represents an important diagnostic pitfall as it can mimic primary breast malignancies. This case demonstrates that breast plasmacytoma may present as the initial clinical manifestation of multiple myeloma and highlights the necessity of combined histopathological evaluation and comprehensive systemic assessment to establish the correct diagnosis.

Keywords: Breast masses, breast plasmacytoma, differential diagnosis, extramedullary plasmacytoma, multiple myeloma

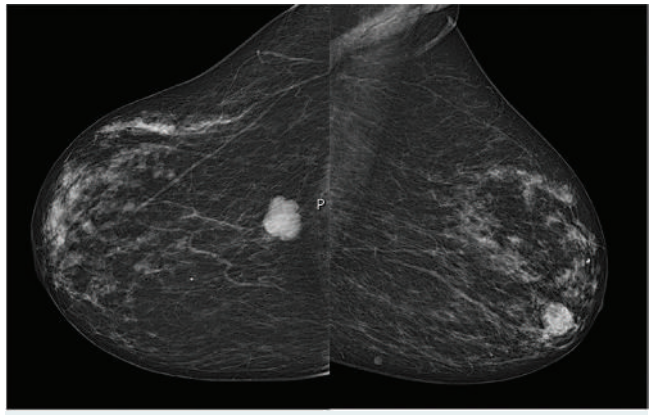


Figure 1. MLO mammographic image of breast plasmacytoma.

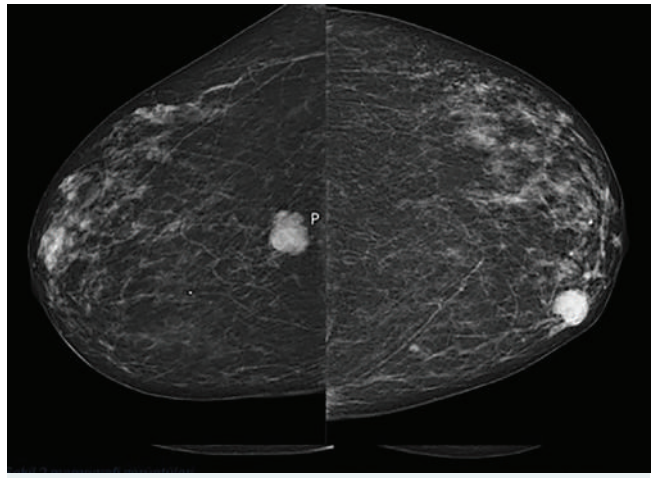


Figure 2. CC mammographic image of breast plasmacytoma.

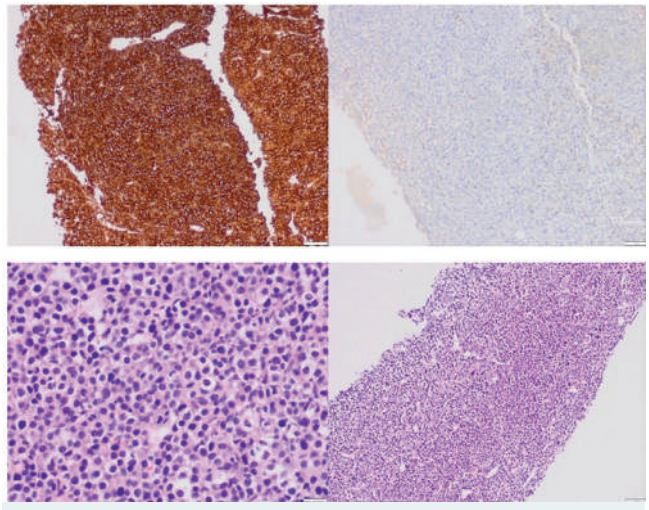


Figure 3. Pathology slides of breast plasmacytoma.

[P-321]

Skeletal recovery without biochemical cure in glucagon receptor-positive BMAH: Is unilateral adrenalectomy sufficient?

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Objective: Bilateral macronodular adrenal hyperplasia (BMAH) typically mandates bilateral adrenalectomy for cure, inevitably causing lifelong steroid dependency. While unilateral adrenalectomy (UA) has emerged as a cortisol-debulking strategy, its efficacy in reversing severe metabolic complications, particularly osteoporosis, in patients with mild autonomous cortisol secretion (MACS) remains debated. We evaluate UA's impact in a glucagon receptor-positive BMAH case.

Material and Methods: A 70-year-old female patient presented with uncontrolled hypertension, diabetes, and severe osteoporosis (lumbar T-score: -4.1). Computed tomography (CT) revealed bilateral giant adrenal masses (left: 60 mm, right: 50 mm). Although no overt cushingoid features were observed, MACS was confirmed (DST: 9.3 µg/dL). While genetic testing (*ARMC5*) was negative, aberrant glucagon receptors were identified. Following the failure of somatostatin analog therapy—intended to suppress glucagon—the patient underwent laparoscopic left adrenalectomy. The postoperative course was uneventful, and the patient was discharged on the 3rd day. Biochemical cure was not achieved due to the activity of the contralateral gland; 1 mg-DST levels remained non-suppressed (4.3 µg/dL). Despite this, the clinical outcomes are striking:

Steroid independence: During the 56-months follow-up, it was observed that the patient did not require any steroid replacement.

Hypertension management: Hypertension was successfully controlled with a reduced medication dosage.

Skeletal recovery: Most importantly, a dramatic improvement in bone mineral density was recorded, with the T-score rising from -4.1 to -1.6.

Clinical interpretation: This outcome indicates a significant improvement in osteoporotic changes, demonstrating that clinical benefits can be achieved through "cortisol debulking" despite persistent autonomous cortisol secretion.

Results: Biochemical cure was not achieved; the 1 mg-DST remained non-suppressed (4.3 µg/dL) due to contralateral gland activity. However, clinical outcomes were striking. At the 56-month follow-up, the patient required no steroid replacement. Hypertension was regulated with reduced medication. Most notably, bone mineral density improved dramatically (T-score -4.1 to -1.6), indicating significant skeletal recovery despite persistent autonomous cortisol secretion.

Conclusion: This case challenges the dogma of strict biochemical normalization. UA-mediated "cortisol debulking" successfully reversed severe osteoporotic changes associated with MACS. In elderly BMAH patients, preserving endogenous function through UA offers a superior balance between metabolic control and quality of life compared to bilateral adrenalectomy.

Keywords: Bilateral macronodular adrenal hyperplasia, mild autonomous cortisol secretion (MACS), unilateral adrenalectomy, cortisol debulking, osteoporosis

Table 1. Preoperative and postoperative comparison

Variable	Preoperative	Postoperative (56 months)	Outcome
Lumbar T-score	**-4.1 (severe osteoporosis)**	**-1.6 (osteopenia)**	**Major recovery**
DST (1 mg)	9.3 µg/dL	4.3 µg/dL	No biochemical cure
Anti-HT meds	1 (uncontrolled)	1 (regulated)	Improved control
HbA1c	6.1%	5.6%	Improved
Steroid need	-	None	Adrenal sufficiency preserved
Adrenal size	Bilateral (60 mm/50 mm)	Right only (50 mm)	Debulking achieved

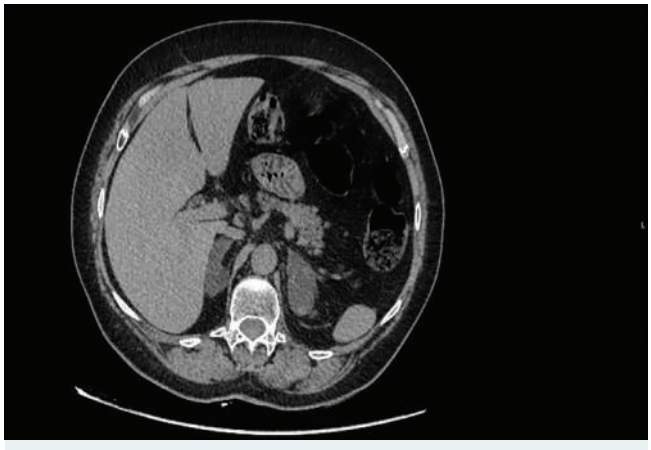


Figure 1. Preoperative CT scan.

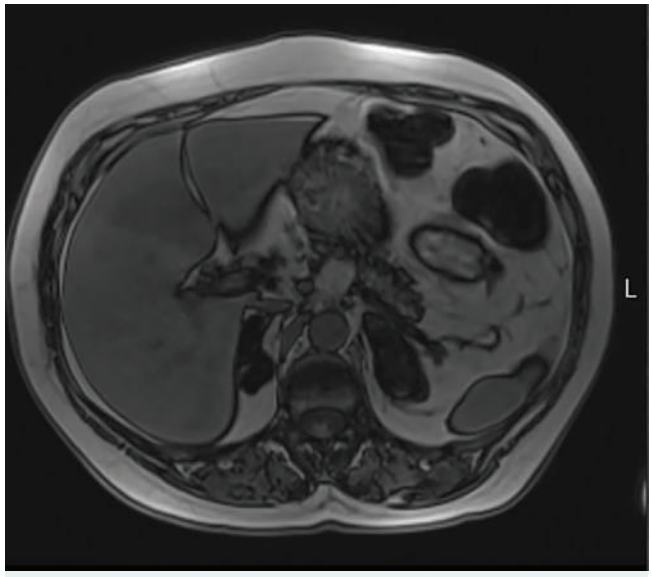


Figure 2. Preoperative MR scan.

[P-322]

Primary thyroid anjiosarcoma: A rare case report

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Objective: Primary angiosarcoma of the thyroid gland is an exceptionally rare and highly aggressive malignant tumor originating from endothelial cells, accounting for only a very small proportion of thyroid malignancies. Although it has been most frequently reported in the Alpine regions, it has been shown to be associated with a long-standing history of multinodular goiter; nevertheless, sporadic cases have also been described worldwide. Clinically, thyroid angiosarcoma typically presents with a rapidly enlarging neck mass accompanied by compressive symptoms, while radiological and cytological findings often mimic poorly differentiated thyroid neoplasms, thereby complicating early diagnosis.

Material and Methods: We evaluated of a 53-year-old male patient who presented with a six-month history of progressive neck swelling, dyspnea, and dysphagia.

Results: Neck ultrasonography revealed a large solid nodule measuring approximately 10 cm in the left thyroid lobe, characterized by a heterogeneous internal structure, hypoechoic appearance, areas of cystic degeneration, and coarse calcifications. Additionally, suspicious lymphadenopathies were detected at levels II-III, and fine-needle aspiration biopsy (FNAB) was performed. The initial FNAB result was reported as non-diagnostic. A second FNAB again yielded a non-diagnostic thyroid nodule biopsy; however, lymph node aspiration demonstrated very sparse malignant epithelial cells, favoring metastatic carcinoma. Nevertheless, the primary tumor origin could not be determined cytologically, and histopathological confirmation was recommended for definitive diagnosis. The patient subsequently underwent total thyroidectomy with left lateral and central neck dissection. No postoperative complications occurred, and the patient was discharged on postoperative day two. At follow-up, the patient was asymptomatic; however, histopathological examination revealed angiosarcoma measuring 5.5 cm in greatest diameter localized in the left thyroid lobe. Regarding lymph node findings, two reactive lymph nodes were identified in the right central compartment, while a total of 30 lymph nodes were dissected from the left central and lateral compartments, three of which demonstrated metastatic angiosarcoma. The patient was referred to medical oncology, and postoperative positron emission tomography/computed tomography (PET/CT) showed no evidence of distant organ metastasis.

Conclusion: This case highlights that repeated non-diagnostic FNAB results do not exclude malignancy in patients presenting with giant thyroid nodules, and that rare aggressive tumors should be considered, particularly in lesions demonstrating rapid growth, heterogeneous characteristics, and suspected invasiveness. Furthermore, early incorporation of endothelial markers into the immunohistochemical panel should be emphasized, as it may facilitate and expedite the diagnostic process.

Keywords: Total thyroidectomy, thyroid angiosarcoma, fine-needle aspiration biopsy (FNAB)

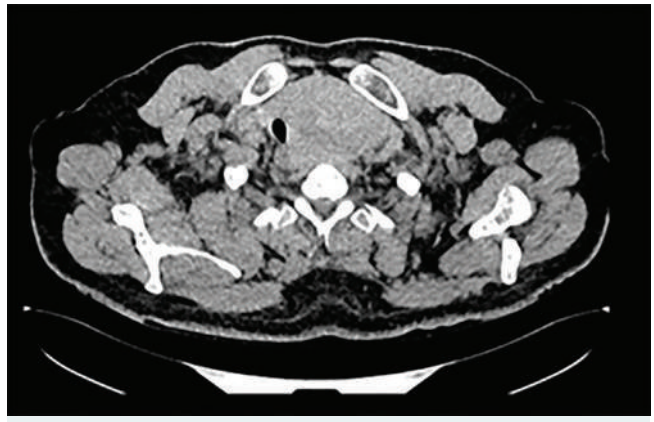


Figure 1. Computed tomography (CT) image demonstrating an approximately 10 cm mass in the left thyroid lobe.

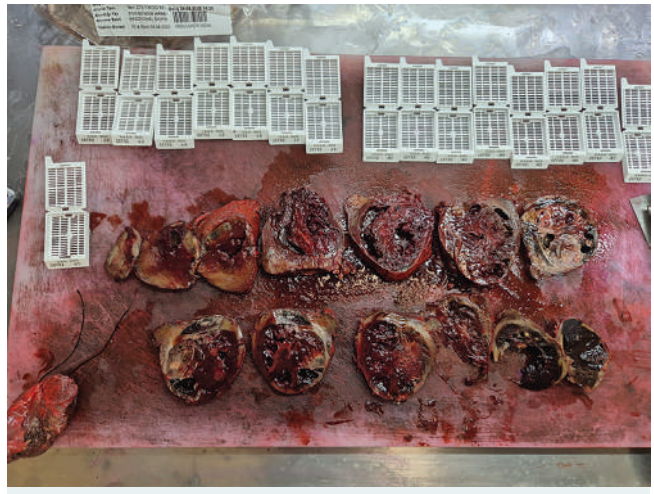


Figure 2. Surgical specimen.

[P-323]

Papillary thyroid carcinoma presenting with femoral fracture: A rare case report

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Objective: Papillary thyroid carcinoma (PTC) is the most common histological subtype of thyroid cancer and usually has a favorable prognosis. Distant metastases are rare, with bone involvement reported in approximately 4% of cases. Bone metastases may lead to pathological fractures and significantly worsen prognosis. We present a rare case of PTC diagnosed following a pathological femoral fracture.

Material and Methods: A 66-year-old female presented to the emergency department with right hip pain and limited mobility. Imaging revealed a pathological intertrochanteric fracture of the right femur. Open biopsy demonstrated metastatic carcinoma of thyroid origin. Following orthopedic resection, further evaluation of the thyroid gland was performed using ultrasonography and fine-needle aspiration biopsy.

Results: Thyroid ultrasonography revealed a 3 cm solid nodule in the right lobe, and fine-needle aspiration biopsy was classified as Bethesda category V. The patient underwent total thyroidectomy with bilateral central neck dissection. Intraoperatively, parathyroid glands were identified using a PT eye device, and intracapsular glands were autotransplanted into the sternocleidomastoid muscle. Histopathological examination confirmed invasive encapsulated follicular variant PTC, with no metastatic involvement of central lymph nodes (pT2N0M1).

Conclusion: This rare case highlights that PTC may present with aggressive behavior despite its generally favorable prognosis. Metastatic malignancy should be considered in patients presenting with atypical fractures, and a multidisciplinary approach is essential for optimal management.

Keywords: Bone metastasis, papillary thyroid carcinoma, pathological femoral fracture

[P-324]

Brachial cleft cyst: A rare case report

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Objective: Brachial anomalies result from changes in the development of the brachial apparatus during embryogenesis between the second and sixth to seventh weeks of fetal life. Persistence of brachial remnants can lead to the development of cysts, sinuses, fistulas, or cartilage islands. Secondary branchial cleft anomalies are the most common cause of this type of neck mass, accounting for approximately 90% of all cases. Although the masses are congenital, they are usually detected during the second to fourth decades of life when they enlarge due to infection or cyst rupture. They occur with equal frequency in men and women. Preoperative diagnosis requires precise determination of the lesion's location, with clinical and radiological findings being crucial.

Material and Methods: The patient was a 50-year-old woman with no significant medical history and no symptoms. She presented to our center with swelling in her right neck that had appeared approximately 6 months ago and had been progressively increasing since then. Physical examination revealed a 2 cm mass in the right submandibular area that was difficult to palpate and had well-defined borders. Ultrasonographic imaging revealed a hypoechoic lesion measuring 29x18 mm, located between the submandibular gland and the jugular vein in the right submandibular region, containing internal cystic areas in places, with no significant vascularization noted on Doppler evaluation. (Epidermoid cyst? Necrotic complicated LAP?) "Based on the MRI report stating," a lesion measuring approximately 25x20x28 mm, hyperintense on T1A and T2A, extending between the submandibular gland and the vascular bundle in the right submandibular region," surgery was planned for the patient. The pathology result was reported as a brachial cleft cyst.

Results: The vast majority of brachial anomalies (90%) originate from secondary clefts. These can be bilateral and present as soft, mobile, and asymptomatic masses under the skin. Depending on their size (ranging from 1 to 10 cm) and location, they may cause local symptoms such as dysphagia, dysphonia, dyspnea, and stridor. Cysts may become painful or tender due to infection, and abscess formation and fistula formation may occur. Sonographically, secondary brachial cleft cysts appear as well-defined, round-oval, hypo- to anechoic masses. Magnetic resonance imaging allows for better preoperative evaluation of the cyst.

Conclusion: Secondary brachial cleft cysts are rare and constitute the vast majority of brachial anomalies. They are usually asymptomatic but can become infected and lead to abscess and/or fistula formation. Clinical and radiological findings are valuable in preoperative evaluation. Treatment consists of surgical excision of the lesion.

Keywords: Brachial, cleft, cyst

[P-325]

Acute airway compression following thyroid fine-needle aspiration biopsy: A rare case requiring emergency lobectomy

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Objective: Thyroid fine-needle aspiration biopsy (FNAB) is a safe and minimally invasive diagnostic procedure widely used for the evaluation of thyroid nodules. Although complications are rare, cervical hematoma can occur and may lead to life-threatening airway compression. In this case report, we present our emergency surgical approach to a compressive thyroid hematoma that developed following FNAB and required urgent surgical intervention.

Material and Methods: A 72-year-old female patient underwent FNAB due to a nodule located in the left lobe of the thyroid gland. Approximately four hours after the procedure, the patient presented to the emergency department with shortness of breath. Physical examination revealed significant neck swelling and tachypnea. Neck computed tomography demonstrated a hematoma in the thyroid bed. Due to progressive respiratory distress, the patient was intubated in the critical care area and taken to emergency surgery. During the operation, active bleeding originating from the anterior thyroid artery of the left thyroid lobe was identified. A left lobectomy was performed to achieve definitive bleeding control. Postoperatively, the patient was admitted to the intensive care unit while intubated and was successfully extubated four hours later. On postoperative day one, the patient was transferred to the surgical ward, and calcium and parathyroid hormone levels were within normal limits. On postoperative day two, with no complications observed, the drains were removed and the patient was discharged.

Results: Although thyroid FNAB is considered a safe procedure with a low complication rate, rarely occurring cervical hematomas may result in life-threatening clinical conditions such as acute airway obstruction. The primary mechanism of hematoma formation is iatrogenic vascular injury, particularly damage to branches of the thyroid arteries, which may lead to rapid volume expansion. Due to the rapid progression of symptoms, early clinical recognition and prompt airway management are critical. Emergency surgical exploration may be required in the presence of progressive dyspnea and increasing neck swelling. In our case, early intubation was performed due to progressive respiratory distress, and active arterial bleeding was identified during surgical exploration, with definitive treatment achieved by lobectomy. This case demonstrates that although post-FNAB hematoma is rare, it may lead to rapid clinical deterioration, and early surgical intervention can be life-saving.

Conclusion: Cervical hematoma after thyroid FNAB is a rare but potentially life-threatening complication. Patients presenting with rapidly progressive neck swelling and respiratory distress require immediate evaluation, prompt airway management, and timely surgical intervention when indicated.

Keywords: Thyroid, FNAB, emergency surgery

[P-326]

Concomitant gallbladder hydatid cyst and Mirizzi syndrome: A rare case report

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Objective: Hydatid disease is a parasitic infection, most commonly caused by *Echinococcus granulosus*, and it predominantly involves the liver and lungs. Primary involvement of the gallbladder is extremely rare. Mirizzi syndrome (MS) is an uncommon but serious clinical condition secondary to cholelithiasis, characterized by obstruction and erosion of the main biliary ducts. The coexistence of a primary gallbladder hydatid cyst (PGHC) and type IV MS has been reported only in a very limited number of cases in the literature. In this poster, we aimed to present our case with this rare association.

Material and Methods: In a patient presenting with right upper quadrant pain and jaundice, physical examination and laboratory tests were performed. Ultrasonography and MRI were obtained. After an unsuccessful ERCP attempt, surgery was planned; intraoperative assessment was performed via laparotomy and the appropriate procedure was undertaken. Postoperatively, albendazole was initiated and long-term follow-up was performed.

Results: A 79-year-old male patient had a positive Murphy's sign on physical examination. Laboratory tests revealed leukocytosis and cholestasis (total bilirubin: 12.5 mg/dL). Ultrasonography and MRI demonstrated a stone in the gallbladder fossa, dense biliary sludge, and findings compatible with MS. Endoscopic retrograde cholangiopancreatography (ERCP) was unsuccessful. At laparotomy, the gallbladder was markedly inflamed and densely adherent to the common bile duct. During cholecystectomy, perforation of the gallbladder resulted in spillage of hydatid membranes and daughter vesicles. Concomitantly, full-thickness erosion of the common bile duct wall was observed. As no cyst was detected on preoperative imaging and no other focus was identified intraoperatively, the case was considered PGHC. Cholecystectomy and Roux-en-Y hepaticojejunostomy were performed. Albendazole therapy was initiated, and the patient was followed for 4 years without recurrence.

Conclusion: PGHC is a rare localization and is difficult to diagnose preoperatively; hydatid membranes and daughter vesicles may be mistaken for biliary sludge or gallstones on imaging. In our case, the finding interpreted as "biliary sludge" on ultrasonography and MRI was recognized intraoperatively as hydatid material. The coexistence of MS and PGHC is exceedingly rare. Although cholecystectomy with adjuvant albendazole is generally sufficient for PGHC, concomitant type IV MS in this patient required bile duct resection and Roux-en-Y hepaticojejunostomy, resulting in a successful clinical outcome during postoperative follow-up. Because this rare association may cause diagnostic confusion, primary hydatid disease should be considered in atypical cholecystitis and MS cases—particularly in endemic regions—and the surgical strategy should be planned to prevent parasitic dissemination while ensuring adequate biliary reconstruction.

Keywords: Primary hydatid cyst of the gallbladder, Mirizzi syndrome

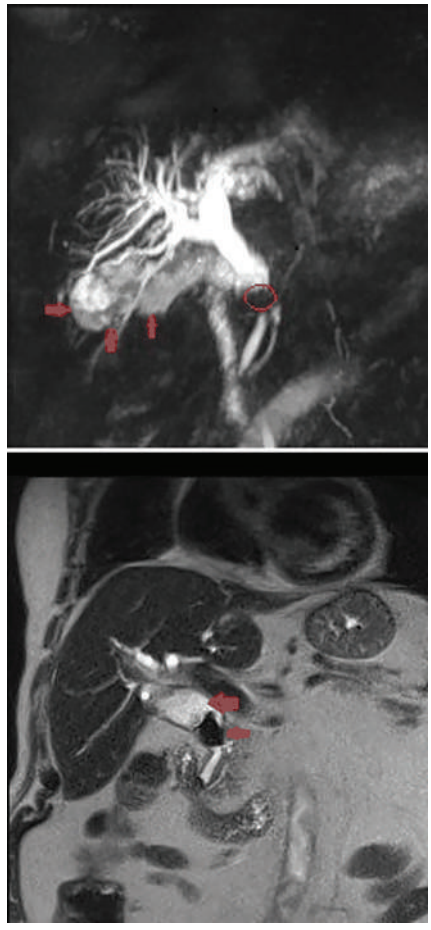


Figure 1. Preoperative MRCP image. Image of daughter cysts following intraoperative gallbladder perforation.

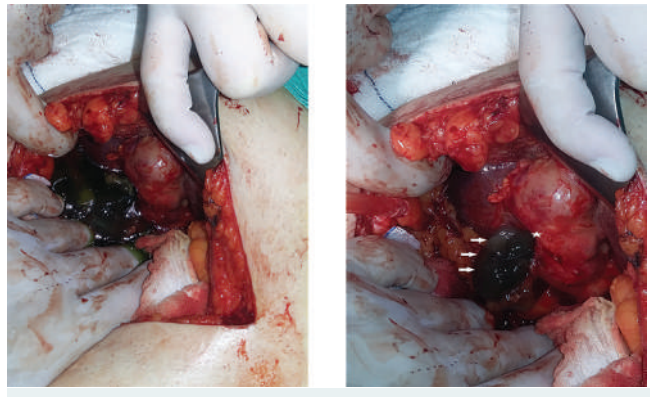


Figure 2. Image of daughter cysts following intraoperative gallbladder perforation.

[P-327]

Gallbladder torsion: A rare case report

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Objective: Acute cholecystitis is one of the most common surgical emergencies in patients presenting with acute abdomen; however, gallbladder torsion is reported as a rare condition. This rare pathology was first described in 1898, and since then, more than 500 cases have been reported. Although the exact etiology of gallbladder torsion is not fully understood, certain anatomical variations are thought to predispose patients to torsion. Preoperative diagnosis is challenging, and it is possible in less than 10% of cases. Gallbladder torsion is difficult to distinguish because its clinical and physical examination findings are similar to those of acute cholecystitis. While acute cholecystitis does not always require emergency surgery, delayed intervention in gallbladder torsion increases morbidity and mortality. The aim of this case report is to emphasize that gallbladder torsion should always be considered in the differential diagnosis of elderly patients presenting with clinical features of acute cholecystitis.

Material and Methods: An 82-year-old woman presented to the emergency department with sudden-onset right upper quadrant pain, nausea, and vomiting. Her medical history included Parkinson's disease, Alzheimer's disease, and hypertension. Laboratory tests and imaging studies raised the suspicion of gallbladder torsion, and the patient was admitted to the general surgery department for laparoscopic cholecystectomy. Intraoperatively, the gallbladder was found to be nearly detached from its posterior wall and displaced inferiorly. The hilum had rotated three complete turns, resulting in complete torsion, and the gallbladder was necrotic. The procedure was completed laparoscopically without complications.

Results: On physical examination, the patient had diffuse abdominal tenderness and a positive Murphy sign. Laboratory findings revealed elevated C-reactive protein (376.1 mg/L) and white blood cell count (12.25×10^3/μL), while other laboratory values were within normal limits. Hepatobiliary ultrasonography demonstrated inferior displacement of the gallbladder, with torsion of the neck and cystic duct. Further evaluation with computed tomography showed a hydropic gallbladder with torsion involving the cystic artery, confirming the diagnosis. Postoperatively, the patient's clinical and laboratory parameters normalized, and no complications occurred. She was discharged on the seventh postoperative day.

Conclusion: Although acute cholecystitis is a common cause of acute abdomen, gallbladder torsion is often overlooked preoperatively. In our case, the patient presented with typical acute cholecystitis symptoms, including right upper quadrant pain, nausea, and vomiting, along with elevated inflammatory markers. This case highlights the importance of considering gallbladder torsion in elderly patients, particularly women, who present with clinical signs of acute cholecystitis.

Keywords: Gallbladder, torsion, cholecystitis

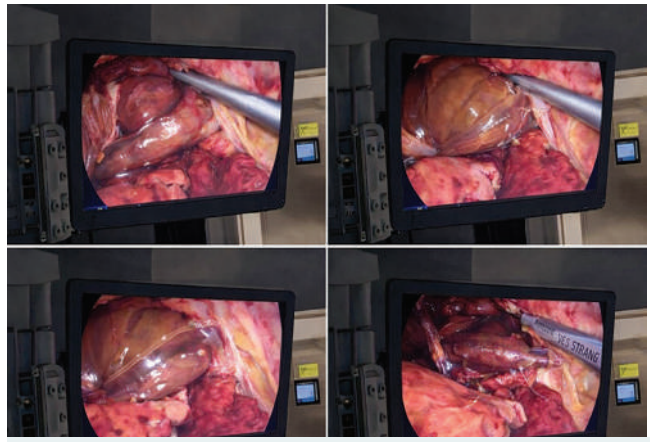


Figure 1. Intraoperative gallbladder images.

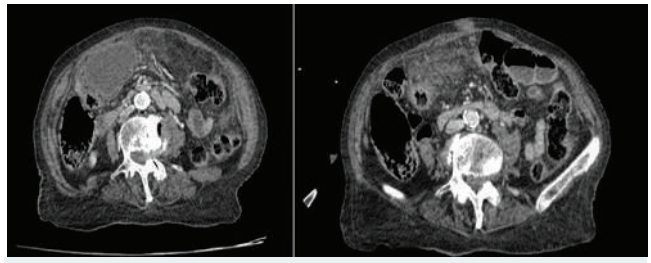


Figure 2. Preoperative CT images.

[P-328]

Is free intraperitoneal air always indicative of gastrointestinal perforation?

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Objective: Gallbladder perforation is a rare but potentially life-threatening complication of acute cholecystitis. The fundus, which has a relatively sparse vascular supply, is the most frequently affected anatomical site. While the presence of free intraperitoneal air (pneumoperitoneum) on computed tomography (CT) is typically associated with gastrointestinal (GI) perforation requiring urgent surgery, this case highlights that it can also arise from atypical etiologies such as a contained gallbladder perforation.

Material and Methods: A 75-year-old male presented with abdominal pain. One week prior, he had been managed for acute pancreatitis with elevated amylase (1089 U/L) and lipase (1814 U/L) levels, supported by CT findings. Following medical treatment, he was discharged. Upon re-admission, physical examination revealed no signs of peritonitis. Contrast-enhanced CT showed peripancreatic necrotizing collections and widespread pneumoperitoneum; however, no extraluminal contrast leakage was observed on oral contrast imaging. Laboratory follow-up showed a significant rise in CRP (from 18 mg/L to 138 mg/L) and leukocyte count (from 8.4 to 13.7×10^3/μL). Due to the clinicoradiological mismatch, a diagnostic laparotomy was performed. No GI perforation was found; instead, a contained perforation covered by the omentum was identified at the posterior fundus of the gallbladder. A cholecystectomy was performed. The postoperative course was uneventful, and the patient was discharged on day 6. No issues were noted at the one-month follow-up.

Results: Free intraperitoneal air is an important radiological finding most commonly associated with GI perforation. However, it has been reported that free air is not always secondary to luminal perforation and may rarely be related to alternative etiologies such as gallbladder perforation. Gallbladder perforations are classified according to the Niemeier classification as acute free perforation (type I), subacute localized perforation (type II), and chronic fistulized form (type III). The present case is consistent with a sealed (type II) perforation limited by the omentum. CT has high diagnostic value in suspected perforation for determining localization and evaluating accompanying intra-abdominal pathologies. In this case, despite the presence of widespread free air on CT, the absence of contrast extravasation and the lack of prominent clinical findings created a clinicoradiological discrepancy. This situation demonstrates that the etiology of free air should not always be considered GI perforation.

Conclusion: Although the detection of free intraperitoneal air is most commonly associated with GI perforation, rare but clinically significant etiologies such as sealed gallbladder perforation should also be considered in the differential diagnosis.

Keywords: Free intraperitoneal air, gallbladder perforation, pneumoperitoneum

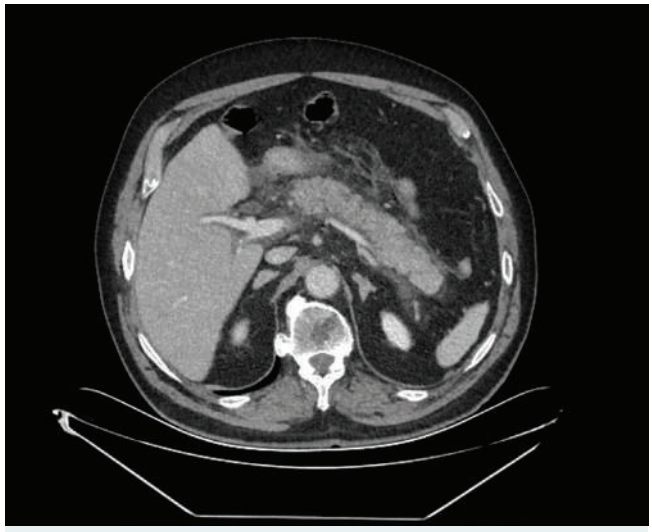


Figure 1. Contrast-enhanced abdominal CT demonstrating a bulky appearance of the pancreas and inflammatory changes in the peripancreatic fat planes; findings consistent with acute pancreatitis.

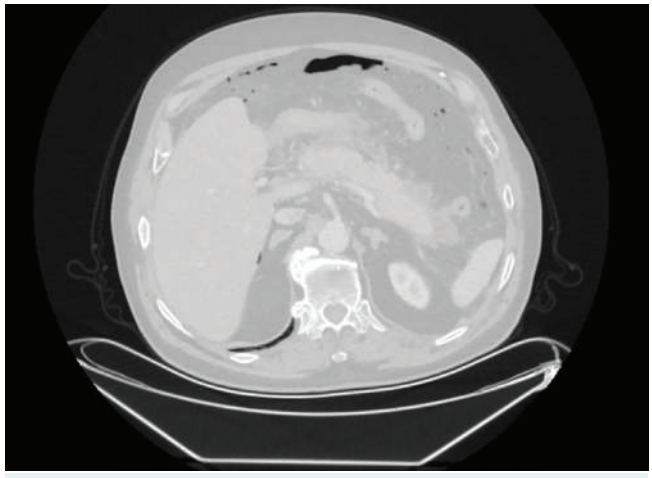


Figure 2. Contrast-enhanced abdominal CT demonstrating peripancreatic necrotizing collection areas and widespread free intraperitoneal air.

[P-329]

A rare cause of gastric outlet obstruction: A case of Bouveret syndrome

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Objective: Bouveret syndrome is a rare cause of gallstone ileus in which a gallstone passes through a bilioenteric fistula into the duodenum, leading to gastric outlet obstruction. In elderly patients with multiple comorbidities, delayed diagnosis may limit endoscopic treatment and increase surgical morbidity. This report describes the clinical, laboratory, imaging, and management features of an elderly patient with a high comorbidity burden diagnosed with Bouveret syndrome.

Material and Methods: A case presenting to the emergency department with signs of gastric outlet obstruction and diagnosed with Bouveret syndrome by USG/BT was retrospectively evaluated. Demographic data, comorbidity indices (ASA, Charlson), symptom duration, laboratory parameters (WBC, CRP, lactate), imaging findings, and characteristics of the ectopic gallstone (location, size, number, calcification, Hounsfield units), diagnostic delay, endoscopic interventions (endoscopy/ERCP), surgical approach, postoperative complications, intensive care unit and hospital length of stay, and follow-up outcomes were recorded.

Results: A 99-year-old female patient presented to the emergency department with a 19-days history of nausea, vomiting, and impaired oral intake. Owing to multiple comorbidities, the patient was classified as ASA-IV with a Charlson comorbidity index of 5 (BMI: 19). Laboratory evaluation revealed a marked inflammatory response (WBC: 23,960/mm^3, CRP: 146 mg/L), with a lactate level of 2 mmol/L. Abdominal ultrasonography and contrast-enhanced computed tomography demonstrated a single ectopic gallstone localized in the duodenum, measuring 52 mm in diameter, calcified, and of high density (617 HU). Based on these findings, together with signs of gastric outlet obstruction, a diagnosis of Bouveret syndrome was established. Due to a diagnostic delay exceeding 48 hours and the patient's high-risk profile, endoscopic interventions were limited. Following unsuccessful stone extraction after endoscopy and ERCP, the patient underwent surgical treatment. The obstructing stone was successfully removed via open enterolithotomy (operative time: 60 minutes). No additional surgical intervention was performed for the bilioenteric fistula. In the postoperative period, the patient developed surgical site infection and sepsis, requiring intensive care unit follow-up for 36-days; the total hospital stay was 60 days. The patient was discharged, and no mortality or recurrence was observed during a 12-months follow-up period.

Conclusion: Bouveret syndrome is prone to delayed diagnosis in elderly patients with multiple comorbidities and carries a high risk of morbidity. However, this case demonstrates that despite advanced age (99 years), ASA-IV status, a Charlson comorbidity index of 5, prolonged symptom duration, and a diagnostic delay exceeding 48 hours, a favorable clinical outcome can be achieved through accurate identification of a 52 mm calcified duodenal stone and performance of an open enterolithotomy aimed solely at relieving the obstruction, without fistula repair. Despite severe postoperative complications and prolonged intensive care unit stay, the patient was discharged without mortality, and no recurrence was observed during 12-months of follow-up. This case underscores the importance of early consideration of Bouveret syndrome in elderly patients presenting with gastric outlet obstruction and highlights that, in high-risk patients, the shortest, safest, and most targeted surgical strategy may be life-saving.

Keywords: Advanced age, Bouveret syndrome, enterolithotomy, gallstone ileus, gastric outlet obstruction

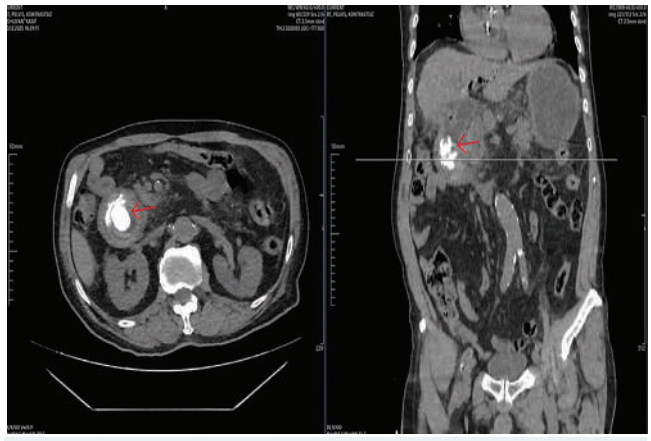


Figure 1. Axial and coronal CT images of the case.

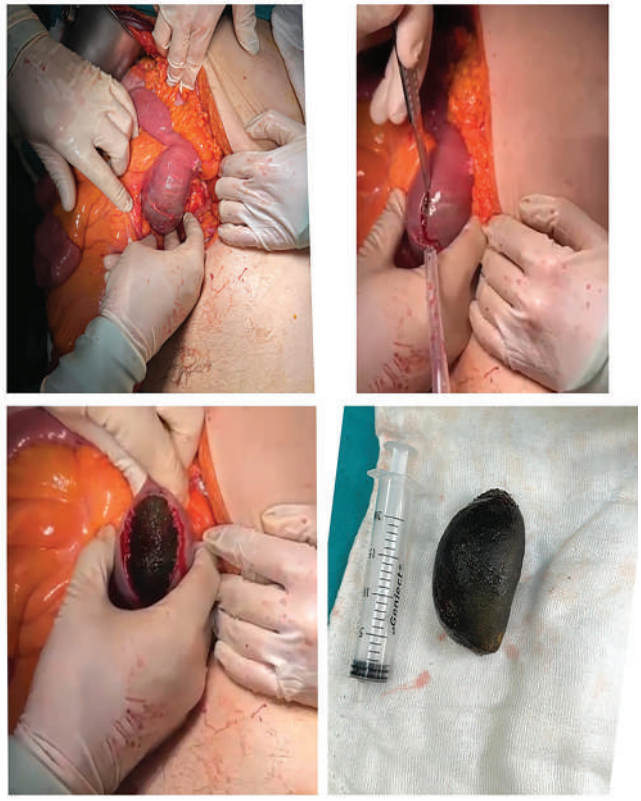


Figure 2. Operative images of the case.

Table 1. Comparison of the case with the literature

PARAMETRE	BİZİM OLGU	LİTERATÜR	YORUM
Yaş / cinsiyet	**99 / Kadın**	Çoğunlukla **yaşlı kadın** hastalar	Bizim olgu **uç yaş** grubunda; "kırılgan hasta" vurgusunu güçlendirir.
Klinik tablo	GÇO (bulantı-kusma, oral alım bozukluğu), semptom **19 gün**	En sık **gastrik çıkış obstrüksiyonu** semptomları; tanı gecikebilir (	Uzamış semptom süresi = tanı gecikmesi mesajını destekler.
Komorbidite / risk	**ASA 4, Charlson 5**, BMI 19	Olgular sıklıkla komorbid; standart kılavuz yok, karar bireyselleşir	"Yüksek riskte en güvenli strateji" temasına çok uygun.
İnflamasyon	WBC **23.960**, CRP **146**, laktat 2	Enfeksiyon/aspirasyon, sepsis gibi komplikasyonlar bildirilir	Bizde ağır inflamasyon + postop sepsis ile uyumlu.
Taş lokalizasyonu	**Duodenum**	Tipik olarak pylorus/duodenum	Klasik yerleşim.
Taş boyutu	**18 mm**	Çoğu olguda taşlar büyük/impakte; endoskopik çıkarım her zaman mümkün değil	18 mm görece "orta"; yine de çıkarılamaması "gecikme + impaksiyon" vurgusunu destekler.
Endoskopik tedavi	Endoskopi + ERCP yapıldı; **çıkarılamadı**	Endoskopik tedavi başarı oranı yaklaşık **%43**; cerrahi başarı **%94** civarı	Literatürle uyumlu: endoskopi ilk seçenek olsa da çoğu olgu cerrahiye gider.
Cerrahi yaklaşım	**Açık enterolitotomi**, süre **60 dk**	Cerrahi "kesin tedavi" olma eğiliminde; açık/lap yaklaşımlar mümkün	"Hedefe yönelik kısa cerrahi" mesajı burada çok güçlü.
Fistül onarımı	**Yapılmadı**, izlem	Yaşlı/kırılgan hastada fistül onarımı tartışmalı; basit taş çıkarımı sonrası nüks düşük bildirilebilir	Bizim olgu: "fistül onarımını zorlamadan başarı" vurgusu için ideal.
Postop komplikasyon	**CAE + sepsis**, YBÜ **36 gün**, yatış **60 gün**	Postop enfeksiyon/aspirasyon vs komplikasyonlar raporlanır; mortalite literatürde **%12–30** aralığına kadar bildirilebilir	Uzun YBÜ'ye rağmen sağkalım → olgunun çarpıcılığı artıyor.
Mortalitede durum	**Yok**	Endoskopi daha düşük mortalite ile anılsa da; cerrahide hasta profiline göre mortalite artabilir (seriler arası değişken)	Bizde "çok yüksek riskte mortalitesiz taburculuk" güçlü mesaj.
Takip / nüks	**12 ay, nüks yok**	Basit enterolitotomi sonrası nüks genelde düşük (bazı raporlarda <%5)	Takip verisi olguyu "tamamlanmış" ve daha değerli yapar.

[P-330]

Emergency management of jejunal perforations distal to gastrojejunostomy: A two-case series treated with Graham omental patch

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Objective: Marginal ulcers and jejunal perforations following bariatric surgery are rare but carry a significant risk of morbidity and mortality. In this study, we present the diagnostic approach, surgical management, and clinical outcomes of two patients who underwent emergency surgery due to perforation occurring distal to the gastrojejunostomy (GJ) anastomosis.

Material and Methods: Two patients with a history of bariatric surgery who presented with an acute abdomen between June and December 2024 were retrospectively evaluated. The patients' clinical findings, laboratory parameters, imaging results, intraoperative findings, and postoperative courses were reviewed. In both cases, jejunal perforations were repaired by primary suturing followed by the application of a Graham omental patch.

Results: Between June and December 2024, two patients with a history of bariatric surgery who presented with an acute abdomen were evaluated emergently. The first case was a 50-year-old female patient with a previous history of sleeve gastrectomy and Roux-en-Y gastric bypass; computed tomography revealed free air consistent with perforation. The second case was a 56-year-old male patient who had recently undergone Roux-en-Y gastric bypass; diffuse free air was observed on CT. In both cases, intraoperative exploration revealed jejunal perforations distal to the GJ anastomosis. The perforations were repaired by primary suturing and reinforced with a Graham omental patch. Leak tests were negative. No major postoperative complications occurred; one patient was discharged after short-term intensive care unit monitoring. The clinical course was stable in both patients, and the surgical repairs were deemed successful.

Conclusion: Marginal ulcers after Roux-en-Y gastric bypass are uncommon but may result in serious morbidity and mortality when complicated by perforation. Although computed tomography is considered the gold standard for diagnosis, perforation findings may be subtle due to altered postoperative anatomy, requiring high clinical suspicion. In this poster, two patients with a history of bariatric surgery who presented with acute abdomen were evaluated. In both cases, jejunal perforation distal to the GJ anastomosis was identified during emergency surgery. Perforations were repaired with primary suturing reinforced by a Graham omental patch. Despite minimal radiological findings in one patient, intraoperative exploration confirmed perforation, emphasizing the importance of early surgical intervention. No major postoperative complications occurred, and clinical outcomes were favorable in both patients. These cases demonstrate that Graham omental patch repair is a safe, effective, and easily applicable technique for distal GJ perforations. A low threshold for surgical exploration should be maintained in bariatric patients presenting with acute abdomen to prevent delayed diagnosis and outcomes.

Keywords: Bariatric surgery, marginal ulcer, jejunal perforation, gastrojejunostomy, emergency surgery

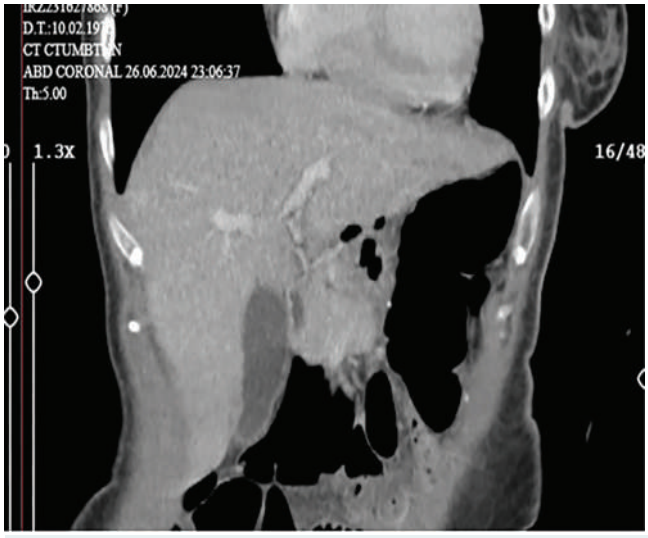


Figure 1. Case 1: preoperative contrast-enhanced CT image (coronal). Thin fluid-air levels consistent with perforation are observed in the hepatogastric region, along with localized millimetric free air foci at the level of the hepatogastric ligament and adjacent to the lesser curvature of the stomach.

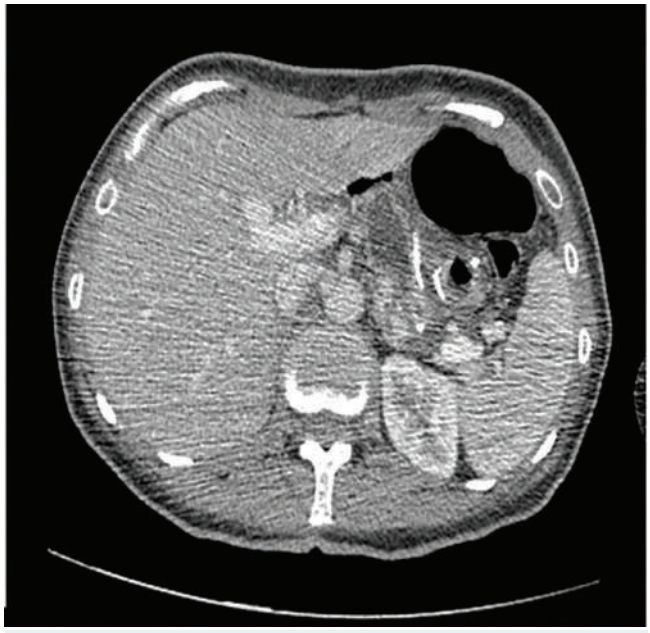


Figure 2. Case 1: preoperative contrast-enhanced CT image (axial). Minimal free fluid is observed in the pelvic cavity, along with metallic suture materials related to previous surgery. No obstructive pathology is identified.



Figure 3. Case 2: preoperative contrast-enhanced CT image (axial). Free air consistent with perforation is observed anterior to the liver, in front of the spleen, and surrounding the stomach.

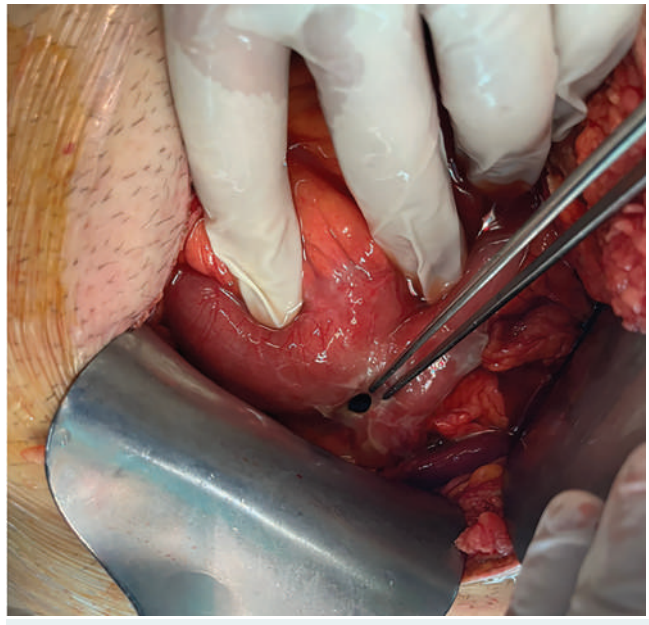


Figure 4. Case 2: Intraoperative image. Approximately 500 cc of free intraperitoneal fluid and a 1 cm perforation focus distal to the gastrojejunostomy anastomosis were observed.

[P-331]

Choice of surgical approach for gallstone ileus

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Objective: Gallstone ileus is the obstruction of the intestinal tract by stones due to gallbladder or biliary fistulas. Gallstone ileus accounts for 1-4% of all intestinal obstructions. Cholecystoduodenal fistula is frequently seen. Gallstone ileus occurs in 0.3-0.5% of all cases of cholelithiasis. Gallstone ileus develops when the gallstone is larger than 2.5 cm. Obstruction usually occurs in the terminal ileum (70%). Contrast-enhanced abdominal CT is the gold standard in imaging. Surgical treatment is performed as one-stage or two-stage.

Material and Methods: Case 1: a 54-year-old woman with no comorbidities or prior surgery presented with abdominal pain, nausea, and vomiting. Contrast-enhanced abdominal CT showed pneumobilia and small-bowel air-fluid levels, suggesting ileus. At laparotomy, a mass was palpated 170 cm distal to the ligament of Treitz; enterolithotomy was performed, the gallstone was removed, and the bowel was primarily repaired. Two cholecystoduodenal fistulas were identified, so cholecystectomy and fistula resection were performed in the same session. She was discharged uneventfully on postoperative day tenth. Case 2: An 87-year-old woman with comorbidities and known gallstones, with no prior surgery, presented with nausea, vomiting, abdominal pain, and constipation. Contrast-enhanced CT demonstrated pneumobilia and small-bowel intussusception in the left lower quadrant. At laparotomy, a mass was palpated 40 cm distal to the ligament of Treitz; the gallstone was removed via enterotomy and the bowel was repaired. Due to advanced age and comorbidities, cholecystectomy was deferred. She was discharged uneventfully on postoperative day sixth.

Results: Gallstone ileus is a rare cause of intestinal obstruction. In patients without prior abdominal surgery, Rigler's triad can aid diagnosis, and laparotomy may be required in up to 50% of cases. Surgical management may be one-stage (enterolithotomy with cholecystectomy and fistula repair in the same session) or two-stage (enterolithotomy alone initially). The choice depends on age, comorbidities, and obstruction site: one-stage surgery was preferred in the first case due to the absence of comorbidities, whereas advanced age and comorbidities led to a two-stage approach in the second case. In high-risk patients, two-stage surgery is associated with lower morbidity and mortality, supporting an individualized approach.

Conclusion: Although gallstone ileus is a rare condition, it should be kept in mind in the prediagnosis of elderly patients who do not have a history of previous abdominal surgery but present with signs of obstruction. Enterolithotomy, fistula repair and cholecystectomy can be performed in one or two surgical sessions in the treatment of these cases, or enterolithotomy may be sufficient in elderly and comorbid patients.

Keywords: Cholecysto-duodenal fistula, gallstone ileus, small bowel obstruction

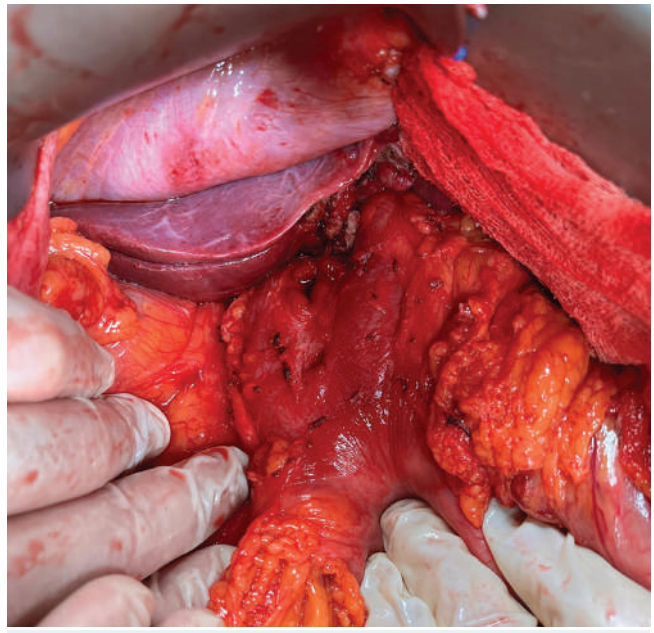


Figure 1. Cholecysto-duodenal fistula.

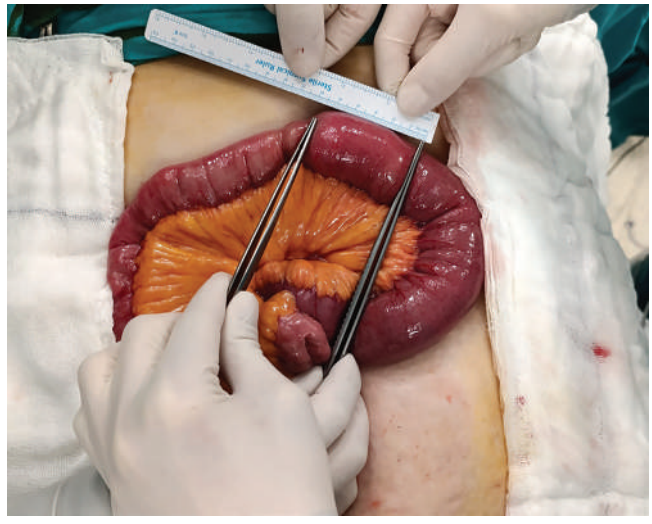


Figure 2. Obstruction of the small intestine segment due to gallstone.

[P-332]

Small bowel intussusception caused by cavernous hemangioma: A rare case

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Objective: Intussusception is a rare cause of mechanical intestinal obstruction, resulting from telescoping of one bowel segment into an adjacent segment. In adults, it accounts for less than 5% of all intussusception cases and is usually associated with an underlying structural lesion. Cavernous hemangiomas are rare benign vascular tumors of the gastrointestinal tract that are often asymptomatic but may require surgical intervention when obstruction occurs.

Material and Methods: A 35-year-old male presented to the emergency department with abdominal pain accompanied by nausea and vomiting. Clinical evaluation, laboratory findings, and radiological imaging were performed. Plain abdominal radiography and contrast-enhanced abdominal computed tomography suggested mechanical intestinal obstruction secondary to intussusception. Surgical exploration was planned accordingly.

Results: Intraoperatively, intussusception was identified approximately 60 cm proximal to the ileocecal valve in the terminal ileum. After manual reduction, a well-circumscribed solid intraluminal lesion measuring approximately 5-6 cm was detected as the leading point. Segmental ileal resection of approximately 10 cm with clear surgical margins was performed, followed by primary anastomosis. The postoperative course was uneventful. The patient passed flatus and stool on postoperative day 2, resumed oral intake on day 3, and was discharged without complications on postoperative day 5. Histopathological examination revealed a cavernous hemangioma.

Conclusion: Cavernous hemangioma is a rare cause of intussusception in adult patients. Although diagnosis in asymptomatic cases is challenging, surgical resection remains a safe and effective treatment option in patients presenting with intestinal obstruction. Adult intussusception cases should be managed with an individualized surgical approach, considering the high likelihood of an underlying organic lesion.

Keywords: Cavernous hemangioma, intussusception, small bowel obstruction

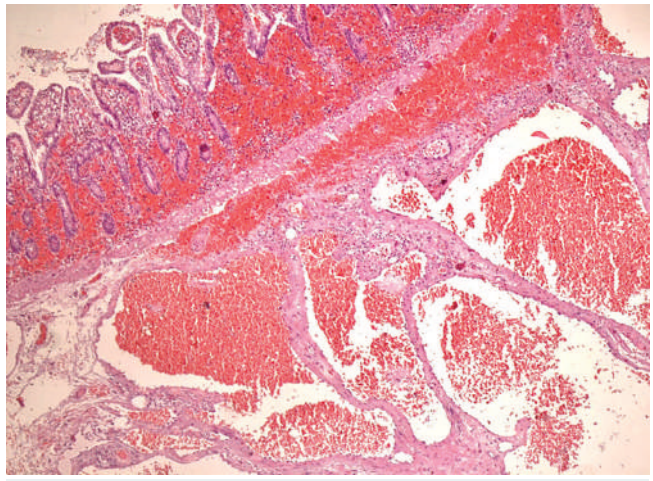


Figure 1. Cavernous hemangioma.

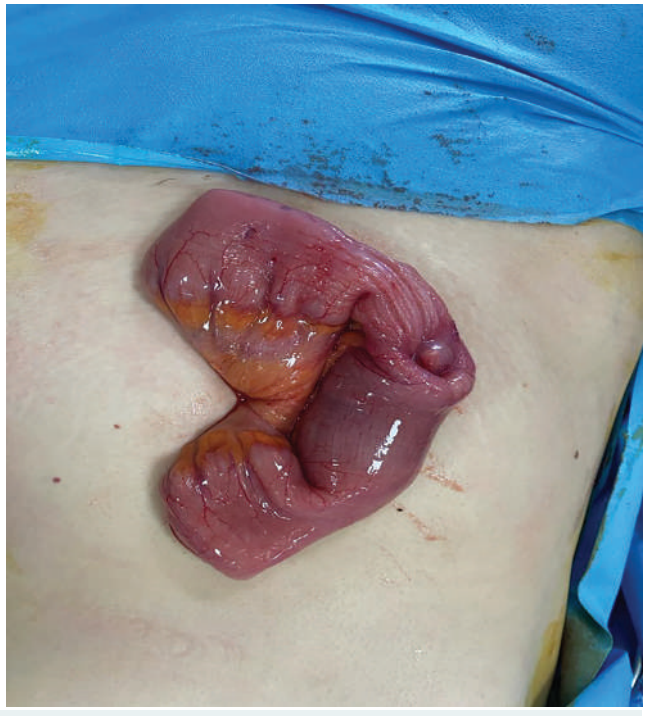


Figure 2. Intussusception.

[P-333]

A rare cause of ileus: Giant mesenteric cystic tumoral mass

Ramazan Serdar Arslan, Yusuf Veli, Tamer Akay, Serkan Şengül, Yılmaz Güler, Zülfikar Karabulut

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Objective: Although giant mesenteric cysts are rare, they can present with acute surgical conditions such as ileus due to compression and invasion of adjacent organs. While imaging techniques guide the diagnostic process, definitive diagnosis in most cases is established through surgical exploration and histopathological examination.

Material and Methods: An 85-year-old male patient presented to the emergency department with complaints of abdominal pain, abdominal distension, and inability to pass gas or stool. Physical examination revealed abdominal distension and generalized tenderness. Abdominal ultrasonography detected a large soft tissue tumor, prompting an abdominal MRI. Magnetic resonance imaging revealed a large tumoral mass measuring approximately 28×18 cm, characterized by thick walls, septations, poorly defined margins, and diffusion restriction. The patient was admitted to the surgical ward for operative management.

Results: During emergency laparotomy, a giant tumoral mass measuring approximately 30×20 cm extending from the epigastric region to the pelvis was observed. The mass caused extensive adhesions to the small bowel and colon loops, invaded the appendix, and completely obstructed the intestinal passage due to compression. After adhesiolysis, the mass was completely resected along with the appendix. Other intra-abdominal solid organs were evaluated as normal. The patient had an uneventful postoperative course and was discharged with surgical cure. Histopathological examination revealed undifferentiated pleomorphic sarcoma (UPS), and the patient was referred to oncology for follow-up.

Conclusion: UPS, is a high-grade soft tissue sarcoma and one of the most common soft tissue sarcomas in adults. It is a rare and aggressive type of cancer that typically originates in the soft tissues of the body. These cancers often present with symptoms at a late stage and can reach advanced sizes by the time of diagnosis. In cases presenting with ileus (intestinal obstruction), emergency surgical intervention can be life-saving. Although imaging methods provide information about the size and spread of the mass, definitive diagnosis and treatment are often only possible through surgical exploration.

Keywords: Intra-abdominal mass, ileus, soft tissue tumor, emergency surgery

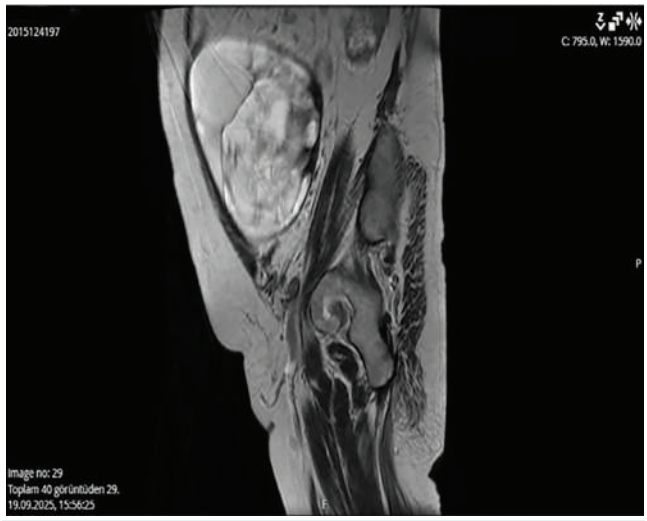


Figure 1. Pelvic MRI showing a solid-cystic, septated giant mass.

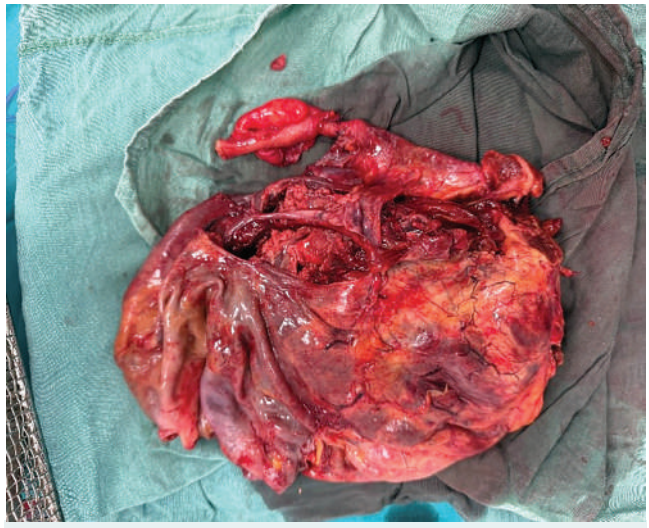


Figure 2. Giant cystic tumoral mass measuring 30×20 cm invading the appendix.

[P-334]

Abdominal cocoon syndrome presenting with illeus due to internal hernia (idiopathic sclerosing encapsulated peritonitis): Case report

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Objective: Abdominal cocoon syndrome (idiopathic sclerosing encapsulating peritonitis) is a rare cause of mechanical obstruction characterized by partial or complete encapsulation of small bowel loops within a fibro-collagenous membrane. Clinical findings are often non-specific, presenting as recurrent episodes of subileus/ileus, and preoperative diagnosis is difficult.

Material and Methods: A 53-year-old male patient with no known comorbidities or history of surgery presented with nausea-vomiting, abdominal pain, and inability to pass gas or stool. Contrast-enhanced abdominal CT revealed suspected internal hernia at the duodenal level and dilatation/air-fluid levels in the jejunal loops. Emergency surgery was planned with a preliminary diagnosis of mechanical obstruction; laparotomy was performed during laparoscopic exploration due to suspected abdominal cocoon.

Results: Approximately 80 cm distal to the Treitz ligament, segments of the small intestine extending to the terminal ileum were found to be trapped within a cocoon-like fibrous membrane, with dense adhesions between the loops. The membrane was carefully opened, and the intestinal loops were freed using careful enterolysis; resection was not performed as viability was preserved. Gas and stool passage began on postoperative day 2; oral intake was tolerated, and the patient was discharged on postoperative day 5.

Conclusion: Abdominal cocoon syndrome must always be considered in the differential diagnosis of patients presenting with recurrent ileus/intestinal obstruction attacks who have no prior history of abdominal surgery; this possibility should be considered, especially in the presence of clinical and radiological findings suggestive of internal herniation. The diagnosis is often made intraoperatively; the mainstay of treatment consists of opening/excision of the membrane and careful enterolysis.

Keywords: Abdominal cocoon, sclerosing encapsulating peritonitis, small bowel obstruction, internal hernia



Figure 1. Appearance suggestive of midline duodenal internal herniation on contrast-enhanced abdominal CT. Dilatation up to 3 cm and air-fluid levels are observed in the jejunal loops at the same levels, consistent with subileus.



Figure 2. The intraoperative view shows that the small bowel loops are encapsulated in a fibrous, thick membrane in a cocoon-like manner, and following the release of the loops, it is observed that this membrane is the mechanical cause of the obstruction (consistent with abdominal cocoon syndrome).

[P-335]

The role of inflammatory myofibroblastic tumor in adult intussusception: Clinical and pathological findings

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Objective: Intussusception is a condition in which segments of the intestine telescope into each other, creating a telescopic appearance and leading to transient or permanent gastrointestinal obstruction. It is less common in adults compared to children. Adult intussusceptions account for less than 1% of all cases of intussusception. Its incidence in adults is extremely rare and has been reported in fewer than one out of every 1,300 abdominal operations. Intussusception may cause ileus and bowel dilatation, which can subsequently lead to ischemia, necrosis, perforation, intra-abdominal sepsis, and mortality. Inflammatory myofibroblastic tumor (IMT) is an extremely rare neoplasm composed of myofibroblastic and fibroblastic spindle cells accompanied by a dense inflammatory infiltrate consisting of plasma cells, lymphocytes, and occasionally eosinophils. IMT may arise in almost any part of the body. In the gastrointestinal tract, IMT may be confused with inflammatory fibroid polyps (IFP). However, IFP can be distinguished histopathologically by the presence of stellate cells, reactive blood vessels, and a prominent infiltrate rich in eosinophils.

Material and Methods: A 50-year-old male patient presented to our emergency department with a five-day history of abdominal pain. The patient had no previous history of abdominal surgery, no known comorbidities, no regular medication use, and no history of drug allergy. He reported the onset of vomiting on the day of admission. Physical examination revealed a distended abdomen. Vital signs were stable. Due to persistent nausea, a nasogastric tube was inserted and oral intake was discontinued. Abdominal computed tomography was performed as an additional diagnostic evaluation. The presence of a target sign, which is pathognomonic for intussusception, was detected on computed tomography, and surgery was planned with a preliminary diagnosis of intussusception. Intraoperatively, an intussuscepted small bowel segment was identified 250 cm distal to the ligament of Treitz. The involved small bowel segment, including the intussusception site, was laparoscopically resected with proximal and distal margins, and primary anastomosis was performed. Figure 1: HE-stained section showing the relationship between intestinal mucosa and mass at 4x magnification, Figure 2: ALK-D5F3 positive staining area in the tumor during immunohistochemical examination at 10x magnification.

Results: The pathological examination revealed a submucosal, polypoid inflammatory mass measuring 5.5×3.5×3 cm, composed of spindle cells with focal myxoid and fibroid stroma. Immunohistochemical analysis demonstrated ALK positivity, and the lesion was diagnosed as an inflammatory myofibroblastic tumor.

Conclusion: Adult intestinal intussusception is a rare clinical condition. Contrast-enhanced computed tomography is a useful radiological modality and plays a crucial role in the diagnosis of the disease. IMT is a rare pathological entity with low rates of recurrence and metastasis after surgical resection. However, the diagnosis may be overlooked in the preoperative period.

Keywords: Intestinal obstruction, intussusception, inflammatory myofibroblastic tumor

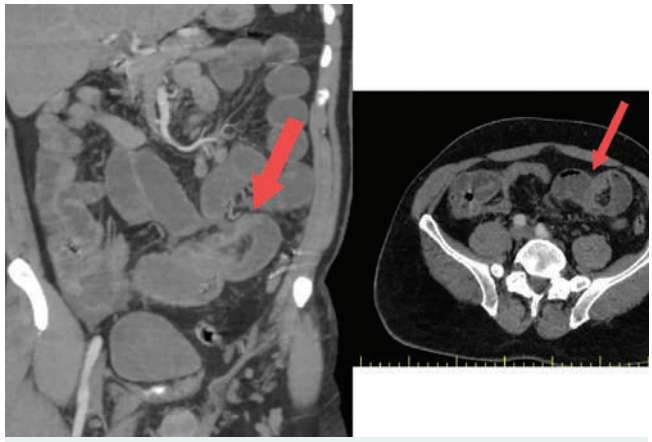


Figure 1. Imaging findings.



Figure 2. Surgical view.

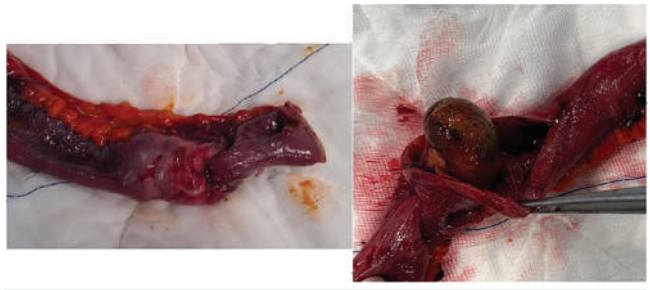


Figure 3. Pathological findings.

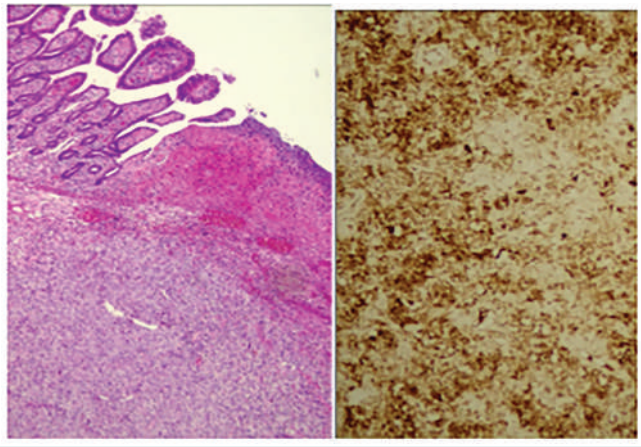


Figure 4. Pathological findings.

Table 1. Laboratory results

Parameter	Value	Unit
WBC	14.91	$\times 10^9$/L
RBC	5.39	$\times 10^{12}$/L
Hemoglobin	14.2	g/dL
Creatinine	0.83	mg/dL
e-GFR	103	mL/min
Sodium (Na)	135	mEq/L
Potassium (K)	3.74	mEq/L
Chloride (Cl)	98	mEq/L
Total Bilirubin	0.77	mg/dL
Direct Bilirubin	0.33	mg/dL
Indirect Bilirubin	0.44	mg/dL
ALT	17	U/L
AST	15	U/L
Amylase	46	U/L
Lipase	23	U/L
C-Reactive Protein (CRP)	148.4	mg/dL

[P-336]

A rare concurrence in acute abdomen: Simultaneous acute appendicitis, acute cholecystitis, acute pancreatitis

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Objective: Acute appendicitis, acute cholecystitis, and acute pancreatitis are common causes of acute abdomen; however, the concomitant occurrence of all three conditions is exceedingly rare. Overlapping clinical presentations may pose significant diagnostic and therapeutic challenges. This case report presents this uncommon coexistence.

Material and Methods: This case report describes the coexistence of acute appendicitis, acute cholecystitis, and acute pancreatitis in a patient presenting to the emergency department with acute abdomen. Clinical presentation, laboratory findings, and radiological imaging were retrospectively reviewed. Contrast-enhanced whole-abdominal computed tomography was used for diagnostic evaluation. Diagnostic laparoscopy was performed, and intraoperative findings were documented. The postoperative clinical course, laboratory parameters, and treatment response were assessed through review of the patient's medical records.

Results: A 48-year-old female patient with no known comorbidities presented to the emergency department with a two-day history of epigastric and lower quadrant abdominal pain accompanied by loss of appetite. Physical examination demonstrated tenderness in the epigastric region and right lower quadrant. Laboratory evaluation revealed the following values: leukocyte count, 12.82×10^3/μL; C-reactive protein, 2.2 mg/dL; aspartate aminotransferase, 107 U/L; alanine aminotransferase, 52 U/L; lipase, 5041 U/L; total bilirubin, 1.01 mg/dL; and direct bilirubin, 0.52 mg/dL. Contrast-enhanced abdominal computed tomography was performed at presentation. Imaging demonstrated fluid accumulation extending to the umbilical region at the level of the pancreatic head and body. The gallbladder appeared hydropic, with inflammatory wall thickening and pericholecystic fluid collection (Figure 1). A millimetric image suggestive of a gallstone was noted within the gallbladder lumen. The distal segment of the appendix measured approximately 10 mm in diameter and exhibited an inflammatory appearance, suggesting acute appendicitis (Figure 2). Based on the clinical, laboratory, and radiological findings, diagnostic laparoscopy was performed. Intraoperatively, the gallbladder was found to be edematous and inflamed, without evidence of necrosis (Figure 3). Appendectomy was performed due to the edematous and inflamed appearance of the appendix. Examination of the excised appendix revealed the presence of a fecalith (Figure 4). Postoperatively, the patient was managed with medical therapy and close monitoring. With improvement in clinical and laboratory parameters, the patient was discharged on postoperative day 4.

Conclusion: The simultaneous presence of multiple pathologies in acute abdomen is uncommon but may complicate diagnosis. In this case, contrast-enhanced abdominal CT was crucial in identifying concurrent acute pancreatitis, acute cholecystitis, and acute appendicitis. Successful outcomes were achieved with appropriate surgical and medical management. Clinicians should consider the possibility of multiple coexisting pathologies in patients presenting with acute abdomen.

Keywords: Acute abdomen, acute appendicitis, acute cholecystitis, acute pancreatitis, concurrent abdominal pathologies

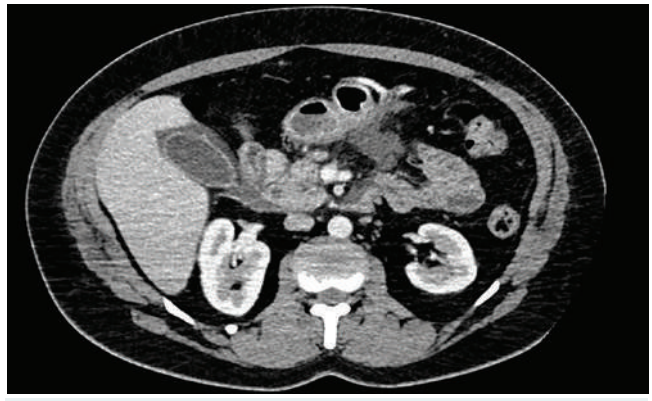


Figure 1. Computed tomography image of the gallbladder and pancreas. Contrast-enhanced CT image showing a hydropic gallbladder with wall thickening and pericholecystic and peripancreatic fluid collection, suggestive of acute cholecystitis and acute pancreatitis.



Figure 2. Computed tomography image of the appendix. CT image showing the appendix measuring 10 mm in diameter with an inflamed appearance.

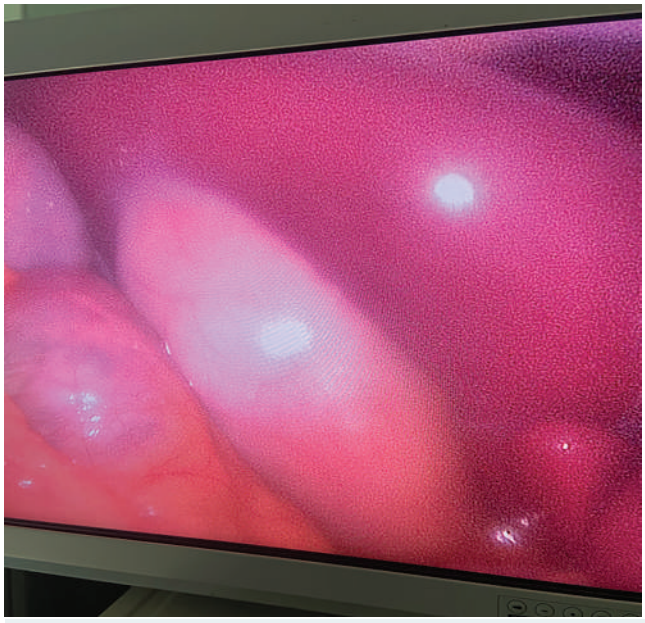


Figure 3. Laparoscopic view of the gall bladder. The gallbladder appeared edematous and inflamed, with no evidence of necrosis.

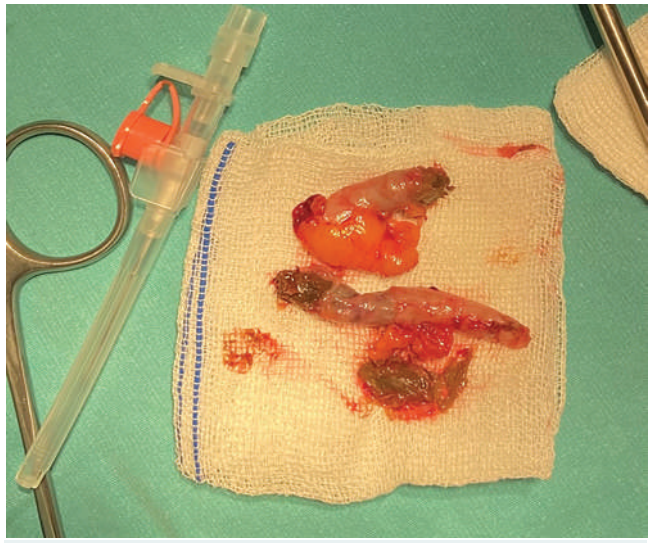


Figure 4. Resected bladder. The gallbladder appeared edematous and inflamed, with no evidence of necrosis.

[P-337]

Anterior abdominal wall necrosis following horse serum injection: A rare case

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Objective: To date, tissue necrosis following subcutaneous horse serum injection in humans has not been reported. However, immune-mediated reactions to heterologous sera, such as the Arthus reaction, a type III hypersensitivity response caused by immune complex deposition in small vessels, and systemic reactions including serum sickness after equine-derived rabies immunoglobulin have been described. In addition, Nicolau syndrome, a rare complication of parenteral drug administration characterized by pain, edema, erythema, and necrotic plaque formation, is well recognized. To the best of our knowledge, this case represents the first report of localized tissue necrosis following parenteral horse serum administration in humans.

Material and Methods: A 46-year-old woman with invasive carcinoma of the left breast was started on neoadjuvant doxorubicin-cyclophosphamide (AC) chemotherapy. Her medical history was significant for diabetes mellitus and obesity. During active chemotherapy, she reported self-administering a preparation containing equine serum, obtained from a veterinarian, without medical supervision, by subcutaneous injection into the abdominal wall at eight different sites, repeated weekly for a total of seven injections. Five days after receiving the third chemotherapy cycle, she presented with malodorous, exudative necrotic lesions on the anterior abdominal wall. Laboratory evaluation revealed leukopenia (4.530/µL), anemia (Hb 9.9 g/dL), and elevated inflammatory markers (CRP 65 mg/L). Abdominal computed tomography showed no intra-abdominal involvement. Early surgical debridement was performed, and eight separate necrotic/gangrenous lesions were excised and sent for histopathological analysis. Postoperatively, oral intake was resumed, antibiotic therapy was initiated, and chemotherapy was temporarily suspended due to infection. The patient was discharged on postoperative day 3 with outpatient wound care. Two sites developed superficial wound dehiscence during follow-up and were managed conservatively. Complete wound healing was achieved by postoperative day 21, after which the patient was referred back to oncology.

Results: Histopathological findings: All eight skin and subcutaneous tissue specimens showed epithelial ulceration, chronic inflammation, and fat necrosis, with no evidence of malignancy.

Conclusion: This case demonstrates that subcutaneous injection of horse serum into the abdominal wall, performed without medical supervision, can result in severe local soft tissue necrosis in an immunosuppressed breast cancer patient receiving active chemotherapy. Inappropriate use of heterologous animal sera may lead to rapidly progressive complications requiring surgical intervention, particularly in immunocompromised individuals. The clinical course and pattern of tissue injury in this case show similarities to Nicolau syndrome, a rare complication characterized by necrotic plaque formation following parenteral drug administration. This report highlights the potential risks associated with uncontrolled injections used for alternative treatment purposes.

Keywords: Horse serum, necrosis, nicolau syndrome, immunosuppression, case report

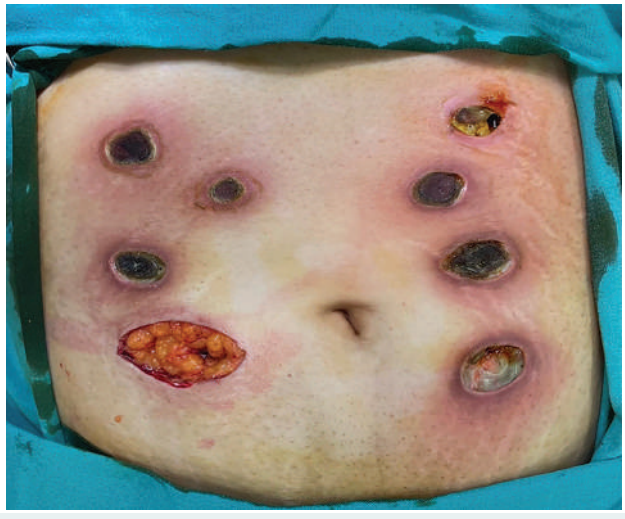


Figure 1. Necrotic lesions of the anterior abdominal wall. Necrotic lesions following repeated subcutaneous horse serum injections at eight sites of the anterior abdominal wall.



Figure 2. Wound appearance on postoperative day 21.



Figure 3. Necrotic skin and subcutaneous tissue specimens excised during surgery.

[P-338]

Gastric perforation secondary to incarcerated hiatal hernia associated with severe lactic acidosis in a 98-year-old patient

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Objective: Hiatal hernias are anatomical defects characterized by the displacement of the gastric fundus into the mediastinum. Paraesophageal hernias (types II-IV) may predispose patients to life-threatening surgical emergencies such as gastric volvulus and strangulation. In the literature, perforations due to gastric strangulation are associated with high mortality rates. This presentation discusses a case of hiatal hernia perforation at an extreme age, accompanied by a severe lactic acidosis profile.

Material and Methods: A 98-year-old female patient presented to the emergency department with sudden-onset, severe left-sided chest pain radiating to the back, dyspnea, and hematemesis. Initial examination revealed hypertension (140/85 mmHg), tachycardia (110 bpm), tachypnea (24 bpm), and hypoxia (SpO_2: 88%). Auscultation showed diminished breath sounds in the left lung; the abdomen was soft and non-tender.

Results: Chest X-ray revealed a widened mediastinum and a mass appearance with an air-fluid level in the left retrocardiac area (Figure 1). Arterial blood gas analysis demonstrated severe metabolic acidosis (pH: 7.23, lactate: 6.43 mmol/L). Thoraco-abdominal CT showed significant herniation of the stomach into the posterior mediastinum, 25 mm of free fluid, and free intraperitoneal air. The patient was taken for emergency surgery. Exploration revealed a strangulated gastric fundus herniated through a 4 cm hiatal defect. A 2 cm perforation was identified in the herniated fundus (Figure 2). Following irrigation and debridement, a wedge resection including the perforated area was performed, and the hiatal defect was repaired primarily. The patient, followed postoperatively in the intensive care unit under intubation, succumbed 48 hours later.

Conclusion: In elderly patients, strangulation of hiatal hernias may be masked by chest pain and respiratory distress instead of typical acute abdominal findings. As stated in the literature, lactate levels above 6 mmol/L are among the strongest predictors of tissue necrosis and poor prognosis. Despite early radiological diagnosis and surgical intervention, mortality may be inevitable in the presence of extreme age and profound acidosis. This case emphasizes the importance of considering hiatal hernia complications in the differential diagnosis of acute chest pain in the elderly.

Keywords: Incarcerated hiatal hernia, gastric perforation, lactic acidosis, incarcerated hiatal hernia, gastric perforation, lactic acidosis

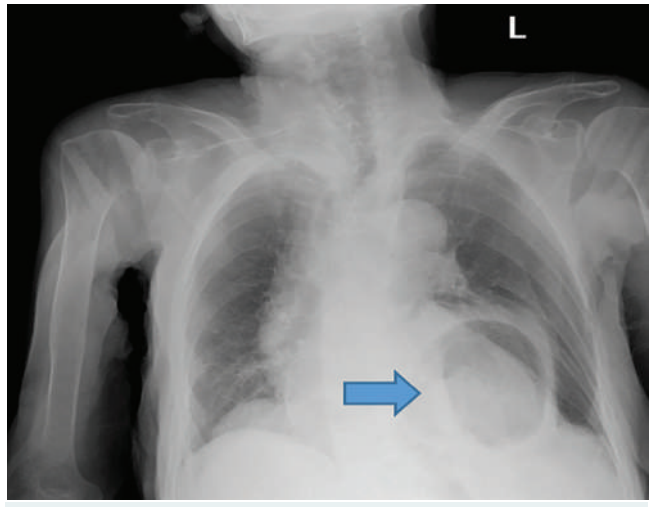


Figure 1. Chest X-ray showing a retrocardiac air-fluid level consistent with a hiatal hernia.

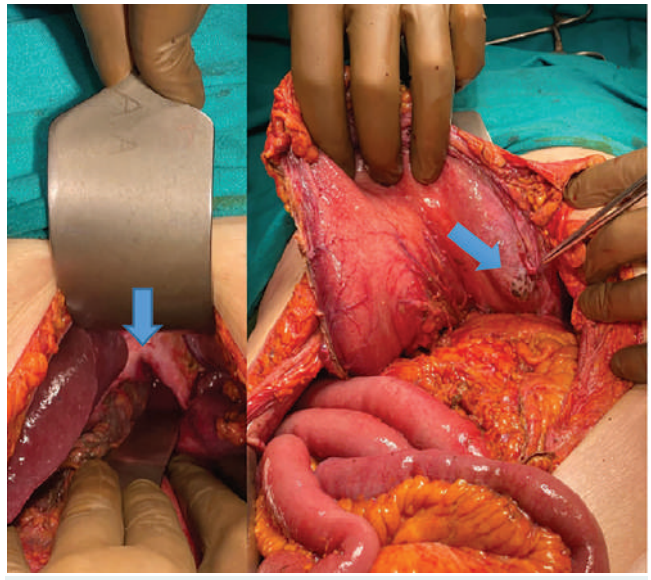


Figure 2. Intraoperative view of the 2 cm gastric perforation in the fundus after reduction from the hiatal defect.

[P-339]

A rare cause of acute abdomen: Spontaneus rupture of a splenic hydatic cyst

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Objective: Echinococcus, or hydatid disease, has four main subtypes: *Echinococcus granulosus, Echinococcus multilocularis, Echinococcus vogeli*, and *Echinococcus oligarthrus. Echinococcus granulosus* causes cystic echinococcosis (CE) and is the most commonly encountered clinical form. Although hydatid disease most commonly involves the liver and lungs, splenic involvement is reported in approximately 5% of cases. Cyst rupture in these patients is usually associated with trauma; however, spontaneous rupture may rarely occur. In this study, we aimed to increase awareness among general surgeons of a rare, life-threatening cause of acute abdomen.

Material and Methods: We present the case of a 45-year-old female patient who was admitted with sudden onset of severe abdominal pain and was diagnosed with spontaneous rupture of a splenic hydatid cyst.

Results: A 45-year-old female patient with no comorbidities presented with sudden, severe abdominal pain without any history of trauma. Physical examination revealed generalized abdominal guarding and rebound tenderness, more pronounced in the left upper quadrant. Contrast-enhanced abdominal CT demonstrated diffuse free intraperitoneal fluid in all quadrants and a splenic lesion consistent with a hydatid cyst. No hepatic lesions were detected. The patient presented within two hours of pain onset. Laboratory evaluation showed mildly elevated C-reactive protein and leukocyte levels. Emergency exploratory laparotomy was performed. Intraoperatively, widespread free fluid compatible with cyst contents, a perforated cyst capsule originating from the spleen, and germinative membranes were observed. Cystotomy and extensive peritoneal lavage were performed. No daughter cysts were identified. The postoperative course was uneventful. Albendazole therapy was initiated at a dose of 15 mg/kg/day divided into two doses. The patient was discharged in good condition on postoperative day four.

Conclusion: Although splenic hydatid cysts are rare, cyst rupture represents a life-threatening cause of acute abdomen and may lead to anaphylactic shock. Early recognition and prompt surgical management are crucial.

Keywords: Splenic hydatid cyst, acute abdomen, spontaneous rupture

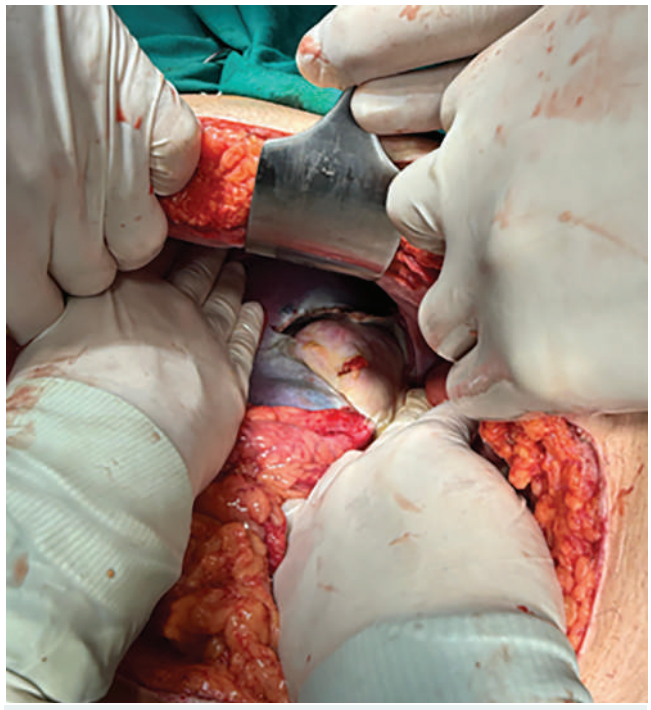


Figure 1. Perforated splenic hydatid cyst.

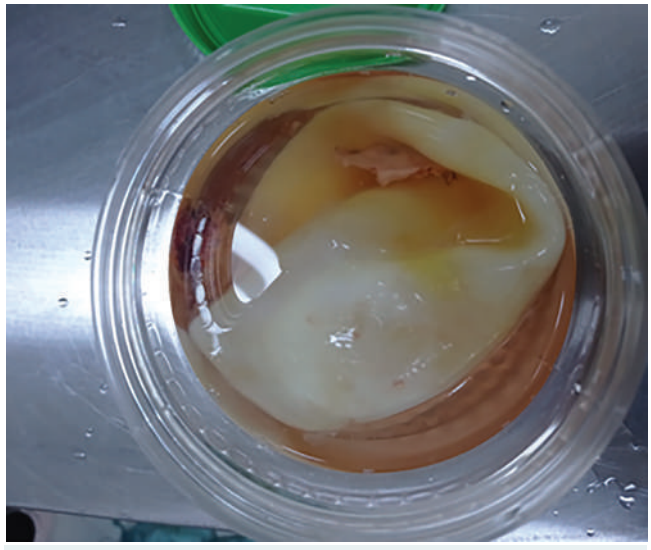


Figure 2. Germinative membrane.

[P-340]

Ileal ischemia due to superior mesenteric vein thrombosis: A case managed with emergency surgery

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Objective: Superior mesenteric vein (SMV) thrombosis is uncommon but can quickly progress to bowel ischemia if missed. This case highlights that symptoms mimicking obstruction may actually reflect mesenteric venous thrombosis.

Material and Methods: Sixty sevenyearold man presented with 3 days of obstipation, nausea, and vomiting. He had hypertension, cirrhosis, and peripheral arterial disease, with no prior abdominal surgery. After contrast-enhanced CT, emergency laparotomy was performed.

Results: CT showed marked small-bowel dilatation, diffuse wall thickening of ileal loops in the right lower quadrant, and mesenteric heterogeneity. A thrombus completely occluding the SMV with extension toward the portal vein was detected, and the liver had a cirrhotic appearance. At surgery, an approximately 100 cm ileal segment starting ~20 cm proximal to the ileocecal valve was ischemic/necrotic with absent peristalsis. Segmental small-bowel resection was performed and a Mikulicz (doublebarrel) ileostomy was created. The patient resumed oral intake on postoperative day 1 and was discharged uneventfully on day 7. Pathology confirmed transmural ischemia/necrosis with hemorrhage and edema.

Conclusion: In patients presenting with an ileus-like picture, SMV thrombosis should be considered-especially when cirrhosis or vascular disease is present. Prompt CT and timely surgery can limit bowel loss and improve outcomes.

Keywords: Ileal ischemia, mesenteric vein thrombosis, ileus, emergency surgery

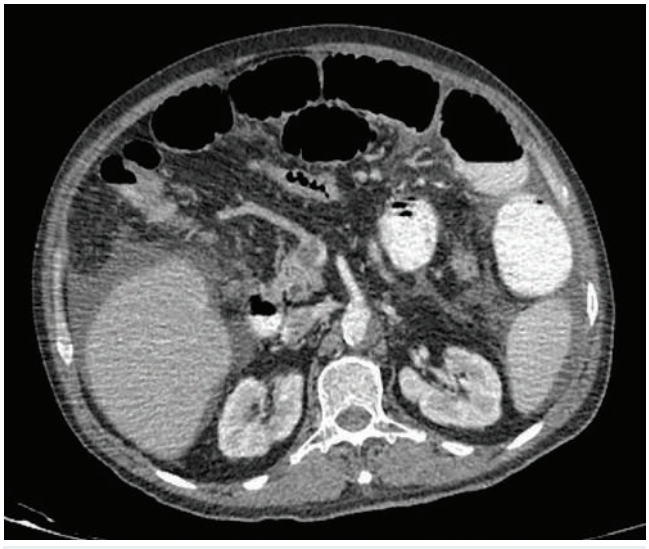


Figure 1. Computed tomography scan: superior mesenteric vein occlusion by thrombus with extension toward the portal vein; associated ileal wall thickening and dilatation.



Figure 2. Intraoperative view: ischemic/necrotic ileal segment and operative strategy with resection plus Mikulicz ileostomy.

[P-341]

Gas embolism following hydrogen peroxide ingestion: A case successfully treated with hyperbaric oxygen

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Objective: Hydrogen peroxide (H_2O_2) ingestion can result in gas embolism, a rare but potentially serious morbidity and mortality event. The extent of vascular involvement varies, and early diagnosis is crucial. Hyperbaric oxygen therapy (HBOT) is the primary treatment for gas embolisms.

Material and Methods: A 54-year-old male cleaning worker with no significant medical history presented to the emergency department with severe nausea and retrosternal pain after ingesting approximately 250 mL of 3% H_2O_2 orally. He was oriented, cooperative, vital signs were stable. Systemic examination was normal. Abdominal examination revealed no tenderness, guarding; rebound tenderness.Laboratory tests showed moderate leukocytosis ($12.68x10^3/\mu L$). Liver function parameters were normal. Contrast-enhanced abdominal CT scan revealed widespread gas emboli within the portal venous structures and mesenteric vascular structures but no perforation. Admitted to the ICU for close vital sign monitoring and systemic examination. Following a control CT, HBOT was administered. A subsequent CT showed a dramatic regression of the gas emboli. The patient was transferred to the ward for observation and continued monitoring with closed oral access. During follow-up, nausea subsided, abdominal examination was comfortable, and oral intake was gradually increased after symptomatic treatment. The patient was discharged in good health on the 7th day of follow-up.

Results: When H_2O_2 is ingested in high concentrations and large quantities, systemic effects can occur in addition to damage to the gastrointestinal and respiratory systems. In this case, the detection of widespread gas emboli in the portal venous system on CT findings indicates that the gas formed after H_2O_2 ingestion entered the systemic circulation. Even when H_2O_2 is ingested in low concentrations, it is rapidly broken down into water and oxygen by the catalase enzyme in the gastrointestinal system. The volume of released gas can increase; this can lead to the development of gas emboli in the portal venous system,mesenteric vessels,and even the cerebral circulation. Clinical findings can vary widely, from mild symptoms to fatal outcomes. If swallowed, 30 mL of 35% H_2O_2 is sufficient to produce 3.4 L of oxygen gas. In the literature, studies on the systemic effects of H_2O_2 and gas embolism frequently highlight the effectiveness of oxygen therapy and HBOT. The effectiveness of HBOT in the direct treatment of gas embolism has been proven in many studies. A review titled "Hyperbaric Oxygen Therapy for the Treatment of Decompression Sickness and Gas Embolism" reported that hyperbaric oxygen therapy improves patient outcomes in gas embolism by accelerating the dissolution of gases.

Conclusion: Gas embolism developing after H_2O_2 ingestion is a serious condition requiring urgent diagnosis and treatment. This case clearly demonstrates the effectiveness of HBOT in gas embolism management. Early intervention can improve the patient's prognosis and reduce the risk of complications. Monitoring and treating such conditions plays a crucial role in healthcare systems.

Keywords: Hydrogen peroxide, gas embolism, hyperbaric oxygen therapy



Figure 1. H_2O_2 portal gas embolism.

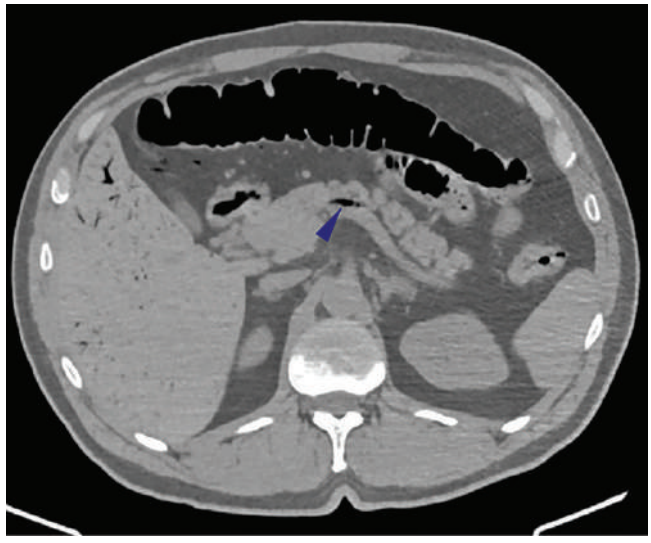


Figure 2. Mesenteric gas embolism.

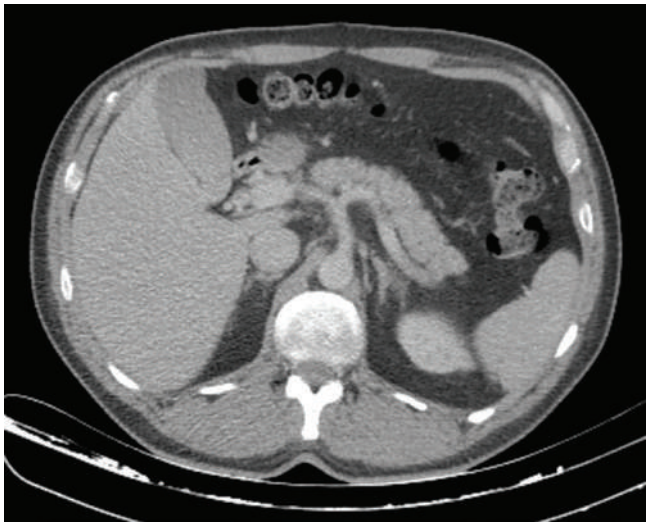


Figure 3. HBOT post-observation CT scan.

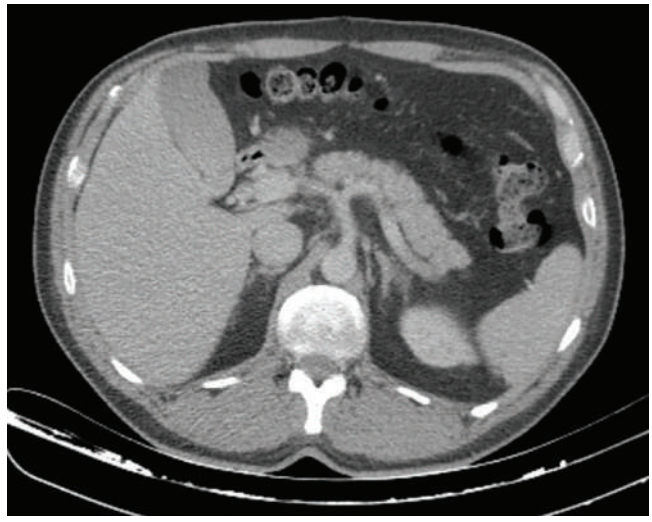


Figure 4. HBOT post-observation CT scan.

[P-342]

A rare cause of acute abdomen: Isolated mixed-type gastric volvulus unaccompanied by hiatal hernia

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Objective: Gastric volvulus is a rare but life-threatening surgical emergency resulting from abnormal rotation of the stomach. Although commonly associated with hiatal hernia, primary volvulus due to ligamentous laxity is infrequent. GV is classified as organo-axial, mesentero-axial, or mixed-type. While hiatal hernia or diaphragmatic defects accompany approximately 70% of cases, we aim to present a rare case of isolated mixed-type gastric volvulus without any anatomical defects.

Material and Methods: Ninety-one-year-old male with dementia presented to the emergency department with sudden onset abdominal pain and distension. Physical examination revealed severe abdominal distension. Contrary to Borchardt's triad, which typically includes the inability to pass a nasogastric (NG) tube, an NG tube was successfully inserted, and gastric content was drained. Although the initial non-contrast computed tomography (CT) did not explicitly report volvulus, the non-visualization of the spleen and high clinical suspicion prompted a contrast-enhanced CT. Imaging revealed massive gastric dilation with air-fluid levels. The orientation of the stomach and the medialization of the spleen were consistent with mixed-type volvulus. No hiatal hernia or diaphragmatic defect was identified, suggesting a primary etiology due to ligamentous laxity. Endoscopic detorsion was attempted but failed.

Results: The patient underwent emergency laparotomy. Intraoperative exploration confirmed the absence of a hiatal hernia and the presence of mixed-type rotation. The stomach was detorsed to its anatomical position, and the spleen was reduced. Serosal tears caused by distension were repaired primarily. A gastropexy was performed to prevent recurrence. Considering the patient's advanced age, dementia, and nutritional requirements, a Stamm gastrostomy was utilized. This procedure reinforced the gastropexy and established a secure route for enteral feeding. The patient was discharged on postoperative day 15 without complications.

Conclusion: The successful passage of an NG tube should not rule out gastric volvulus, especially in mixed-type or incomplete torsion cases where the gastroesophageal junction may remain patent. CT is the gold standard for diagnosis and surgical planning, particularly for identifying primary volvulus. In elderly patients with comorbidities, Stamm gastrostomy serves as a life-saving adjunct, providing both effective fixation and a reliable avenue for postoperative care.

Keywords: Gastric volvulus, volvulus



Figure 1. Axial plane computed tomography image. The NG tube have entered the stomach, and there was no diaphragmatic anomaly. The spleen was also observed to be retracted medially.

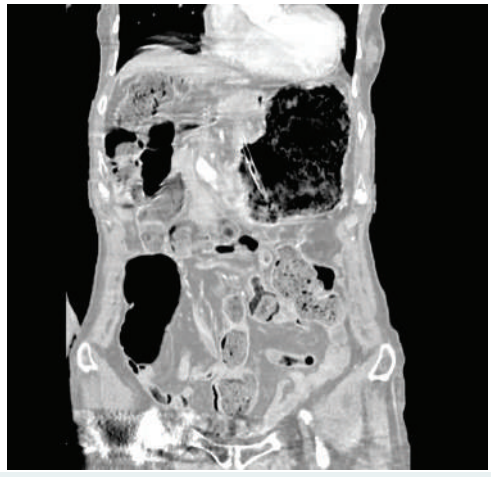


Figure 2. Coronal plane computed tomography image.

[P-343]

Complicated jejunal diverticular perforation: Our case experience

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Objective: Jejunal diverticular disease is a rare clinical entity with an incidence ranging from 0.06% to 1.3%. While the majority of cases remain asymptomatic, complications such as diverticulitis and, more rarely, perforation can develop. We aim to present two cases of complicated jejunal diverticular disease managed with emergency surgery.

Material and Methods: Case 1 A 94-year-old female with no known comorbidities presented with abdominal pain persisting for one week. Examination revealed bilateral spontaneously reduced inguinal hernias and generalized abdominal tenderness. Laboratory results showed CRP: 244.2 mg/L and procalcitonin: 3.3 µg/L. Abdominal CT suggested intestinal perforation with free air and fluid. During emergency laparotomy, diffuse purulent fluid was observed. Extensive jejunal diverticula were noted 30-100 cm distal to the ligament of Treitz, with a perforation identified at the 50 cm mark. Segmental small bowel resection and double-layer isoperistaltic side-to-side anastomosis were performed. The patient was transferred to the ICU but unfortunately developed cardiac arrest and passed away 6 hours postoperatively. Cultures grew *Klebsiella pneumoniae* and *E. coli*.

Results: Case 2 A 69-year-old male with hypertension and diabetes presented with generalized abdominal pain of one-day duration. Examination revealed generalized tenderness and rebound in the left lower quadrant. CRP was elevated (245 mg/L). CT imaging showed inflammatory density increases in the small bowel mesentery and diverticula in the colon. Upon exploration, purulent fluid and a perforated area with diffuse diverticula were found 20-60 cm distal to the ligament of Treitz. Segmental resection and double-layer isoperistaltic side-to-side anastomosis were performed. The patient recovered well, started oral intake on postoperative day 4, and was discharged on day 7. Pathology confirmed phlegmonous diverticulitis.

Conclusion: Jejunal diverticulitis is far less common than colonic diverticular disease and typically affects patients in their sixth and seventh decades. Consequently, jejunal diverticulitis, which can be life-threatening due to delayed diagnosis, must be considered in the differential diagnosis of acute abdomen, particularly in elderly patients.

Keywords: Jejunal diverticulitis, perforation



Figure 1. Perforated diverticulit area.



Figure 2. Widespread diverticular appearance.

[P-344]

Gastrointestinal manifestations of rheumatoid arthritis

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Objective: Rheumatoid arthritis (RA) and related spondyloarthropathies are primarily systemic inflammatory diseases affecting the joints; however, they may occasionally present with extra-articular involvement, including the gastrointestinal system and intra-abdominal tissues. The literature reports that such involvement can pose diagnostic difficulties and is often confused with infectious or malignant processes. Granulomatous and necrotizing lesions, in particular, require the exclusion of infectious causes, especially tuberculosis, in the differential diagnosis.

Material and Methods: Case A 30-year-old female patient had been followed up by rheumatology since 2019 with a diagnosis of ankylosing spondylitis. She presented to the emergency department on 31.01.2024 with acute abdominal pain. She reported pain in the right lower quadrant, suprapubic region, and left lower quadrant. Physical examination revealed acute abdomen. Laboratory findings: WBC: 8.03×10^9/L, neutrophils 43%, lymphocytes 49.4%, Hgb: 13.2 g/dL, PLT: 305×10^9/L, CRP: 2.2 mg/L, ALT: 43, AST: 33, LDH: 223, non-contrast upper abdomen CT scan revealed areas with fatty density and contamination in the surrounding fatty planes were detected at the umbilical level adjacent to the right anterior abdominal wall, and omental infarction was considered as the primary diagnosis. Based on the clinical and radiological findings, a decision was made to perform surgical exploration.

Results: During the operation, abnormal tissues were observed on the uterus and in the vicinity of the bladder, and excision was performed. Pathological examination revealed a necrotizing palisading granulomatous reaction in yellow-beige colored tissue samples. The pathology report stated that the findings were consistent with RA and extra-articular involvement of rheumatoid variants, and recommended further investigation for granulomatous diseases (especially tuberculosis). These findings are consistent with the literature on rare gastrointestinal and intra-abdominal involvement in rheumatological diseases.

Conclusion: The PPD (tuberculin) test and ARB staining microscopy performed on the patient were negative. Tuberculosis has been ruled out. This case highlights the rare extra-articular involvement that can present with an acute abdominal picture in inflammatory rheumatic diseases such as ankylosing spondylitis. In cases where granulomatous and necrotizing lesions are detected, infectious causes must be ruled out; however, the systemic effects of rheumatological disease should also be considered in the differential diagnosis. A multidisciplinary approach is critical for accurate diagnosis and appropriate management.

Keyword: Rhomatoid arthritis

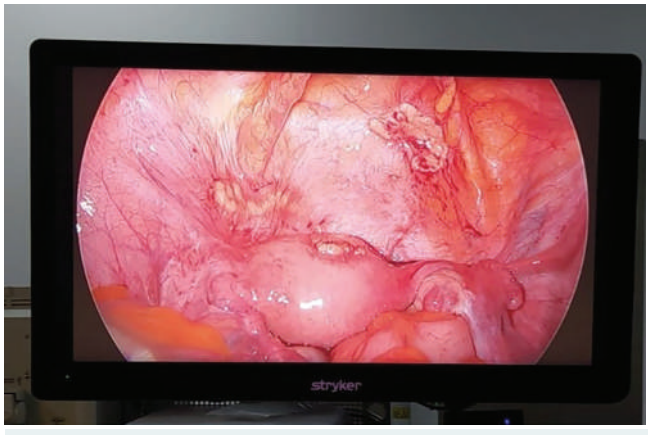


Figure 1. Surgery image.

[P-345]

Primary necrotizing fasciitis of the breast: Case report

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Objective: Necrotizing fasciitis is a life-threatening infection of the soft tissue and fascia, most often affecting the abdominal wall, extremities, and perineum. We aimed to present a case of primary necrotizing fasciitis with no identifiable risk factors, including trauma, surgery, insect bites, breastfeeding, diabetes, or immunosuppression.

Material and Methods: This is a case presentation of primary breast necrotizing fasciitis.

Results: A 60-year-old woman was treated with oral antibiotics for one week for pain, redness, and swelling in the left breast. She presented to the emergency department with worsening symptoms. Examination revealed erythema, edema, and severe tenderness in a 4x4 cm area from the inner quadrant of the left breast to the sternum (Figure 1A). Laboratory tests showed leukocytosis (17.970 103/mm^3, neutrophils 77%) and elevated C-reactive protein (143.7 mg/L). The LRINEC score was 7. Ultrasound revealed an abscess-like lesion measuring approximately 45×30 mm. Intravenous broad-spectrum antibiotics (piperacillin/tazobactam 3x4.5 g and clindamycin 3x900 mg) and fluid support were initiated. Under general anesthesia, multiple foul-smelling abscesses were drained. A wide surgical resection was performed to remove necrotic tissue extending to the pectoral fascia and sternum. No organisms grew in culture. Vacuum-assisted wound therapy began on postoperative day 5 (Figure 1B). On day 11 a partial-thickness skin graft from the right thigh was applied (Figure 1C-D). Pathology showed abscess and fat necrosis without malignancy. During two years of follow-up, no comorbidities or breast pathology were detected on examination or imaging.

Conclusion: Early diagnosis and combined treatment are essential to reduce mortality and morbidity in primary breast necrotizing fasciitis, due to its rarity and rapid progression.

Keywords: Breast, necrotizing fasciitis, primary

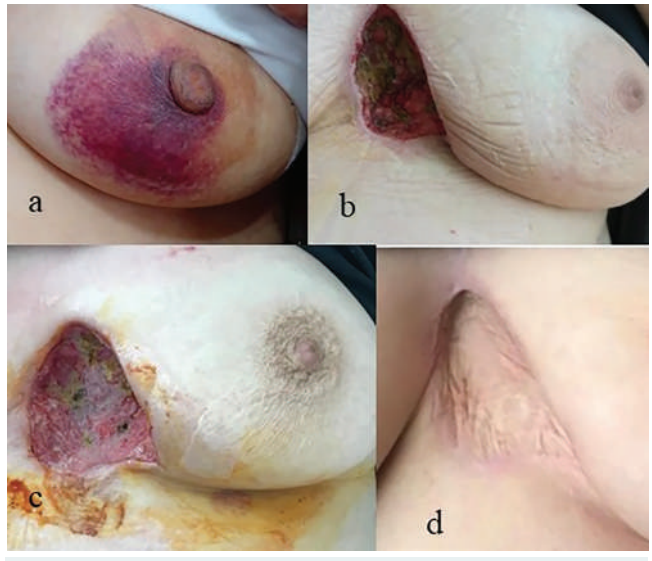


Figure 1. Case of primary necrotizing fasciitis of the breast. a. Necrotizing fasciitis was located in the inner quadrant of the left breast; b. Surgical debridement, 5th postoperative day; c. Partial-thickness skin graft, 11th postoperative day; d. Partial-thickness skin graft, 8th postoperative month.

[P-346]

Small bowel obstruction caused by a mesodiverticular band associated with Meckel's diverticulum: A rare cause of ileus

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Objective: Meckel's diverticulum is the most common congenital anomaly of the gastrointestinal tract, occurring in approximately 2-3% of the general population. It usually remains clinically silent throughout life and is often detected incidentally. Although most patients are asymptomatic, clinical symptoms develop in only about 16% of cases. The most common complications include gastrointestinal bleeding, small bowel obstruction, and diverticulitis. A rare cause of obstruction is the formation of a mesodiverticular band, which can lead to mechanical small bowel obstruction and acute abdomen. In this case report, we present the diagnostic process and surgical management of a rare ileus caused by a mesodiverticular band associated with Meckel's diverticulum.

Material and Methods: An 18-year-old female patient presented to the emergency department with sudden-onset abdominal pain that began in the morning and was accompanied by nausea and vomiting. She reported no passage of flatus or stool. The patient had no known comorbidities. Her surgical history included an appendectomy and an abdominal operation performed six years earlier for ileus. Physical examination revealed abdominal distension and diffuse tenderness without guarding or rebound tenderness. Digital rectal examination showed an empty rectal ampulla. Laboratory tests demonstrated a C-reactive protein level of 0 mg/L, a white blood cell count of 11.7×10^9/L, and a lactate level of 1.7 mmol/L. Contrast-enhanced abdominal computed tomography revealed dilated small bowel loops with air-fluid levels, reaching a maximum diameter of approximately 34 mm. A transition zone was identified at the ileal level, consistent with mechanical small bowel obstruction.

Results: Based on the clinical and radiological findings, surgical exploration was performed. Intraoperatively, a band originating from the Meckel's diverticulum and extending toward the anterior abdominal wall was identified. This mesodiverticular band caused adhesion and mechanical obstruction of the small bowel. An ischemic area was observed in the bowel segment distal to the diverticulum due to compression by the band. Consequently, segmental small bowel resection with side-to-side anastomosis was performed. The postoperative course was uneventful, and the patient was discharged without complications.

Conclusion: In conclusion, although Meckel's diverticulum is typically asymptomatic, it can rarely cause mechanical small bowel obstruction via a mesodiverticular band. In young patients presenting with acute abdomen, especially those with a history of adhesive ileus, this rare etiology should be considered. Early diagnosis and timely surgical intervention are crucial to prevent bowel ischemia and associated morbidity.

Keywords: Meckel's diverticulum, mesodiverticular band, small bowel obstruction

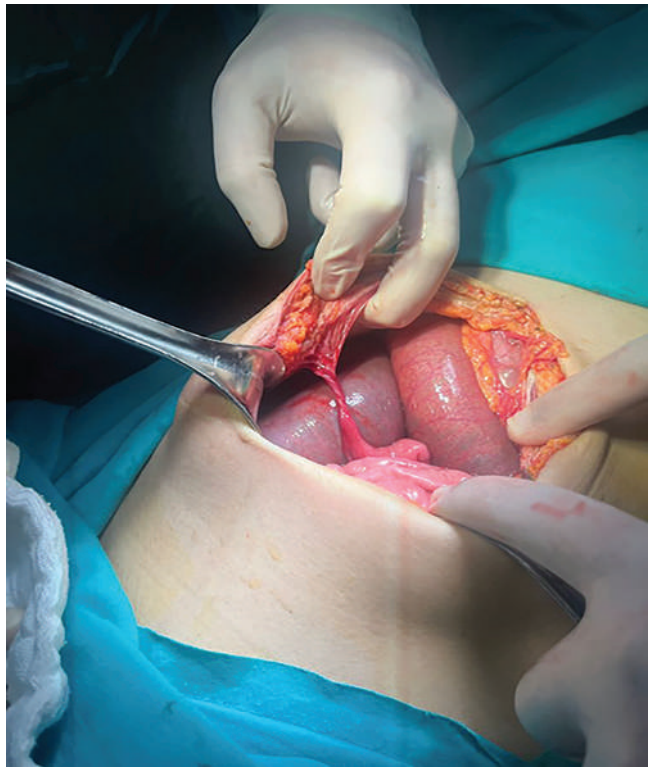


Figure 1. Intraoperative view of a mesodiverticular band arising from Meckel's diverticulum.

[P-347]

Laparoscopic repair of traumatic diaphragmatic injury with gastric incarceration: A rare case

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Objective: The incidence of diaphragmatic rupture following thoracoabdominal blunt trauma ranges from 0.8% to 5%. Acute gastric incarceration associated with diaphragmatic hernia in the early period after blunt trauma is exceedingly rare, and delayed diagnosis or treatment can be life-threatening. This report describes a case of traumatic diaphragmatic rupture with gastric incarceration, managed laparoscopically after hemodynamic stabilization in the acute phase in a patient with multiple traumatic injuries.

Material and Methods: This is a case presentation of laparoscopic repair of traumatic diaphragmatic injury with gastric incarceration.

Results: A 50-year-old woman was admitted to the emergency department following a non-vehicular traffic accident. On presentation, she was in poor general condition, intubated, hypotensive, and tachycardic. Laboratory evaluation revealed a hemoglobin of 7.79 g/dL, a creatinine of 0.53 mg/dL, and a C-reactive protein of 2 mg/L. Hemodynamic stabilization was achieved with intravenous fluid resuscitation. Chest computed tomography demonstrated gastric herniation and diaphragmatic rupture in the left hemothorax. Additional imaging identified multiple fractures of the pelvis and bilateral lower extremities. Laparoscopic abdominal exploration under general anesthesia confirmed a gastric herniation incarcerated into the thoracic cavity through an approximately 6x7 cm defect in the left diaphragm (Figure 1). The stomach was reduced into the abdominal cavity using an endo-grasper (Figure 2). Further exploration identified a collapse of the left lung, and a 28-French chest tube was inserted by a thoracic surgeon via the left mid-axillary line at the sixth intercostal space. The diaphragmatic defect was primarily closed with 2/0 polyglycolic acid sutures and reinforced with a 15 cm×10 cm piece of dual-mesh, which was fixed with an absorbable tacker. Orthopedic surgical intervention was subsequently performed for the extremity and pelvic fractures. The patient was discharged without complications at the end of the first postoperative month.

Conclusion: Gastric incarceration after diaphragmatic rupture is rare. Early diagnosis and prompt surgical intervention are essential once hemodynamic stability is achieved, and major injuries are excluded. Laparoscopic repair is a safe and effective treatment option.

Keywords: Trauma, diaphragm, incarceration

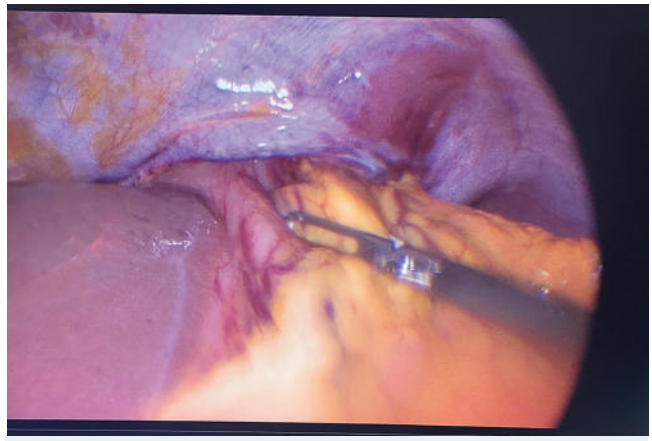


Figure 1. Laparoscopic view of gastric incarceration.

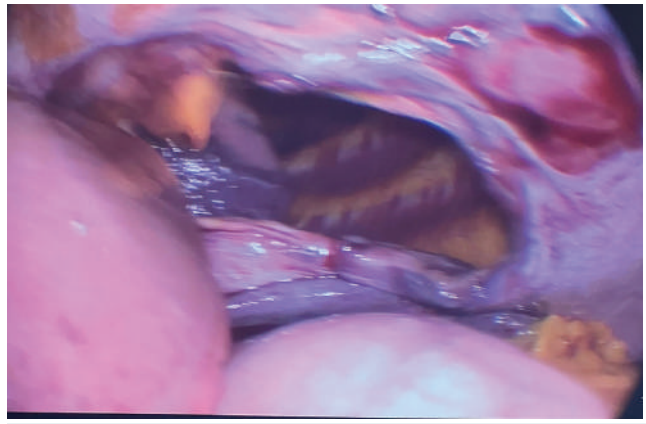


Figure 2. Laparoscopic view of the defect in the diaphragm after reduction of the stomach using an endo-grasper.

[P-348]

Diagnosis and management of esophageal injury in cervical gunshot wounds: A case report

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Objective: Cervical gunshot injuries are associated with a high risk of morbidity and mortality due to the close anatomical proximity of vital structures, including major vascular components, the trachea, and the esophagus. Although esophageal injuries are relatively uncommon, delayed diagnosis may result in severe and potentially life-threatening complications. In this case report, we present an esophageal injury secondary to a cervical gunshot wound, in which the diagnostic process was particularly challenging.

Material and Methods: This study comprises evaluation of a single patient managed with suspected esophageal injury following a cervical gunshot wound. The patient's clinical findings, imaging modalities, and endoscopic examination results were analyzed in detail. Following the diagnostic workup, surgical exploration was performed. A mucosal defect identified during intraoperative endoscopic assessment was primarily repaired. The patient was subsequently monitored in terms of postoperative clinical course, enteral nutritional management, and the development of potential complications.

Results: A 20-year-old male presented on February 2, 2026, with a gunshot wound to the neck. He was conscious (GCS: 15) and hemodynamically stable on admission. Physical examination revealed two entry wounds on the left cervical region and one exit wound over the left scapula. A bullet was palpated subcutaneously in the right cervical area. Minimal cervical and mediastinal emphysema were detected. Tetanus prophylaxis and intravenous antibiotics were initiated. A left clavicle fracture was identified, and the patient was admitted for observation. During follow-up, serous discharge from the cervical wound raised suspicion of esophageal perforation, and he was referred to a tertiary center. Imaging demonstrated pneumomediastinum without definitive evidence of perforation. Upper gastrointestinal endoscopy revealed a lesion in the cervical esophagus consistent with a fistulous opening, and surgical exploration was undertaken. Exploration via a left cervical oblique incision showed no clear transmural defect. Intraoperative endoscopy identified a blunt mucosal injury, which was repaired primarily. A drain was placed, a surgical gastrostomy was performed, and the retained bullet was removed. The postoperative course was uneventful. Enteral feeding was initiated via gastrostomy, oral intake was gradually resumed, and the patient was discharged without complications.

Conclusion: Despite two separate bullet penetrations to the cervical region, the absence of major vascular or vital organ injury is noteworthy. However, even in hemodynamically stable patients without major organ damage, esophageal injuries may lack clear clinical or radiological findings, leading to potential diagnostic delay. Early endoscopic evaluation in suspicious cases is therefore essential. When indicated, timely surgical exploration reduces morbidity. A multidisciplinary approach and early enteral support further improve clinical outcomes.

Keywords: Cervical gunshot wound, esophageal injury, penetrating neck trauma

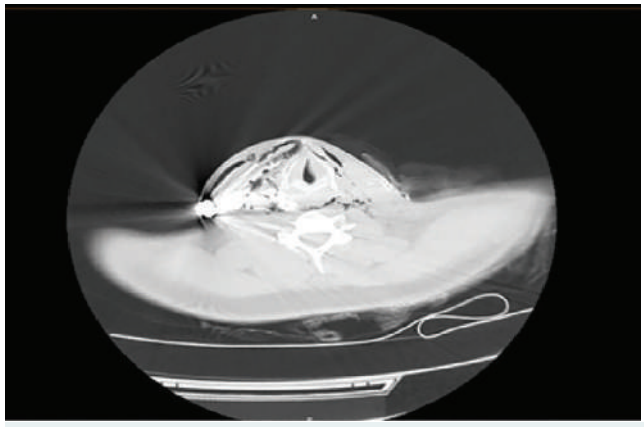


Figure 1. Contrast-enhanced cervical computed tomography demonstrating pneumomediastinum secondary to a cervical gunshot wound and a subcutaneously located bullet in the right cervical region.

[P-349]

Portal and mesenteric venous thrombosis following non-perforated laparoscopic appendectomy: Pylephlebitis in a thrombophilic patient

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Objective: Pylephlebitis is a rare and life-threatening form of septic thrombophlebitis involving the portal venous system, typically arising as a complication of intra-abdominal infections. While frequently associated with perforated appendicitis, its occurrence following non-perforated (suppurative) cases is exceptionally rare. It is hypothesized that the venous stasis induced by laparoscopic pneumoperitoneum, when combined with a genetic thrombophilic predisposition, may trigger thrombosis within the portal and mesenteric vascular beds. This report presents a unique case of extensive portal vein thrombosis (PVT) and superior mesenteric vein (SMV) occlusion following non-perforated laparoscopic appendectomy.

Material and Methods: A 39-year-old female (G6P5A1) with a medical history of type 2 DM, coronary artery disease, and recurrent pericardial effusion (on chronic colchicine therapy) underwent laparoscopic appendectomy for acute appendicitis. Preoperative contrast-enhanced computed tomography (CT) demonstrated normal portal and mesenteric vasculature. Following a non-perforated appendectomy, the patient was discharged on postoperative day one. On the second day, she developed nausea, vomiting, abdominal pain, and fever, eventually presenting to the emergency department one week later. Laboratory findings revealed leukocytosis and elevated CRP, along with increased ALP and GGT levels. Notably, AST, ALT, and lactate levels remained within normal limits throughout the clinical course. Contrast-enhanced CT revealed extensive thrombosis in the portal vein and total occlusion of the proximal SMV, though distal vascular perfusion was preserved. The patient was hospitalized and treated with intravenous broad-spectrum antibiotics and systemic anticoagulation. By day ten, biochemical parameters normalized, and she was discharged on anticoagulant therapy. Subsequent thrombophilia screening at a transplant center identified MTHFR C677T (heterozygous mutant) and PAI-1 (4G/5G) (heterozygous) mutations.

Results: Pylephlebitis can develop even in the absence of macroscopic perforation due to microscopic bacterial translocation triggered by increased intraluminal pressure. Laparoscopic pneumoperitoneum-induced stasis further facilitates the progression of this septic process into PVT and SMV occlusion. The preservation of normal transaminase and lactate levels, despite total proximal SMV occlusion, is attributed to maintained distal collateral perfusion preventing intestinal ischemia. The identified *MTHFR* and *PAI-1* mutations, exacerbated by surgical stress and systemic inflammation, likely catalyzed the coagulation cascade.

Conclusion: Pylephlebitis following non-perforated appendicitis is a silent, catastrophic vascular event that can be masked by normal transaminase and lactate levels. Surgeons must not be misled by a "false sense of security" provided by conventional laboratory findings; high clinical suspicion and early radiological evidence are paramount to prevent this surgical tragedy.

Keywords: Laparoscopic appendectomy, pylephlebitis, portomesenteric vein thrombosis

[P-350]

Necessity of endoscopic screening in liver donors: A donor diagnosed with rectal cancer

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Objective: Donor safety is maintained at the highest level during living-donor liver transplantation processes. Although donor candidates are routinely screened for malignancy, the scope of screening protocols—particularly the necessity of endoscopic imaging—remains a subject of debate. In this presentation, we aimed to discuss donor screening processes in light of the literature, based on a case diagnosed with advanced-stage rectal cancer one year after becoming a liver donor.

Material and Methods: This study presents a retrospective analysis of a patient managed in our clinic.

Results: A 42-year-old female patient, who had served as a living liver donor at an external center one year ago, presented to our clinic with the complaint of rectal bleeding. Rectoscopy revealed a mass encircling approximately 270 degrees of the lumen at a distance of 10 cm from the anal verge, and multiple biopsies were performed. The pathological examination reported a focus of adenocarcinoma *in situ* within an adenomatous polyp. No distant metastasis was detected on chest computed tomography and abdominopelvic magnetic resonance imaging. Since there was no diagnosis of invasive carcinoma, neoadjuvant therapy was not administered. The patient underwent a low anterior resection and a protective loop ileostomy. Following an uneventful postoperative period, the patient was discharged in good health. The final pathology was reported as adenocarcinoma (grade 3, pT3) with a tumor diameter of 5 cm and 13 tumor-free lymph nodes. The patient was referred for oncology follow-up to plan adjuvant therapy.

Conclusion: This case opens for discussion the necessity of endoscopic screening, particularly in donor candidates over the age of 40 or those with familial risk factors. To enhance donor and recipient safety, updating screening algorithms based on age and risk factors would provide a significant contribution to the literature.

Keywords: Living liver donor, rectal cancer, donor evaluation

[P-351]

Middle aortic syndrome (MAS)

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Objective: Middle aortic syndrome (MAS) is a rare vascular disorder characterized by segmental stenosis of the abdominal aorta and/or the distal descending thoracic aorta, frequently involving its major branches, and arising from either congenital or acquired etiologies. The condition predominantly affects young patients and typically manifests as refractory hypertension, lower extremity claudication, and signs of impaired end-organ perfusion. Owing to the non-specific nature of its clinical presentation, diagnosis is often delayed, thereby increasing the risk of severe cardiovascular complications. Herein, we report a case of MAS with delayed diagnosis in a young female patient.

Material and Methods: The clinical, laboratory, and imaging findings of a patient with a history of refractory hypertension, lower extremity claudication, and cardiac complications were retrospectively evaluated. The diagnostic workup included physical examination findings in conjunction with computed tomography angiography. The anatomical characteristics of the abdominal aorta and its major branches, as well as the presence of potential vascular anomalies, were examined in detail.

Results: The 24-year-old female patient initially presented with symptoms of claudication in 2019. In 2021, she required admission to the intensive care unit due to pulmonary edema secondary to heart failure. Between 2022 and 2023, she had recurrent hospitalizations for refractory hypertension. Computed tomography angiography demonstrated complete narrowing of the abdominal aorta. Marked anatomical variations were identified in the origin and course of the celiac trunk, superior mesenteric artery, and renal arteries. The left renal artery was not clearly visualized, and the distal segment of the celiac artery appeared short and hypoplastic. These findings were considered consistent with MAS.

Conclusion: MAS should be considered in the differential diagnosis of young patients presenting with refractory hypertension and lower extremity claudication. Early diagnosis is critical for preventing heart failure and other serious vascular complications. Appropriate imaging modalities and a multidisciplinary approach play a pivotal role in establishing the diagnosis.

Keyword: Middle aortic syndrome



Figure 1. Middle aortic syndrome.

[P-352]

Stoma management in a patient with high-output ileostomy following mesenteric ischemia: A case report

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Objective: Acute mesenteric ischemia caused by mesenteric artery thrombosis is a life-threatening condition associated with high morbidity and mortality. In emergency bowel resections, stoma site marking is often not feasible, increasing the risk of postoperative stoma-related complications. High-output ileostomy is a challenging clinical condition that may lead to severe fluid-electrolyte imbalance and peristomal skin complications, complicating postoperative management.

Material and Methods: This report retrospectively evaluates the clinical course and stoma care management of a patient who underwent emergency surgery for mesenteric ischemia with creation of a double-barrel ileostomy. Stoma characteristics, postoperative complications, nursing interventions, and medical management strategies were reviewed.

Results: A 74-year-old female patient with a history of diabetes mellitus and hypertension underwent emergency surgery due to extensive mesenteric ischemia. Necrotic segments of the small intestine were resected, and a double-barrel ileostomy was created under emergency conditions without preoperative stoma site marking. Postoperatively, the stoma was located in the left lower quadrant, close to the umbilicus, and was irregularly shaped and mildly retracted. Peristomal skin irritation developed due to exudate leakage from the surgical field. On postoperative day 11, the patient developed a high-output ileostomy with daily output exceeding 2000-2500 mL, accompanied by electrolyte imbalances. Management included fluid and electrolyte replacement, loperamide therapy, and dietary modification. Stoma care involved the use of a two-piece convex appliance, a drainable transparent pouch, skin barrier spray, stoma powder, and a stoma belt. Due to poor compliance of the patient and relatives with stoma care, frequent pouch changes were required. Despite the high surgical risk, ileostomy closure was performed at postoperative week five, and the patient was discharged without complications.

Conclusion: Emergency stoma creation without appropriate site selection increases the risk of high-output stoma and peristomal skin complications. This case highlights the critical role of experienced stoma and wound care nurses within a multidisciplinary team in achieving favorable outcomes in complex surgical patients.

Keywords: High-output stoma, ileostomy, stoma complications



Figure 1. Appearance of a double-barrel ileostomy following emergency surgery, showing stoma retraction and peristomal skin irritation associated with a high-output stoma.

View of a double-barrel ileostomy created after emergency surgery, showing a stoma located below the skin level with surrounding widespread erythema, moisture, and areas of impaired peristomal skin integrity due to leakage.

[P-360]

Mesh migration after graft-reinforced hiatal hernia repair: A case report

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Objective: Hiatal hernia is defined as the protrusion of the stomach or other abdominal organs into the thoracic cavity through the diaphragmatic hiatus. Hiatal hernias may be congenital or acquired, and their prevalence increases with age. Predisposing factors include conditions that increase intraabdominal pressure such as obesity, pregnancy, and chronic constipation. The most common presenting symptoms are reflux, dysphagia, and regurgitation; however, respiratory symptoms may also be observed in some cases. Treatment options vary depending on the severity of symptoms and the type of hernia.

Material and Methods: This case report presents the follow-up and treatment process applied after mesh migration that developed in the postoperative sixth month in a patient who had previously undergone grafted repair for hiatal hernia at our hospital.

Results: An 80-year-old female patient presented to the emergency department with complaints of nausea, vomiting, and dysphagia, including difficulty swallowing liquids. Chest radiography and computed tomography revealed a mixed-type giant hiatal hernia. Endoscopic evaluation was attempted but was unsuccessful. Due to persistent symptoms and the development of respiratory distress, the patient—who had a known history of coronary artery disease and hypertension—was taken to surgery under emergency conditions. After reduction of the stomach, duodenum, and colon from the hernia sac back into the abdominal cavity, graft-reinforced hiatal hernia repair was performed using a polypropylene (Prolene) mesh. The patient's postoperative course was uneventful, oral intake was tolerated, and she was discharged. At the sixth postoperative month, the patient re-presented with dysphagia. Contrast-enhanced computed tomography showed no evidence of recurrent hiatal hernia. Upper gastrointestinal endoscopy demonstrated a foreign body in the distal esophagus, which was primarily interpreted as mesh material. Endoscopic extraction attempts by the gastroenterology team and rigid bronchoscopy performed by the thoracic surgery team were unsuccessful. Consequently, the patient was re-operated on by our team. During gastrotomy, a polypropylene mesh protruding into the esophageal lumen was identified and excised. Intraoperative gastroscopy confirmed patency of the esophageal lumen. The patient tolerated an R3 diet on postoperative day 2 and was discharged.

Conclusion: The use of mesh in hiatal hernia repair remains controversial. In addition, biological mesh should be considered as an alternative to polypropylene mesh during mesh selection. Surgeons should be aware that early-term mesh migration may occur following mesh-reinforced hiatal hernia repair.

Keywords: Hiatal hernia, mesh migration

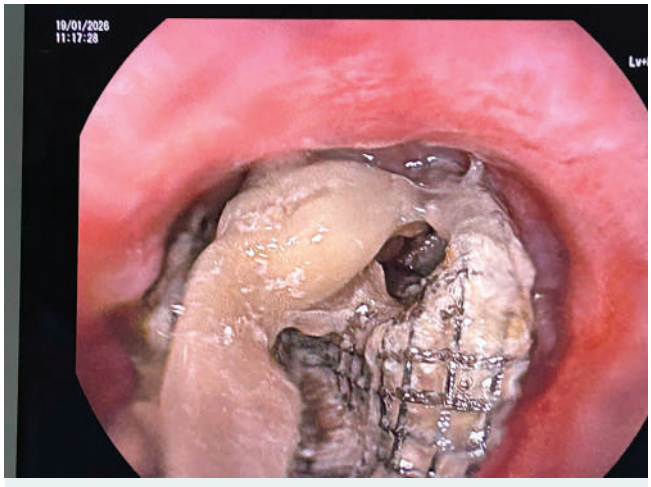


Figure 1.

[P-364]

A challenging situation during ERCP: Impacted dormia basket – what should be done?

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Objective: Since 1974, endoscopic retrograde cholangiopancreatography (ERCP) has been the standard technique for the removal of bile duct stones, achieving success rates of 85-90% using sphincterotomy followed by balloon or basket extraction. Although generally safe, ERCP is associated with complications such as pancreatitis, bleeding, cholangitis, and perforation. Impaction of a Dormia basket is a rare but challenging complication that requires prompt recognition and appropriate management.

Material and Methods: Case 1: An 80-year-old male with coronary artery disease and hypothyroidism presented with jaundice, fever, abdominal pain, nausea, and vomiting. Physical examination revealed icterus and a positive Murphy's sign. Laboratory findings showed elevated bilirubin levels. Imaging demonstrated gallstones up to 11 mm and a 7 mm stone in the common bile duct. During ERCP, a filling defect was observed, and an impacted Dormia basket was encountered. Balloon dilation of the papilla was attempted but unsuccessful, necessitating emergency surgery. Open exploration of the common bile duct was performed, and the impacted basket and stones were removed through a choledochotomy. The patient was monitored in intensive care postoperatively and discharged on postoperative day ten with a cystic duct drain, which was removed after 45 days. Case 2: A 61-year-old male with chronic obstructive pulmonary disease and hypertension presented with similar symptoms. Imaging revealed multiple gallstones, the largest measuring 20 mm, and suspected distal bile duct stones. ERCP demonstrated type I Mirizzi syndrome. Sphincterotomy and biliary stenting were performed, leading to clinical improvement. Twenty days later, the patient returned with recurrent symptoms. Repeat imaging showed stones in the common bile duct. During repeat ERCP, the stent was removed, and an impacted stone in the distal cystic duct was identified. Basket extraction failed, resulting in basket impaction and emergency surgery. Subtotal cholecystectomy and bile duct exploration were performed. As the basket could not be removed, a duodenotomy was required to extract the impacted basket and stones. A cystic duct drain was placed, and the patient was discharged on postoperative day seven.

Results: Dormia basket impaction is reported in 0.8-5.9% of ERCP procedures, usually caused by large or hard stones. Endoscopic techniques such as balloon dilation or mechanical lithotripsy may be attempted; however, surgical intervention becomes necessary when these methods fail. Early recognition and timely surgical management are essential to prevent serious complications.

Conclusion: While ERCP remains an effective method for treating biliary stone disease, clinicians must be prepared to manage rare complications such as Dormia basket impaction. Multidisciplinary approaches and surgical backup are crucial for optimal outcomes.

Keywords: Biliary complications, common bile duct stones, Dormia basket impaction, endoscopic retrograde cholangiopancreatography (ERCP), open surgical intervention

[P-365]

A rare intraoperative pathology in recurrent inguinal hernia: Amyand's hernia

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Objective: Amyand's hernia is an extremely rare clinical condition characterized by the presence of the vermiform appendix within an inguinal hernia sac, with an incidence reported between 0.19% and 1% in the literature. This condition may lead to acute appendicitis due to luminal obstruction, vascular compression, and inflammation resulting from the entrapment of the appendix within the hernia sac. Since clinical findings often overlap with incarcerated hernia, preoperative diagnosis is challenging, and definitive diagnosis is frequently made intraoperatively. The occurrence of Amyand's hernia in recurrent cases previously repaired with mesh is a phenomenon reported very limitedly in the literature. This report aims to discuss the management of an Amyand's hernia case detected in a recurrent site following laparoscopic surgery, in light of current literature.

Material and Methods: A 52-year-old male patient, who had undergone laparoscopic transabdominal preperitoneal repair for a right inguinal hernia six years prior, presented with pain and swelling in the right inguinal region for the last three months. Physical examination revealed a reducible mass in the right inguinal region; ultrasonography showed bowel loops and fatty tissue herniating through the fascial defect. The patient was operated on under spinal anesthesia with a preliminary diagnosis of recurrent inguinal hernia, utilizing an open anterior approach. During the dissection of the indirect hernia sac, it was observed that an edematous and hyperemic appendix formed one wall of the sac. According to the Losanoff-Basson classification, the clinical picture was evaluated as "type 2" (acute appendicitis confined to the sac). Following appendectomy, the hernia defect was repaired using the Lichtenstein technique with a self-gripping polypropylene mesh. The operation lasted 45 minutes; the patient had an uneventful postoperative course and was discharged at the 24th hour. Histopathological examination confirmed "acute suppurative appendicitis."

Results: The primary determinant in the surgery of Amyand's hernia is the degree of appendiceal inflammation and the presence of peritonitis. The Losanoff-Basson classification standardizes the surgical strategy at this point; in type 2 cases where contamination is limited, as in our patient, the use of polypropylene mesh alongside appendectomy is considered safe. Although adhesions from previous laparoscopic surgery may complicate dissection in recurrent cases, an open surgical approach allows for direct visualization of the sac and secure repair.

Conclusion: In conclusion, Amyand's hernia should be considered in the differential diagnosis of recurrent inguinal hernia cases. A personalized surgical approach guided by the Losanoff-Basson classification is the key to successful outcomes.

Keywords: Amyand's hernia, Losanoff-Basson classification, recurrent inguinal hernia



Figure 1. Amyand's hernia.

Appendix tissue within the hernia sac.



Figure 2. Amyand's hernia.

Appendix tissue within the hernia sac.

[P-368]

Recurrence of hepatocellular carcinoma after liver transplantation: Metastasis initially to the spleen followed by involvement of the pectoral muscle

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Objective: Hepatocellular carcinoma (HCC) is the most common primary liver malignancy and a leading cause of cancer-related mortality worldwide. Curative options include liver resection and transplantation, the latter offering lower recurrence rates, particularly in cirrhotic patients; however, recurrence occurs in 6-20% of selected cases. Most recurrences develop within the first two years (early recurrence). Extrahepatic recurrences most commonly affect the lungs, lymph nodes, bones, and adrenal glands, whereas late recurrences after two years are rare.

Material and Methods: A 66-year-old male presented in December 2018 with elevated AFP. Imaging revealed two nodules in liver segment VI consistent with HCC. At diagnosis, the patient was Child-Pugh A, and met Milan criteria; thus, a deceased-donor liver transplantation (LT) was performed in October 2019. Explanted liver pathology s howed no viable tumor. Sixty-six months post-transplant, late extrahepatic recurrence developed in the spleen and, eight months later, in the pectoral muscle. The splenic lesion was considered consistent with HCC recurrence, and splenectomy was performed in May 2025. Histopathology confirmed metastatic HCC (3×3×2.7 cm). Postoperative course was uneventful. Eight months after splenectomy, AFP rose to 1139.8 ng/mL. CT and PET/CT revealed a 3.1×2.5 cm lesion in the pectoral muscle with increased FDG uptake (SUV_{max} 4.8). Surgical resection was performed, and pathology confirmed metastatic HCC (4.8×2.3 cm). Early follow-up showed no evidence of further recurrence.

Results: With improved survival, extrahepatic metastases after LT have gained clinical significance. Management of post-LT HCC recurrence generally follows approaches used in non-transplanted patients. Surgical resection may be considered for resectable metastases, alongside systemic therapies, RFA, and TACE. Resectable recurrence is associated with better prognosis, though overall survival remains poor. Extrahepatic metastases usually occur as part of disseminated hematogenous spread, with isolated organ involvement being rare. In our case, late recurrence involved the spleen at 66 months and the pectoral muscle at 74 months post-LT. The impact of metastasectomy on survival remains unclear; however, aggressive approaches including surgical resection may improve outcomes. Disease control for the second pectoral recurrence after splenectomy is under ongoing follow-up.

Conclusion: The survival benefit of surgical resection for isolated extrahepatic metastases of HCC remains unclear; however, in selected patients, it may offer low morbidity and potential for long-term survival. Given the uncertainties in managing recurrent HCC, long-term follow-up and additional evidence are required.

Keywords: Hepatocellular carcinoma, liver transplantation, extrahepatic metastasis

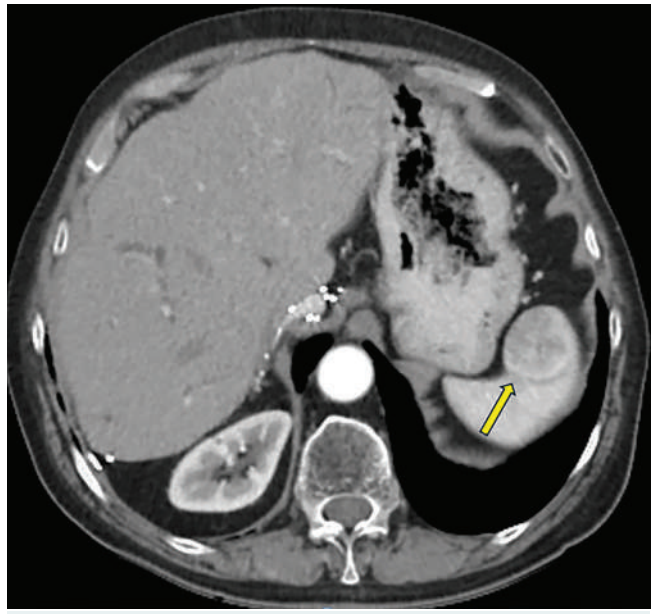


Figure 1. Splenic recurrence of HCC after liver transplantation: on contrast-enhanced axial CT, a splenic mass consistent with recurrent hepatocellular carcinoma is observed. The lesion is indicated by the yellow arrow.

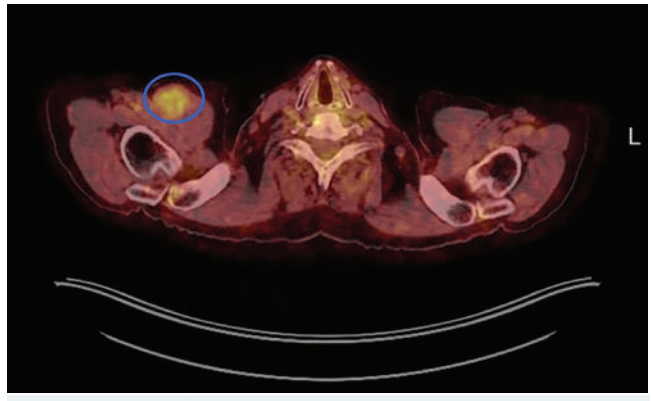


Figure 2. Mass in the pectoral muscle after splenectomy: PET/CT demonstrates uptake within the mass, which is outlined by the blue circle.

[P-369]

A rare case report: Primary lymphoma of the breast

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Objective: Breast lymphoma is a rare hematological malignancy. They are divided into two types: Primary and secondary. Its treatment and prognosis differ from other breast carcinomas. Primary breast lymphoma is rarer. In our case report, we aimed to present the diagnosis and treatment process of a rare primary breast lymphoma, along with a review of the literature.

Material and Methods: A 71-year-old female patient with no other medical conditions besides known hypertension presented with a mass in her right breast. Mammography and ultrasound imaging revealed a 3x2 cm lesion in the upper inner quadrant of the right breast, which was biopsied using a tru-cut biopsy. Pathology reports indicated findings suggestive of lymphoproliferative neoplasia, primarily low-grade follicular lymphoma. Peripheral blood smear, including complete blood count, came back negative for lymphoma. PET-CT scan revealed no other pathological FDG uptake in the body besides the primary tumor uptake in the breast. The oncology council recommended total excision of the lesion for histopathological typing, and the pathology result revealed a grade 1-2 follicular lymphoma. The patient has started chemotherapy.

Results: Breast lymphomas account for less than 1% of breast malignancies. The most common type is diffuse large B-cell lymphoma. It most often presents as breast involvement secondary to systemic disease. Primary and secondary breast lymphomas require different treatment regimens, making a clear distinction between them. Primary breast lymphoma is thought to originate from the lymphoid ducts in the breast, specifically from the intramammary lymph nodes. To be diagnosed as primary breast lymphoma, there must be no history of lymphoma or symptoms at the time of diagnosis, a close association between the lymphoma and breast tissue, and no involvement of organs outside the breast at the time of diagnosis. Based on these criteria, we can diagnose our case as primary lymphoma of the breast. Clinically, patients may exhibit B symptoms similar to those seen in hematological malignancies. There are no specific findings on radiological imaging. Treatment involves systemic chemotherapy and radiotherapy, depending on the histological subtype and stage of the disease. Due to the rarity of primary breast lymphoma, there are no definitive treatment guidelines yet. It is known that excision of the lesion does not contribute to the prognosis. Therefore, surgery is not recommended except for local control or diagnostic purposes. The 5-year survival rate is around 50% for primary breast lymphoma, while it is 25% for secondary breast lymphoma.

Conclusion: Breast lymphomas are clinically similar to other breast carcinomas, but their treatment differs from other breast carcinomas, and accurate diagnosis is crucial to avoid unnecessary surgery.

Keywords: Breast, lymphoma, hematology

[P-376]

A rare cause of asymptomatic spleen cyst: Spleen endometriosis mimicking hydatid cyst

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Objective: Spleen endometriosis is an extremely rare form of extragenital endometriosis. Diagnosis is difficult in the preoperative period because it often does not present specific clinical and radiological findings. This study aims to present a rare case diagnosed with spleen endometriosis following histopathological examination after surgery for a suspected hydatid cyst.

Material and Methods: A 39-year-old female patient with non-active complaints was evaluated after a cystic lesion was detected inthe upper pole of the spleen on abdominal ultrasound performed for suspected hydatid cyst. Ultrasound revealed a cystic lesion measuring 40×49 mm in the upper pole of the spleen, with smooth lobulated contours, septations, and calcified walls. Contrast-enhanced abdominal computed tomography revealed a cystic lesion measuring approximately 52×40 mm in the anterosuperior section of the spleen, which was multilocular and contained internal septa and calcifications; epidermoid and hydatid cysts were considered in the differential diagnosis. Upper gastrointestinal endoscopy revealed no findings suggestive of malignancy or extrinsic compression. The patient underwent planned laparoscopic splenectomy.

Results: Abdominal ultrasonography demonstrated a 40×49 mm cystic lesion with smooth lobulated contours, internal septa, and calcified walls in the upper pole of the spleen. Contrast-enhanced abdominal CT revealed a 52×40 mm multilobulated cystic lesion with internal septa and wall/septal calcifications in the anterosuperior splenic segment; the leading differential diagnoses were epidermoid and hydatid cysts with cystic neoplasm considered less likely. No free fluid, pathological lymphadenopathy, or additional solid organ pathology was identified, and upper gastrointestinal endoscopy showed no malignant or obstructive findings. Laparoscopic exploration identified an approximately 5 cm cystic lesion confined to the superior spleen without invasion of adjacent tissues, and laparoscopic splenectomy was performed uneventfully. Histopathological examination demonstrated a multilocular cyst with hyalinized walls and glandular structures lined by a single-layer epithelium within the splenic parenchyma, without evidence of malignancy; immunohistochemistry showed positivity for PAX8, ER, and PR and negativity for CA19-9 and CEA, consistent with splenic endometriosis. The postoperative course was uneventful.

Conclusion: Splenic endometriosis is an exceptionally rare form of extragenital endometriosis and is typically reported in association with symptomatic presentations or preoperative suspicion. In contrast, the present case was entirely asymptomatic, and the calcified, septated, multilocular splenic cyst was radiologically interpreted as a benign cystic lesion. The lack of endometriosis-specific findings on endoscopic, intraoperative, and laboratory evaluation further underscores the diagnostic challenge. This case highlights that, although rare, endometriosis should be considered in the differential diagnosis of splenic cystic lesions mimicking hydatid or epidermoid cysts, particularly in women of reproductive age. Consistent with the literature, definitive diagnosis relied on histopathological and immunohistochemical evaluation, emphasizing the need for a multidisciplinary approach in the assessment of splenic cystic lesions, even in asymptomatic patients.

Keywords: Case report, cystic spleen lesion, extra-genital endometriosis, laparoscopic splenectomy, splenic endometriosis

Table 1. Comparison of our case with the current literature (splenic endometriosis)

Kaynak (künyeli)	Hasta / Klinik	Görüntüleme (boyut–özellik)	Ayırıcı tanı / yaklaşım	Cerrahi	Patoloji–İHK	Seyir
Weyl A, Ulac C, Delchier MC, Suc B, Cuellar E, Chantalat E. (2020). *J Endometriosis and Pelvic Pain Disorders*. "Splenic lesion mimicking breast metastasis: the first description of splenic parenchymal endometriosis."	54 yaş, premenopozal; **asemptomatik**	13 cm, kompartmante kistik lezyon; FDG tutulumu (SUVmax 4.8)	Meme kanseri metastazı taklidi	Laparoskopik	ER+, PR+, HER2–, PAX8+	2 yıl sorunsuz
Krzeczowski RM, Jackson TN, Kabbani W, Grossman Verner HM, Sladek P. (2022). *Cureus*. "Splenic cysts and the case of mistaken identity."	36 yaş, premenopozal; **kronik LUQ ağrı + postprandiyal bulantı/kusma**	8 cm multiloküle kistik kitle + **duvar/septa kalsifikasyon**	Travmatik/iatrojenik/enfeksiyöz/pseudokist	Açık	Kronik hemoraji; PAX8+, ER+, PR+	Takip kayıp
Mills SEA, Bitar M, Mueller KH. (2022). *ACS Case Reviews in Surgery*. "Incidentally found splenic endometriosis during laparoscopic splenectomy for large splenic cyst."	26 yaş, premenopozal; **şişkinlik/erken doyma** (yakınmalar başka nedenle ilişkilendirilmiş)	10 cm splenik kist; mideye bası	Travmatik/vasküler/enfeksiyöz	Laparoskopik	Endometriotik kist (gland+stroma); ER/PR pozitifliği vurgulanır	Sorunsuz
Bilgin İAB, … (2022). *North Clin Istanbul*. "Endometriosis of the spleen." (Literatürde "4. olgu" olarak sunulur; Tablo 1'de önceki 3 olgu ile kıyas)	31 yaş, premenopozal; **sağ alt kadran ağrısı**	Üst polde 9 cm septalı kistik lezyon	İatrojenik/enfeksiyöz	Laparoskopik	Epitel döşenmesi yok + kist duvarında endometriozis odakları; ER/PR pozitifliği	Sorunsuz
Bu olgu (Ankara Etlik Şehir Hastanesi, 2024)	Kadın; BT isteminde "dalakta kitle"	**BT:** Dalak **superiorda 52×40 mm**, lobüle konturlu, multiloküle, internal septalı; **septa/duvar kalsifikasyonlu**; ayırıcı tanıda epidermoid/hidatik + düşük olasılıkla kistik neoplazm	Klinik–radyolojik olarak komplekskist nedeniyle cerrahi plan	**Laparoskopik total splenektomi**; bilus EndoGIA ile transeksiyon + JP dren	**Endometriozis (dalak, splenektomi)**: hyalinize duvarlı multiloküler kist; malignite yok. **İHK:** PAX8+, ER+, PR+; CA19-9/CEA negatif	Postop biyokimya/lab değerleri genel olarak stabil görünümde

[P-377]

Surgical management of a case of type 3 popliteal artery entrapment syndrome with acute thrombosis after decompression

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Objective: Popliteal artery entrapment syndrome (PAES) is a rare cause of lower extremity ischemia in young individuals without atherosclerotic risk factors. It is most commonly associated with anatomical variations of the medial head of the gastrocnemius muscle. In type 3 PAES, aberrant muscular slips compress the popliteal artery, leading to progressive intimal damage, thrombosis, and distal embolization. Delayed diagnosis may result in recurrent ischemic events and the need for complex revascularization procedures. We present a case of type 3 PAES requiring multistage surgical intervention following initial decompression and patch repair.

Material and Methods: A 26-year-old male with no significant cardiovascular risk factors presented with acute onset of right foot discoloration, coldness, and pain. Computed tomography angiography revealed intraluminal thrombus within the right popliteal artery. Diagnostic and therapeutic digital subtraction angiography was performed, and selective thrombolytic therapy was initiated. Magnetic resonance imaging of the knee demonstrated an abnormal superior origin of the medial gastrocnemius head compressing the popliteal artery, consistent with type 3 PAES. The patient underwent posterior surgical exploration with resection of the aberrant gastrocnemius muscle and saphenous vein patch angioplasty of the popliteal artery. Initial postoperative recovery was uneventful, and distal perfusion improved.

Results: Six months later, the patient presented again with acute limb ischemia. Angiography demonstrated occlusion of the superficial femoral artery with poor distal runoff. Thrombosis of the saphenous vein graft was identified, and thrombectomy with re-anastomosis was performed. Due to persistent perfusion impairment, femoro-distal bypass and thromboendarterectomy were subsequently carried out. Histopathological examination excluded vasculitis and revealed degenerative and inflammatory changes in the vascular wall. Following definitive surgical reconstruction, distal circulation improved clinically.

Conclusion: PAES may require more than simple decompression, particularly in cases with established arterial wall damage and thrombotic complications. Early recognition and appropriate surgical planning are essential to prevent recurrent ischemia and multiple revascularization procedures. PAES should always be considered in young patients presenting with unexplained lower extremity ischemia.

Keywords: Popliteal artery entrapement syndrome, acute arterial thrombosis, revascularization

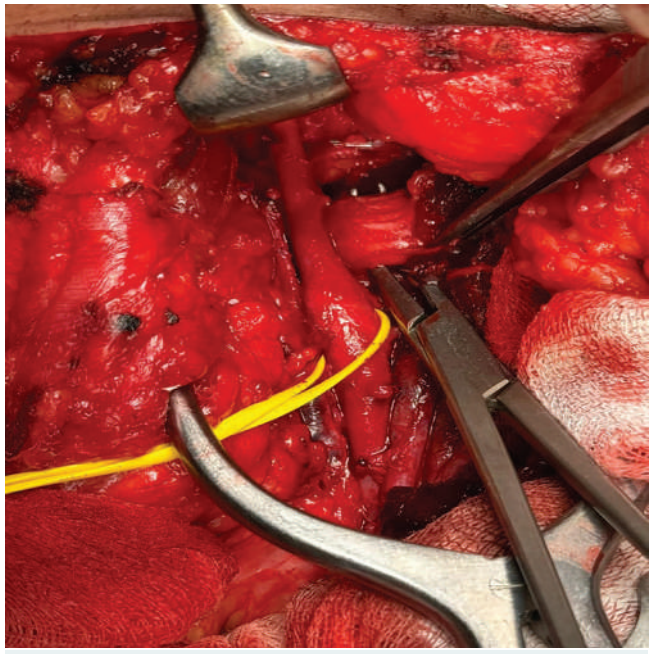


Figure 1. Compressed popliteal artery.

Poplietal artery compressed by gastrcnemius muscle tendon.

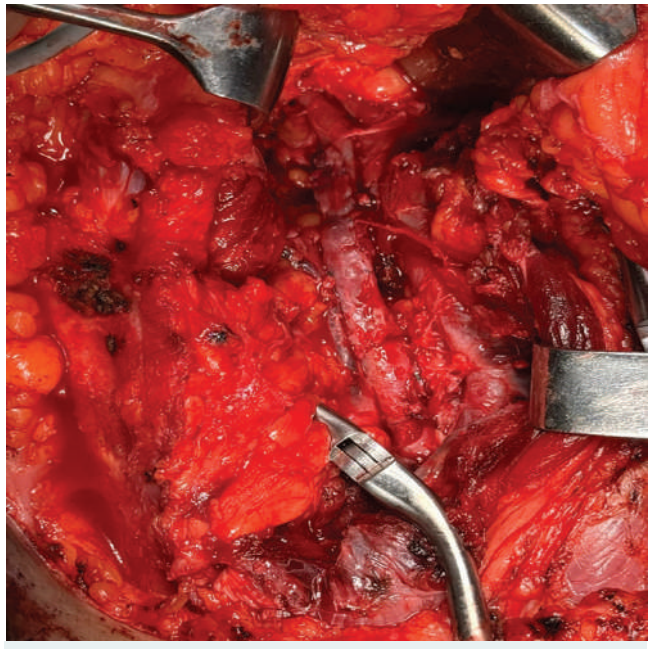


Figure 2. Decompressed popliteal artery.

[P-379]

Paraperitoneal type ureter herniation in the inguinal region: A rare case diagnosed preoperatively

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Objective: Inguinal hernia repair is one of the most commonly performed surgical procedures worldwide, performed on millions of patients each year. In contrast, uretero-inguinal hernia, characterized by herniation of the ureter into the inguinal canal, is quite rare. Paraperitoneal form is constituting the vast majority of cases. Uretero-inguinal hernias often present with typical inguinal hernia findings, making preoperative diagnosis difficult and leading to diagnosis frequently being made during the intraoperative period. Cross-sectional imaging methods are critically important for diagnosis, especially in patients with unexplained hydronephrosis, renal dysfunction, or atypical hernia contents. This report presents a rare case of paraperitoneal ureteroinguinal hernia diagnosed with preoperative imaging.

Material and Methods: Laboratory results, renal scintigraphy, and computed tomography data on the urinary system from the Gaziantep University Hospital database were retrospectively reviewed.

Results: A 27-year-old male patient was referred to our clinic for further evaluation due to elevated serum creatinine levels detected during his military medical examination. The urological evaluation revealed no dysuria, hematuria, flank pain, or lower urinary tract symptoms. The abdominal physical examination was unremarkable except for a hernia, and the patient had no history of surgery. The creatinine level was 1.04 mg/dL, which was within the normal range. Renal scintigraphy showed that the right kidney contributed 57.1% to total renal function and the left kidney contributed 42.9%. Contrast-enhanced computed tomography revealed grade II ectasia in the collecting system of the left kidney. Additionally, cross-sectional imaging showed that the left ureter was herniated into the inguinal canal. Based on these findings, surgery was planned. After completing the preoperative preparations, the patient underwent surgery. Exploration during surgery confirmed that the left ureter was herniated into the inguinal canal. The ureter was carefully dissected from the surrounding tissues and reduced into the retroperitoneal space. After controlling the hernia sac accompanying the ureter, inguinal hernia repair was performed using the Lichtenstein technique. No complications were observed in the early postoperative period, and the patient was discharged on the third postoperative day when serum creatinine returned to normal levels.

Conclusion: Although ureteroinguinal hernia is rare, its recognition in the preoperative period can facilitate surgical planning and reduce the risk of intraoperative ureteral injury. The use of cross-sectional imaging methods in patients with unexplained renal dysfunction or atypical inguinal hernia findings may increase diagnostic accuracy and contribute to the prevention of possible complications.

Keywords: Inguinal canal, lichtenstein technique, uretero-inguinal hernia



Figure 1. Paraperitoneal type ureter herniation.

[P-383]

A rare Strasberg type C injury successfully managed without surgery: A case report

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Objective: Approximately 180,000-200,000 cholecystectomies are performed annually in our country, with laparoscopic cholecystectomy being the most commonly preferred surgical treatment for cholelithiasis. However, its widespread use has been associated with an increased incidence of biliary injuries. Anatomical variations, limited operative exposure, and inflammation-related distortion of tissue planes may lead to misidentification during dissection, increasing the risk of injury. The reported incidence of biliary injury in laparoscopic cholecystectomy is 0.3-0.7%, approximately three times higher than in open surgery, and many injuries present postoperatively with bile leakage or biloma. Among the available classification systems, the Strasberg-Bismuth classification is the most widely used. Type A refers to leaks from small ducts, type B to occlusion of an aberrant right hepatic duct, and type VC to bile leakage caused by transection of this duct, which may be mistaken for the cystic duct. This case report describes the successful minimally invasive management of a rare Strasberg type C injury following laparoscopic cholecystectomy using percutaneous drainage and endoscopic interventions.

Material and Methods: This study is a retrospective case report of a patient who developed a Strasberg type C biliary injury following laparoscopic cholecystectomy performed at our clinic in September 2025. Diagnostic evaluation included ultrasonography, magnetic resonance cholangiopancreatography (MRCP), and endoscopic retrograde cholangiopancreatography (ERCP), with laboratory, clinical, and imaging findings assessed together. Management consisted of percutaneous drainage and endoscopic sphincterotomy, and the patient was followed in a multidisciplinary setting by surgical and gastroenterology teams. The study was conducted in accordance with the Declaration of Helsinki, and written informed consent was obtained.

Results: Bile duct injuries may result in significant morbidity, primarily due to bile leakage and related complications. In this case, a Strasberg type C injury was successfully managed with percutaneous drainage and endoscopic stent placement, avoiding surgical repair. Regression of the biloma and normalization of laboratory findings support the effectiveness of a conservative, minimally invasive approach in appropriately selected patients.

Conclusion: In bile duct injuries following laparoscopic cholecystectomy, early diagnosis, a multidisciplinary approach, and appropriate endoscopic and percutaneous treatment strategies can substantially reduce the need for surgical intervention. In Strasberg type C injuries, preservation of the main bile ducts enables successful management through effective drainage and pressure-decompressing endoscopic procedures. This case supports that a conservative approach is a safe and effective treatment option in carefully selected patients.

Keywords: Biliary injury, endoscopic treatment, laparoscopic cholecystectomy, percutaneous drainage, Strasberg type C

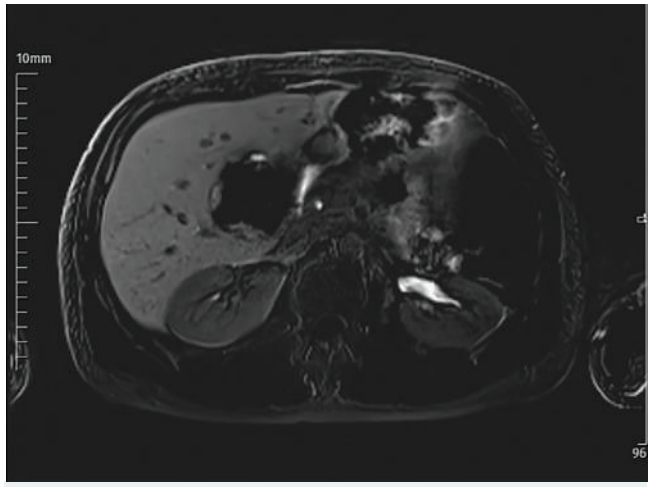


Figure 1. Biloma area.

A collection extending from the inferior hepatic hilum to the lesser curvature of the stomach (biloma?).

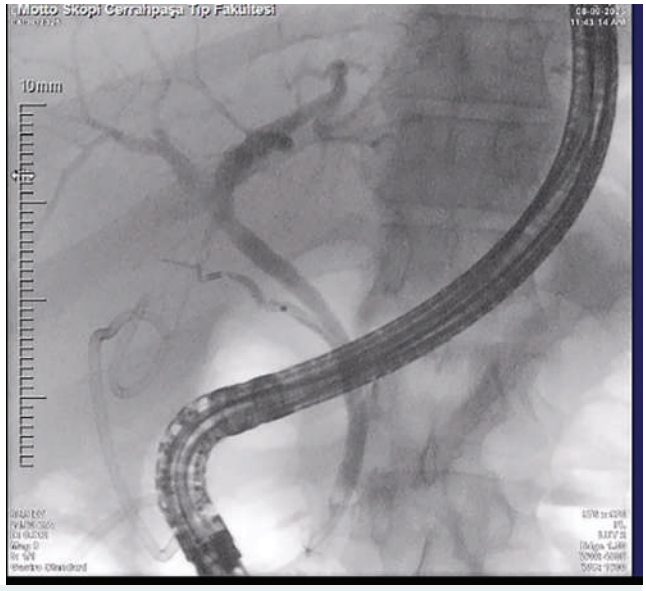


Figure 2. Placement of a plastic stent in the common bile duct.

[P-384]

Primary extranodal high-grade B-cell non-Hodgkin lymphoma extending into the abdomen, located in the rectus muscles

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Objective: Approximately 20-40% of non-Hodgkin lymphomas (NHL) present as primary extranodal disease. Primary soft tissue involvement accounts for only 0.1-1% of all NHL cases. The clinical presentation of lymphoma in soft tissue is highly variable and can mimic other soft tissue malignancies, leading to diagnostic errors. Primary extranodal cases originating from abdominal wall muscles are quite limited in the literature.

Material and Methods: Clinical presentation: A 62-year-old male patient presented with a complaint of a palpable and painless mass in his abdominal wall that had been gradually growing for approximately one year. He had no other medical conditions besides known diabetes mellitus, and no history of abdominal surgery. On physical examination, a mass lesion approximately 8x10 cm was palpated in the upper right quadrant of the abdomen. The patient did not have systemic "B symptoms" such as fever, night sweats, or weight loss. Abdominal CT scan revealed: A mass lesion approximately 13-cm in craniocaudal dimension and approximately 11x5 cm in axial plane, extending to the rectus abdominus muscle, with a unclear boundary between the bowel loops and the mass containing cystic necrotic areas, located inferiorly adjacent to the transverse colon on the right side. Tissue diagnosis is recommended. Inferior to this lesion, two nodular lesions measuring 3-cm and 2-cm are observed in the right rectus muscle.

Results: Abdominal wall lymphomas are rare and can often be confused with sarcomas, undifferentiated carcinomas, or other soft tissue tumors. Fascial plane crossing and the presence of lymphadenopathy surrounding large vascular structures on CT are critical radiological clues that differentiate lymphoma from sarcomas. Definitive differentiation is possible with tissue biopsy and immunohistochemical panels including pan-leukocyte markers. In the treatment approach, systemic chemotherapy is vital in cases of DLBCL, an aggressive subtype. Excellent clinical outcomes have been reported with chemotherapy after surgical debulking in early-stage cases.

Conclusion: This case demonstrates that NHL should always be considered in the differential diagnosis of masses detected in the abdominal wall muscles. We believe that the diagnostic procedure should be performed by planning direct en bloc resection. Non-surgical biopsy methods may not contain sufficient tissue, leading to a delay in diagnosis and the need for re-biopsy. They also delay en bloc excision of the primary lesion by leaving residual tissue. Long-term disease-free survival can be achieved in primary soft tissue lymphomas with accurate staging and modern chemo-immunotherapy protocols.

Keywords: Abdominal wall, non-Hodgkin lenfoma, resection

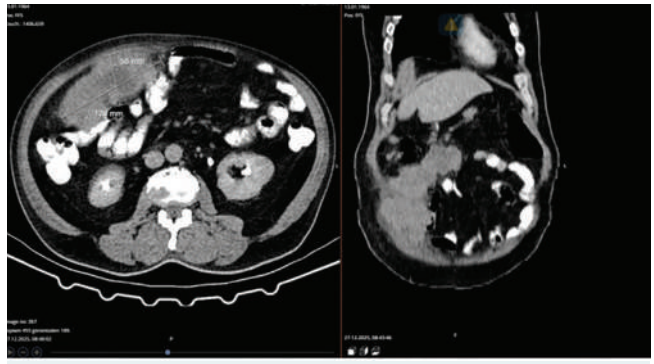


Figure 1. CT image of axial and coronal sections.



Figure 2. Specimen after resection.

[P-390]

Unexpected diagnosis of neuroendocrine tumor in a case of ileus secondary to small bowel diverticulum

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Material and Methods: A 26-year-old female patient who presented with acute abdominal symptoms and was diagnosed with ileus was evaluated. Clinical findings, radiological imaging results, surgical approach, histopathological findings, and postoperative management were retrospectively reviewed. Abdominopelvic computed tomography (CT) was used for preoperative assessment. Surgical intervention was performed laparoscopically. Histopathological evaluation included tumor grading and proliferation index (Ki-67). Postoperative staging and follow-up were conducted using Ga-68 DOTATATE PET/CT, and the patient was discussed in a multidisciplinary oncology board.

Results: Preoperative imaging revealed dilated distal ileal loops with air-fluid levels, consistent with ileus. Laparoscopic exploration demonstrated a small bowel diverticulum approximately 10-cm distal to the ligament of Treitz, forming a loop that caused strangulation of the ileal segment. The diverticulum was resected at its base. Histopathological examination revealed a well-differentiated neuroendocrine tumor (Grade 1) with a Ki-67 index of 2% and a mitotic rate of 0-1. The tumor extended from the submucosa to the subserosa, and subserosal tumor foci were identified at the surgical margin. Ga-68 DOTATATE PET/CT performed during follow-up showed no pathological uptake. Due to positive surgical margins, the patient underwent laparoscopic partial small bowel resection with side-to-side anastomosis. The postoperative course was uneventful, and no early complications were observed. The patient was placed under close clinical and oncological follow-up.

Conclusion: Small bowel neuroendocrine tumors should be considered in the differential diagnosis of young patients presenting with acute ileus, although rare. Detailed histopathological evaluation and a multidisciplinary approach are crucial for optimal management, particularly in cases involving diverticular resection.

Keywords: Small bowel diverticulum, neuroendocrine tumor, ileus, laparoscopic surgery, case report

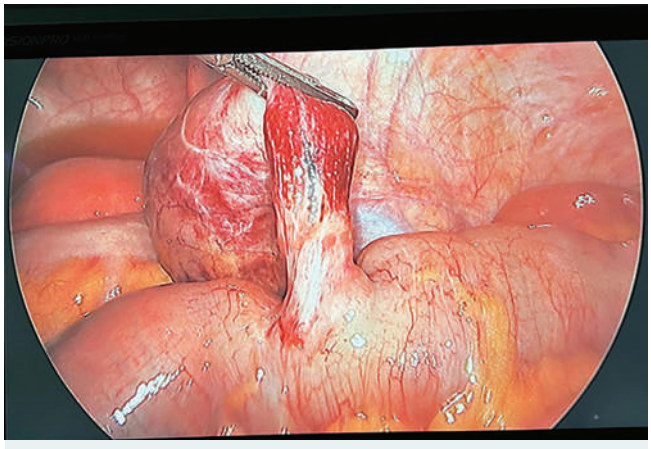


Figure 1. Peroperative images.

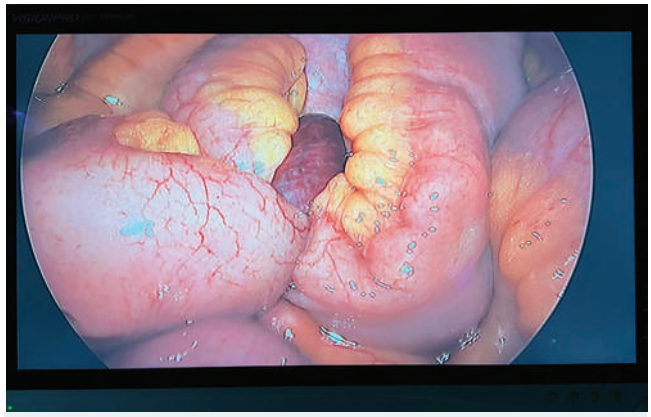


Figure 2. Peroperative images.

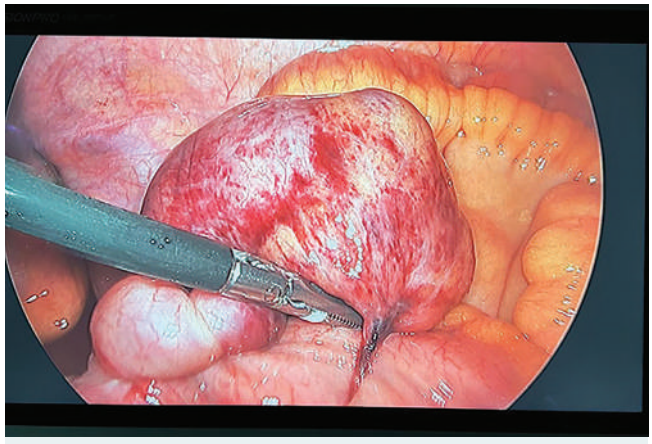


Figure 3. Peroperative images.

[P-391]

Incidental umbilical endometriosis detected during umbilical hernia repair: A case report

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Objective: Umbilical endometriosis is a rare condition characterized by the presence of endometrial tissue in the umbilical region and accounts for less than 1% of all endometriosis cases. Primary umbilical endometriosis occurs spontaneously, whereas the secondary form is usually associated with previous abdominal or gynecological surgery. Incidental detection during umbilical hernia repair is extremely uncommon.

Material and Methods: A 40-year-old female patient presented with swelling in the umbilical region. Physical examination and imaging findings were consistent with an umbilical hernia. The patient reported no cyclic umbilical pain, tenderness, or skin changes related to the menstrual cycle. Elective umbilical hernia repair was performed using mesh. The excised tissue from the umbilical region was routinely sent for histopathological examination.

Results: No remarkable macroscopic pathological findings were observed intraoperatively. Histopathological evaluation revealed endometrial glands and stroma consistent with umbilical endometriosis. The patient had no history of previous abdominal or gynecological surgery. The postoperative course was uneventful, and the patient was referred for multidisciplinary follow-up.

Conclusion: Histopathological evaluation of tissues excised during umbilical hernia repair may reveal rare but clinically significant diagnoses. Umbilical endometriosis should be considered in the differential diagnosis of umbilical lesions even in the absence of cyclic symptoms, particularly in female patients. This case highlights an atypical and incidental presentation of umbilical endometriosis and aims to raise awareness among general surgeons.

Keywords: Case report, endometriosis, hernia repair, umbilical endometriosis, umbilical hernia

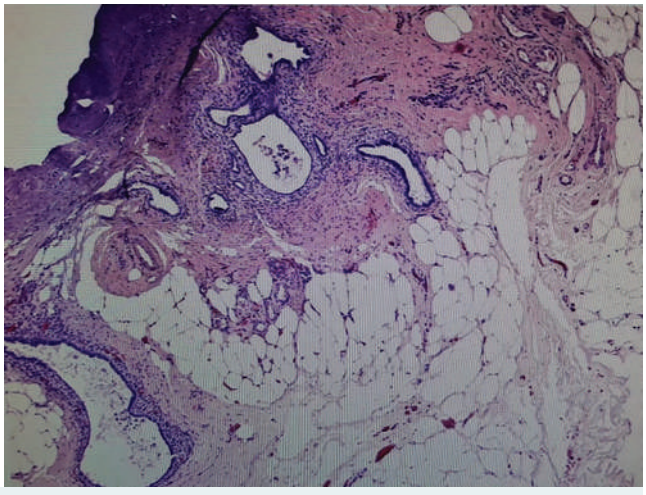


Figure 1. Glandular and stromal endometrial tissue surrounded by fibroadipose tissue (×40).

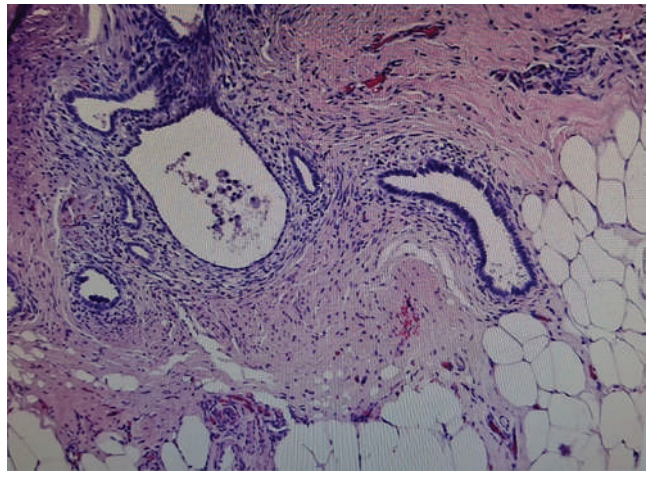


Figure 2. Endometriosis involving endometrial glandular structures in the endometrial stroma (x100).

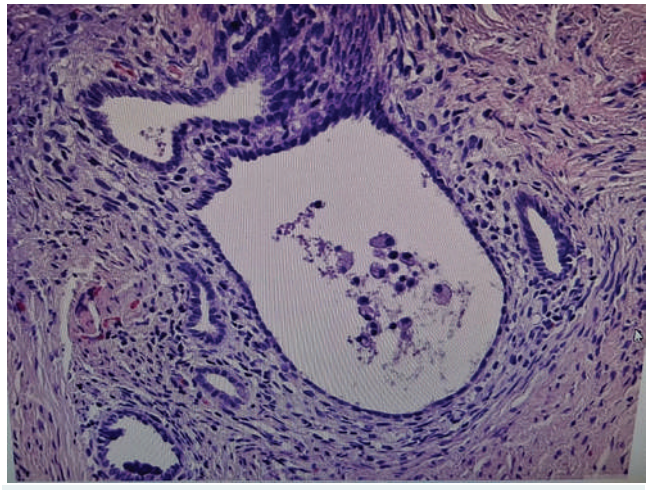


Figure 3. Endometrial glandular structure lined by columnar epithelium, surrounded by endometrial-type stroma (x200).

[P-392]

Ventriculoperitoneal shunt hernia

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Objective: Ventriculoperitoneal shunting is one of the most commonly used surgical methods in the treatment of hydrocephalus. Complications related to the shunt system can manifest as infection, mechanical dysfunction, and abdominal complications. Abdominal complications include pseudocyst, bowel perforation, catheter migration, and herniation. The presence of the shunt catheter within a hernia sac is a very rare occurrence. Reporting such cases is important for understanding the diagnosis and surgical approach.

Material and Methods: A 46-year-old patient presented with pain and swelling in the left upper quadrant. The patient's history revealed a ventriculoperitoneal shunt placement due to hydrocephalus. Physical examination revealed a reducible abdominal hernia in the left upper quadrant. Laboratory findings were within normal limits. Imaging showed a tubular structure consistent with a ventriculoperitoneal shunt catheter within the hernia sac. The patient underwent elective surgery. During the operation, the distal catheter of the ventriculoperitoneal shunt was visualized within the hernia sac. The hernia was reduced while preserving the catheter, and abdominal wall repair was performed. No postoperative complications occurred, and the patient was discharged without complications.

Results: A significant portion of VP shunt complications occur in the abdominal region. The most commonly reported complications are pseudocyst formation and catheter migration. Catheter placement within the hernia sac is a rare occurrence. The presence of an intraabdominal catheter and chronic pressure changes may contribute to abdominal wall weakness. Similar cases have been reported in both pediatric and adult patients in the literature. The basic approach to treatment is hernia repair and preservation of the shunt. Shunt revision is generally not necessary if there is no evidence of shunt dysfunction or infection.

Conclusion: In patients with VP shunts, the possibility of herniation should be kept in mind in the presence of abdominal distension and pain. Successful results can be achieved with surgical repair.

Keywords: Ventriculoperitoneal shunt, abdominal hernia, hydrocephalus, surgical complication

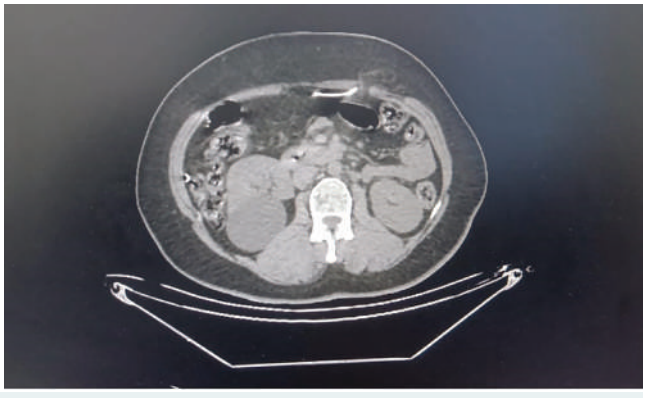


Figure 1. CT scan of a shunt hernia.

CT: Computed tomography.

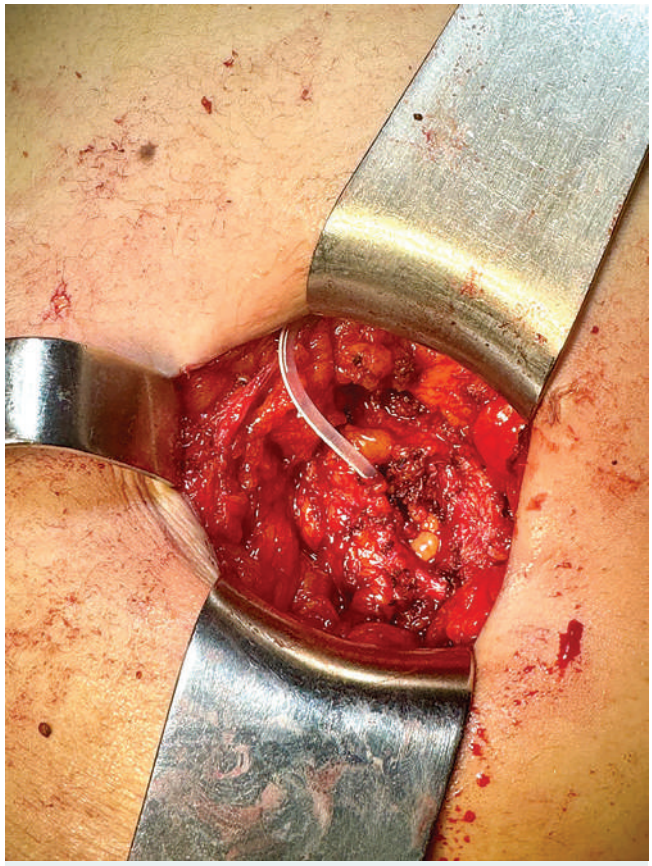


Figure 2. Intraoperative image.

[P-393]

A rare cause of elevated creatinine levels in the posttransplant period: A case of graft ureter herniation

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Objective: Kidney transplantation is the most effective treatment method for improving survival and quality of life in end-stage renal disease. However, in transplant recipients, the risk of developing incisional hernia increases due to factors such as immunosuppressive therapy, compromised tissue integrity, and delayed wound healing. The presence of the graft ureter within the hernia sac is extremely rare; if not anticipated during surgical repair, it can lead to serious complications such as iatrogenic ureteral injury, urinary leakage, obstructive uropathy, and graft dysfunction. This report presents a rare case of posttransplant incisional hernia in which a graft ureter was detected within the hernia defect, emphasizing the decisive role of preoperative diagnosis in surgical safety.

Material and Methods: Patient records from Gaziantep University Hospital were retrospectively reviewed. The patient's demographic characteristics, transplant history, laboratory parameters, and radiological findings were evaluated.

Results: A 62-year-old patient who underwent kidney transplantation from a living donor due to renal failure for 3 years was admitted to the nephrology outpatient clinic for further investigation and treatment due to a new decrease in urine output and serum creatinine of 2.77 mg/dL after transplantation. No pathological findings were found on physical examination. An abdominal computed tomography scan revealed that the lower part of the graft ureter was herniated into the incisional hernia defect and dilation was detected proximal to the graft ureter. Surgery was planned for the patient. A percutaneous nephrostomy was placed in the graft kidney during the preoperative period. The surgical intervention was performed with careful planning to prevent possible ureteral injury. Intraoperative exploration confirmed that the graft ureter was located within the defect. The ureter was carefully dissected from the surrounding tissues using sharp and blunt dissection techniques and safely reduced into the retroperitoneal space. The hernia repair defect was repaired. No intraoperative complications developed. The postoperative course was uneventful; the patient was discharged with stable renal function.

Conclusion: It should be kept in mind that in incisional hernias developing in posttransplant patients, the graft ureter may very rarely be located within the hernia sac. Preoperative cross-sectional imaging contributes to the safe establishment of the surgical strategy by enabling the recognition of atypical hernia contents and reduces the risk of iatrogenic injury that could threaten graft function. This case demonstrates that detailed radiological evaluation is critical for optimal surgical outcomes in patients with a history of transplantation.

Keywords: Kidney transplantation, graft ureter, incisional hernia

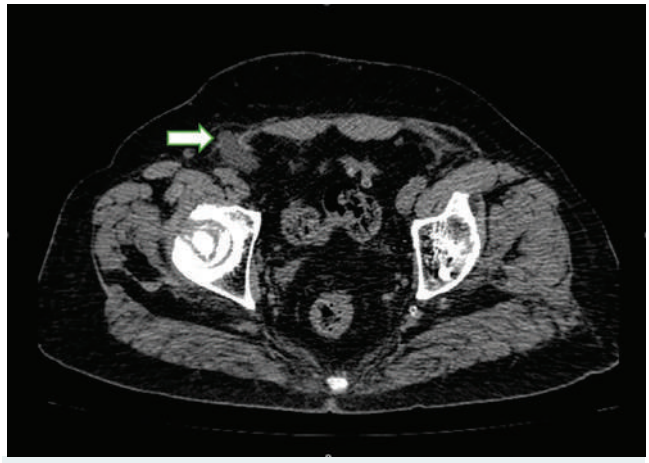


Figure 1. CT scan image of the ureteral graft.

CT: Computed tomography

[P-394]

Nipple adenoma mimicking malignancy clinically and radiologically: Diagnostic challenges and surgical management of a rare benign lesion

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Objective: Nipple adenoma is a rare, benign epithelial proliferation originating from the lactiferous ducts. Due to its clinical, radiological, and even macroscopic features, it can mimic malignant breast diseases, leading to diagnostic challenges.

Material and Methods: A six-year-old female patient presented to our clinic with a complaint of a palpable mass in her left breast. Physical examination revealed a palpable mass, approximately 4-cm in size, completely involving the left nipple and areola complex. The initial breast ultrasonography (USG) performed during the diagnostic imaging process revealed a mass lesion in the retroareolar area of the left breast with lobulated contours, heterogeneous hypoechoic structure, anarchic vascularity, and posterior acoustic shadowing. Subsequent dynamic contrast-enhanced breast magnetic resonance imaging (MRI) revealed a mass lesion approximately 27x22 mm in size, extending from the skin to the retroareolar area at the level of the left nipple, exhibiting intense contrast enhancement in the early stages and showing diffusion restriction. Additionally, segmental linear ductal and nodular non-mass contrast enhancement areas extending approximately 18-mm were present posterior to this mass. The MRI findings suggested an accompanying ductal carcinoma *in situ* (DCIS) or tumor spread. Due to these radiological findings, the lesion was evaluated as BI-RADS category 5 (highly malignant), and histopathological confirmation was recommended.

Results: A tru-cut (core) biopsy was performed on the patient from the retroareolar lesion of the left breast under ultrasound guidance. Histopathological and immunohistochemical examination of the biopsy material revealed papillary-like structures and ducts containing focal apocrine and columnar metaplasia. Immunohistochemically, SMMS and p63 were observed, the myoepithelial cell layer was preserved, and the ER receptor was heterogeneously positive. The biopsy report concluded that "no overt invasive malignancy was observed," but due to the high clinical and radiological suspicion, evaluation with excisional biopsy was recommended. Final histopathological examination of the excised material revealed a 2.5-cm diameter lesion consisting of partly papillary and partly solid areas. Microscopically, the lesion showed ductal hyperplasia, papilloma, adenosis, and fibrocystic changes. Immunohistochemical analysis confirmed the preservation of the myoepithelial cell layer with p63 and CD10, and the Ki-67 proliferation index was found to be 2-3%. The lesion did not extend beyond the surgical margins. All these findings were considered consistent with a diagnosis of nipple adenoma.

Conclusion: Nipple adenoma, although rare, is an important benign pathology that can mimic malignant breast diseases. Accurate diagnosis is critical to preventing unnecessary radical surgeries. Surgical excision is an effective and safe approach, both diagnostically and therapeutically.

Keywords: Nipple adenoma, benign breast tumor, differential diagnosis, nipple lesions, surgical excision

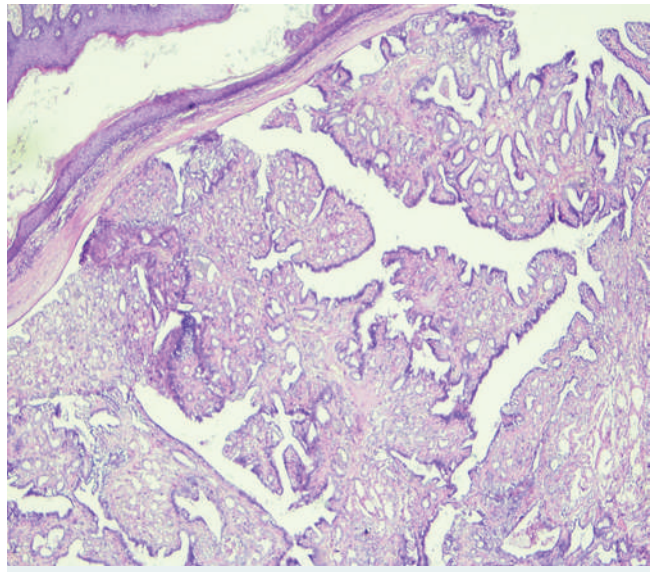


Figure 1. Nipple adenoma, papillary-adenomatous structure (H&E, x10).

H&E: Hematoxylin and eosin.

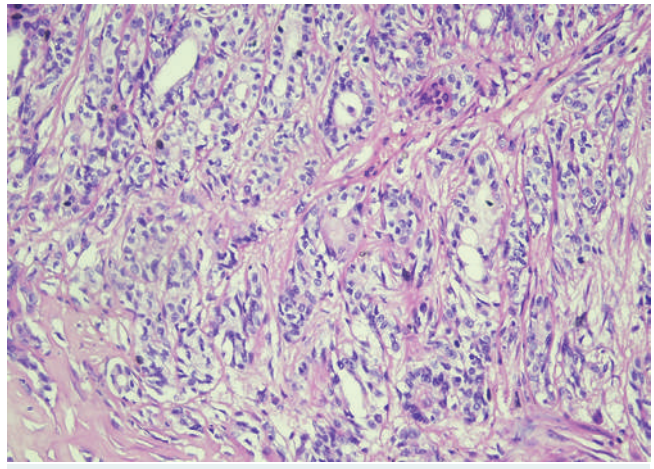


Figure 2. Nipple adenoma, H&E, x200.

H&E: Hematoxylin and eosin.

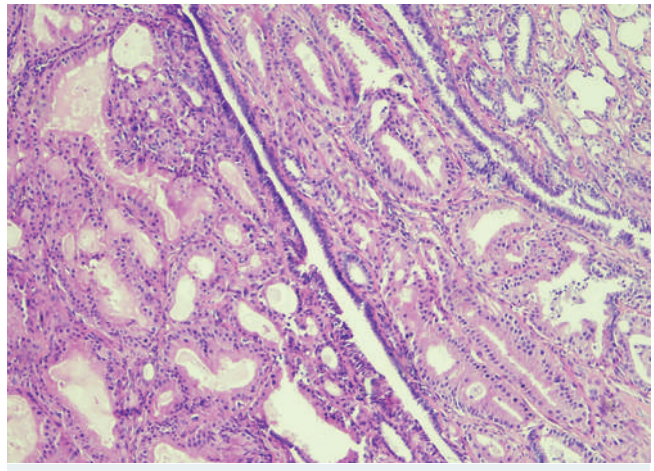


Figure 3. Nipple adenoma, H&E, x100.

H&E: Hematoxylin and eosin.

[P-395]

A rare vascular suprarenal mass mimicking malignancy: A case of cavernous hemangioma

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2Etimesgut Martyr Sait Ertürk State Hospital, Ankara

Objective: A rare vascular tumor of the adrenal gland, adrenal cavernous hemangioma is one of the extremely rare benign lesions, most commonly detected incidentally in the literature and described as non-functional lesions. However, when it reaches large sizes, it can present with symptoms, and due to its heterogeneous imaging characteristics, it can be challenging to differentiate from malignant adrenal neoplasms. It is reported in the literature that preoperative diagnosis is often not possible, surgical resection plays both a diagnostic and therapeutic role. In this study, the clinical, radiological, surgical, histopathological features of a symptomatic, non-functional, and large adrenal cavernous hemangioma case are presented with a review of the literature.

Material and Methods: A patient who underwent surgery for adrenal cavernous hemangioma was retrospectively reviewed. Demographic data, mode of presentation, preoperative clinical and laboratory findings, surgical method applied, pathological examination were evaluated. Postoperative follow-up was recorded.

Results: A woman in her seventies presented with abdominal pain and early satiety. Physical examination was unremarkable. Preoperative hormonal evaluation Showed no evidence of adrenal hyperfunction, and the mass was considered non-functional. Imaging studies revealed a heterogeneous, approximately 10-cm left adrenal mass with cystic, hemorrhagic, and possible vascular components, raising suspicion for malignancy. Due to the mass size and symptomatic course, surgical treatment was performed. Laparoscopic approach was initiated and converted to open surgery, resulting in left adrenalectomy. Postoperative course was uneventful. Histopathological and immunohistochemical examination confirmed cavernous hemangioma, with normal adrenal tissue and no early recurrence.

Conclusion: In the literature, it is reported that the majority of adrenal cavernous hemangiomas are non-functional, however, in particularly large cases, they can become symptomatic, and due to their heterogeneous radiological appearances, they are frequently misdiagnosed as malignant adrenal tumors. Therefore, in cases with symptomatic course and where malignancy cannot be safely excluded preoperatively, surgical resection is accepted as an appropriate approach both for diagnostic and therapeutic purposes. The presented case is instructive in highlighting the challenges in the differential diagnosis of adrenal cavernous hemangiomas and the importance of surgical treatment, with a course and successful surgical management consistent with the characteristics described in the literature.

Keywords: Adrenal cavernous hemangioma, adrenal mass, differential diagnosis of malignancy, non-functional adrenal tumor, vascular tumor

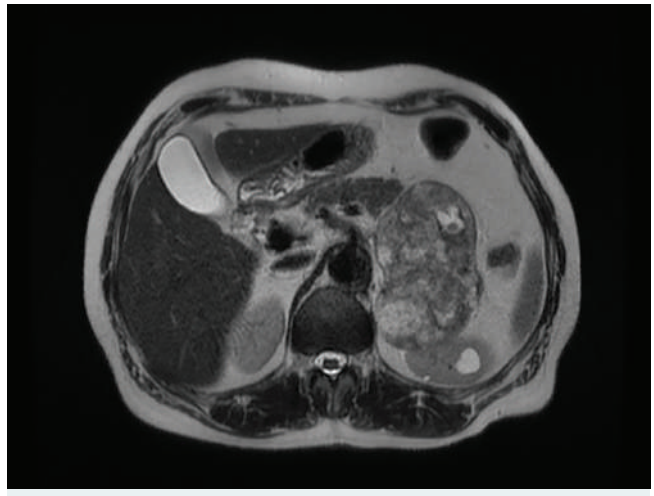


Figure 1. Preoperative MRI image.

MRI: Magnetic resonance imaging.

Table 1. Comparison with the literature

Çalışma / Yıl	Hasta (Yaş/Cinsiyet)	Taraf	Boyut	Klinik (Semptom)	Hormon değerlendirme	Görüntüleme bulguları (özet)	Preop ayırıcı tanı / malignite şüphesi	Cerrahi	Patoloji (ana bulgu)	Takip/sonuç
Bizim olgumuz	**71 / Kadın**	**Sol**	**~10.1 cm** (101 mm)	**Karın ağrısı + erken doyma** (kitlenin bası etkisi ile uyumlu)	**Non-fonksiyonel** (*kortizol, metanefrin vb. ile hipersekresyon dışlandı—klinik not*)	**USG + BT + MR mevcut.** MR'da **vasküler/heterojen görünüm** (Excel: "var"). Büyük kitle olması nedeniyle benign-malign ayırımı zor.	**Malignite şüphesi var** (Excel: 1). Ayırıcı tanıda "adenom" işaretli (Excel: 4) (*klinikte ACC/feo/metastazda pratikte gündeme gelir*)	**Lap başlandı → eksplorasyon → açık cerrahiye konversiyon.** Dren konuldu, **POD2 çekildi**, komplikasyon yok.	**Kavernöz hemanjiom.** Adrenal bez dokusu normal sınırlarda. İHK paneli çalışılmış (RCC, PAX8, CD10, kalretinin, inhibin, Ki-67).	**Nüks yok** (3 ay). R0 (Excel: 1). Yatış 11 gün.
Almajed ve ark., 2024 (Am J Case Rep)	Erkek, **41** (metinde 39 da geçiyor)	Sağ	**4.56×4.24×3.9 cm** (rezeksiyon 5×4×4 cm)	İnsidental (renal kolik araştırılırken)	**DST ile kortizol baskılı → non-fonksiyonel**	CT'de heterojen/enhansman + yağ/kalsifikasyon komponentleri; preop myelolipomaya benzetilmiş	Tanısal belirsizlik + büyüme nedeniyle cerrahi	**Laparoskopik adrenalektomi**	Hemanjiyom; dilate vasküler kanallar, düz endotel ile uyumlu	Sorunsuz iyileşme, komplikasyon yok (PMC)
Huang ve ark., 2021 (BMC Surgery)	Erkek, **67**	Sağ	**9.5×6.3 cm** (ayrıca 63×95 mm vurgusu)	Dull flank/back pain	Endokrin testler normal (renin/aldosteron, katekolaminler)	**Arteriyel fazda periferik belirgin kontrastlanma + venöz/geç fazda progresif dolum** (hemangiom lehine klasik patern)	Preop **feo** düşünülmüş (yanlış tanı)	**Retroperitoneal lap adrenalektomi**	"Adrenal hemangioma" + **iç kanama/nekroz** alanları	1 yıl takipte nüks yok (Springer)
Tokluu ve ark., 2022 (Int J Clin Exp Pathol)	Erkek, **67**	Sol	**5.4 cm** (gross 4.9 cm)	Kilo kaybı araştırılırken; HT, anemi vb. komorbid	Metanefriner ve aldosteron/renin normal; prednizon nedeniyle Cushing değerlendirmesi sınırlı	CT'de 5.4 cm adrenal kitle; büyük lezyonlarda malignite ayırımı güç vurgulanıyor	**Malignite şüphesi** nedeniyle cerrahi	**Sol adrenalektomi**	Hemanjiyom: kalın-ince duvarlı damar yapıları, hemorajik zemin, periferde adrenokortikal demanlarla uyumlu	Cerrahi ana yaklaşım olarak vurgulanıyor
Chua ve ark., 2022 (Cureus – olgu + derleme)	Erkek, **79**	Sol	**20.8 cm** (dev kitle)	Abdominal rahatsızlık + anemi; palpabl kitle	Metabolik work-up çoğunlukla normal (derleme: %70)	CT'de yağ/nekroz/kalsifikasyon; indeterminee görünüm nedeniyle malignite dışlanamamış	Malignite dışlanamadığı için rezeksiyon	**Açık sol adrenalektomi**	Kavernöz hemanjiom; tanının çoğunlukla postop histoloji ile konduğu vurgusu	Derleme: olguların çoğu açık (%71), lap %24.6; radyolojik bulgular patognomonik değil

[P-396]

A rare germ cell tumor of the adrenal gland: A case of mature cystic teratoma

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Objective: Adrenal gland-derived masses are most often detected incidentally in clinical practice; however, rare pathologies may pose significant challenges in the differential diagnosis. Mature cystic teratoma located in the adrenal gland is an extremely rare entity among germ cell tumors and has been reported in only a limited number of cases in the literature. Due to non-specific clinical manifestations and the anatomical characteristics of the adrenal region, these lesions are frequently confused with other adrenal pathologies. In this study, we present a case of an adrenal mature cystic teratoma that was surgically treated following a detailed clinical, hormonal, and radiological evaluation in a patient who presented with a complaint of abdominal distension.

Material and Methods: The patient who was operated on with the diagnosis of an adrenal-origin mass was retrospectively evaluated. Demographic data, mode of presentation, preoperative clinical and laboratory findings, the surgical approach applied, and the results of pathological examination were analyzed. Postoperative follow-up was performed.

Results: A 22-year-old female presented with abdominal distension. Physical examination and routine laboratory tests were unremarkable. Hormonal evaluation revealed normal serum cortisol and dhea-s levels, and pheochromocytoma was excluded based on hormonal and clinical findings. Abdominal computed tomography demonstrated a well-defined, heterogeneous mass approximately 120-mm in diameter in the left adrenal lodge, containing cystic areas, macroscopic fat, and calcified/tooth-like components, without contrast enhancement, invasion, or vascular involvement. These findings favored the diagnosis of a mature cystic teratoma. A laparoscopic approach was initially attempted; however, due to the size and location of the mass, conversion to open surgery was required, and left adrenalectomy was performed. No postoperative complications occurred. Histopathological examination confirmed a mature cystic teratoma with negative surgical margins. No recurrence or mortality was observed during six months of follow-up.

Conclusion: Although adrenal mature cystic teratomas are extremely rare, they may become symptomatic when they reach large sizes. As demonstrated in this case, characteristic imaging findings—namely the coexistence of fat, cystic components, and calcifications—play a crucial role in diagnosis, while functional evaluation and exclusion of pheochromocytoma are essential for safe surgical planning. The literature indicates that preoperative diagnosis is often challenging and that this rare entity may be overlooked in the differential diagnosis of adrenal incidentalomas (Table 1). Nevertheless, in large adrenal masses containing fat and calcifications, the possibility of a mature cystic teratoma should be considered to determine the appropriate surgical strategy. Surgical resection remains the cornerstone for both definitive diagnosis and treatment, with favorable and complication-free outcomes reported when appropriate patient management is applied, consistent with the literature.

Keywords: Adrenal mass, adrenal teratoma, differential diagnosis of pheochromocytoma, mature cystic teratoma, rare case



Figure 1. CT imaging of the mass.

CT: Computed tomography

Table 1. Comparison with the literature

Çalışma (Yıl)	Olgu (n)	Yaş / Cinsiyet	Lokalizasyon	Boyut	Başvuru Şikâyeti	Fonksiyonel Değerlendirme (Feo vb.)	Görüntüleme (vurgulu ipuçları)	Cerrahi Yaklaşım	Postop Seyir / Takip
Bizim olgumuz (2026, Türkiye)	1	22 / K	Sol adrenal loj	~120 mm	**Karında şişlik**	**Feokromositoma ekarte;** fonksiyonel kitle lehine bulgu yok	**Kistik + yağ komponenti + kalsifik/diş-benzeri odaklar,** invazyon yok → **matür teratom lehine**	**Laparoskopiyle başlandı → eksplorasyon kısıtlılığı nedeniyle açık cerrahiye konversiyon,** adrenalektomi	Komplikasyon yok; **dren 3. gün çekildi;** 6 ayda nüks yok
Li ve ark. (2015)	1	49 / E	Sağ adrenal	~6×7×11 cm	İnsidental	Adrenal hormonlar + AFP/hCG normal (fonksiyonel değil)	BT: **yağ densitesi + kalsifikasyon,** myelolipom/adenoma karışabilmiş	**Retroperitoneoskopik lap adrenalektomi**	Sorunsuz; **8 ayda nüks yok**
Assarrar ve ark. (2022)	1	56 / K	Sağ adrenal	76×72×80 mm	Dispepsi/epigastrik ağrı	**Hormonal değerlendirme normal**	Kontrastlı BT: **büyük kitle; yağ ağırlıklı + yumuşak doku + kalsifikasyon**	**Açık transperitoneal adrenalektomi**	Patoloji matür teratom; büyük/dejeneratif olguda açık cerrahiyi vurgular
Ma ve ark. (2022)	1	59 / K	Sağ adrenal	(metinde heterojen kitle; ölçü verisi kısıtlı)	İnsidental	**Adrenal fonksiyon normal**	BT: **heterojen adrenal kitle,** ayırıcı tanıda karışabilir	Cerrahi rezeksiyon (olgu sunumu)	Klinik olarak iyi seyir; matür teratom vurgusu
Li ve ark. (JSCR, 2024)	1	52 / E	**Sol adrenal**	7.2×7.5 cm	İnsidental	Renin/aldosteron/ACTH/kortizol normal	BT: **yağ dominant + "sac within a sac" + kalsifikasyon,** minimal/önemsiz enhancement	**Laparoskopik sol adrenalektomi**	Komplikasyon yok; **6 ayda nüks yok**
Wang ve ark. (Medicine, 2019) ***(adrenal bölge/retroperitoneal, bilateral)***	1	22 / K	**Bilateral adrenal bölge**	Sol 10.4×10.1×13.2 cm; Sağ 12.3×10.5×12.5 cm	İnsidental	24s idrar kortizol + fraksiyone metanefrinler + ARR normal	BT/MR: **solid-kistik + kemik/yağ komponentleri,** dev kitleler	**Laparoskopik simultane rezeksiyon (en-blok)**	Komplikasyon yok; taburcu **11. gün, 10 ay nüks yok**

[P-397]

Oxidized regenerated cellulose mimicking recurrent mass after total thyroidectomy: A diagnostic pitfall

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Objective: Oxidized regenerated cellulose (ORC) is a biological material widely used for hemostasis during thyroid surgery. Although it is generally expected to be resorbed within a few weeks, in rare cases it may persist and lead to pseudotumoral lesions, which can be confused with locoregional recurrence, granuloma, or residual tumor. This situation creates a diagnostic challenge, particularly in postoperative patients presenting with cervical masses. In this case report, we aimed to present a case of persistent ORC following total thyroidectomy that demonstrated clinical progression.

Material and Methods: A 54-year-old female patient underwent total thyroidectomy on March 5, 2025, with the diagnosis of multinodular goiter. No complications were observed in the early postoperative period. However, during follow-up, progressive cervical swelling developed, prompting further evaluation. Neck ultrasonography revealed a hypoechoic, avascular, solid-appearing lesion located in the thyroidectomy bed. Although the imaging findings were initially considered compatible with benign postoperative changes, the lesion demonstrated progressive enlargement over time, caused dysphagia, and became externally visible; therefore, the patient was considered symptomatic. Due to the progression of clinical findings and significant mass effect, surgical exploration was planned. During surgery, a mass consistent with persistent oxidized regenerated cellulose material was identified in the previous surgical field and was completely excised. Histopathological examination revealed fibro-adipose tissue demonstrating focal fat necrosis and foreign body-type chronic inflammatory reaction associated with oxidized cellulose material. No evidence of neoplasia was detected.

Results: Previous reports in the literature have documented that ORC and similar surgical cellulose-based materials may mimic recurrent masses following thyroid and parathyroid surgery. On ultrasonography, these lesions typically appear hypoechoic and avascular, which may serve as an important clue in the differential diagnosis. However, diagnostic uncertainty may persist in the presence of clinical progression and symptoms. In such cases, surgical excision represents an effective approach for both definitive diagnosis and treatment.

Conclusion: In patients presenting with cervical masses after thyroidectomy, particularly in the presence of lesion progression and clinical symptoms, persistent oxidized regenerated cellulose should be considered in the differential diagnosis. Minimal and well-documented use of ORC is crucial to prevent misdiagnosis of recurrence and avoid unnecessary reoperations.

Keywords: Oxidized regenerated cellulose, total thyroidectomy, postoperative cervical mass, ultrasonography



Figure 1. Clinical appearance of persistent oxidized regenerated cellulose after total thyroidectomy. (A) Anterior cervical view demonstrating a swelling in the thyroidectomy bed mimicking a recurrent mass. (B) Lateral cervical view showing a visible mass effect causing contour deformity of the neck.

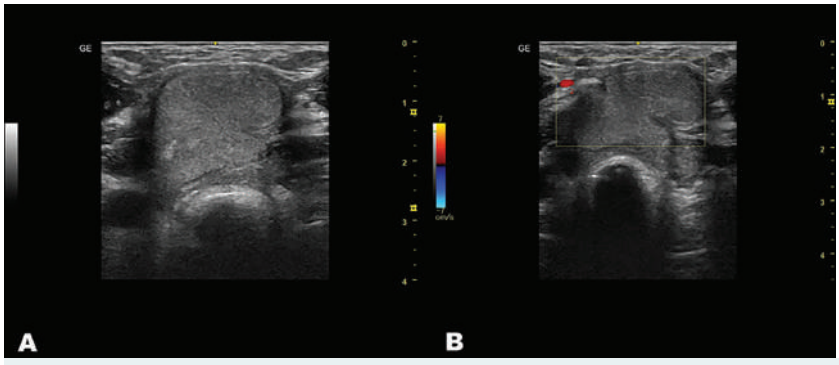


Figure 2. Ultrasonographic appearance of persistent oxidized regenerated cellulose in the thyroidectomy bed after total thyroidectomy. (A) Gray-scale neck ultrasonography demonstrating a hypoechoic, solid-appearing lesion located in the thyroidectomy bed. (B) Color Doppler ultrasonography showing that the same lesion is avascular.

[P-398]

Occult thyroid carcinoma: A rare case report

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Objective: Thyroid cancer incidence has been steadily increasing worldwide in recent years. With the more widespread use of ultrasonography and other imaging modalities, the incidence of occult thyroid carcinoma (OTC) and papillary thyroid microcarcinoma (PTMC) has also increased. The term OTC has been defined variably in the literature. In most clinical settings, OTC and PTMC are considered synonymous or closely related; however, certain discordant situations exist. Boucek et al. proposed a four-group classification for OTC, and Liu et al. additionally suggested a fifth group within this classification (Figure 1). In this case, we report an OTC presenting with isolated cervical lymph node metastasis despite normal thyroid imaging (Boucek et al., Group 3). Although lymph node metastasis in PTMC is rare and predominantly confined to the central compartment, the detection of level V lateral neck metastasis without central involvement in our patient suggests an unusual skip-metastasis pattern.

Material and Methods: The patient who presented with a complaint of neck swelling underwent thyroid ultrasonography, neck ultrasonography, and cervical MRI. An excisional biopsy was performed on a level V lymph node. To investigate the primary focus, thyroid scintigraphy was obtained, and PET/CT was performed due to a history of breast cancer. Definitive diagnosis was established by histopathological examination following total thyroidectomy with bilateral central neck dissection and left lateral neck dissection.

Results: A 52-year-old woman presented with a complaint of neck swelling. No abnormality was detected on thyroid ultrasonography. Cervical ultrasonography and MRI revealed pathological lymphadenopathy at level V. Excisional biopsy demonstrated metastasis of papillary thyroid carcinoma. Thyroid scintigraphy and PET/CT showed no pathology or primary lesion in the thyroid gland. Postoperative pathology revealed PTMC measuring 3 mm and 1 mm. Among 26 lymph nodes removed during lateral neck dissection, metastasis of papillary carcinoma was identified in one.

Conclusion: OTC is a thyroid carcinoma in which no thyroid tumor is detected or suspected clinically or radiologically, and the diagnosis is established either incidentally in the thyroidectomy specimen or through a metastatic focus. Incidentally detected PTMC is one of the most common subcategories of OTC, and its detection rate has increased with the routine use of imaging and FNAB. The present case demonstrates OTC presenting with isolated lateral cervical (level V) metastasis in a patient in whom no primary lesion could be identified preoperatively, emphasizing that even millimetric PTMC foci may carry metastatic potential. Better characterization of metastatic patterns and clarification of diagnostic and therapeutic strategies are warranted.

Keywords: Occult thyroid carcinoma, papillary thyroid microcarcinoma, skip metastasis

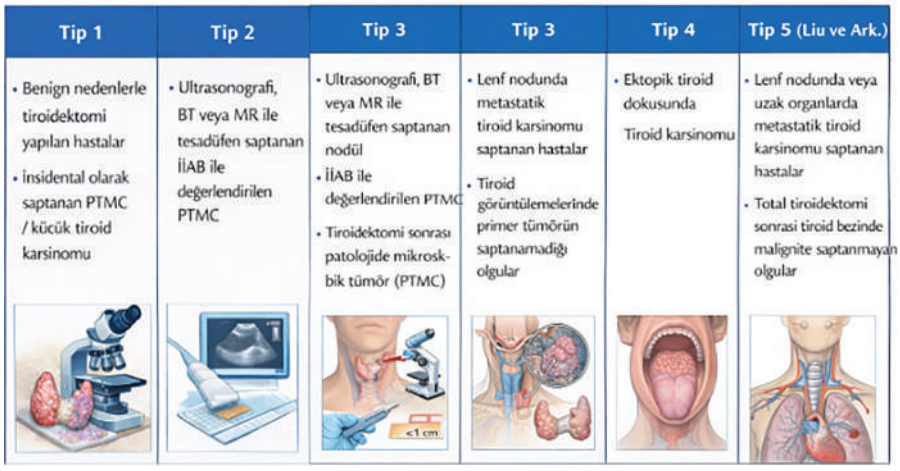


Figure 1. OTC classification.

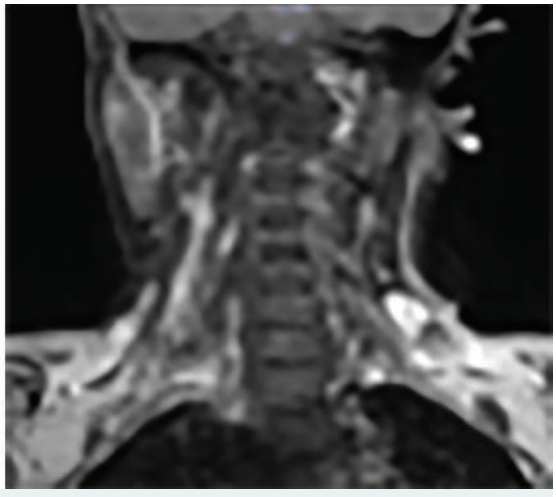


Figure 2. Level 5 lap image on neck MRI.

[P-399]

When gallstones do not remain confined to the gallbladder: Port-site abscess caused by a retained gallstone after laparoscopic cholecystectomy

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Objective: Laparoscopic cholecystectomy is the gold standard treatment for symptomatic gallstone disease. However, gallbladder perforation and spillage of gallstones may occur, particularly in cases with acute cholecystitis or difficult dissection. Although most spilled gallstones remain clinically silent, they may rarely lead to late complications such as abscess formation, fistulas, or inflammatory masses. Port-site abscesses related to retained gallstones are extremely rare and may cause diagnostic delay. We present a case of a port-site abscess caused by a retained gallstone one year after laparoscopic cholecystectomy.

Material and Methods: A 68-year-old female patient presenting with pain, swelling, and erythema at the epigastric region and a history of laparoscopic cholecystectomy one year earlier was retrospectively evaluated. Physical examination findings, laboratory results, ultrasonography, and contrast-enhanced abdominal computed tomography were reviewed. Surgical management, intraoperative findings, and postoperative outcome were analyzed.

Results: Physical examination revealed localized erythema, tenderness, and increased temperature at the previous epigastric port-site. Laboratory tests showed elevated C-reactive protein levels. Ultrasonography demonstrated a thick-walled loculated collection containing a calcified focus with acoustic shadowing. Computed tomography revealed a subcutaneous abscess in the anterior abdominal wall with a hyperdense calcified lesion within the collection. Surgical drainage and debridement were performed without entering the peritoneal cavity. A gallstone was macroscopically identified and removed from the abscess cavity. Wound culture grew *Escherichia coli*. The patient recovered uneventfully after antibiotic therapy and was discharged in good condition.

Conclusion: Retained gallstones spilled during laparoscopic cholecystectomy may rarely cause late-onset port-site abscesses. In patients with a history of laparoscopic cholecystectomy presenting with late abdominal wall infections, retained gallstones should be considered in the differential diagnosis.

Keywords: Delayed complication, laparoscopic cholecystectomy, port-site abscess, retained gallstone

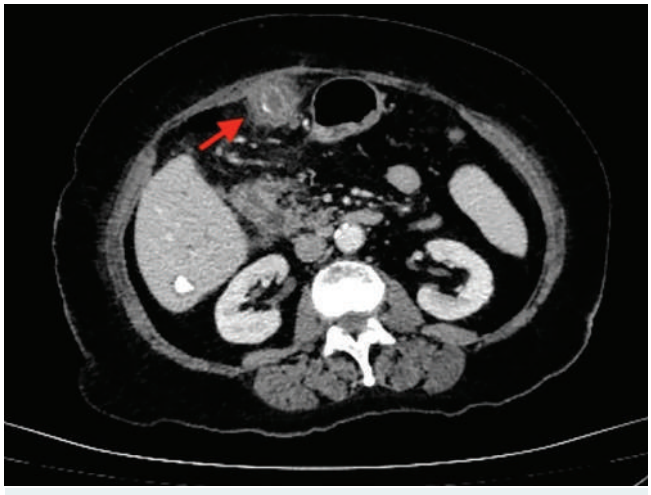


Figure 1. Axial contrast-enhanced abdominal computed tomography demonstrating a subcutaneous abscess in the anterior abdominal wall with peripheral contrast enhancement and a centrally located hyperdense calcified focus (red arrow), consistent with a retained gallstone.



Figure 2. Sagittal CT image showing a subcutaneous abscess located at the epigastric port site containing a calcified gallstone (red arrow).



Figure 3. Gallstone retrieved from the abscess cavity during surgical debridement.

[P-400]

Fungal splenic abscess in a diabetic patient requiring splenectomy

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Objective: Splenic abscess is an uncommon but potentially fatal condition, with fungal etiologies representing a small proportion of cases (0.07-0.14%). Early diagnosis is challenging due to nonspecific clinical features. Current management strategies include targeted antimicrobial therapy, image-guided percutaneous drainage, and splenectomy. Selection of therapy is guided by abscess size, number, causative organism, clinical stability, and response to initial medical management. Fungal splenic abscesses, particularly in immunocompromised patients such as those with diabetes mellitus, are associated with poor response to conservative treatment and frequently require definitive surgical intervention.

Material and Methods: A 55-year-old woman with diabetes mellitus presented with diabetic ketoacidosis. Contrast-enhanced computed tomography of the abdomen demonstrated a solitary 5-cm cystic lesion in the spleen. Comprehensive evaluation, including blood cultures, transthoracic echocardiography, and funduscopic examination, failed to identify a primary infectious source, although imaging findings were consistent with splenic abscess

Results: Empirical intravenous antimicrobial therapy was initiated in accordance with standard management protocols. Despite adequate medical treatment, the lesion persisted, and the etiology remained indeterminate. Given the abscess size (>4 cm), lack of clinical and radiologic resolution, and the high likelihood of treatment failure with medical therapy alone in suspected fungal infection, splenectomy was pursued. Surgical management provided definitive source control and allowed for histopathological diagnosis, which confirmed a fungal splenic abscess.

Conclusion: This case illustrates the importance of a structured, guideline-based approach to the management of splenic abscesses. While antimicrobial therapy and percutaneous drainage may be considered in selected patients, splenectomy is recommended in cases of large or persistent lesions, failure of conservative management, or suspected fungal infection. In such settings, early surgical intervention offers both diagnostic certainty and definitive treatment, potentially reducing morbidity and mortality.

Keywords: Fungal splenic abscess, splenectomy, immunocompromised

[P-401]

Successful management of congenital transmezocolic internal hernia in adult patients with second-look surgery

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Objective: Congenital internal hernias are rare in adults. However, delayed diagnosis can lead to life-threatening complications such as strangulation and intestinal necrosis. Diagnosis is particularly difficult in acute abdomen and ileus presentations in adults with no history of prior abdominal surgery. This case report presents a successful management of small bowel obstruction due to congenital transmesocolic internal herniation without resection using second-look surgery.

Material and Methods: The clinical, radiological, and surgical findings of a 27-year-old female patient with no history of surgery who presented with acute onset abdominal pain and nausea were retrospectively evaluated.

Results: Laboratory tests revealed leukocytosis and elevated C-reactive protein levels. Contrast-enhanced abdominal computed tomography showed clustering, acute dilation, wall thickening, decreased contrast enhancement, and intraperitoneal fluid in the mid-distal ileal loops. During emergency exploratory laparotomy, a segment of small bowel approximately 160 cm in length was found herniated through a congenital defect in the transverse colon mesentery. The herniated loops were reduced, and the mesenteric defect was primarily repaired. Resection was not performed due to the borderline assessment of bowel viability. A second-look surgery was planned 48 hours later. At the second look, intestinal perfusion and peristalsis were found to have improved significantly, and resection was not required. Findings of ischemia-reperfusion injury that developed in the postoperative period resolved with a conservative approach. The patient was discharged on the ninth postoperative day.

Conclusion: Although congenital transmesocolic internal hernias are rare in adults, they should always be considered in cases of unexplained acute abdomen and ileus. Computed tomography plays a critical role in early diagnosis. Second-look surgery in cases with borderline ischemia offers a bowel-preserving, safe, and effective surgical strategy by preventing unnecessary bowel resection.

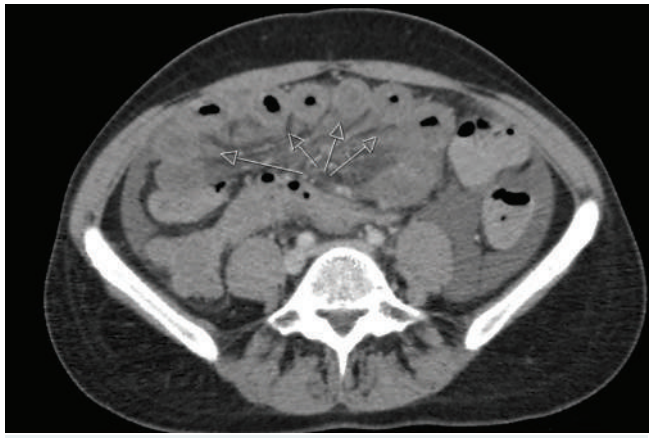


Figure 1A. Preoperative contrast-enhanced abdominal CT scan 1A.

Ileal loop wall thickening and ischemic processes.



Figure 1B. Preoperative contrast-enhanced abdominal CT scan 1B.

Acute angulation and internal herniation level.

Keywords: Congenital internal hernia, transmesocolic hernia, small bowel obstruction, second-look surgery, acute abdomen

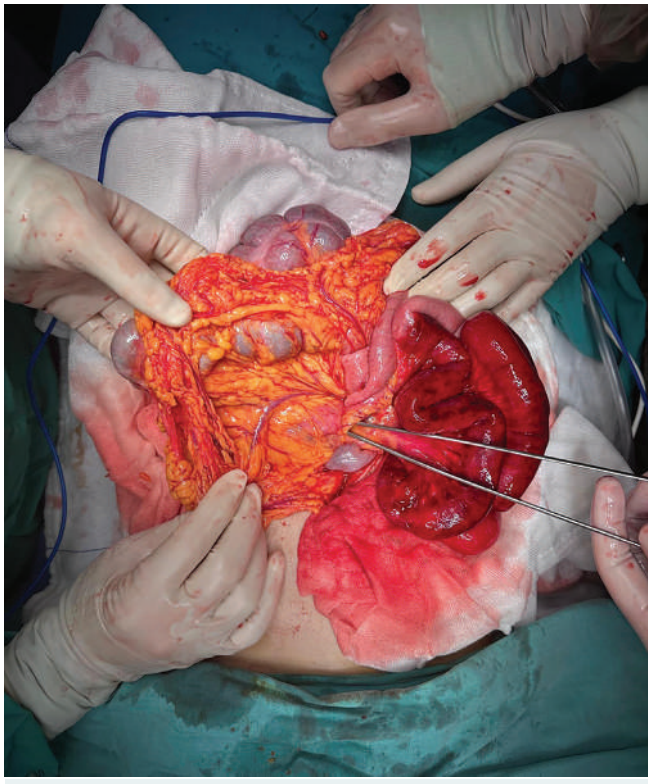


Figure 2A. Internal herniation findings 2A.
Intraoperative defect visible in the transverse colon mesentery.

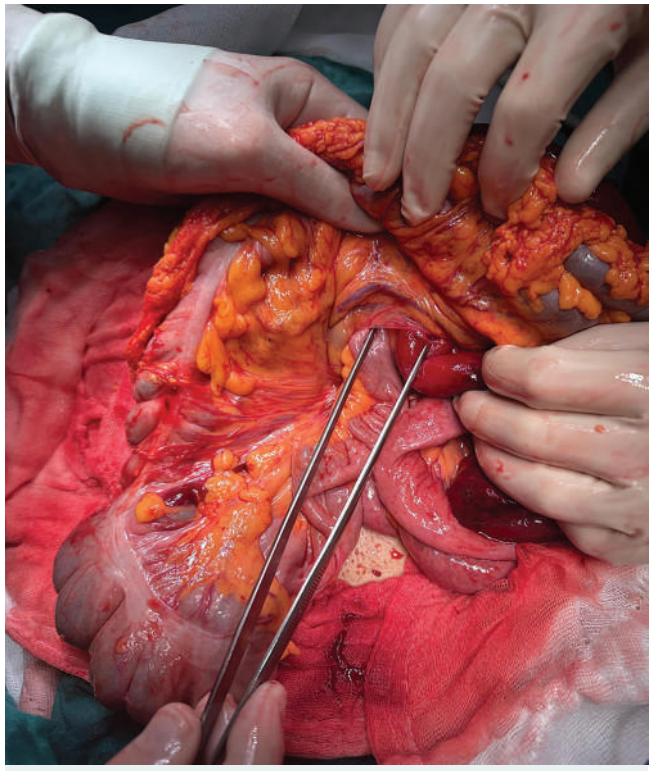


Figure 2C. Internal herniation findings 2C. Intraoperative defect visible in the transverse colon mesentery.



Figure 2B. Internal herniation findings 2B.
Intraoperative defect visible in the transverse colon mesentery.

[P-402]

Laparoscopic management of atypical appendicitis: A case of a 22 cm appendix

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Objective: Acute appendicitis is one of the most common surgical emergencies and a leading cause of acute abdomen. Although the clinical presentation is usually typical, rare anatomical variations in appendiceal length, position, and orientation may result in atypical symptoms and diagnostic challenges. The average length of the appendix is reported to be 8-10 cm; however, extremely long appendices exceeding 15-20 cm have rarely been described. An excessively long appendix may coil, follow an atypical course, or have its distal tip embedded within the mesoappendix, leading to misleading radiological findings and suspicion of perforation. We present a case of acute appendicitis with an exceptionally long appendix that caused preoperative diagnostic difficulty.

Material and Methods: A 23-year-old male patient presented to the emergency department with a three-day history of abdominal pain. The pain initially involved the epigastric and periumbilical regions and later localized to the right lower quadrant. Clinical, laboratory, and radiological evaluations were performed, and contrast-enhanced abdominal computed tomography was obtained.

Results: On physical examination, the patient was febrile (38 °C) with marked tenderness, guarding, and rebound tenderness in the right lower quadrant. Laboratory analysis revealed marked leukocytosis (WBC: 27.000/µL). Contrast-enhanced CT demonstrated findings consistent with acute appendicitis; however, the distal tip of the appendix could not be clearly identified, and radiological suspicion of perforation was reported. Laparoscopic exploration using a standard three-trocar technique revealed a markedly elongated, inflamed appendix with an anterior (preileal) course and a circularly coiled configuration. The distal portion of the appendix was embedded within the mesoappendix, explaining the inability to visualize the tip on preoperative imaging. No macroscopic perforation was observed. Inflammatory pelvic fluid was present and aspirated. Laparoscopic appendectomy was completed successfully. After complete separation of the mesoappendix, the appendix was straightened and measured along a single longitudinal axis, revealing a total length of 22 cm. The postoperative course was uneventful, and the patient was discharged on postoperative day one. Histopathological examination confirmed acute appendicitis.

Conclusion: Extreme appendiceal length is a rare anatomical variation that may lead to atypical clinical and radiological findings in acute appendicitis. Failure to visualize the distal appendiceal tip on imaging does not necessarily indicate perforation. Laparoscopy provides definitive diagnostic clarification and safe, effective treatment in cases with atypical appendiceal anatomy and should be considered the preferred surgical approach.

Keywords: Acute appendicitis, laparoscopic appendectomy, long appendix

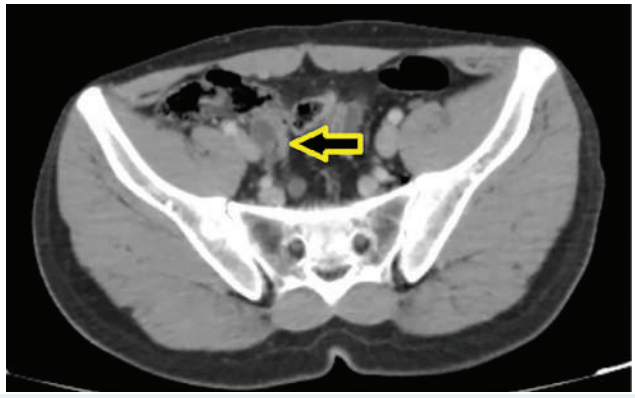


Figure 1. Contrast-enhanced abdominal computed tomography findings.

Axial contrast-enhanced abdominal computed tomography demonstrating inflammatory changes consistent with acute appendicitis. The appendiceal lumen follows a curved and circular course; however, the distal tip cannot be clearly identified as a separate structure, leading to preoperative suspicion of perforation.

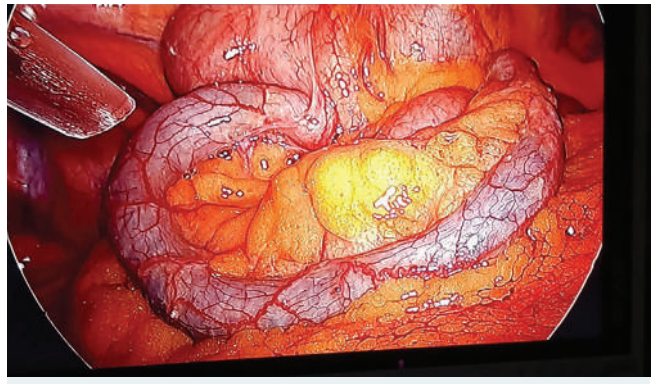


Figure 2. Intraoperative laparoscopic view.

Intraoperative laparoscopic view showing a markedly elongated and inflamed appendix with an anterior (preileal) course and a circularly coiled configuration. The atypical orientation and coiling account for the difficulty in identifying the distal appendiceal tip on preoperative imaging.



Figure 3. Gross appearance of the resected appendix.

Gross appearance of the resected appendix demonstrating marked elongation and a coiled configuration. The specimen is shown adjacent to a surgical ruler for reference. After complete separation of the mesoappendix, the appendix was straightened along a single longitudinal axis and measured to be 22 cm in length.

[P-403]

A rare clinical presentation in acute mesenteric ischemia: Gallbladder ischemia

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Objective: Acute mesenteric ischemia (AMI) is rarely encountered in the general population; however, it is a cause of acute abdominal pain that is difficult to diagnose and requires early detection due to its high mortality rate. Etiologies of AMI include arterial occlusion, non-occlusive mesenteric ischemia, and venous occlusion. We aim to present this case because the coexistence of AMI and gallbladder ischemia has not been previously reported in the literature.

Material and Methods: Patient with a history of hypertension and no known hematological disorders presented to the emergency department with nausea, vomiting and generalized abdominal pain that had started 7-8 hours prior. Laboratory analysis revealed a WBC count of $30.6\times 10^{3}\mu L$, creatinine 1.6 mg/dL, lipase 245 U/L, CRP 62.1 mg/dL, and procalcitonin 2.22 µg. Sequential lactate levels were 4.6, 4.7, and 4.5 mmol/L despite aggressive hydration. An IV contrast-enhanced abdominal CT was performed. Considering the laboratory findings and the patient's clinical status, a CT Angiography of the abdomen was subsequently ordered. Although the CT Angiography report did not explicitly state findings favoring AMI, an emergency laparotomy was planned after a detailed review of the imaging by the surgical team and obtaining informed consent from the patient and relatives.

Results: Upon exploration, ischemia and necrosis were observed in all small bowel segments, sparing only 120 cm distal to the Treitz ligament and 140 cm proximal to the ileocecal valve. Consequently, a segmental small bowel resection and double-barrel enterostomy were performed. Due to observed necrosis at the stoma ends, the patient was re-explored on postoperative day 1. Necrosis was found in the remaining small bowel, sparing only 40 cm distal to the Treitz ligament and 20 cm proximal to the ileocecal valve. Furthermore, the gallbladder was also found to be ischemic during this exploration. The abdominal aorta, right hepatic artery, superior mesenteric artery, and renal arteries were observed to be full, rhythmic, and patent. Segmental small bowel resection, double-barrel enterostomy, and cholecystectomy were performed. The patient was followed up with a diagnosis of short bowel syndrome. On postoperative day 45, the patient developed respiratory distress, was intubated in the intensive care unit, and subsequently suffered cardiopulmonary arrest. The patient did not respond to CPR and passed away.

Conclusion: In this case, while the vital role of surgical exploration is re-emphasized, the importance of clinical suspicion, the review of imaging by the general surgeon—even when not detailed in the radiology report—and the decisive action for diagnostic laparotomy are highlighted.

Keywords: Gallblader, mesenteric ischemia



Figure 1. Gallblader.



Figure 2. Gallblader.

[P-404]

Recurrent intestinal perforation and ischemic necrosis in a patient with systemic lupus erythematosus: A case report

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Objective: This case report describes the management of acute abdominal complications and subsequent surgical interventions in a 39-year-old female with systemic lupus erythematosus (SLE), highlighting the challenges of intestinal involvement.

Material and Methods: A 39-year-old female with SLE presented with abdominal pain and diarrhea. Colonoscopy revealed terminal ileitis, suggesting SLE-related intestinal involvement. Following clinical deterioration with obstructive symptoms, contrast-enhanced CT showed wall thickening in the ascending colon and terminal ileum with mesenteric fat stranding. Emergency diagnostic laparotomy revealed closed perforations in the ileal loops, gato formation, and patchy necrosis.

Results: A wide resection was performed from 130 cm distal to the ligament of Treitz to the proximal third of the transverse colon, followed by end jejunostomy and transversostomy. Despite multiple cytokine filter applications for persistent sepsis, worsening abdominal findings necessitated a second laparotomy on postoperative day 6. A new necrotic and perforated area was identified 20 cm proximal to the jejunostomy. Consequently, further resection was performed from 100 cm distal to Treitz, and a jejunocolic anastomosis was created. On postoperative day 5, fecal discharge from the wound indicated an anastomotic leak, leading to a third operation where the anastomosis was converted to a permanent end jejunostomy. The patient initially responded to IVIG and steroid therapy, with regressing sepsis. However, while being followed for short bowel syndrome, she developed pulmonary thromboembolism despite prophylactic low molecular weight heparin. She progressed to shock and cardiac arrest under heparin infusion and was declared exitus. Pathological examination revealed full-thickness ischemic necrosis, though findings were not specifically diagnostic of SLE-specific vasculitis.

Conclusion: This case underscores the devastating potential of acute abdominal conditions in SLE. While initial findings suggested lupus enteritis, recurrent perforations and full-thickness necrosis indicate a progression based on severe intestinal ischemia rather than simple inflammation. The development of thromboembolism despite prophylaxis suggests an underlying prothrombotic state.The aggressive nature of SLE-related gastrointestinal complications, characterized by recurrence despite surgical intervention, carries high mortality.The failure of multiple laparotomies and the temporary response to immunomodulators reflect significant treatment resistance. This case emphasizes the necessity of a high index of clinical suspicion, rapid evaluation of ischemic causes (vasculitis or thrombosis), and an integrated multidisciplinary approach. Even without specific pathological confirmation of SLE vasculitis, ischemic processes must be prioritized in the management of acute abdominal complaints in SLE patients to improve prognosis.

Keywords: Systemic lupus erythematosus, lupus enteritis, intestinal ischemia



Figure 1. First laparotomy.

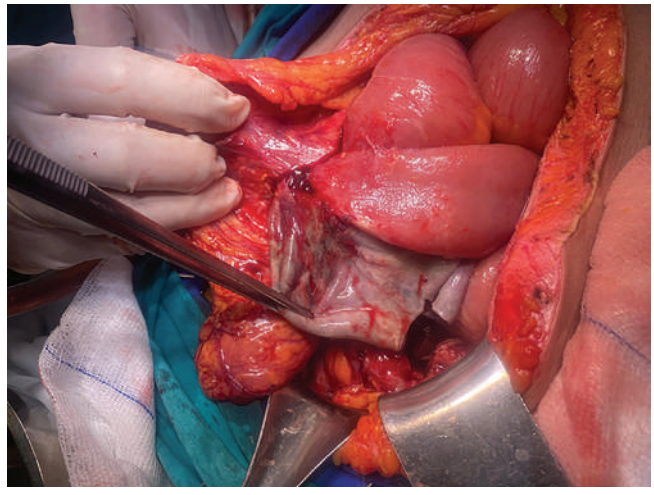


Figure 2. Ischemic necrotic segment.

[P-405]

Small bowel obstruction following gastric balloon placement: A rare complication

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Objective: Endoscopic gastric balloon placement is a commonly used minimally invasive method in the treatment of obesity. It is generally considered safe. In the literature, the reported rate of balloon migration ranges from 0.5% to 1.5%. The incidence of obstruction requiring surgical intervention is below 1%. In this study, a case of mechanical ileus secondary to balloon migration is presented.

Material and Methods: A 24-year-old female patient with no known comorbidities and no history of prior abdominal surgery presented to the emergency department with persistent epigastric and periumbilical pain that had started 2 days earlier, inability to pass gas or stool for 2 days, and three episodes of yellow-colored vomiting. According to the medical history obtained, she had undergone endoscopic gastric balloon placement 3 months prior.

Results: On physical examination, abdominal distension and epigastric and periumbilical tenderness were noted. A preliminary diagnosis of mechanical ileus/internal herniation was considered, and an emergency laparotomy was planned. During laparotomy, free intraperitoneal fluid was observed. A foreign body was identified 150 cm distal to the ligament of Treitz. A 3 cm enterotomy was performed, and the foreign body was removed. Primary repair was carried out, and the repair site was reinforced with Lambert sutures. A Jackson-Pratt drain was placed in the pelvis.

Conclusion: Oral intake was initiated on postoperative day 1, and the patient was advanced to diet 1 on the same day. On postoperative day 2, the diet was progressed to diet 3. During follow-up, no nausea or vomiting developed, and the patient had passage of flatus and stool. The patient was discharged on postoperative day 3 with prescriptions and follow-up recommendations. Balloon migration is a rare (<1%) but serious complication. It should always be considered in patients presenting with ileus who have a history of gastric balloon placement. Early surgical intervention significantly improves the prognosis.

Keywords: Emergency laparotomy, foreign body-related obstruction, ileus

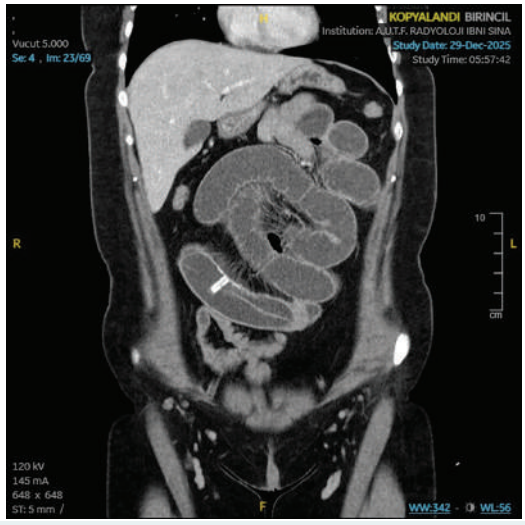


Figure 1. CT Imaging findings consistent with mechanical obstruction at the level of the small intestine.

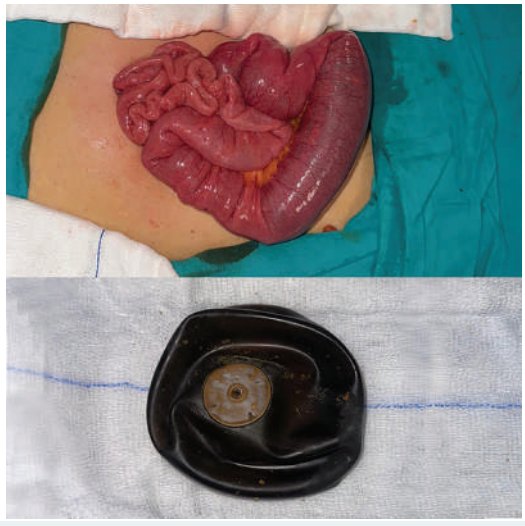


Figure 2. Intraoperative view showing a foreign body within the small bowel lumen and a transition zone located 150 cm distal to the ligament of Treitz.

[P-406]

Intestinal tuberculosis: A case undergoing ileocecal resection due to ileus

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Objective: Intestinal tuberculosis is a rare infectious disease which may clinically and radiologically mimic inflammatory bowel disease and malignancies. The ileocecal region is the most commonly involved site, and surgical intervention may be required due to complications such as obstruction, perforation, or bleeding. In this study, we aimed to present a case of intestinal tuberculosis presenting with ileus and diagnosed after surgical treatment.

Material and Methods: A 42-year-old male patient presented to the emergency department with complaints of nausea and vomiting. In his medical history, chronic hepatitis B infection and newly diagnosed pulmonary tuberculosis were present. Abdominal computed tomography revealed wall thickening up to approximately 11 mm in the ileocecal region, which was interpreted as inflammatory bowel disease or a mass lesion. Dilatation of small bowel loops compatible with ileus was observed. The patient was hospitalized in the general surgery department and followed under anti-tuberculosis treatment with medical management for ileus.

Results: During follow-up, due to the absence of clinical improvement despite medical treatment and progression of ileus findings, surgical treatment was decided. Intraoperatively, mass-like lesions causing luminal obstruction were detected at three different segments approximately 50-60 cm proximal to the terminal ileum and at the level of the cecum (Figure 1 and Figure 2). Ileocecal resection was performed. The postoperative course was uneventful, and the patient was discharged on postoperative day six. Histopathological examination was reported as intestinal tuberculosis.

Conclusion: Intestinal tuberculosis may mimic malignancy and inflammatory bowel disease with findings such as wall thickening and obstruction in the ileocecal region. In patients who do not respond to medical treatment and develop obstruction, surgical treatment may be required both for diagnosis and treatment. Intestinal tuberculosis should be considered in the differential diagnosis in patients presenting with ileocecal mass and ileus findings.

Keywords: Intestinal tuberculosis, ileus

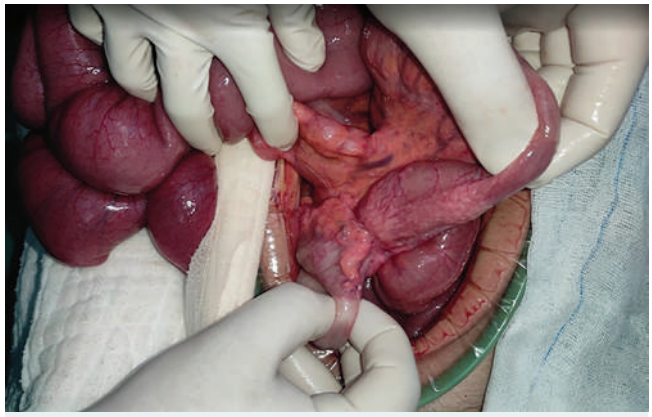


Figure 1. Intraoperative view of mass-like lesions causing ileus in the ileocecal region.



Figure 2. Intraoperative view of a mass-like lesion causing ileus in another ileal segment.

[P-408]

A reliable reconstruction option in hidradenitis suppurativa: Superior gluteal artery perforator flap

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Objective: Hidradenitis suppurativa (HS) is a recurrent, chronic, inflammatory skin disease that occurs in areas with a high concentration of apocrine glands, such as the axilla, inguinal region, perineum, and gluteal region. Its pathophysiology is explained by hyperkeratosis of the follicular epithelium and the resulting obstruction of the follicle, leading to an inflammatory condition. It presents with painful nodules, abscesses, fistulized sinuses, and prominent scarring. Conservative approaches are generally insufficient in these patients. Surgical treatment becomes inevitable to halt the progression of the disease and prevent recurrence. Incisions and drainage provide symptomatic relief during the acute abscess phase but do not eliminate the underlying cause. The gold standard in surgical treatment is extensive local excision based on the principle of radical removal of all inflammatory, hair-containing, and apocrine gland-containing skin and subcutaneous fatty tissue until healthy tissue borders are reached. The inevitable result of this excision is extensive tissue defects that cannot be closed primarily. In such cases, advanced reconstructive surgical techniques are employed.

Material and Methods: In this case, the diagnosis, treatment, and follow-up process of a patient with gluteal HS who underwent SGAP flap surgery at our clinic was evaluated.

Results: A 51-year-old male patient presented to the outpatient clinic with HS in the gluteal region, measuring approximately 12x11 cm, with a history of abscess drainage, fistulized sinuses, and deep scarring. A wide local excision was performed to include all foci of the disease. The wound was closed with a wet dressing. On the 4th postoperative day, a SGAP flap was applied to the right gluteal region by the plastic surgery team. The patient was discharged on the 7th postoperative day. No complications were observed in the flap tissue during postoperative follow-ups.

Conclusion: Pedicle perforator flap techniques represent a modern revolution in reconstruction. Secondary healing, split-thickness skin grafts, and musculocutaneous flaps-traditional reconstruction techniques-have prompted surgeons to seek new approaches due to high contracture risk, prolonged healing times, functional losses, and poor aesthetic outcomes. The fundamental principle of the pedicled perforator flap technique is the elevation of an island of tissue through a single perforator vessel that nourishes the skin and subcutaneous fatty tissue while preserving the underlying major muscle tissue. No recurrence has been reported in perforator flap repairs performed after wide local excision. In HS management, a multidisciplinary approach and correctly applied advanced reconstructive techniques have shown high success rates. However, larger case series and longer follow-up periods are needed for the future.

Keywords: Glutea, hidradenitis suppurativa, superior gluteal artery perforator flap



Figure 1. Preoperative, intraoperative, and postoperative follow-ups.

[P-411]

Managing Chilaiditi syndrome in laparoscopic surgery

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Objective: Chilaiditi syndrome is a rare anatomical condition characterized by interposition of the colon, most commonly the hepatic flexure, between the liver and the diaphragm. On imaging, it may mimic serious conditions such as pneumoperitoneum and can present with abdominal pain, nausea, or respiratory symptoms due to diaphragmatic compression. Although most cases are asymptomatic and detected incidentally, Chilaiditi syndrome becomes clinically significant when it complicates surgical procedures, particularly laparoscopic operations in the upper abdomen. Altered anatomy may obscure normal landmarks, increase the risk of bowel injury, and necessitate modifications in trocar placement. Therefore, preoperative recognition and surgical planning are essential for safe operative management.

Material and Methods: We present a case of laparoscopic cholecystectomy performed in a patient with preoperatively diagnosed Chilaiditi syndrome. Preoperative imaging findings, intraoperative technical adaptations, and postoperative outcomes were retrospectively evaluated to highlight key surgical considerations.

Results: Preoperative computed tomography revealed interposition of the colon between the liver and diaphragm, consistent with Chilaiditi syndrome. Intraoperatively, reduction of the interposed colon was achieved easily. However, the liver was found to be displaced inferiorly, altering the usual anatomical relationships. Consequently, trocar placement was modified, with ports inserted at lower-than-standard positions to avoid bowel injury. Particular caution was exercised during instrument insertion due to the atypical presence of intestinal loops in the right upper quadrant.The procedure was completed without intraoperative complications. Given the patient's underlying chronic obstructive pulmonary disease and the potential impact of diaphragmatic compression, close postoperative respiratory monitoring was performed. The patient had an uneventful recovery and was discharged on postoperative day three.

Conclusion: Chilaiditi syndrome presents unique technical challenges during laparoscopic cholecystectomy despite the relative ease of colonic reduction. Inferior displacement of the liver and altered anatomical landmarks increase the risk of injury during trocar insertion and instrument manipulation. Careful preoperative imaging review, modification of trocar positioning, and heightened intraoperative vigilance are essential to ensure procedural safety. Additionally, potential respiratory implications related to diaphragmatic compression should be considered, particularly in patients with preexisting pulmonary disease. With appropriate planning and technique adjustments, laparoscopic cholecystectomy can be safely performed in patients with Chilaiditi syndrome.

Keywords: Chilaiditi syndrome, laparoscopic surgery, cholecystectomy, anatomical variation

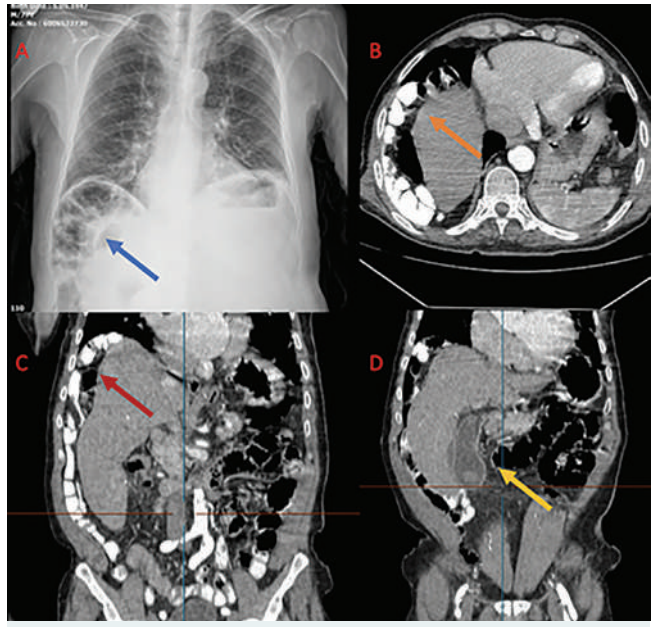


Figure 1.

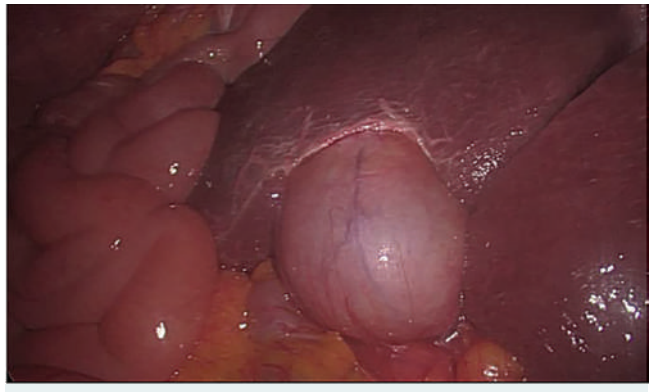


Figure 2.

[P-418]

Non-recurrent laryngeal nerve in thyroid surgery: Impact of intraoperative neuromonitoring and primary nerve repair on surgical outcomes

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Objective: The non-recurrent laryngeal nerve (NRLN) is a rare anatomical variation of the RLN and represents one of the highest-risk situations for nerve injury in thyroid surgery. The reported incidence of NRLN is 0.3-1% on the right side and <0.1% on the left. In this variation, the nerve branches from the vagus nerve at a high cervical level and directly enters the larynx without following the tracheoesophageal groove. Failure to recognize the NRLN intraoperatively may result in permanent vocal cord paralysis. In this study, we aimed to evaluate intraoperative neuromonitoring findings, the experience of primary repair in a case with nerve injury, and surgical outcomes in patients with NRLN identified during thyroid surgery, and to compare these findings with the literature.

Material and Methods: Patients who underwent thyroidectomy in our clinic were retrospectively reviewed. Patients in whom a NRLN was identified intraoperatively were included in the study. The evaluated parameters included demographic data, surgical indication, intraoperative neuromonitoring findings, nerve injury and repair status, postoperative vocal cord function, and pathological results.

Results: A total of four NRLN cases were identified. The mean age was 64.3 years (range: 54-70). Surgical indications were hyperthyroidism (n=2), thyrotoxicosis (n=1), and compressive symptoms (n=1). Pathology revealed papillary thyroid carcinoma in one case and benign disease in three cases. During intraoperative neuromonitoring, no signal was obtained from vagus nerve stimulation in one patient; however, a strong response was recorded from a high-located NRLN in the same patient, confirming the presence of NRLN. NRLN injury occurred in one case and was repaired intraoperatively using primary epineural suturing. Postoperative vocal cord assessment showed permanent paralysis in 1 (25%), transient minimal limitation in 1 (25%), and normal function in 2 (50%) patients.

Conclusion: In the presence of a NRLN, failure to identify the nerve in its usual anatomical location complicates dissection and increases injury risk. The 25% permanent paralysis rate in our series supports the elevated surgical risk associated with NRLN. Intraoperative neuromonitoring is a valuable adjunct; absence of response to vagus stimulation with a positive signal at the laryngeal entry level represents a typical neurophysiological pattern for NRLN, also observed in our series. NRLN injury is rare but serious, and primary epineural repair may provide functional recovery. When vagus stimulation is negative, NRLN should be suspected and sought at the laryngeal entry level.

Keywords: Non-recurrent laryngeal nerve, thyroid surgery, intraoperative neuromonitoring

Table 1. Clinical characteristics of non-recurrent laryngeal nerve cases (n=4)

Number of cases	4
Age, mean (range)	64.3 (54-70)
Gender	-
Surgical indication	Hyperthyroidism 2 (50%) Thyrotoxicosis 1 (25%) Compressive symptoms 1 (25%)
Pathology	Papillary carcinoma 1 (25%) Benign 3 (75%)
Absent vagus signal	1 (25%)
High-located NRLN response	1 (25%)
NRLN injury	1 (25%)
Primary nerve repair	1 (25%)
Vocal cord function	Normal 2 (50%) Transient limitation 1 (25%) Permanent paralysis 1 (25%)

[P-421]

Revisional sleeve gastrectomy in a patient who developed weight gain after plication surgery: A single case report

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Objective: Various bariatric surgical techniques are used in the treatment of obesity. As a primary surgical procedure, gastric plication aims to achieve weight loss by reducing gastric volume. However, in some patients, insufficient weight loss or weight regain may be observed after plication. In such cases, revisional surgical options are considered to achieve more effective weight loss. Sleeve gastrectomy is one of the commonly preferred methods in revisional surgery. The aim of this study is to evaluate the effectiveness and safety of revisional sleeve gastrectomy in patients who developed weight gain after primary plication surgery.

Material and Methods: A 38-year-old female patient who underwent gastric plication as primary obesity surgery was found to have significant weight gain within one year. Clinical and metabolic evaluations of the patient were performed, and revisional surgery was decided due to insufficient weight loss. Revisional surgery was carried out using the laparoscopic sleeve gastrectomy technique. The patient's weight, metabolic parameters, and quality of life were monitored before and after the operation.

Results: After revisional sleeve gastrectomy, a significant reduction in the patient's weight was observed. During the 6-month follow-up period, approximately 25% of the initial body weight was lost. Improvements were noted in blood glucose levels, lipid profile, and blood pressure values. No postoperative complications developed, and the patient successfully adhered to lifestyle changes after surgery.

Conclusion: Revisional sleeve gastrectomy is an appropriate and safe option for achieving effective weight loss and metabolic improvement in patients who develop weight gain after gastric plication surgery. Patient selection, a multidisciplinary approach, and long-term follow-up are key factors for success. Revisional surgery is an important component of personalized strategies in the treatment of obesity.

Keywords: Bariatric surgery, bariatric surgery, plication, revisional sleeve gastrectomy, weight gain

[P-422]

A rare benign breast lesion: Hamartoma of the right breast

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Objective: Breast hamartomas are rare tumors formed by irregular but benign proliferation of normal breast tissue components. Histopathologically, they consist of varying proportions of glandular, fibrous, and fatty tissue. Clinically, they usually present as painless, slow-growing, well-circumscribed, most commonly in middle-aged women. They can be confused with fibroadenoma, lipoma, or fibrocystic changes. Imaging provides important diagnostic clues, but definitive diagnosis is often made by histopathology. Although malignant transformation is rarely reported, correct diagnosis and appropriate surgical management are necessary.

Material and Methods: A 47-year-old woman presented our general surgery clinic with a palpable mass in the right breast. She reported noticing the mass in the for about four months. There was no family history of breast cancer. Physical examination revealed a painless, well-circumscribed mass in the lower quadrant of the right breast. No pathological axillary lymph nodes were detected. Ultrasound showed a 21×11 mm solid lesion at 7-8 o'clock in the right breast, with a hypoechoic periphery, hyperechoic center, defined margins, and macrolobulated; hamartoma was the preliminary diagnosis. MRI also demonstrated a solid mass of 2×1 cm compatible with hamartoma. Tru-cut biopsy was performed and histopathology reported findings consistent with a hamartoma containing fibrous tissue. The lesion was excised through an incision in the lower outer quadrant of the right breast. No complications occurred postoperatively, and the patient was discharged without issues on the second postoperative day. Histopathological specimen confirmed the diagnosis of hamartoma.

Results: Breast hamartomas are rare lesions that require careful diagnosis because they resemble other benign breast lesions clinically. Reported cases in the literature show that these lesions most commonly occur in middle-aged women and present as slow-growing, usually asymptomatic masses. Their well-circumscribed and mobile nature on physical examination often leads to confusion with many benign pathologies, especially fibroadenoma. Therefore, clinical evaluation must be supported by imaging methods. Mammography, ultrasonography, and magnetic resonance imaging are helpful in diagnosis by revealing the heterogeneous content and capsule-like appearance of hamartomas. However, imaging findings are not always specific, so definitive diagnosis is made by histopathological examination. Preoperative tru-cut biopsy assists in the diagnosis. Malignant transformation has been rarely reported in hamartomas. This increases the importance of surgical excision, especially in lesions with rapid growth or atypical radiologic features.

Conclusion: Although breast hamartomas are rare, they must be considered in the differential diagnosis of benign breast lesions. A multidisciplinary approach including clinical examination, imaging, and histopathological evaluation is essential for accurate diagnosis and appropriate treatment.

Keywords: Benign breast lesion, hamartomas, trucut biopsy

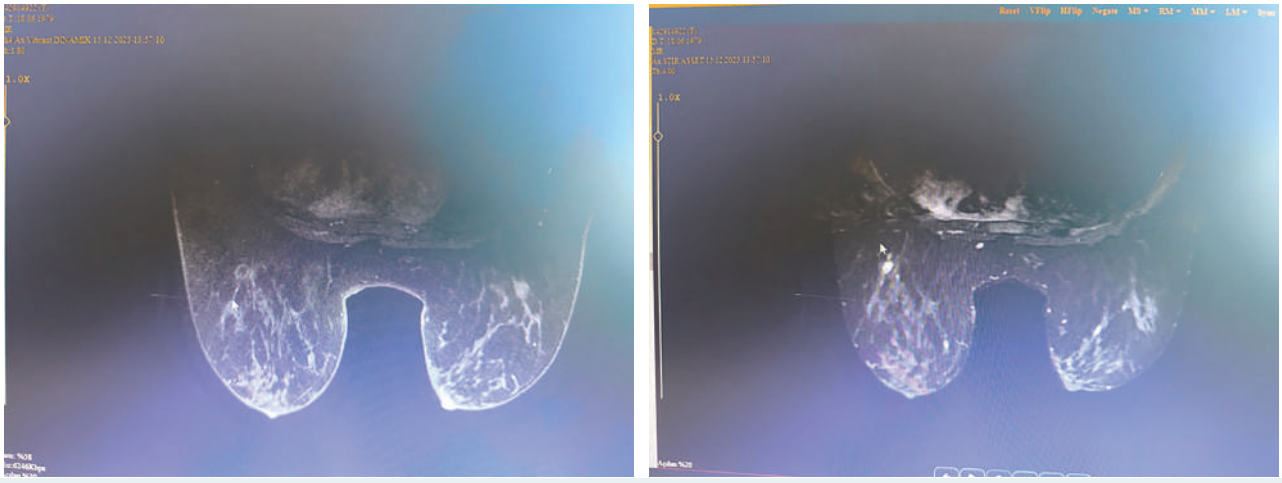


Figure 1. Breast MRI image. Image of a mass visible in the right breast. Breast MRI image dynamic phase.

[P-452]

Laparoscopic cholecystectomy in a case of hepatized gallbladder: Surgical process and outcomes

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Objective: Gallbladders have been reported in various ectopic locations. An intrahepatic gallbladder is defined as a gallbladder located within the liver parenchyma or in a subcapsular position along the anteroinferior surface of the right hepatic lobe.

Material and Methods: In this report, we present the case of a 62-year-old man in whom an intrahepatic gallbladder was not identified preoperatively but who underwent laparoscopic cholecystectomy without intraoperative or postoperative complications.

Results: A 62-year-old male presented to the outpatient clinic with a six-month history of intermittent colicky abdominal pain, predominantly localized to the right hypochondrium and radiating to the right shoulder. His past medical and family histories were unremarkable. General examination was unremarkableand all observations were stable. Abdominal examination revealed no palpable masses ororganomegaly. There was mild tenderness in the right upper quadrant and epigastric region with no rebound tenderness and Murphy's sign was negative. Initial laboratory investigations including full blood count, liver function tests, and serum amylase as well as kidney functiontests were all normal. Based on the history and clinical findings, a provisional diagnosis of gallbladder stones was suspected. Abdominal ultrasonography and computed tomography were planned for further evaluation. Following appropriate preoperative preparation, the patient underwent elective laparoscopic cholecystectomy successfully. No intraoperative complications occurred, and the patient was discharged on postoperative day one without any complications.

Conclusion: Although intrahepatic gallbladder is a rare congenital anomaly, it frequently requires surgical intervention due to an increased incidence of cholelithiasis associated with biliary stasis. Awareness of ectopic gallbladder locations and accurate recognition of this condition are crucial for appropriate intraoperative planning and for minimizing potential surgical complications.

Keywords: Gallbladder, intrahepatic gallbladder, laparoscopic cholecystectomy

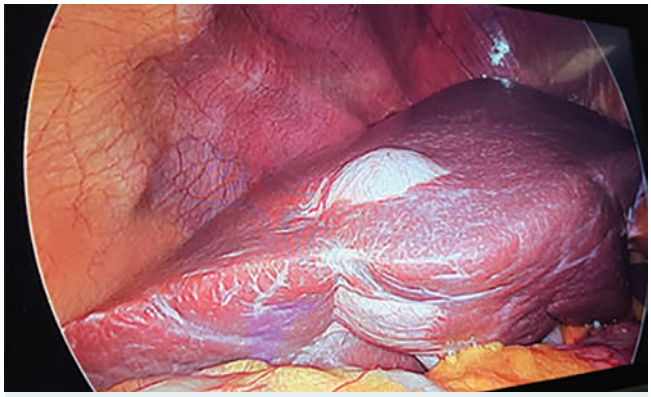


Figure 1. Intraoperative photograph of an intrahepatic gallbladder.

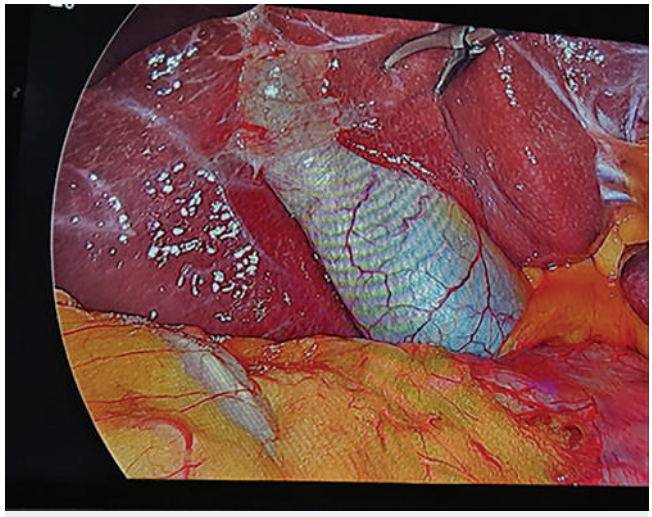


Figure 2. Intraoperative photograph of an intrahepatic gallbladder.

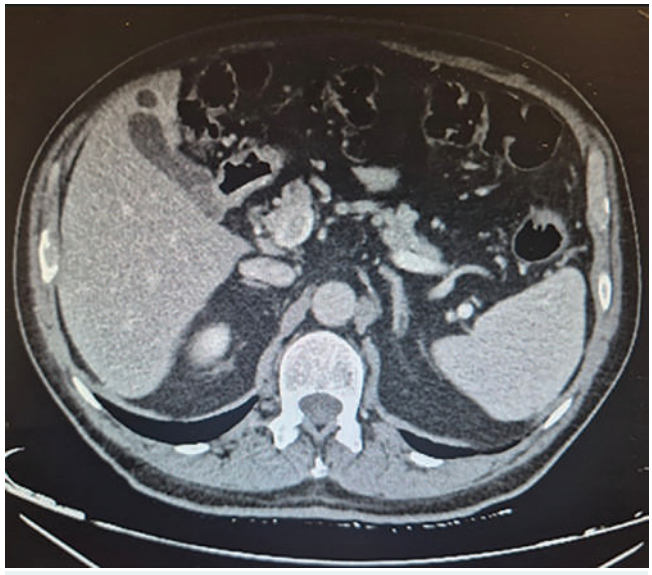


Figure 3. Intrahepatic gallbladder computed tomography imaging.

[P-453]

Gastric fistula developing after gynecological oncology surgery: Case report

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Objective: Gastrointestinal complications following gynecological oncology surgery occur in 5-10% of cases. Gastric fistula is a rare but serious condition among these complications. This study presents a case of gastric fistula that developed in a patient operated on for mucinous ovarian cancer and aims to emphasize the importance of a multimodal treatment approach.

Material and Methods: A 28-year-old female patient was operated on by gynecology for mucinous cell ovarian cancer. The patient underwent oophorectomy, total omentectomy due to omental cake, and peritonectomy. On the 45th postoperative day, the patient presented to our emergency department with epigastric abdominal pain. Computed tomography revealed an abscess between the stomach and spleen. The fistula was drained under computed tomography guidance after consultation with interventional radiology, and fistulization to the stomach was detected during drainage. The patient was monitored conservatively with discontinuation of oral intake. During follow-up, the fistula closed spontaneously. A pouch radiograph taken before catheter removal showed that the pouch had opened into the gastric vein. The patient underwent surgery, and wedge resection of the fistula area was performed with a stapler. The postoperative period was uncomplicated, and the patient was discharged in good health.

Results: Common cytoreductive procedures in gynecological oncology surgery, especially omentectomy and peritonectomy, are risk factors for intra-abdominal abscess development. Percutaneous drainage is the first-line treatment in patients with gastric fistulas and has a success rate of 70-90%. 15-25% of fistulas can close spontaneously with conservative treatment. Fistulography is essential for pre-surgical anatomical evaluation. In definitive surgical treatment, wedge resection with a stapler is a safe and effective method.

Conclusion: Gastric fistula developing after gynecological oncology surgery is a rare but serious complication. Early diagnosis, appropriate drainage guided by computed tomography, conservative treatment, and timely surgical intervention can lead to successful outcomes. A multimodal and multidisciplinary approach is the most important factor in patient management and provides results consistent with the literature.

Keywords: Gastric fistula, multimodal treatment, ovarian cancer, percutaneous drainage, postoperative complications

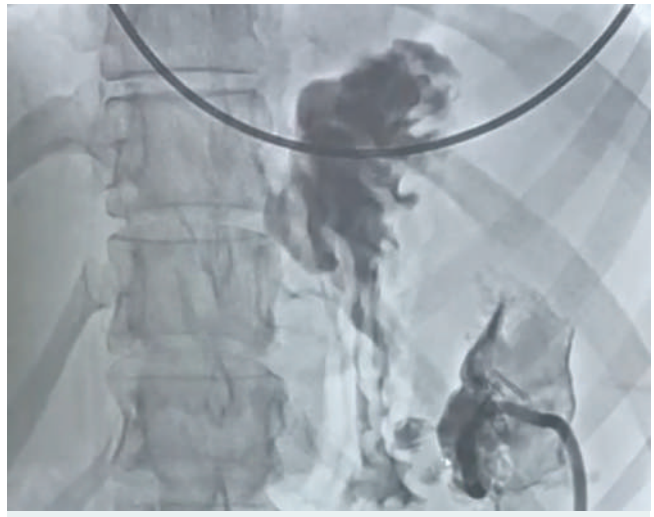


Figure 1. Catheter drainage, fistula to the porta vena. The contrast agent injected through the catheter placed in the abscess sac passes into the portal vein.

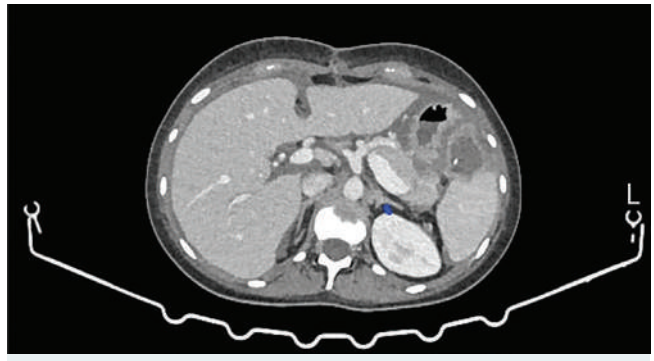


Figure 2. Abscess sac between the stomach and spleen.

[P-454]

Giant retroperitoneal dedifferentiated liposarcoma: A rare case presentation requiring multivisceral en-bloc resection

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Objective: Retroperitoneal soft tissue sarcomas are rare malignancies, accounting for approximately 10-15% of all sarcomas. Among these, dedifferentiated liposarcomas are characterized by aggressive biological behaviour and a high risk of local recurrence. Due to the expansive nature of the retroperitoneal space, these tumours often remain asymptomatic for prolonged periods, leading to delayed diagnosis and presentation at advanced stages with large tumour volumes. Radiologically, dedifferentiated liposarcomas may mimic peritoneal carcinomatosis or gynaecological malignancies, posing significant diagnostic challenges. This case report describes a patient who was initially suspected of having a gynaecological malignancy but was ultimately diagnosed with a giant retroperitoneal dedifferentiated liposarcoma following surgical and histopathological evaluation.

Material and Methods: A 76-year-old female with a medical history of hypertension and asthma presented with progressive constipation and abdominal distension over several months. Contrast-enhanced abdominal computed tomography demonstrated heterogeneously enhancing mass lesions within the mesenteric fatty tissue, consistent with an omental cake appearance. Serum tumour markers were within normal limits. Tru-cut biopsy findings were suggestive of liposarcoma, and surgical intervention was planned. Intraoperative exploration revealed a giant retroperitoneal mass measuring approximately 50×40×15 cm. With the aim of achieving R0 resection, the tumour was excised en bloc with the left kidney and left adrenal gland. Due to concerns regarding surgical margin safety, splenectomy and total abdominal hysterectomy with bilateral salpingo-oophorectomy were additionally performed. The postoperative course was uneventful, and the patient was discharged on postoperative day seven. Histopathological examination confirmed FNCLCC grade 2 dedifferentiated liposarcoma with negative surgical margins, and immunohistochemical analysis demonstrated strong positivity for MDM2 and CDK4.

Results: Retroperitoneal dedifferentiated liposarcomas typically present with nonspecific symptoms, contributing to delayed diagnosis and advanced disease at presentation. While tumour sizes reported in the literature commonly range between 15 and 30 cm, the approximately 50 cm mass observed in this case represents an exceptional finding. Moreover, the radiological mimicry of gynaecological malignancy and the requirement for extensive multivisceral en bloc resection involving the kidney, adrenal gland, spleen, and gynaecological organs render this case particularly rare. As complete surgical excision with negative margins remains the most critical prognostic factor, aggressive multivisceral resection is justified when clear anatomical planes are absent.

Conclusion: This case highlights the importance of accurate diagnosis and radical surgical management in achieving optimal oncological outcomes.

Keywords: Differential diagnosis (gynaecological malignancy), multivisceral en bloc resection, retroperitoneal dedifferentiated liposarcoma

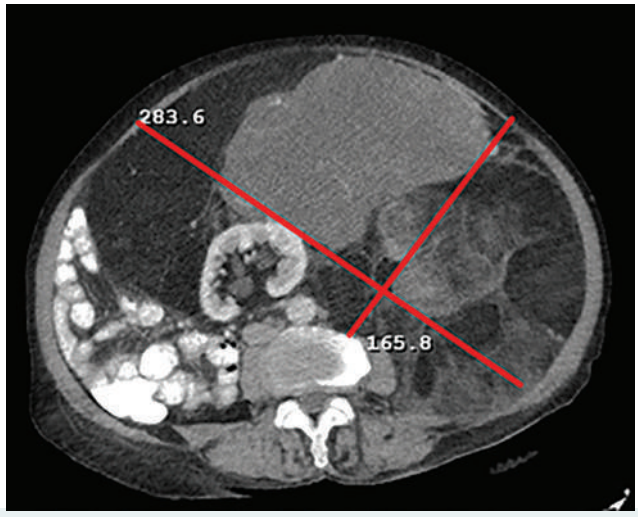


Figure 1. Contrast-enhanced abdominal CT coronal reformat image; a large mass lesion with fatty components originating from the left retroperitoneal area, displacing the left kidney medially and the intestinal loops.

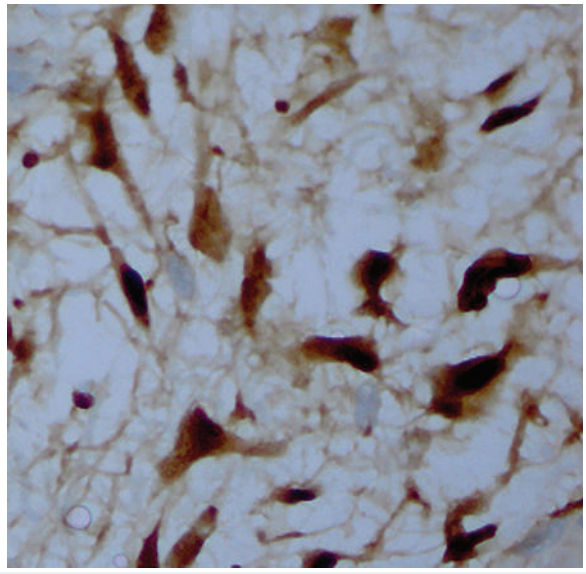


Figure 2. CDK4 x100 diffuse positivity.

[P-455]

The impact of histological subtype on clinical course in retroperitoneal adipose tumors: A comparison of dedifferentiated liposarcoma and benign adipose tumor

Mehmet Furkan Avcı, Turgay Şimşek, Mehmet Fatih Özsaray, Abdülaziz Emek, Nuh Zafer Cantürk, Orhan Tatlı

Kocaeli University Faculty of Medicine, Kocaeli

Objective: Retroperitoneal adipose tumors are rare, and preoperative differentiation between benign and malignant lesions is often challenging. Because these tumors can remain asymptomatic for a long time within the wide retroperitoneal space, they are usually diagnosed after reaching a large size. Histological subtype, particularly the presence of dedifferentiated liposarcoma, has a significant impact on clinical course, local recurrence risk, and prognosis. In this study, two retroperitoneal adipose tumors with different biological behaviors were compared to highlight the impact of histological subtype on clinical outcomes.

Material and Methods: This study is a retrospective evaluation of two patients who presented with abdominal pain and were found to have retroperitoneal adipose tumors. The patients were assessed using contrast-enhanced computed tomography (CT), and open surgical resection was performed following a multidisciplinary board decision. Resected specimens were examined histopathologically and immunohistochemically. Postoperatively, the patients were followed up with clinical and radiological evaluations.

Results: In both cases, preoperative contrast-enhanced CT revealed retroperitoneal adipose tumors. In the first case, the mass measured 36×24×13 cm and showed a heterogeneous appearance with thick septations and solid nodular components. En-bloc surgical resection was performed, and histopathology revealed FNCLCC grade 3 dedifferentiated liposarcoma with positive margins. At six months, follow-up CT demonstrated local recurrence involving the left kidney, and the patient underwent reoperation with concomitant nephrectomy. In the second case, a 22×11 cm retroperitoneal mass with homogeneous fat density and thin septations was observed, and complete resection was achieved. Histopathology showed no cellular atypia or mitotic activity, consistent with a benign adipose neoplasm (lipoma), and surgical margins were negative. During one-year follow-up, no local recurrence or complications were detected. When the cases were compared, early local recurrence occurred in the dedifferentiated liposarcoma case, whereas no recurrence occurred in the benign case. Positive margins and aggressive histology adversely affected the clinical course. No perioperative mortality or major complications were observed.

Conclusion: Histological subtype is one of the most important factors determining the clinical course and risk of local recurrence in retroperitoneal adipose tumors. Dedifferentiated liposarcoma exhibits aggressive biological behavior with early local recurrence, whereas benign adipose tumors generally have a favorable postoperative prognosis. In malignant cases, achieving negative surgical margins and close long-term follow-up are critical for disease-free survival. Therefore, a histology-based surgical approach and regular surveillance are recommended in the management of retroperitoneal adipose tumors.

Keywords: Retroperitoneal tumor, liposarcoma, adipose neoplasia

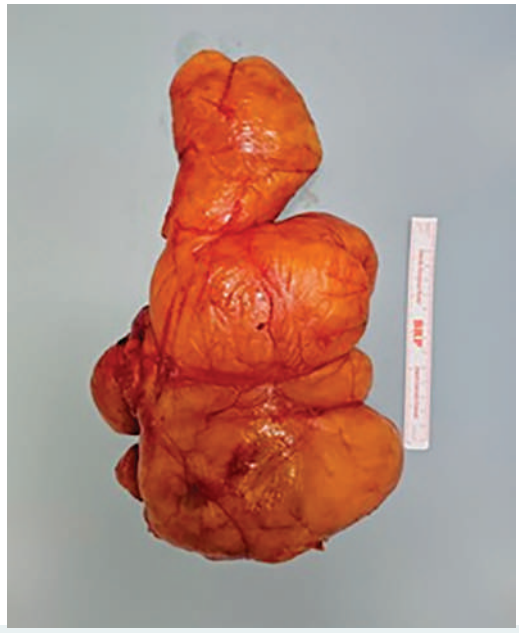


Figure 1. Adipose neoplasm.

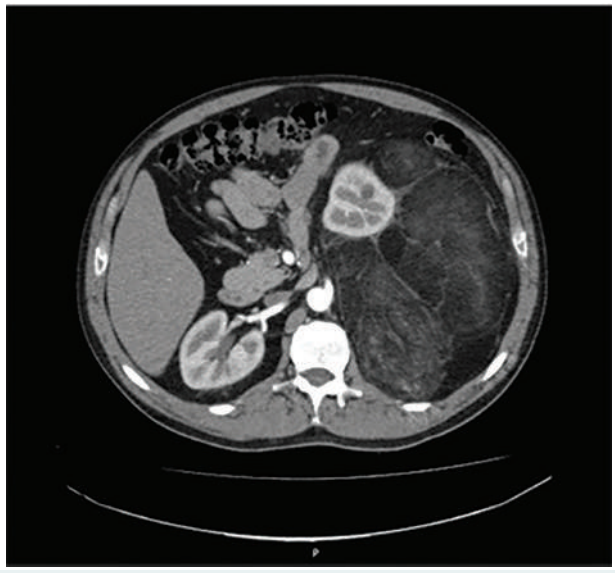


Figure 1. Dedifferentiated liposarcoma.

[P-456]

Early gastric cancer originating from a giant pedunculated gastric polyp

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Objective: Polypoid lesions are defined as mucosal or submucosal projections extending into the gastrointestinal lumen. Although initial diagnosis of a gastric polyp can be made by endoscopic visualization, histopathological examination is essential for accurate classification. In clinical practice, such polypoid lesions are commonly referred to as "polyps." Gastric polyps are encountered in approximately 2-3% of upper gastrointestinal endoscopic examinations.Early gastric cancer is defined as adenocarcinoma confined to the mucosa or submucosa (T1Nx), regardless of regional lymph node involvement. Early gastric cancer has an excellent prognosis, with five-year survival rates exceeding 90%. A 56-year-old female patient presented to our outpatient clinic with complaints of epigastric pain, nausea, and loss of appetite. Her vital signs were as follows: blood pressure 110/70 mmHg, pulse rate 80 beats per minute, and body temperature 36.7 °C. Physical examination revealed epigastric tenderness, with no other pathological findings. Laboratory investigations showed hemoglobin level of 9.8 g/dL, while other parameters were within normal limits.

Material and Methods: Upper gastrointestinal endoscopy was planned for diagnostic and screening purposes and was performed under anesthesia.

Results: Endoscopic examination revealed a giant pedunculated gastric polyp originating from the corpus and extending toward the antrum. Multiple biopsies were obtained from the polyp and sent to the pathology laboratory for histopathological evaluation. Histopathological examination revealed adenocarcinoma. The patient was subsequently referred to the oncology department for further evaluation, including contrast-enhanced thoracic and whole-abdominal computed tomography (CT) and positron emission tomography (PET). Based on imaging findings and multidisciplinary discussion at the general surgery–oncology board, the case was considered consistent with early-stage gastric adenocarcinoma. Endoscopic excision of the polyp was planned, with further treatment to be reassessed according to the histopathological findings. During the procedure, the pedunculated polyp was observed to extend from the gastric corpus through the pylorus into the duodenal bulb. The polyp was retracted from the bulb back into the stomach and resected at its stalk using a snare, completing the polypectomy. Histopathological examination of the resected specimen demonstrated that the adenocarcinoma was confined to the surface of the polyp, with no evidence of malignancy in the stalk or at the mucosal junction.

Conclusion: With the widespread use of endoscopy for the screening and diagnosis of upper gastrointestinal diseases, the detection rate of gastric polyps has increased, leading to a parallel rise in the diagnosis of early-stage gastric cancer. In polyps with a risk of malignant transformation, complete excision by polypectomy—including the stalk and adjacent mucosa—plays a critical role in both diagnosis and treatment.

Keyword: Gastric polyp

[P-457]

Deep aggressive angiomyxoma of the vulva: A rare case with an infiltrative growth pattern

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Objective: Aggressive angiomyxoma is a rare mesenchymal neoplasm of the pelvic and perineal regions with locally aggressive behavior. Although slow-growing, its infiltrative nature makes complete surgical excision difficult and is associated with a high risk of recurrence. This report presents the clinical, radiological, surgical, and pathological features of a deep aggressive angiomyxoma located in the labium majus.

Material and Methods: Clinical, radiological, surgical, and pathological data of a patient who underwent surgical treatment for a vulvar mass were retrospectively evaluated.

Results: A 25-year-old woman presented with a two-year history of progressively increasing swelling in the left genital region and recently increased pain. Physical examination revealed a soft, mobile, subcutaneous mass measuring approximately 10×5 cm along the left labium majus (Figure 1). No ulceration, discoloration, active bleeding, or bilateral inguinal lymphadenopathy was observed. The patient had no chronic diseases. Her medical history included appendectomy and genital condyloma excision in 2023. Ultrasonography demonstrated a semisolid, heterogeneous subcutaneous mass. Pelvic magnetic resonance imaging revealed a lesion extending from the left labium majus to the left inguinal canal, showing hyperintense signal intensity on T2-weighted images and peripheral-septal contrast enhancement. Imaging findings were interpreted as an infiltrative, low-grade locally aggressive soft tissue tumor (Figure 2). Surgical exploration in the lithotomy position revealed a lesion closely related to surrounding soft tissues, without a distinct capsule and with ill-defined margins. The lesion was excised. Due to the size of the defect and tissue tension, plastic surgery consultation was obtained, and reconstruction was performed using a fasciocutaneous flap (Figure 3). No postoperative complications occurred. Macroscopic examination revealed a bright, homogeneous lesion with myxoid features. Microscopic evaluation showed hypocellular areas with loose myxoid stroma and thin-walled vascular structures. Tumor infiltration into adipose tissue and peripheral nerve structures was observed, adjacent to the surgical margins. Immunohistochemistry demonstrated estrogen and progesterone receptor positivity, focal desmin positivity, and weak smooth muscle actin expression. CD31, S100, SOX10, STAT6, and MUC4 were negative. The Ki-67 proliferation index was 2%. These findings confirmed the diagnosis of deep aggressive angiomyxoma. Due to margin proximity, positron emission tomography revealed a millimetric residual lesion consistent with the surgical field. The patient was enrolled in close clinical and radiological follow-up.

Conclusion: Deep aggressive angiomyxoma has a high recurrence potential due to its infiltrative growth pattern despite benign histology. Vulvar anatomical limitations hinder clear surgical margins and increase residual disease risk, necessitating a multidisciplinary surgical approach and long-term clinical-radiological follow-up.

Keywords: Aggressive angiomyxoma, vulva, labium majus, soft tissue tumors



Figure 1. Preoperative clinical appearance of the mass located in the left labium majus.



Figure 2. Preoperative MRI image.

[P-458]

A rare cause of intra-abdominal mass in an adult patient: Omental cavernous lymphangioma

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Objective: Lymphangiomas are benign malformations of the lymphatic system, predominantly diagnosed in children; adult cases are rare. Intra-abdominal involvement represents a small fraction of all lymphangiomas and is even less frequent in adults. These lesions most commonly arise from the mesentery or omentum, while primary omental localization in adults has been only rarely reported. Although the exact pathogenesis remains unclear, progressive cystic dilatation due to congenital lymphatic drainage abnormalities during embryologic development is the most accepted mechanism. Histologically, lymphangiomas are classified as simple, cavernous, or cystic types. The cavernous subtype consists of dilated endothelial-lined lymphatic channels within a fibrous stroma. Clinical presentation is usually non-specific and may include abdominal pain, distension, nausea, or constipation. Imaging typically reveals multiloculated cystic lesions with thin septations; however, proximity to adjacent organs may complicate differentiation from malignancy. Definitive diagnosis is generally established after surgical resection and histopathological evaluation.

Material and Methods: This study represents a retrospective single-center case report. Clinical findings, radiologic imaging, intraoperative observations, and histopathological results were reviewed from medical records.

Results: A 43-year-old woman presented with longstanding abdominal pain and constipation. Physical examination suggested a mass in the left lower quadrant. Laboratory findings were normal. Contrast-enhanced abdominal computed tomography demonstrated a cystic lesion surrounding the left colon and extending toward the left adnexa, with loculated fluid in the pararectal area. Malignancy could not be excluded radiologically. Colonoscopy revealed no significant intraluminal pathology except for a small rectal polyp. Following multidisciplinary assessment, surgical exploration was performed. Intraoperatively, the omentum encased the left segment of the transverse colon, producing a marked mass effect. Given the close relationship with the colon and the inability to exclude malignancy preoperatively, a left hemicolectomy was undertaken according to oncologic principles. Histopathology confirmed cavernous lymphangioma of the omentum without evidence of colonic malignancy. The postoperative course was uneventful, and no recurrence was observed during three years of follow-up.

Conclusion: Cavernous omental lymphangioma in adults is an exceptionally rare benign condition. Its non-specific clinical and radiologic features may mimic malignant disease, making preoperative diagnosis difficult. Complete surgical excision is curative, with low recurrence rates after total resection. Lymphangioma should be considered in the differential diagnosis of intra-abdominal cystic masses in adults to guide appropriate management and potentially avoid unnecessary extensive resections.

Keywords: Cavernous lymphangioma, intra-abdominal mass

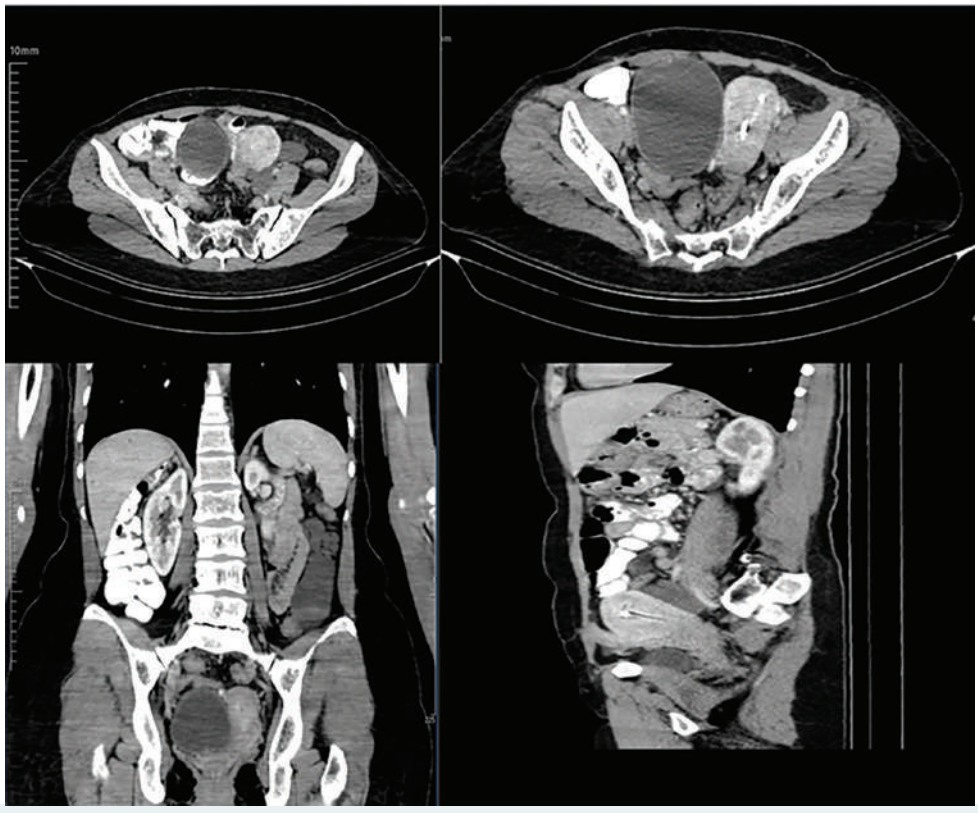


Figure 1. Imaging findings.

[P-459]

Primary squamous cell carcinoma presenting with an obstructive mass in the cecum: A rare colon tumor

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Objective: The vast majority of colorectal cancers are adenocarcinomas, whereas primary squamous cell carcinoma of the colon is extremely rare. Definitive diagnosis is established by histopathological and immunohistochemical evaluation of resection material. This report presents a case of primary squamous cell carcinoma detected in a patient after surgery for an obstructing cecal mass.

Material and Methods: Clinical, radiological, endoscopic, surgical, and pathological data of a patient who underwent surgical treatment for an obstructive cecal mass were retrospectively reviewed. Histopathological and immunohistochemical analyses of the resection specimen were performed.

Results: A 62-year-old woman presented to the emergency department with a four-day history of abdominal pain, constipation, and nausea. She was hemodynamically stable. Her medical history included cholecystectomy, appendectomy, bilateral total thyroidectomy, and incisional hernia repair, with no chronic diseases. Abdominal computed tomography demonstrated irregular wall thickening in the proximal colon with distal dilated bowel loops and air-fluid levels consistent with ileus. The patient was hospitalized, and after decompression, colonoscopy on the second day revealed a near-complete obstructing cecal mass preventing luminal passage. Biopsies were obtained; however, emergency surgery was performed on the same day due to obstruction without awaiting biopsy results. Surgical exploration revealed an approximately 6 cm obstructing cecal mass and dense adhesions between small bowel loops. No macroscopic metastasis or peritoneal carcinomatosis was observed; ascites was present. Right hemicolectomy with ileocolic anastomosis and adhesiolysis were performed. The postoperative course was uneventful, and the patient was discharged on day 8. No additional findings were noted during follow-up. Colonoscopic biopsy was reported as poorly differentiated carcinoma. Pathological examination of the resection specimen revealed an ulcerative tumor measuring 5.5×4×4 cm. Histopathology demonstrated moderately differentiated squamous cell carcinoma with subserosal invasion. Angiolymphatic invasion was present, while venous and perineural invasion were absent. All 31 lymph nodes were reactive, and surgical margins were negative. Immunohistochemical examination showed cytokeratin 5/6 positivity with widespread cytoplasmic staining and nuclear p63 positivity. Chromogranin and synaptophysin were negative. The Ki-67 proliferation index was 40%. Tumor-infiltrating lymphocytes were prominent. Mismatch repair analysis revealed loss of MLH1 and PMS2 and preserved MSH2 and MSH6 expression. Anal canal involvement, an adenocarcinoma component, and another primary squamous cell carcinoma focus were excluded, establishing the diagnosis of primary colonic squamous cell carcinoma.

Conclusion: Primary squamous cell carcinoma of the cecum is a rare histological subtype. Accurate diagnosis requires detailed histopathological and immunohistochemical evaluation of resection material and is essential for appropriate clinical management and follow-up.

Keywords: Squamous cell carcinoma, colorectal tumors, immunohistochemistry

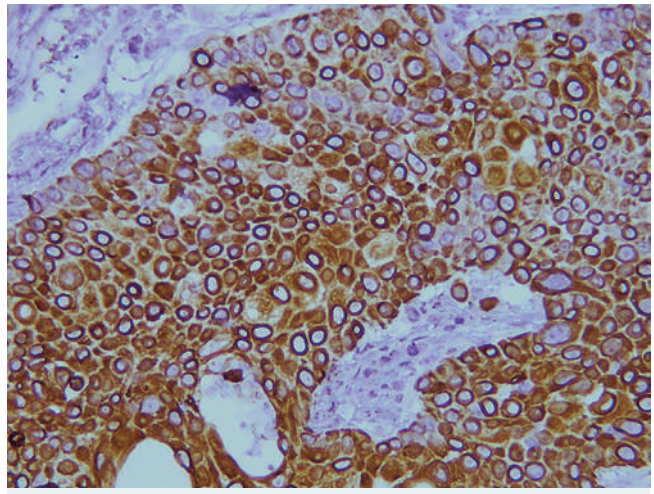


Figure 1. Widespread cytoplasmic positive staining with cytokeratin 5/6 in tumor cells (×400).

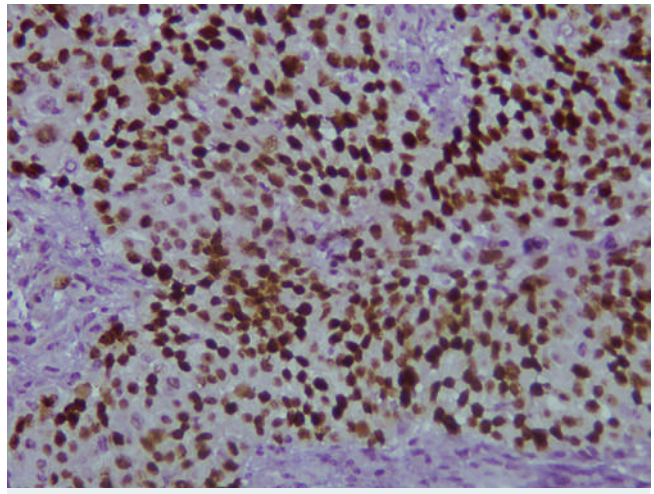


Figure 2. Prominent nuclear positivity in tumor cells with p63 (×400).

[P-460]

Incidental giant ileal GIST: A case report

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Objective: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the gastrointestinal system and are usually located in the stomach and small intestine. These tumors, which often present with non-specific symptoms, can be detected incidentally, especially when they are small in size.

Material and Methods: Our hospital has accessed the preoperative and postoperative information of the patient operated on in gastroenterology surgery through the system.

Results: A 53-year-old male patient presented with a hard mass in the right lower quadrant of his abdomen. Imaging findings revealed a 16 cm mass originating in the ileum, showing no invasion into surrounding tissues. The patient underwent segmental small bowel resection. The pathology result was consistent with high-risk GIST, and R0 resection was achieved. The patient recovered without complications in the postoperative period, and adjuvant imatinib therapy was initiated. No recurrence or metastasis was observed during the twelve-month follow-up.

Conclusion: This case demonstrates that large-sized ileal GISTs with an asymptomatic course can be detected incidentally. Early surgical resection and appropriate adjuvant therapy are fundamental approaches that increase long-term survival.

Keywords: GIST, ileum, imatinib

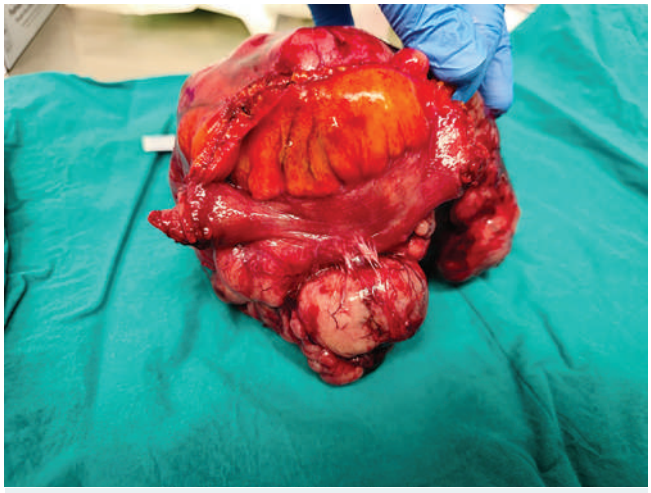


Figure 1. Small intestine GIST specimen. Specimen material from GIST originating from the ileum wall.



Figure 2. Specimen material from GIST originating from the ileum wall.

[P-462]

A rare retroperitoneal tumor detected synchronously with colorectal adenocarcinoma: PEComa

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Objective: Perivascular epithelioid cell tumors (PEComa) are rare mesenchymal neoplasms composed of distinctive perivascular epithelioid cells that co-express melanocytic (HMB-45, Melan-A) and muscle (SMA, Desmin) markers. While commonly found in the uterus and gastrointestinal system, retroperitoneal localization is exceptionally rare, and synchronous presentation with another malignancy is infrequently reported in the literature. This study aims to present a case of retroperitoneal PEComa incidentally detected during surgery for colorectal adenocarcinoma.

Material and Methods: A 73-year-old female patient presented with abdominal pain and constipation. Abdominal CT revealed wall thickening and lymphadenopathy at the sigmoid-descending colon level, but no retroperitoneal mass was reported. Following a colonoscopy that showed an ulcerovegetative mass at 30 cm, an anterior resection was planned. During surgical exploration, a yellow, 1.5 cm retroperitoneal mass, independent of the rectal tumor, was noticed in the superomedial aspect of the left kidney and was totally excised in addition to the rectal surgery.

Results: Pathological examination of the rectal specimen revealed "Moderately differentiated Adenocarcinoma (pT3N0Mx)". The retroperitoneal mass showed a mesenchymal tumor composed of epithelioid cells with clear and eosinophilic cytoplasm. Immunohistochemical analysis demonstrated that the tumor cells were positive for HMB-45, Melan-A, and SMA, while negative for S-100, CD117 (c-kit), and DOG-1. With a Ki-67 index of 2% and no necrosis, the lesion was diagnosed as "PEComa" based on its immune profile and morphology. The patient was discharged on the 10th postoperative day, and adjuvant therapy was planned for the rectal cancer.

Conclusion: Cases of retroperitoneal PEComa concurrent with colorectal malignancies are extremely limited in the literature. These tumors, which lack specific radiological findings, can be confused with Gastrointestinal Stromal Tumors (GIST) or metastases. Definitive diagnosis is established via immunohistochemical examination showing HMB-45 and SMA positivity with CD117 negativity. Surgical excision and close follow-up remain the primary treatment approach for these tumors, which may have uncertain malignant potential.

Keywords: PEComa, rectal cancer, retroperitoneal tumor



Figure 1. Radiographic appearance of a colorectal lesion on computed tomography.

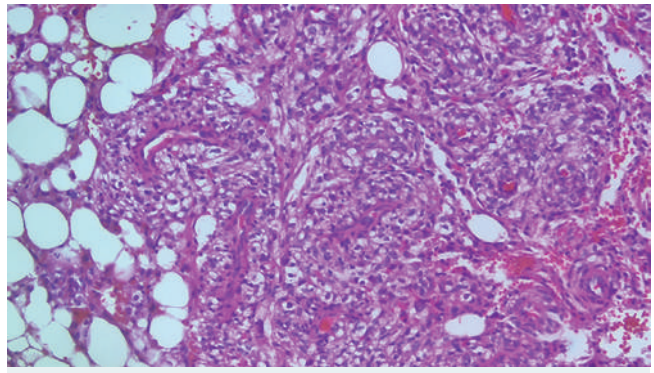


Figure 2. Microscopic appearance of the retroperitoneal mass.

[P-463]

Neostigmine use in the treatment of postoperative gastroparesis developing in a patient with Parkinson's disease: A case report

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Objective: Postoperative gastroparesis is a gastrointestinal motility disorder that can develop after abdominal surgery and is more common in patients who are elderly, have diabetes mellitus, or have neurological disease. Clinically, it presents with nausea, vomiting, gastric dilatation, and oral intake intolerance, which may prolong the hospital stay. Standard treatment includes nasogastric decompression, fluid-electrolyte balance, and prokinetic agents; however, resistance to treatment may develop in some cases. Although neostigmine, an acetylcholinesterase inhibitor, is known to increase intestinal motility, its role in the treatment of postoperative gastroparesis is limited. This study presents the successful treatment of refractory gastroparesis with neostigmine following extended right hemicolectomy.

Material and Methods: A 78-year-old male patient with a history of Parkinson's disease, hypertension, diabetes mellitus, and hypothyroidism underwent an extended laparoscopic right hemicolectomy due to a mucinous adenocarcinoma located in the hepatic flexure. During the operation, the stomach was skeletonized along the greater curvature, including the pylorus. Due to postoperative nausea, vomiting, and abdominal distension, nasogastric drainage was applied. Since metoclopramide was contraindicated due to Parkinson's disease, domperidone 3×10 mg intravenous and neostigmine 2.5 mg intravenous infusion therapy were initiated after a neurology consultation.

Results: On postoperative day 5, nausea-vomiting and abdominal distension developed after oral intake. Imaging revealed marked gastric dilatation. Daily drainage of 1300-1500 mL of bile-containing fluid was observed via nasogastric tube, and bowel sounds were hypoactive. Despite intravenous domperidone treatment, no clinical improvement was observed within three days. After neostigmine treatment: A decrease in nasogastric drainage volume, an increase in bowel sounds, gas and stool passage were observed, and an improvement in oral intake tolerance was noted. No extrapyramidal symptoms were observed during the treatment. The nasogastric tube was removed on the third day of treatment. Following the discontinuation of treatment, mild symptoms developed, and neostigmine was restarted, resulting in complete clinical improvement. Nine days after the start of treatment, the patient was able to tolerate a diet 3 regimen. No recurrence was observed during clinical follow-up.

Conclusion: Postoperative gastroparesis is a challenging clinical condition to manage, particularly in patients at high risk for autonomic dysfunction. This case demonstrates that the use of neostigmine in postoperative gastroparesis resistant to standard prokinetic therapy may improve clinical outcomes by increasing gastrointestinal motility. With appropriate patient selection and close monitoring, neostigmine may be an alternative treatment option in selected cases. However, larger clinical studies are needed to determine the optimal dose and duration of treatment.

Keywords: Postoperative gastroparesis, neostigmine, gastrointestinal motility

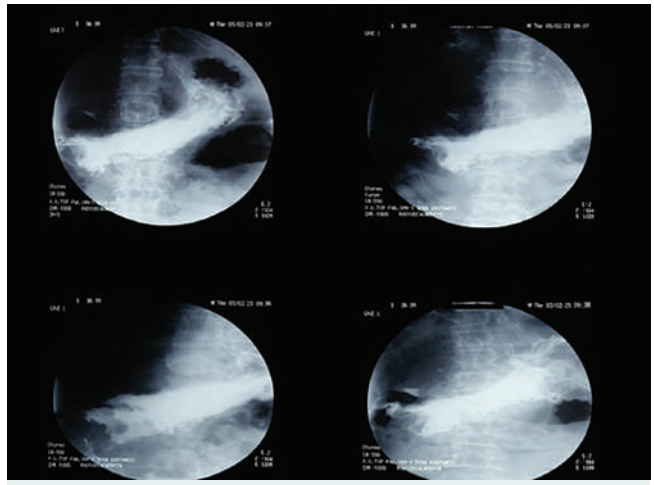


Figure 1. Findings of gastroparesis on upper gastrointestinal system imaging (top images from initial scan, bottom images from scan at 20 minutes).

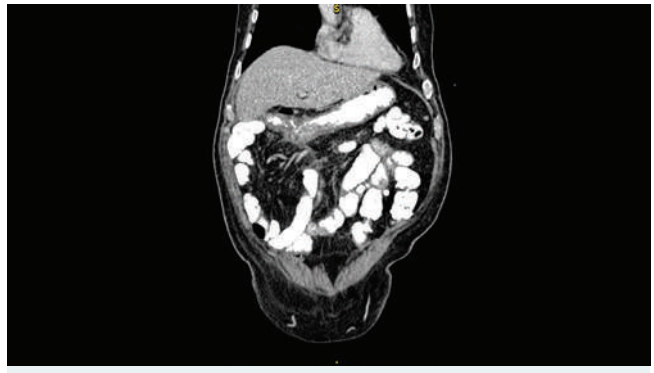


Figure 2. Control CT scan taken at the end of treatment and passage of the contrast medium into the small bowel loops.

Table 1. Nasogastric drainage volume following neostigmine therapy (mL)

Day 1	600
Day 2	200
Day 3	200
Day 4	100

[P-464]

A rare colon tumor causing intussusception in an adult

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Objective: Intussusception is defined as the telescoping of a proximal segment of the intestine into the lumen of an adjacent distal segment. It most commonly occurs in the ileocecal region, followed by ileocolic and colocolic types. In childhood, intussusception is usually caused by benign conditions and often resolves with medical treatment. In adults, however, it is rare and most often associated with an underlying malignant pathology, requiring surgical intervention. In this case report, we present a rare adult case of a tumor in the transverse colon causing intussusception

Material and Methods: A 42-year-old male patient presented with abdominal pain, nausea, constipation, vomiting, and abdominal distension. His medical history revealed no prior abdominal surgery, and there was no family history of malignancy. Physical examination showed abdominal distension without additional pathological findings. Contrast-enhanced abdominal computed tomography revealed an intussusception at the midline level of the transverse colon, measuring approximately 15×6 cm, containing areas of fat density. A lesion protruding into the lumen, inflammatory changes in the adjacent mesentery, and millimetric lymph nodes were also observed. Subsequent colonoscopy demonstrated a pedunculated tumoral mass corresponding to this region, which obstructed passage of the colonoscope. Histopathological evaluation of the biopsy specimen revealed ulceration, hemorrhage, and congestion. Total excision of the mass was recommended for definitive diagnosis. The patient subsequently unde

Results: Intussusception in adults is a rare but clinically significant condition. Benign causes include leiomyomas and lipomas of the ileocecal wall, while malignant causes include tumors such as adenocarcinoma and lymphoma

Conclusion: In adult patients with clinical and physical examination findings suggestive of intussusception, the possibility of underlying malignancy should always be considered, even though it is rare

Keywords: Intussusception, colon, malignancy



Figure 1. CT scan of intussusception.

[P-465]

Primary squamous cell carcinoma of the breast: A rare and aggressive malignancy

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Objective: Primary squamous cell carcinoma (SCC) of the breast is an exceptionally rare and aggressive malignancy, accounting for less than 0.1% of all invasive breast cancers. Diagnostic criteria strictly require that the tumor consists of >90% squamous cells and does not originate from the overlying skin, nipple, or distant sites. These tumors typically present with a triple-negative phenotype and high proliferative indices, associating them with a prognosis comparable to or worse than poorly differentiated ductal carcinomas.

Material and Methods: A 42-year-old postmenopausal woman presented with a painful mass in the left breast axillary tail. Imaging revealed a diagnostic discrepancy: mammography showed a well-circumscribed mass (BI-RADS 0), whereas ultrasonography demonstrated an irregular, hypoechoic lesion (BI-RADS 3). Following an inconclusive core needle biopsy showing only inflammatory changes, an excisional biopsy was performed. Metastatic disease from extramammary sites was rigorously excluded via PET-CT and clinical work-up.

Results: Immunohistochemical analysis confirmed a poorly differentiated, triple-negative (ER-, PR-, HER2-) SCC with positive p63 and CK5/6 expression and a Ki-67 index of 30%. The patient underwent left subcutaneous mastectomy with axillary lymph node dissection. Remarkably, while four sentinel lymph nodes were negative, one non-sentinel node exhibited carcinoma macrometastasis, illustrating the phenomenon of "skip metastasis". Adjuvant therapy included six cycles of paclitaxel, cyclophosphamide, and adriamycin followed by radiotherapy.

Conclusion: Primary breast SCC often exhibits a "pseudocystic" appearance, mimicking abscesses, which poses significant diagnostic challenges. Unlike invasive ductal carcinoma, these tumors show a lower rate of nodal involvement (10-30%), yet the phenomenon of "skip metastasis" necessitates careful surgical consideration. Therapeutically, due to potential resistance to standard anthracyclines, platinum-based regimens (cisplatin/carboplatin) and targeted therapies addressing frequent EGFR overexpression (approx. 40%) should be strongly considered to improve outcomes in these aggressive tumors.

Keywords: Breast cancer, primary squamous cell carcinoma, rare tumor, triple-negative



Figure 1. A solid mass is indicated on the breast MRI scans.

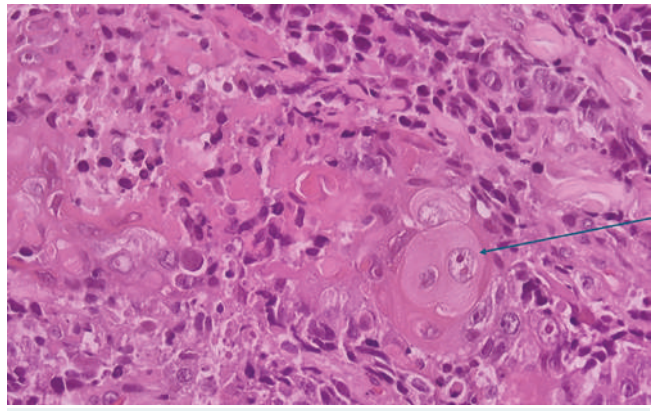


Figure 2. The image a marked pathological tumor cell.

[P-466]

Palpation thyroiditis and massive multinodular goiter: A case of mechanically-induced hyperthyroidism necessitating total thyroidectomy

Yalçın Ural Turhan Akbulut, Sarp Tunalı, Yiğit Türk, Murat Özdemir, Recep Gökhan İçöz

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Objective: This case report presents the unusual co-occurrence of severe hyperthyroidism developing on the basis of palpation thyroiditis, combined with a massive multinodular goiter (MNG).

Material and Methods: The physical examination, biochemical investigations (thyroid function tests), and radiological imaging of the patient, who presented with weight loss and dysphagia, were evaluated. Following unresponsiveness to medical treatment and a diagnostic palpation test, a definitive diagnosis was established. The case was analyzed through the total thyroidectomy procedure, specimen weight, and histopathological results.

Results: A 65-year-old female patient presented with complaints of weight loss, hand tremor, and dysphagia. Her history included diagnosis of juvenile goiter at the age of 16 and history of radioactive iodine therapy. Physical examination revealed a bilateral, firm, fixed, massive MNG. Laboratory investigations confirmed hyperthyroidism. Imaging revealed a significant increase in gland size, numerous nodules, and reduced parenchymal activity. Medical therapy initiated under the presumptive diagnosis of Graves' disease failed to achieve a response. An increase in hormone levels following thyroid palpation, and a subsequent drop upon restriction, supported the diagnosis of palpation thyroiditis. Due to the massive MNG and uncontrolled symptoms, the patient underwent total thyroidectomy. The resected specimen weighed 737 grams. Pathological examination confirmed MNG, with no evidence of malignancy. No surgical complications occurred in the postoperative period, and the patient was discharged.

Conclusion: The increase in hormone levels subsequent to palpation serves as a critical diagnostic clue for palpation thyroiditis. While surgical intervention is rarely required, it became necessary in this case due to the co-occurrence of massive MNG and the inability to control the patient's symptoms.

Keywords: Palpation thyroiditis, giant multinodular goiter, hyperthyroidism, thyroidectomy

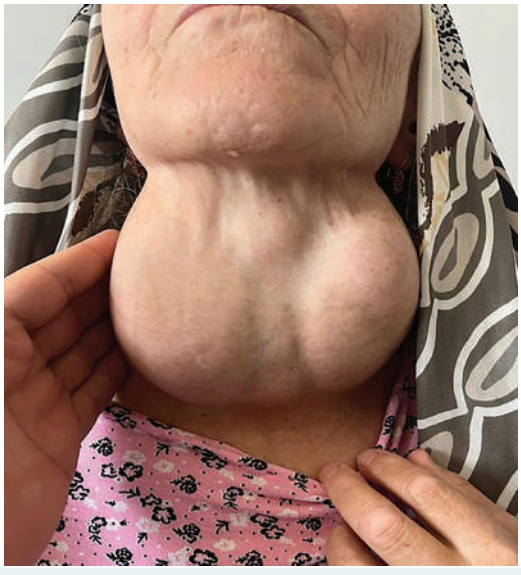


Figure 1. Preoperative image.



Figure 2. Preoperative image.

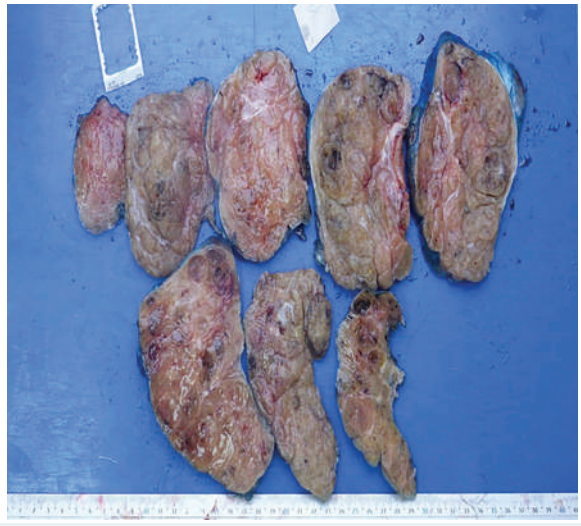


Figure 3. Pathology specimen.



Figure 4. Postoperative control.

[P-467]

A rare anatomical variation in thyroid surgery: A case of right non-recurrent laryngeal nerve confirmed by intraoperative nerve monitoring

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Objective: Non-recurrent laryngeal nerve (NRLN) is a rare but clinically critical anatomical variation in thyroid surgery. In normal anatomy, the recurrent laryngeal nerve (RLN) loops around the subclavian artery on the right and the aortic arch on the left before reaching the tracheoesophageal groove. However, due to embryological developmental differences, the nerve may directly enter the larynx without looping around these structures. The incidence of NRLN is reported between 0.5-1% in literature, predominantly on the right side; left-sided occurrence is extremely rare. When NRLN is present, failure to locate the nerve in its expected position may lead surgeons toward more aggressive dissection, increasing iatrogenic injury risk. This case presents a right NRLN confirmed by intraoperative nerve monitoring (IONM) and discusses its contribution in managing this anatomical variation.

Material and Methods: A 75-year-old female patient was evaluated for a 17x12 mm nodule in the lower pole of the left thyroid lobe. Fine needle aspiration biopsy revealed suspicious cytology for malignancy, and bilateral total thyroidectomy with IONM was planned. Surgery was initiated with left lobectomy; the left vagus nerve, left superior laryngeal nerve, and left RLN were identified through dissection and confirmed with IONM.

Results: During right lobectomy, the right vagus nerve was identified. When typical RLN course was not observed in the tracheoesophageal groove, dissection strategy was redirected in a controlled manner. The nerve was found entering the larynx with a transverse course, confirming right NRLN. The nerve was verified and preserved using IONM. According to Toniato classification, the transverse course above the inferior thyroid artery trunk was compatible with type IIa pattern. Thoracic computed tomography demonstrated findings consistent with aberrant right subclavian artery; systematic reviews report this vascular anomaly in 97% of right NRLN cases. No postoperative dysphonia or dysphagia was observed; serum calcium and parathyroid hormone levels were normal. The patient was discharged uneventfully on postoperative day two. Pathological examination revealed benign hyperplastic nodule in the left lobe and unifocal 1 mm papillary thyroid carcinoma in the right lobe.

Conclusion: NRLN, although rare, is an important anatomical variation that may predispose to major complications. Recent meta-analyses have demonstrated that IONM reduces temporary unilateral RLN injury by 38% and permanent injury by 51%. NRLN possibility should be considered in patients with aberrant right subclavian artery on preoperative imaging. IONM provides valuable contribution for evaluating nerve response via vagus stimulation and functional confirmation when the nerve is not observed in its typical anatomical course.

Keywords: Arteria lusoria, intraoperative nerve monitoring, non-recurrent laryngeal nerve, recurrent laryngeal nerve, thyroidectomy

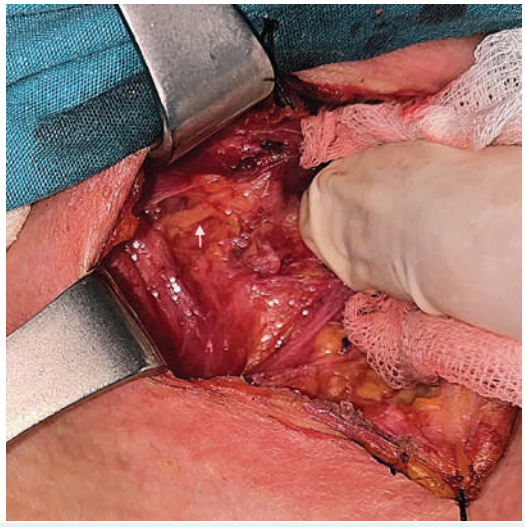


Figure 1. Non-recurrent laryngeal nerve. Transverse course of the right non-recurrent laryngeal nerve (NRLN) (white arrow) entering directly into the larynx.

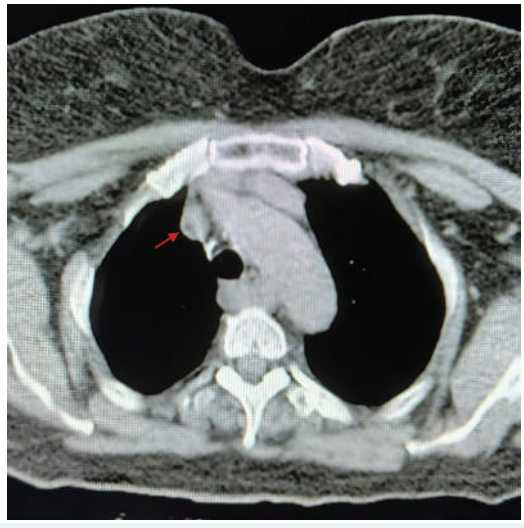


Figure 2. Aberrant right subclavian artery. Appearance of the aberrant right subclavian artery (red arrow) on preoperative CT scan.

[P-468]

Late-onset thyroid metastasis with tracheal invasion of clear cell renal cell carcinoma: A case report

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Objective: Renal cell carcinoma (RCC) is the most common malignant tumor of the kidney and is characterized by a high metastatic potential. The most frequent metastatic sites include the lungs, liver, bones, and brain; however, thyroid gland metastasis is rare. RCC accounts for approximately 12% of all tumors metastasizing to the thyroid gland. Thyroid metastases may develop many years after nephrectomy and may occasionally present as the first sign of recurrence. Therefore, metastatic RCC should be considered in euthyroid patients presenting with rapidly enlarging thyroid nodules.

Material and Methods: A 75-year-old female patient presented in August 2024 with progressive neck swelling and dyspnea. Physical examination revealed a prominent cervical mass with tracheal deviation to the left. Her medical history was notable for right nephrectomy performed in 2012 due to clear cell renal cell carcinoma. Neck ultrasonography demonstrated a heterogeneous cystic-solid nodule measuring 61×31 mm occupying nearly the entire right thyroid lobe, along with additional nodules of varying sizes. The patient was biochemically euthyroid. Due to the nodule reaching 6 cm in diameter and causing significant tracheal compression, total thyroidectomy was performed. Histopathological examination revealed a capsulated tumor with extensive hemorrhagic and cystic areas. Immunohistochemical staining showed positivity for RCC, PAX8, CD10, and Vimentin, while TTF-1 and thyroglobulin were negative, confirming the diagnosis of metastatic clear cell renal cell carcinoma.In the postoperative period, the patient developed persistent cough and reported expectoration of mass-like material. Imaging studies and bronchoscopic evaluation revealed a tracheal mass. Consequently, tracheal resection and cervical dissection were performed in October 2024. Pathological examination again confirmed RCC metastasis. The patient is currently being followed by the medical oncology department, and systemic therapy planning is ongoing.

Results: Despite its rich vascular supply, the thyroid gland is an uncommon site for metastatic disease. RCC is among the most frequent primary tumors metastasizing to the thyroid. Previous studies have reported a mean interval of 9-10 years between nephrectomy and thyroid metastasis; in the present case, metastasis occurred 12 years later, consistent with the literature. Tracheal invasion by metastatic RCC is exceedingly rare and has been infrequently reported.

Conclusion: Metastatic RCC should be considered in patients with a history of nephrectomy who present years later with rapidly enlarging thyroid nodules and compressive symptoms. Surgical resection remains an important diagnostic and therapeutic option in selected cases, and a multidisciplinary approach is essential for optimal patient management.

Keywords: Case report, clear cell carcinoma, renal cell carcinoma, thyroid metastasis, tracheal invasion

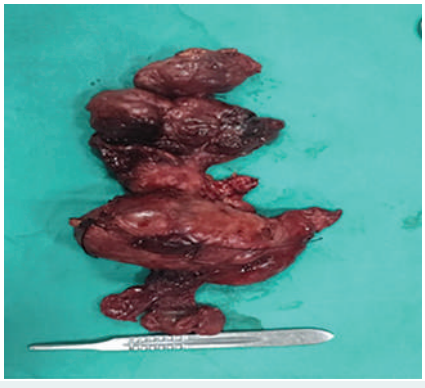


Figure 1. Total thyroidectomy specimen

[P-469]

Axillary lymph node metastasis in papillary thyroid carcinoma at early perioperative period: Report of a case and review of the literature

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Objective: Papillary thyroid carcinoma is a common thyroid cancer that usually grows slowly and has a good prognosis. Despite frequent lymph node metastases, mortality rates are low. However, metastasis to unusual regions such as the axilla can rarely occur.

Material and Methods: A 36-years-old woman with a history of neck swelling was diagnosed with papillary thyroid carcinoma. Cervical lymph node metastasis was detected in the patient.

Results: Total thyroidectomy and lateral-central neck dissection were performed. During postoperative radioactive iodine treatment and whole-body scanning, axillary lymph node metastasis was detected, and the diagnosis of metastasis was confirmed by biopsy.

Conclusion: Risk factors for poor prognosis in papillary thyroid carcinoma include large tumors, extracapsular spread, older age, specific variants, and distant metastasis. Surgical resection is the primary treatment method, aiming to eliminate local and regional spread. However, metastasis to atypical regions such as the axilla is rare and not well understood due to limited data. Such metastases are thought to develop through retrograde spread from the neck or abnormal lymphatic flow caused by surgery. Axillary metastasis is usually detected during or after surgery and may indicate systemic disease. Imaging techniques are important for diagnosis. Although it is generally a sign of poor prognosis, isolated cases without distant metastasis have also been reported. Therefore, the possibility of distant metastasis should be considered in aggressive thyroid cancer treatment.

Keywords: Axillary metastasis, thyroid cancer

[P-471]

Schwannoma of ansa-cervicalis: A rare location for schwannoma

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Objective: Schwannomas are rare neoplasms that originate from the nervous system. We describe a case of schwannoma of the ansa-cervicalis in a patient where preoperative imaging is suggestive of glomus caroticum tumor.

Material and Methods: A 44-year-old man presented to the surgical oncology department with a recurrent anterior triangle neck swelling. Magnatic resonance ımaging (MRI) demonstrated right enhancing soft tissue mass at the carotid bifurcation consistent with glomus tumor. Intraoperatively, the lesion was found abuting the bifurcatuion and arising from the right ansa-cervicalis. Histopathology evaluation revealed schwannoma.

Results: Schwannoma of the ansa-cervicalis is extremely rare. Very few cases have been reported in the literature. Making the preoperative diagnosis is difficult. Preoperative imaging is necessary to rule out other causes of neck masses such as thyroid lesions, lymphadenopathy, and carotid body tumor. Verocay bodies were noted on histology.

Conclusion: Schwannoma of cervical region can have origin from any nerve. Any Neurologic post-operative deficit depends on the nerve of origin and the precision of the surgery performed.

Keywords: Ansa-cervicalis, schwannoma, verocay body

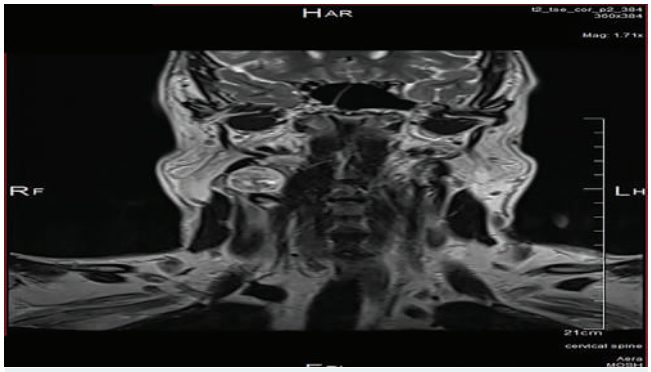


Figure 1. Sagital view of the mass in magnetic resonance investigation.

[P-472]

A rare variation in the gallbladder wall: Ectopic liver tissue and case presentation

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Objective: Ectopic liver tissue (ELT) is a rare developmental anomaly that is not connected to liver tissue but has normal liver histology. It results from the abnormal migration of the hepatic diverticulum during embryological development. It was first reported by Corsy and colleagues in 1922. Types that are located in the gallbladder serosa are usually asymptomatic and are incidentally detected in 0.24-0.47% of cholecystectomy specimens. In this case presentation, accessory liver tissue detected in a patient operated on for symptomatic cholelithiasis is discussed in the context of the literature.

Material and Methods: This study presents the surgical management and histopathological findings of a case in which ectopic liver tissue was incidentally detected in the gallbladder serosa during laparoscopic cholecystectomy planned for symptomatic cholelithiasis.

Results: A 42-year-old female patient with no known comorbidities presented with recurrent right upper quadrant pain. Preoperative ultrasonography revealed multiple stones within the gallbladder, the largest measuring 16 mm. Biochemical analysis, including liver function tests and complete blood count, was within normal limits (AST: 9 U/L, ALT: 11 U/L, ALP: 131 U/L, GGT: 31 U/L, T. Bil: 0,27 mg/dL, WBC: 8800/mm³, Htc: 44%, Plt: 368,000/mm³). During laparoscopic cholecystectomy, an accessory tissue approximately 1.5 cm in size, macroscopically identical to liver parenchyma, was identified on the serosa near the fundus-body junction of the gallbladder. The gallbladder was resected en-bloc with this tissue (Figures 1 and 2). Histopathological examination confirmed chronic cholecystitis, focal gastric metaplasia, and histologically normal liver tissue located on the gallbladder serosa. The patient was discharged with no postoperative complications.

Conclusion: Ectopic liver tissue (ELT) is a rare anatomical anomaly that arises as a result of the abnormal migration or accessory budding of the hepatic diverticulum during the embryonic development stage. Although most frequently reported in the gallbladder serosa (45-47%), it can also be detected in the pancreas, spleen, omentum, and retroperitoneal area. ELT is usually an incidental finding during surgery. Although often asymptomatic, it has the potential to cause pathologies such as hepatitis, cirrhosis, bleeding, and torsion. Due to inadequate ductal drainage, they carry a risk of malignant transformation, and the risk of hepatocellular carcinoma is higher than in normal liver tissue. Therefore, en bloc resection and definitive histopathological evaluation of suspicious tissue nodules detected on the gallbladder is recommended.

Keywords: Ectopic liver tissue, gallbladder, laparoscopic cholecystectomy

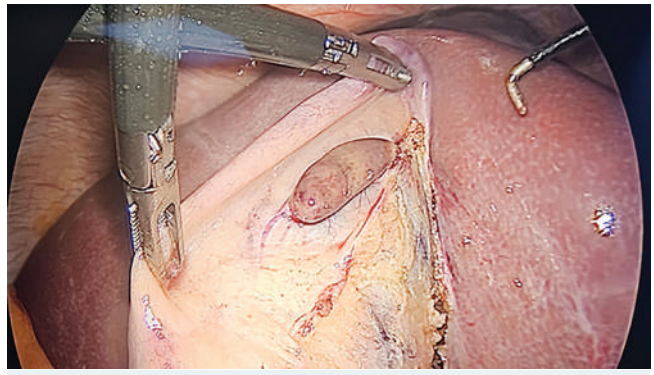


Figure 1. Intraoperative appearance of ectopic liver tissue on the gallbladder serosa.

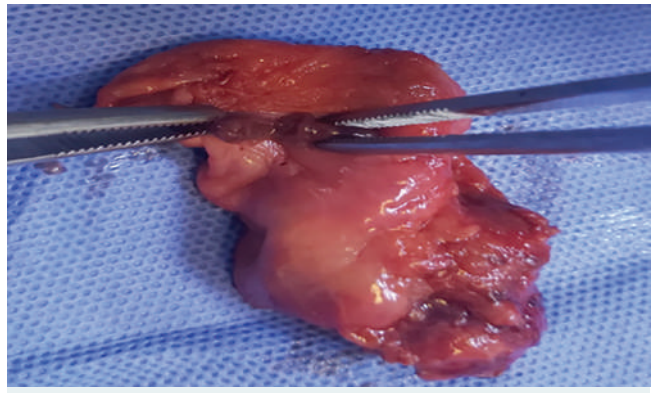


Figure 2. Macroscopic appearance of the gallbladder and ectopic liver tissue after resection.

[P-473]

Case report: Unexpected lymph node metastasis and surgical management in early-stage ampullary adenocarcinoma

Firdevs Melike Onuktav, Oğuzhan Aydın, Yusuf Yunus Korkmaz, Özgür Bostancı, Erdem Kınacı

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Objective: Investigating the etiology of chronic pancreatitis in patients undergoing evaluation for pancreatitis attacks following cholecystectomy can be challenging, as the inflammatory state may mask underlying malignancies. In this report, we present the management of a 52-year-old female patient who presented with a "double-duct" sign and was diagnosed with pT1a adenocarcinoma following a papillectomy.

Material and Methods: Ampullary carcinomas are rare neoplasms originating from the ampulla of Vater. Although they often present early due to biliary obstruction, their biological behavior can be aggressive. The radiologically detected "double-duct" sign is a classic finding for periampullary malignancies. Surgical resection remains the only curative option, with lymph node involvement being the most critical prognostic factor. In our case, the pathology of the papillectomy performed via ERCP (endoscopic retrograde cholangiopancreatography) was reported as "invasive adenocarcinoma (pT1a) arising from a high-grade intraampullary papillary-tubular neoplasm". Due to the proximity of the *in situ* carcinoma to the basal margin, a pylorus-preserving Whipple procedure was performed.

Results: Preoperative computed tomography (CT) revealed a common bile duct width of 12 mm and a Wirsung duct width of 5.5 mm. Preoperative tumor markers were within normal limits (CEA: 0.77 µg/L, CA 15-3: 27.4 U/mL, CA 19-9: 14.9 U/mL). During the Pylorus-Preserving Whipple procedure, the pancreas was noted to be of medium consistency with a 4 mm Wirsung duct. Reconstruction was completed via duct-to-mucosa pancreaticojejunostomy, hepaticojejunostomy, and duodenojejunostomy. Although no residual primary tumor was found in the final pathology specimen, metastasis was detected in 3 out of 26 lymph nodes (3/26). Immunohistochemical analysis showed: CK20(+), CDX-2(+), CK19(+), and CK7(-). The tumor was classified as microsatellite stable (MSS/pMMR).

Conclusion: The most striking aspect of this case is the discrepancy between the T and N stages. While the literature suggests a low risk of lymph node metastasis for pT1a lesions (the earliest stage of invasion), this case demonstrated an 11.5% nodal involvement rate. This highlights the necessity of radical surgery and the significance of nodal spread potential even in early-stage ampullary lesions. Furthermore, the immunohistochemical profile (CK20+, CDX-2+) indicating intestinal-type differentiation is crucial for understanding the biological character of the tumor. Stable tumor markers during the 15-month follow-up support the success of adjuvant therapy and achieving negative surgical margins

Keywords: Adenocarcinoma, ampulla of vater

[P-474]

Case report: Mechanical ileus presenting with segmental ileal ischemia in an elderly patient with no history of previous abdominal surgery

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Objective: In elderly patients, mechanical ileus, especially if accompanied by signs of systemic inflammatory response, should be carefully evaluated for bowel ischemia. Although segmental small bowel ischemia is rare in cases without a history of adhesions, it has high morbidity and mortality. This study presents a case of a patient who presented with ileus and was found to have intraoperative segmental ileal ischemia.

Material an Methods: An 80-year-old male patient with two days of absent stool and gas was evaluated with a preliminary diagnosis of ileus. His medical history included benign prostatic hyperplasia, coronary artery disease, and a history of coronary bypass surgery. Due to clinical deterioration and altered consciousness, laboratory tests and contrast-enhanced abdominal computed tomography (CT) scans were performed. The presence of systemic inflammation and a radiological transition zone led to the patient undergoing emergency surgery.

Results: Laboratory tests revealed a leukocyte count of 33,920/mm³ (neutrophils 92%), CRP of 167 mg/L, and procalcitonin of 2.3 ng/mL. Lactate was 2.7 mmol/L. CT scan showed extensive dilation of the small bowel loops, ileal passage zone at the umbilicus level, wall thickening, and mesenteric fatty plane contamination. No purulent fluid was detected on exploration. A segmental ischemic area approximately 15 cm long with lost peristalsis was observed 20-35 cm proximal to the cecum. The ischemic segment was resected with a 2 cm safe margin from the demarcation line and a side-to-side anastomosis was performed with a stapler.

Conclusion: Segmental bowel ischemia should be considered in patients with advanced age and cardiovascular comorbidities, as well as in the presence of significant inflammatory parameters and mesenteric contamination on CT scans. Early surgical intervention is crucial for prognosis in cases of ileus that develop clinically worsening.

Keywords: Ischemia, ileus

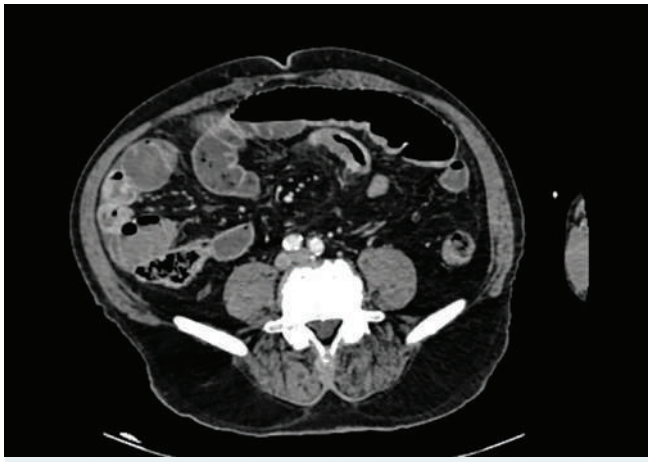


Figure 1. Oral + IV opaque abdomen CT scan. Transition zone.



Figure 2. Intraoperative view. Ischemic segment.

[P-475]

A silent emergency after vaginal birth: Obstetric anal sphincter injury

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Objective: Obstetric anal sphincter injury (OASIS) is the most severe form of perineal trauma, involving perineal damage extending to the anal sphincter complex after vaginal delivery. Its incidence varies due to differences in diagnosis and reporting methods. OASIS affects 5-7% of women having their first vaginal delivery. However, this rate rises to 26% in evaluations performed with ultrasonography. The most important risk factors include forceps delivery, shoulder dystocia, advanced gestational age, induction of labor, and episiotomy. These injuries occurring after vaginal delivery lead to long-term morbidities in women that seriously reduce their quality of life. In this case, we present the management of a successful obstetric anal sphincter injury following early intervention.

Material and Methods: In this case, the diagnosis, treatment and follow-up process of a patient who experienced anal sphincter injury after vaginal delivery at our clinic was evaluated.

Results: A 23-year-old gravida 1, parite 0 female patient was admitted to our clinic for vaginal delivery due to term pregnancy. Labor progressed spontaneously. A mediolateral episiotomy was performed at 7 o'clock during the second stage of labor. The fetal presentation was cephalic and the newborn's birth weight was measured as 3000 gr.During the postpartum perineal and rectovaginal examination, a tear was observed at the 3-9 o'clock position, with a full-thickness tear in the external anal sphincter and a tear of >50% in the internal anal sphincter. No injury was observed in the anorectal mucosa. A general surgeon was consulted for the case. The anal sphincter complex was repaired using the overlapping sphincteroplasty technique with 3.0 PDS.The patient was discharged on the 4th postoperative day. No significant anal sphincter loss was observed on endoanal ultrasound performed at 8 weeks postoperatively. No anal incontinence or other complications were observed during postoperative follow-up.

Conclusion: Early and accurate diagnosis is critical for better functional outcomes.Early diagnosis can be made through systematic perineal examination and rectal examination after vaginal delivery. However, diagnosis is missed in 80% of cases. Endoanal ultrasonography is the gold standard for assessing the location and extent of sphincter damage, while anal manometry is the gold standard for assessing sphincter function. Primary surgical repair performed immediately after diagnosis is the primary treatment method. End-to-end or overlap techniques are the main techniques frequently used in repairs. OASIS can lead to morbidities such as perineal pain, sexual dysfunction, wound dehiscence, abscess, rectovaginal fistula, and anal incontinence; therefore, early and accurate diagnosis is of vital importance. Repair of these injuries by experienced clinicians is important for successful outcomes.

Keywords: Anal sphincter, delivery, obstetrics

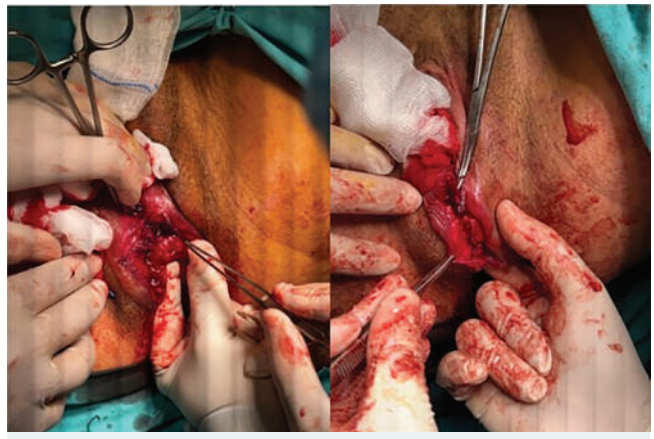


Figure 1. Before and after sphincter injury.

[P-476]

Ileocecal mesenteric duplication cyst in an adult patient: A rare case presenting with mimicry of acute appendicitis

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Objective: Gastrointestinal duplication cysts are rare congenital lesions associated with embryological developmental anomalies and are mostly diagnosed in childhood. Symptomatic cases in adults are rarer and may mimic acute abdominal conditions, particularly acute appendicitis. This case presentation describes the clinical, imaging, surgical, and histopathological findings of a mesenteric duplication cyst in the ileocecal region in an adult patient presenting with right lower quadrant pain and vomiting.

Material and Methods: Clinical data were extracted from institutional records. Contrast-enhanced abdominal CT was reviewed, followed by laparoscopic exploration and ileocecal segmental resection with primary anastomosis. The specimen underwent gross and histopathological evaluation, and postoperative course with short-term follow-up was recorded.

Results: A 37-year-old woman presented with a 2-day history of right lower quadrant pain with nausea and vomiting. Exam showed minimal tenderness without guarding or rebound. Laboratory tests were not suggestive of infection/inflammation (normal leukocytes and lactate, low CRP). Abdominal CT showed a ~25×25 mm cystic lesion on the mesenteric surface of the ileocecal region, suggestive of a duplication cyst; the appendix was normal with no radiological evidence of acute appendicitis. Gynaecological assessment found no acute pathology. Laparoscopy identified a cyst adjacent to the ileum; ileocecal segmental resection with primary anastomosis was performed. No perioperative complications occurred. Oral intake was resumed on postoperative day 3 and the patient was discharged on day 5. No recurrence or re-admission occurred on short-term follow-up. Gross pathology showed a 2.5×2×1.5 cm ileal cyst with a smooth inner surface and serous content. Histopathology confirmed an ileocecal duplication cyst with mucosal ischaemia; seven lymph nodes were reactive, the vermiform appendix was normal, and no malignancy or ectopic (gastric/pancreatic) mucosa was detected.

Conclusion: Adult duplication cysts are rare yet may mimic acute appendicitis with right lower quadrant pain. Here, low inflammatory markers and a normal-appearing appendix on imaging supported alternative aetiologies. Symptoms may arise from compression, torsion/stretching, raised intraluminal pressure and resulting mucosal ischaemia, presenting as pain and vomiting in adults. Given their close relationship to the bowel wall and vascular supply, segmental resection is a safe, curative option. Accordingly, ileocecal duplication cyst should remain a rare but clinically relevant differential diagnosis in adults with right lower quadrant pain, especially when typical appendicitis laboratory and imaging findings are absent. This case highlights mucosal ischaemia as a likely mechanism and suggests that early diagnosis and timely resection minimise morbidity and support favourable outcomes.

Keywords: Ileocecal duplication cyst, mesenteric duplication, acute abdomen in adults

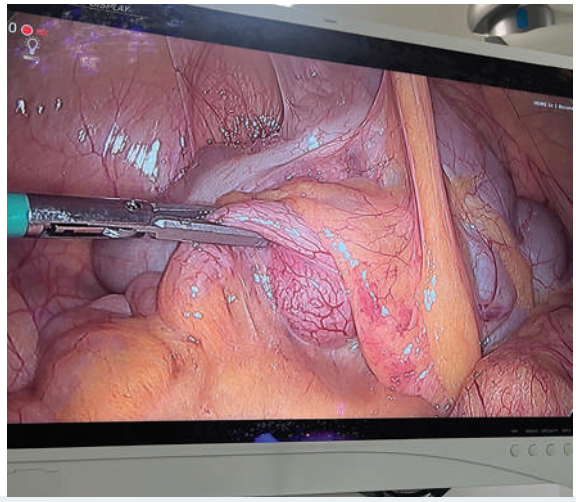


Figure 1. Duplication cyst.

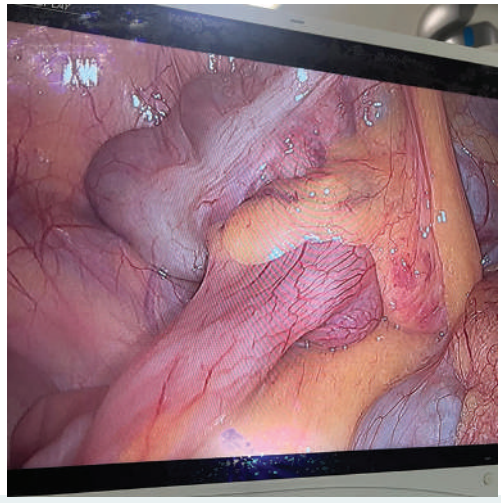


Figure 2. Duplication cyst.

Table 1. Summary of the clinical, imaging, surgical, and pathological characteristics of the case

Parameter	Findings
Age/gender	37 years old/female
Presentation	Emergency department
Duration of symptoms	2 days
Complaint	Right lower quadrant pain, nausea-vomiting
Physical examination	Minimal tenderness in the right lower quadrant, no guarding/rebound
ASA score	II
Laboratory	Leukocytes: normal (6.8), CRP low (~1.5), lactate normal (1.42), Hb normal
Radiological findings (CT)	Approximately 25×25 mm mesenteric cystic lesion in the ileocecal region; appendix normal; minimal free fluid
Preliminary diagnosis	Mesenteric duplication cyst

Table 1. Continued

Parameter	Findings
Surgical approach and procedure performed	Laparoscopic exploration followed by ileocecal segmental resection + primary anastomosis
Operation duration	150 minutes
Intraoperative Complication	None
Postoperative Complications	None
Oral intake	Postoperative day 3
Length of hospital stay	5 days
Macroscopic pathology	2.5×2×1.5 cm cystic lesion; serous content; smooth inner surface; wall thickness 0.2 cm
Histopathological diagnosis	Ileocecal duplication cyst
Additional histological findings	Mucosal ischaemia
Lymph nodes	7 reactive
Appendix	Normal
Ectopic mucosa	None
Malignancy	None
Follow-up period	1 month
Recurrence/mortality	None

[P-477]

Management of a case of gallstone ileus mimicking intussusception and literature review

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Objective: Gallstone ileus is a pathology that occurs when gallstones create an obstruction in the intestines via a bilioenteric fistula. It is especially common in elderly patients and is difficult to diagnose. Gallstone ileus has high mortality and morbidity rates due to its common occurrence in the elderly and the difficulty in diagnosing it. Treatment requires surgical removal of the stone. Fistula repair can be performed in the same session, but in high-risk patients, passage surgery should be performed and fistula repair should be postponed to a second session. The literature indicates that a two-stage treatment approach is more appropriate and that early intervention reduces mortality.

Material and Methods: We present a patient who was hospitalized in the intensive care unit, was consulted to our department due to ileus, and was operated on with a suspicion of intussusception, in whom gallstone ileus was identified intraoperatively.

Results: A 70-year-old female patient with a known diagnosis of Alzheimer's disease, immobilized due to stroke, and being monitored in the intensive care unit for pneumonia with a PEG catheter, underwent abdominal CT scanning due to bile-stained fluid coming from the PEG tube and the cessation of gas and stool passage for the past 5 days. Due to a suspicious appearance of intussusception in approximately 3.5 cm of the small intestine on the CT scan, we decided to perform surgery on the patient (Figure 1). During expulsion, obstruction and edema due to gallstones were observed in the small intestine approximately 140 cm from the ileocecal valve. There was dilation in the proximal bowel loops. The approximately 3.5 cm stone was removed via enterotomy, and the operation was completed (Figure 2). The patient experienced no complications during intensive care monitoring and was started on PEG feeding on the 3rd day after surgery.

Conclusion: In our case, where there was no known diagnosis of cholelithiasis, the presence of Alzheimer's disease and immobility in the patient led to the cholecystitis attacks being overlooked. The presence of intestinal edema due to stone and a target sign on the CT scan raised suspicion of involution in the 3.5 cm segment. It is important to remember that in the rare condition of gallstone ileus, early intervention is life-saving and that in emergency situations, enterolithotomy alone is sufficient. In intensive care, gallstone ileus should be considered in elderly patients diagnosed with ileus, even without a history of independent cholelithiasis.

Keywords: Ileus, intussusception, gallstones

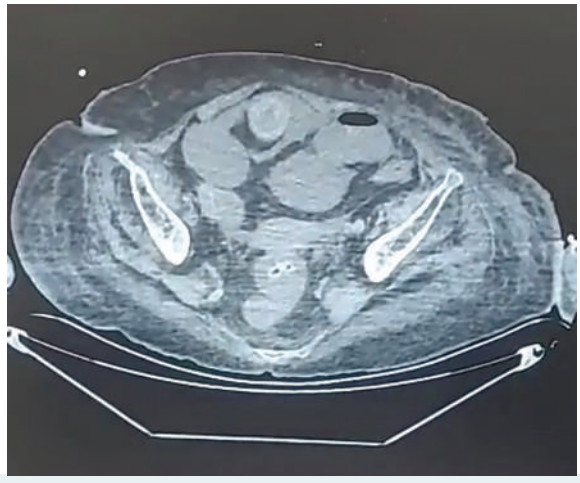


Figure 1.

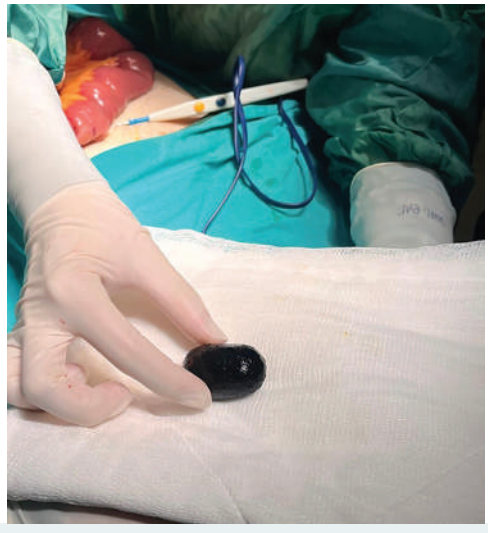


Figure 2.

[P-478]

Transverse colon volvulus: A rare cause of colonic mechanical obstruction

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Objective: Volvulus is a critical clinical condition requiring emergency surgical intervention, characterized by lumen obstruction and vascular occlusion leading to ischemia or necrosis of the colonic wall as a result of a hollow organ twisting around its own axis. Among colon volvuluses, the sigmoid colon (75-80%) and cecum (15-20%) are the most frequently affected regions. Transverse colon volvulus (TCV) accounts for only 1-4% of all cases. Etiological factors include an abnormally long transverse colon, a narrow or hypermobile mesentery, chronic constipation, distal obstructions, and adhesions resulting from previous abdominal surgeries.

Material and Methods: In this case, a 34-year-old patient who underwent surgery due to TCV is presented.

Results: Thirty-four-year-old male patient presented to our emergency department with complaints of abdominal pain, nausea, and vomiting persisting for approximately one day. The patient's history included intermittent abdominal pain for the past two years and a mesenteric detorsion operation one year ago for intermittent midgut volvulus due to intestinal malrotation. Laboratory tests at the time of admission showed no significant pathology. On physical examination, abdominal distension was present, but there was no defense or rebound tenderness. A contrast-enhanced abdominal CT scan revealed a sudden change in calibration at the level of the descending colon, the pathognomonic "whirl sign" in mesenteric structures, and significant colonic dilatation reaching 9 cm proximally. During a therapeutic colonoscopy, a volvulus area was identified at the splenic flexure. Since no signs of ischemia were found, colonoscopic detorsion and decompression were achieved. However, on the third day of follow-up, the cessation of gas and stool passage, abdominal distension, and the detection of the typical "coffee bean sign" on direct abdominal X-ray led to a repeat colonoscopic decompression. Following decompression, the patient was taken to surgery. During the operation, it was confirmed that the transverse colon mesentery was considerably long, the transverse colon had twisted around its own axis at the splenic flexure,and the proximal segments were dilated. A left hemicolectomy was performed on the patient. The postoperative course was uneventful, and the patient was discharged with full recovery on the 9th day.

Conclusion: TCV is a difficult condition to diagnose due to its rarity and non-specific clinical symptoms. High rates of morbidity and mortality have been reported in delayed cases. TCV should be considered not only in the elderly population but also in young patients and individuals with chronic obstruction attacks, as seen in our case. Abdominal CT and the "whirl sign" are of critical importance in diagnosis. To minimize the risk of recurrence, resection of the affected segment and primary anastomosis is the most reliable method rather than detorsion alone. Volvulus should be considered in the differential diagnosis of every patient presenting with mechanical large bowel obstruction; it must be remembered that early intervention.

Keywords: Transvers colon volvulus, whirl sign, intestinal obstruction

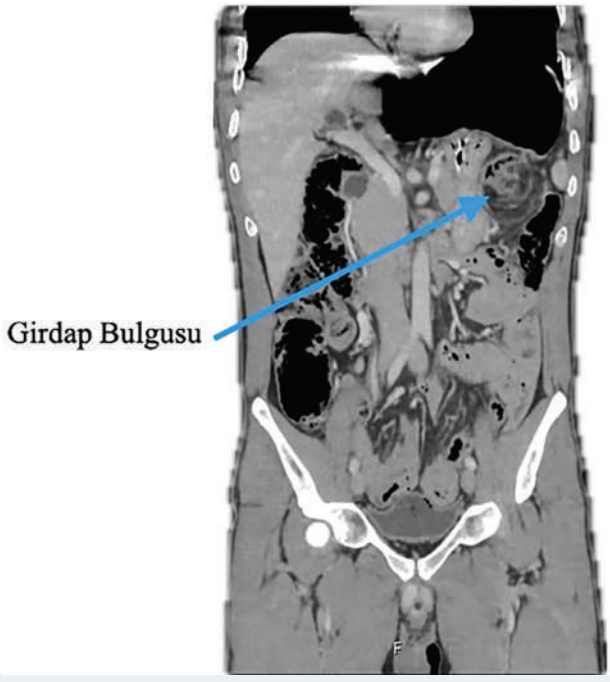


Figure 1. Whirl sign on CT imaging.

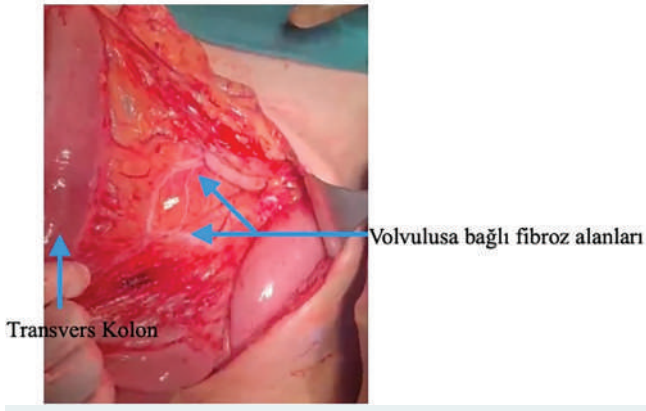


Figure 2. Perioperative findings of transverse colon volvulus.

[P-484]

Sigmoid colon duplication: A rare case report

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Objective: Colonic duplications are rare congenital anomalies of the gastrointestinal tract and are exceptionally uncommon in adults. Clinical manifestations are often non-specific and may mimic diverticulitis, perforation, or obstruction. We present a rare case of sigmoid colon duplication identified intraoperatively in a patient operated on for suspected diverticulitis.

Material and Methods: A 38-year-old male patient was hospitalized with complaints of abdominal pain and constipation. Abdominal computed tomography demonstrated findings consistent with diverticulitis, along with suspected disruption of wall integrity at the level of the sigmoid colon. Based on clinical and radiological evaluation, the patient was scheduled for surgery.

Results: Intraoperative exploration revealed duplication of the sigmoid colon. Multiple diverticula were observed in the proximal colon segments. Due to the presence of extensive diverticular disease, total colectomy with ileorectal anastomosis was performed. The postoperative course was uneventful, and the patient was discharged in good condition on postoperative day seven.

Conclusion: Colonic duplication is an extremely rare condition in adults, and preoperative diagnosis remains challenging. Its association with diverticular disease has been rarely reported. Colonic duplication should be considered in the differential diagnosis in the presence of atypical clinical and radiological findings. Intraoperative findings play a decisive role in determining the surgical strategy.

Keywords: Colonic duplication, diverticulitis, total colectomy

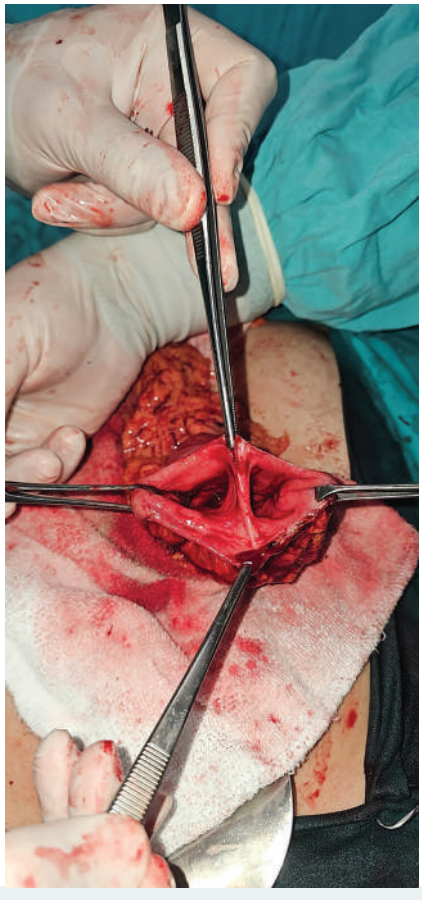


Figure 1. Duplication and double lumen image in the sigmoid colon.

[P-485]

Temporary peripheral facial nerve paralysis after facial mask hyperventilation: A case report

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Objective: Facial paralysis can be primary or secondary. Secondary peripheral facial paralysis most often results from various factors such as trauma, viral infections, post-surgical complications, and tumor compression. In this case, we aimed to present a case of peripheral facial paralysis that developed after mask ventilation, along with a review of the literature.

Material and Methods: Facial paralysis due to mechanical trauma after mask ventilation is a previously defined, rare complication. Pressure behind the mandible during face mask use, use of an inappropriately sized laryngeal mask/endotracheal tube, or difficult intubation can increase the risk of nerve injury.

Results: A 37-year-old female patient presented to our clinic with a palpable mass in her left breast. Investigations revealed a diagnosis of invasive ductal breast cancer. A racket mammoplasty + SLNB operation was planned. Following surgery, during tracheal extubation, the patient developed laryngospasm, prompting hyperventilation via mask by the anesthesiologist. With an oxygen saturation above 95%, the patient was admitted to the ward. During follow-up, the patient reported numbness on the left side of her lip and surrounding area. Neurological examination revealed findings consistent with peripheral facial paralysis. Following a neurology consultation, brain computed tomography and diffusion magnetic resonance imaging scans were performed. No pathological findings were detected, and neurology diagnosed peripheral facial paralysis secondary to mechanical compression during positional or mask ventilation. The patient was treated with 100 mg prednisolone and 40 mg pantoprazol intravenously. The patient, whose symptoms improved after the procedure, was discharged from the hospital.

Conclusion: The incidence of peripheral nerve injuries after general anesthesia is less than 1%. Perioperative nerve damage is a rare but known complication. During anesthesia, ventilation with a face mask and the jaw thrust maneuver can cause damage to the branches of the facial nerve. Cases of facial nerve and its branches (mental and buccal nerves) damage due to face mask compression exist in the literature. Treatment involves steroids and neurotropic B vitamins such as thiamine (B1), pyridoxine (B6), and cobalamin (B12).

Keywords: Facial nerve paralysis, facial mask, temporary

[P-486]

Synchronous small bowel GIST with unique exophytic hyaline degeneration in a patient with advanced gastric adenocarcinoma: Case report

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Objective: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the digestive system. The frequency of synchronous (simultaneous) occurrence of GISTs with other primary gastrointestinal (GI) malignancies, especially gastric cancer, has been significantly reported in the literature. However, it is rare for these tumors to contain macroscopically "pearl-like" cystic and hyaline degeneration areas, and for this structure to be located on the serosal surface, which is a visually misleading presentation.

Material and Methods: A 75-year-old female patient presented with recent vomiting and excessive weight loss. An upper GI endoscopy revealed edematous and polypoid lesions constricting the gastric corpus from the fundus to the antrum. Biopsy results indicated poorly differentiated adenocarcinoma. Due to severe gastric obstruction, the patient underwent palliative surgery.

Results: During laparotomy, locally advanced gastric cancer was detected that completely involved the stomach, had penetrated the serosa, and was adherent to the colonic mesentery to a degree that made dissection impossible. The patient was assessed as inoperable and unresectable. A jejunostomy was planned for palliative feeding. During preparation for jejunostomy, a second synchronous mass was detected approximately 50 cm from the ligament of Treitz. It originated from the intestinal wall, showed exophytic growth, contained areas with a distinct creamy-white colour resembling a cap at the apex, and was partially cystic in structure. This mass was resected. Histopathological and histochemical examinations revealed a 4x3 cm cystic area filled with serous fluid on the outer surface of the 5x4x4 cm mass removed from the small intestine. Brown hemorrhagic foci were noted in the remaining solid areas. Pathological diagnosis: GIST of the small intestine. Immunohistochemistry: DOG1 (+) and CD117 (+) (diffuse and strongly positive). Intraoperative view of a well-defined, exophytic GIST located approximately 50 cm from the ligament of Treitz. At the apex of the tumor, a bright white, homogeneous, and glassy "pearl-like" appearance is noted, consistent with histopathologically significant hyaline and cystic degeneration.

Conclusion: This case is notable for its exophytic serosal hyalinization, which is the pathological counterpart of the pearl-like bright structure observed in the surgical photograph. The "marked hyalinization on free surfaces" mentioned in the pathology report refers to the tumor's stroma becoming homogeneous and glassy. This finding, combined with a low mitotic rate and low-risk of progression, supports a biologically indolent tumor profile. Furthermore, the synchronous detection of a GIST in a patient with advanced gastric cancer once again highlights the importance of surgical exploration. This case presentation demonstrates that GISTs can present with intense hyaline and cystic degeneration, deviating from their usual solid appearance. We believe that recognising such degenerative changes, especially in the presence of synchronous tumors, may be valuable in determining the surgical strategy.

Keywords: Gastrointestinal stromal tumor (GIST), hyaline degeneration, synchronous tumors



Figure 1.

[P-487]

Giant Nuck canal cyst: A case report

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Objective: Nuck's canal cyst is a congenital pathology that is rare in women and develops as a result of the peritoneal extension failing to close. While most cases are small in size, cysts reaching enormous proportions are quite rare. This article presents a case of an enormous Nuck's cyst extending from the middle section of the labium majus to the uterus.

Material and Methods: A 28-year-old female patient presented to the outpatient clinic complaining of increasing pain and swelling in the right groin area over the past few weeks. Her systemic examination was normal. Physical examination revealed a mobile, smooth-surfaced, fluctuant, painless mass palpable in the middle section of the right labium majus. No redness or fistula opening was detected on the skin. Superficial ultrasonography revealed a thin-walled, fluid-filled cystic lesion extending from the level of the labium majus along the right inguinal canal, communicating with the peritoneal cavity. The findings were considered consistent with a Nuck's canal cyst. Surgical exploration revealed that the cyst originated in the middle portion of the labium majus and extended to the uterine level of the peritoneal opening. The cyst was completely excised by dissection up to the intact portion of the peritoneum. The peritoneal defect was primarily closed, and a probing mesh support was applied to prevent possible hernia formation. No complications were observed during postoperative follow-up, and the patient was discharged one day after surgery. The excised cyst measured 12×3 cm macroscopically. Histopathological examination reported a cystic structure lined with a single layer of squamous and cuboidal epithelium and surrounded by a fibrous capsule; the findings were consistent with a Nuck canal cyst. A smooth-walled, translucent cystic structure associated with the hernia sac is observed during inguinal exploration.

Results: Embryologically, the peritoneal extension continues from the inguinal canal to the labium majus, and normally undergoes obliteration shortly after birth. If this canal fails to close, peritoneal fluid may leak into the labium majus, forming a cystic structure. Clinically, patients typically present with a painless swelling in the groin. The most common differential diagnoses are indirect inguinal hernia, lymphangioma, lipoma, Bartholin's cyst, and epidermoid cyst. Ultrasonography is usually sufficient for diagnosis. The preferred method of treatment is surgical excision.

Conclusion: Nuck's canal cyst, although rare, should be considered in the differential diagnosis of inguinal masses in women. Cases reaching enormous sizes are very rare. Excellent prognosis is achieved with surgical excision and appropriate peritoneal repair. This case is noteworthy as one of the largest Nuck's cysts in the literature due to its size.

Keywords: Inguinal canal, labium majus, Nuck channel, peritoneal cyst

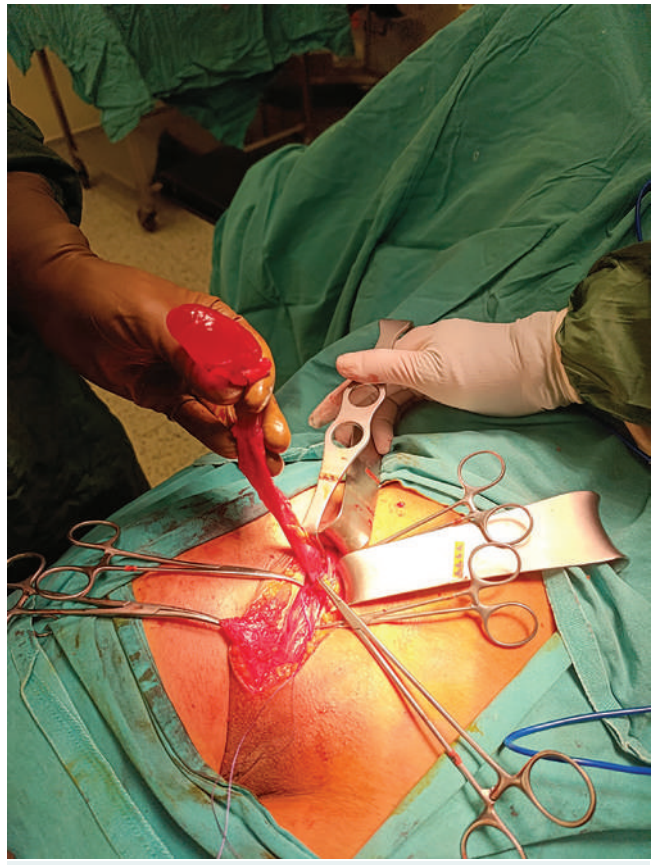


Figure 1. Intraoperative view of a canal of Nuck cyst.

[P-490]

Interparietal Spiegel hernia: Case report

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Objective: Spiegel's hernia was first described in 1645 by the Belgian anatomist Adriaan van den Spiegel, and later Klinkosch reported the first case of a Spigelian hernia in 1764. It constitutes 1-2% of all abdominal hernias. The junction of the semilunar and arcuate lines is the weakest part of the Spigelian fascia and is responsible for most Spigelian hernias. Interparietal hernias, also known as interstitial hernias, are defined by the formation of a hernia sac located between the layers of the anterior abdominal wall.

Material and Methods: In this case report, we aimed to present a case of interparietal Spiegel hernia along with a review of the literature.

Results: A 62-year-old female patient presented to our clinic with abdominal pain in the left quadrant below the umbilicus. Physical examination revealed no palpable lesions or hernia sacs. Laboratory findings showed no pathological evidence, so an abdominal ultrasound was planned. The ultrasound revealed bowel loops between the muscle planes in the left lateral quadrant of the abdomen. With a preliminary diagnosis of Spiegel hernia, a computed tomography (CT) scan of the abdomen was performed. The CT scan showed a Spiegel hernia between the muscle planes in the semilunar line. The patient was diagnosed with an interparietal Spiegel hernia, and surgery was planned. The external oblique muscle fascia was opened approximately 2 cm medially. It was observed that the internal oblique fascia had lost its integrity in an area of approximately 1 cm, and that preperitoneal fat tissue and bowel loops had herniated through this area. The hernia sac was freed from the surrounding tissues and sent back into the abdominal cavity. The internal oblique muscle fascia was repaired with prolene and a prolene mesh was placed over it.The operation was completed by closing the external oblique muscle fascia with prolene.

Conclusion: Spigelian hernia occurs through the Spigelian aponeurosis, which is the aponeurosis of the transversus abdominis muscle bounded laterally by the semilunar line and medially by the lateral border of rectus abdominis. The exact cause of Spigelian hernia is not known, but its development is related to many factors such as collagen disorders, aging, obesity, rapid weight loss, multiple pregnancies, chronic lung disease, trauma, history of surgery, and reproductive diseases. The CT is the method of choice in the differential diagnosis, which can exclude the presence of an obstructing tumor. However, it is reported that both CT and herniography are not successful in differentiating the different types of inguinal hernia.

Keywords: Hernia, interparietal, Spiegel

[P-491]

Pseudoperitoneum formation due to misplacement of dual mesh: A case evaluated with suspicion of recurrent hernia

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Objective: The use of prosthetic mesh in incisional hernia repair reduces recurrence rates; however, rare complications related to mesh malposition may cause diagnostic difficulties. Improper anatomical placement of dual mesh can lead to pseudoperitoneum and chronic seroma formation, which may mimic recurrent hernia on radiological imaging.

Material and Methods: A 70-year-old female patient with a history of multiple incisional hernia surgeries presented with abdominal pain and swelling. Computed tomography demonstrated findings suggestive of recurrent incisional hernia and ileus. As no clinical signs of ileus were present, the patient was evaluated electively and scheduled for surgical exploration.

Results: Surgical exploration revealed no true hernia defect. Instead, an epithelialized pseudoperitoneal layer with a large associated seroma sac was identified between the previously placed dual mesh and the subcutaneous tissue. Seroma drainage was performed, the epithelialized surface was mechanically disrupted, and sterile talc was applied to promote adhesion. No postoperative complications were observed.

Conclusion: Malposition of dual mesh may result in pseudoperitoneum and seroma formation, leading to radiological findings that can be misinterpreted as recurrent incisional hernia. In patients with a history of repeated hernia repairs, clinical-radiological correlation is essential to avoid misdiagnosis and unnecessary surgical intervention.

Keywords: Incisional hernia, dual mesh, seroma, pseudoperitoneum

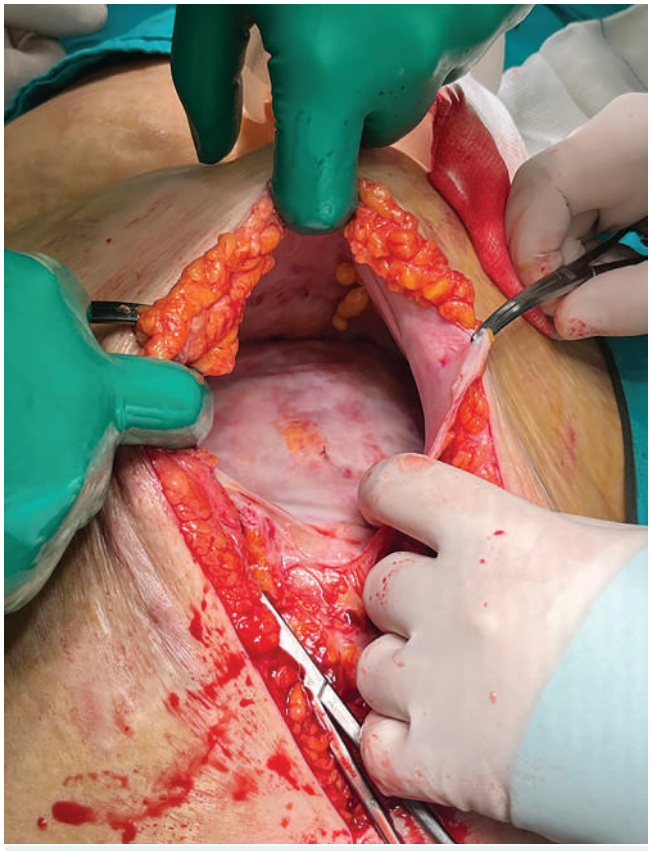


Figure 1. Pseudoperitoneum and sac formation.



Figure 2. Application of sterile talc.

[P-492]

A case of peritoneal mouse (peritoneal loose body) found incidental in a patient operated on for incisional hernia

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Objective: Peritoneal loose bodies (PLBs) are defined as benign structures, usually calcified, found freely within the abdominal cavity. They most commonly arise from torsion, infarction, and rupture of epiploic appendages. The detached fragment gradually becomes surrounded by a fibrous capsule and dystrophic calcification, acquiring a typical "egg-like" structure. PLBs are usually small (<2 cm) and are detected incidentally; however, larger ones are termed "giant PLBs" and are rarely noticed during surgery. In this article, we aim to present a case of a multifocal PLB incidentally detected in a patient who had undergone resection after ischaemia and had portal vein thrombosis.

Material and Methods: A 72-year-old male patient underwent small bowel resection and anastomosis three years ago due to mesenteric ischaemia. He was operated on in the general surgery clinic due to an incisional hernia in his current presentation. Portal vein thrombosis was detected in the patient's recent angiography-abdominal CT scan. During the abdominal exploration performed during the operation, free-floating, approximately 5 cm in diameter, white-grey, oval, smooth-surfaced masses were detected. In addition, necrotic areas in the omentum and 0.5-1 cm masses associated with the omentum were observed. The lesions were excised and sent for pathology. Macroscopically, well-defined, firm, white-grey calcified nodules were observed. Microscopic examination revealed necrotic adipose tissue in the centre, surrounded by a dense fibrotic capsule and areas of dystrophic calcification. No tumour proliferation was observed. The findings were reported as "PLB (peritoneal mouse)".

Results: PLB is a formation that is usually detected incidentally and has a clinically silent course. Most cases are detected during laparotomy, laparoscopy or imaging. Etiologically, besides epiploic appendage torsion, omental or peritoneal fat necrosis may also be a source. In our case, circulatory disorders such as previous ischaemic bowel resection and portal vein thrombosis may have predisposed the omental fat tissue to ischaemic necrosis. Therefore, the formation of PLB was likely considered a sequela of ischaemic fat necrosis. Giant PLB cases are rare in the literature; most are between 2 and 4 cm in size. The presence of multifocal lesions measuring approximately 5 cm in our case makes it interesting.

Conclusion: PLBs are generally benign and asymptomatic. However, they may be more common in patients who have previously undergone abdominal surgery or experienced ischaemic events. When detected incidentally during surgery, their characteristic macroscopic and pathological features should be known to avoid confusion with malignancy.

Keywords: Calcification, intra-abdominal mass, necrotic adipose tissue, omental body, peritoneal loose body



Figure 1. Intraoperative appearance of peritoneal loose bodies. During abdominal exploration, white-grey, smooth-surfaced PLBs found free around the omentum (view from the surgical field).

[P-493]

A rare case: Primery thyroid amyloidosis

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Objective: Amyloid goiter results from the accumulation of amyloid proteins in the thyroid gland. Amyloid deposition can cause compressive symptoms along with enlargement of the thyroid gland. Treatment is surgical, especially if there is a compressive symptom. Here, we present a rare case of primary thyroid amyloidosis diagnosed by histopathological examination after surgery.

Material and Methods: Immunohistochemical staining shows a positive result with amyloid A.

Results: A 36-year-old female patient with no underlying medical conditions was referred from the endocrinology clinic to the general surgery outpatient clinic in January 2026 with complaints of throat swelling and difficulty breathing. Examination revealed swelling in the neck. Thyroid ultrasound showed a multinodular goiter. Thoracic and abdominal computed tomography scans showed no signs of systemic amyloidosis. Surgery was planned due to compression symptoms. The patient underwent bilateral total thyroidectomy. She was discharged on the 3rd postoperative day after recovery. Pathology revealed positive staining for amyloid A, confirming thyroid amyloidosis.

Conclusion: Amyloid goiter is an extremely rare pathological condition caused by amyloid infiltration of the thyroid tissue. It occurs in association with primary or secondary amyloidosis, more frequently seen in secondary amyloidosis. Preoperatively, it simulates a multinodular goiter. Surgical intervention is necessary to diagnose the condition and alleviate the compressive symptoms.

Keywords: Bilateral total thyroidectomy, multinodular goiter, thyroid amyloidosis

[P-495]

Adult patient with an undescended testis within an inguinal hernia sac: A rare case

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Objective: Inguinal hernia is the most common abdominal wall hernia in adults and represents a frequent reason for admission to surgical clinics. Although it usually presents with groin swelling and pain, it may occasionally be associated with congenital anomalies. Cryptorchidism, defined as the absence of the testis from the scrotum, is commonly diagnosed in childhood but is rare in the adult population. While the coexistence of inguinal hernia and cryptorchidism is frequently observed in children, it has been reported only rarely in adults. Adult cases of cryptorchidism are most often detected incidentally during surgical procedures performed for inguinal hernia. Testes that remain outside the scrotum for a prolonged period are associated with an increased risk of atrophy and malignant transformation, making appropriate surgical management essential. In this case report, we present an adult patient in whom an undescended testis was identified within the inguinal hernia sac and managed surgically in the same session, along with a brief review of the relevant literature.

Material and Methods: A 25-year-old male patient presented to the hospital with complaints of pain and swelling in the right groin region. He had no known comorbidities and no history of previous surgical procedures. Physical examination revealed both direct and indirect inguinal hernias palpable in the right inguinal area.

Results: Superficial ultrasonography demonstrated herniation of intra-abdominal fatty tissue and bowel loops into the inguinal canal through a 16-mm defect in the right lower quadrant during the Valsalva maneuver, with the hernia sac being reducible. No additional pathology or mass was detected. The patient underwent elective surgery, during which an indirect inguinal hernia was identified. Opening of the hernia sac revealed an atrophic undescended testis (Figure 1). Urology was consulted intraoperatively, and orchiectomy was performed. The postoperative course was uneventful, and the patient was discharged on postoperative day 2. Histopathological examination confirmed an atrophic testis.

Conclusion: Although inguinal hernia is common in adult males, the presence of an undescended testis within the hernia sac is extremely rare and is usually diagnosed intraoperatively. Adult cases of cryptorchidism are generally detected incidentally during inguinal hernia repair, and prolonged extra-scrotal location of the testis is associated with an increased risk of atrophy and malignant transformation; therefore, orchiectomy is recommended in adult patients. This case emphasizes that, although rare, cryptorchidism should be considered during inguinal hernia surgery in adult male patients and demonstrates that a multidisciplinary approach is safe and effective.

Keywords: Inguinal hernia, undescended testis, congenital anomaly, atrophic testis

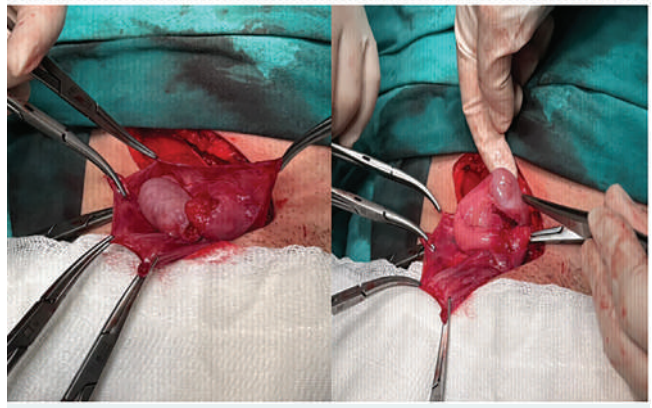


Figure 1. Intraoperative appearance of peritoneal loose bodies. During abdominal exploration, white-grey, smooth-surfaced PLBs found free around the omentum (view from the surgical field).

[P-498]

Canal of Nuck cyst detected during laparoscopic TAPP repair for presumed inguinal hernia in a female patient: A case report

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Objective: A canal of Nuck cyst is a rare condition in adult women that results from incomplete obliteration of the processus vaginalis. It may present with clinical findings similar to those of an inguinal hernia and therefore is frequently misdiagnosed or underdiagnosed. Preoperative imaging modalities are not always diagnostic, and the diagnosis is most often established based on intraoperative findings and histopathological examination.

Material and Methods: A 49-year-old female patient presented with right groin pain. Physical examination revealed tenderness in the right inguinal region. Based on the clinical findings, ultrasonographic evaluation was performed. On subsequent ultrasonography, findings consistent with a right indirect inguinal hernia were observed, while no cystic lesion or additional pathology was detected. Accordingly, the patient was scheduled for laparoscopic surgery with a prediagnosis of inguinal hernia, and a transabdominal preperitoneal (TAPP) repair of the right inguinal hernia was planned.

Results: During laparoscopic exploration, a cystic lesion containing serous fluid without bowel or omental involvement was identified in the right inguinal region. The lesion was considered intraoperatively to be consistent with a canal of Nuck cyst and was totally excised. Subsequently, the existing inguinal defect was repaired using the TAPP technique. Histopathological examination of the excised specimen revealed a cystic structure lined by flattened single-layer epithelium. Immunohistochemical analysis demonstrated positive staining for calretinin, while ERG, CD31, and p53 were negative. These findings were reported as consistent with a mesothelial cyst (canal of Nuck cyst). The postoperative course was uneventful, and the patient was discharged without complications.

Conclusion: Even in female patients in whom an inguinal hernia is identified on preoperative ultrasonography and no cystic lesion is detected, a canal of Nuck cyst may be encountered during surgical exploration. Therefore, the laparoscopic approach offers significant advantages in terms of both accurate diagnosis and simultaneous treatment.

Keywords: Canal of Nuck cyst, case report, inguinal hernia, laparoscopic surgery

[P-499]

A rare but aggressive appendix tumor: goblet cell carcinoma

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Objective: Goblet cell carcinoma is a rare primary tumor of the appendix, occurring in the sixth decade of life, with equal incidence in men and women, usually spreading to peritoneal surfaces without hematogenous metastasis. Like other primary appendix tumors, it may present with acute appendicitis and diagnosed incidentally, due to its aggressive spread, it may also be detected in the late stages. It contains both epithelial and neuroendocrine components and is classified into three subtypes based on histopathological features. It is reported that the subtype with signet ring cell differentiation has the worst survival rate. We aim to contribute to the literature with a case of goblet cell carcinoma that recurred with signet ring cell carcinoma differentiation one and a half years after diagnosis.

Material and Methods: A 45-year-old female patient with no comorbidities other than known hypertension presented in August 2023 with changes in bowel habits and right lower quadrant pain that had been present for three months. Contrast-enhanced CT scan revealed minimal dilation in the small bowel loops and no other pathological findings. Colonoscopy was reported as "Ileocaecal valve stenosis, ulcerovegetative appearance extending to the appendix," and biopsy revealed "Diffuse atypical cellular infiltration characterized by widespread intracellular mucin." Surgery was planned. Right hemicolectomy was performed in September 2023.

Results: The patient was referred to oncology after postoperative pathology report concluded "Appendix goblet cell carcinoma, T4bN2," and received 8 cycles of adjuvant oxaliplatin and capecitabine. No disease recurrence was observed for a year and a half of follow-up. In April 2025, the patient presented with abdominal swelling, imaging revealed widespread intra-abdominal ascites and peritoneal carcinomatosis (Figure 1). The patient was evaluated by our gastrointestinal oncology council, cytoreductive surgery and HIPEC were decided upon. In August 2025, our team performed anastomosis revision, omentectomy, peritonectomy, total abdominal hysterectomy and bilateral salpingo-oophorectomy, cholecystectomy, and administered 15 mg of mitomycin at a dose of 1.5 LT/m^2, prepared at 42 degrees Celsius, HIPEC infusion. Postoperative pathology report revealed "signet ring cell carcinoma metastasis and infiltration" in the anastomosis line serosa, both ovaries, uterus, cervix, gallbladder, peritoneal and omental specimens.

Conclusion: Biological behavior and clinical evaluation of goblet cell adenocarcinomas are controversial. There are cases treated with HIPEC and cytoreductive surgery in the literature, a high recurrence rate has been observed in follow-ups, intraperitoneal recurrence is the most common one. Due to its highly aggressive nature, it requires meticulous and multidisciplinary management, and sharing of clinical experiences is necessary.

Keywords: Appendix, HIPEC, goblet cell carcinoma

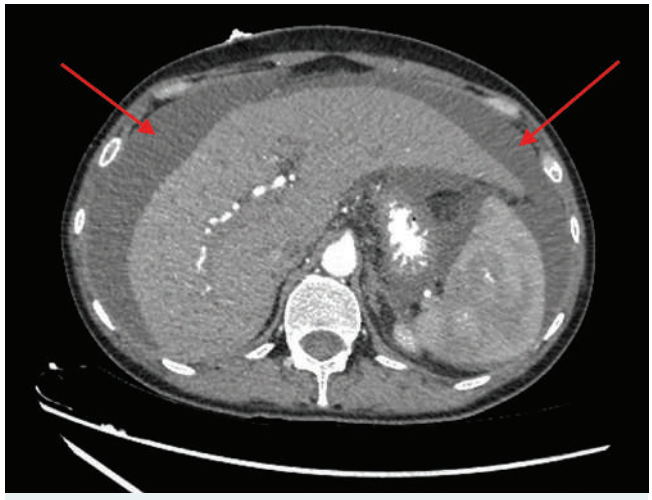


Figure 1. Intra-abdominal ascites.

[P-502]

Efficiency of nivolumab in PD-L1 positive metastatic gastric cancer: Case presentation

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Objective: Immunotherapy has recently become a new focus in the treatment of malignant tumors following surgery, chemotherapy, radiotherapy, and molecularly targeted therapy. Nivolumab, a human monoclonal antibody, is the first programmed cell death protein-1 (PD-1) inhibitor that can block the interaction of its ligand (PD-L1) restore the immune response of T-cells, and enhance the recognition of tumor cells by the immune system.

Material and Methods: PD-1 is expressed in cytotoxic T-cells and T-regulatory cells that are activated in response to inflammation or infection in peripheral tissues. Binding of programmed PD-L1 to PD-1 limits the response of T-cells to stimuli and causes immune suppression. Anti-PD-1 therapies disrupt this pathway and allow activated cytotoxic T-cells to attack cancer cells. In this case report, we aim to present a case of gastric cancer with multiple liver metastases that regressed almost completely after PD-L1 treatment, along with a review of the literature.

Results: A 68-year-old male patient with gastric cancer and multiple liver metastases was referred to our clinic from an external center. Abdominal CT scan revealed a lesion consistent with multiple metastases in the liver, the largest measuring 43×38 mm, and a mass in the gastric antrum showing local invasion of the liver. Pathology blocks showed a PD-L1 expression percentage of 70%. The patient was started on docetaxel, cisplatin, 5Fu, and nivolumab. Post-treatment follow-up showed regression of the liver lesions. The patient, who was given one course of Folfiri treatment, refused the treatment and discontinued it. Four years later, the patient presented to our clinic again with complaints of upper gastrointestinal bleeding. It was learned that the patient had received frequent blood transfusions for the past 5 months and had undergone gastric coil embolization once at an external center. A control CT scan showed that the multiple lesions in the liver responded almost completely to treatment, with only a single lesion in segment 7 showing activation. Due to the persistence of systemic disease and uncontrollable bleeding, palliative gastrectomy was performed.

Conclusion: PD-1 is expressed in activated T and B-cells in peripheral tissues in response to inflammation or infection. Binding of PD-L1 to PD-1 inactivates T-cells and limits the immune response to stimuli, leading to immunosuppression. Cancer cells enhance the immunosuppressive effect of this pathway by triggering PD-1 expression, allowing cancer to “hide” from the natural immune attack. Anti-PD-1 therapies disrupt this pathway by preventing the PD-1 ligand from binding to its receptor; thus, active cytotoxic T-cells become able to attack cancer cells.

Keywords: Immunotherapy, PD-L1, programmed cell death

[P-503]

High-risk small intestinal gastrointestinal stromal tumor with spontaneous peritoneal dissemination in the absence of tumor rupture: A rare case report

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Objective: Gastrointestinal stromal tümörler (GIST), gastrointestinal sistemin en sık görülen mezenkimal tümörleri olup biyolojik davranışları heterojendir. GIST’lerde intraabdominal yayılım çoğunlukla tümör rüptürü sonrası gelişen serbest peritoneal ekim şeklinde görülmekte ve kötü prognostik bir bulgu olarak kabul edilmektedir. Ancak rüptür bulgusu olmaksızın peritoneal ekim görülmesi nadirdir. Bu çalışmada, rüptür bulgusu olmaksızın, spontan ekim ve implantasyon gösteren yüksek riskli bir ince barsak GIST olgusunun sunulması amaçlanmıştır.

Material and Methods: Karın ağrısı şikayeti ile dış merkeze başvuran ve batın içi kitle saptanması üzerine kliniğimize refere edilen 76 yaşındaki erkek hastanın klinik, radyolojik, intraoperatif ve patolojik verileri retrospektif olarak değerlendirildi. Preoperatif kontrastlı batın bilgisayarlı tomografi görüntüleri incelendi. Cerrahi eksplorasyon sırasında elde edilen intraoperatif bulgular analiz edildi. Rezeksiyon materyallerinin histopatolojik ve immünhistokimyasal incelemeleri yapıldı.

Results: Hastanın özgeçmişinde 10 yıl önce geçirilmiş gastrointestinal sistem kanaması mevcuttu. Preoperatif görüntülemede, pelvisi ve sağ alt kadranı dolduran, yaklaşık 15 cm çapında batın içi kitle saptandı; peritoneal implant veya tümör rüptürü lehine bulgu izlenmedi. Cerrahi eksplorasyonda Treitz ligamanından 200. Cm’den köken alan, kapsülü intakt primer tümör saptandı ve kitle, köken aldığı ince barsak ansı ile birlikte en-blok rezeksiyon ile çıkarıldı. Nodüler implantların, çekum serozası, çekum mezosu ve Treitz ligamanından yaklaşık 150. cm distalinden itibaren ileoçekal bölgeye kadar uzanan ince barsak mezenterinde görüldü. Treitz ligamanının 150. cm proksimalinde implant saptanmadı. İmplantlar milimetrik boyuttan en büyüğü yaklaşık 3 cm çapa ulaşan polipoid lezyonlar şeklindeydi ve intraoperatif görüntülerle belgelendi. Primer tümörün kaynaklandığı düşünülen ince barsak ansının mezosu bölünürken mezenterik vasküler yapıda 10 yıl önce geçirilmiş GİS kanama nedenli yerleştirilen coil materyali görüldü. Postoperatif patolojide; batın içi kitle ve ince barsak mezosundan eksize edilen lezyonlar yüksek riskli GIST ile uyumlu bulundu. İmmünohistokimyasal incelemede CD117, DOG-1 ve CD34 yaygın ve güçlü pozitif, SMA, desmin, S100 ve myogenin negatif saptandı. Ki-67 proliferasyon indeksi en yoğun alanda %45-50 olarak değerlendirildi.

Conclusion: Bu olgu, GIST’lerde intraabdominal implantasyonun her zaman rüptür ve serbest peritoneal ekim ile ilişkili olmadığını göstermektedir. GİST’lerde üptür bulgusu olmaksızın intraabdominal ekim ve implantasyon görülmesi farklı yayılım mekanizmalarının varlığına işaret etmektedir. GIST olgularında, rüptür öyküsü bulunmasa dahi atipik ve lokalize intraabdominal implantasyon olasılığı göz önünde bulundurulmalıdır.

Keywords: GIST, spontaneous peritoneal implantation



Figure 1. Primary tumor.



Figure 2. Peritoneal implantation.

[P-504]

Perforated Amyand hernia in a 95-year-old male patient operated with the preoperative diagnosis of incarcerated inguinal hernia: A rare case report

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Objective: Amyand's hernia is defined as the presence of the vermiform appendix within an inguinal hernia sac and is observed in approximately 0.5-1% of all inguinal hernias. The occurrence of acute appendicitis within the hernia sac is even rarer, reported in approximately 0.07-0.13% of cases. Amyand's hernias containing perforated appendicitis are exceedingly uncommon in the literature, with an incidence of less than 0.01%. Preoperative diagnosis is often difficult, and patients are typically operated on with a preliminary diagnosis of incarcerated inguinal hernia. The surgical approach should be planned according to intraoperative findings and evaluated using the Losanoff–Basson classification.

Material and Methods: A 95-year-old male patient hospitalized in the hematology ward for myelodysplastic syndrome (MDS) was referred to our clinic with a painful swelling in the right inguinal region. He had undergone surgery for a right inguinal hernia approximately 20 years earlier. The patient reported progressive swelling in the right inguinal area for one week and severe pain during the last two days, and the previously reducible swelling had become irreducible. Laboratory investigations revealed pancytopenia (Hb: 7.7 g/dL, platelets: 23,000/mm³, leukocytes: 1,600/mm³). Physical examination demonstrated a firm, tender, irreducible mass in the right inguinal region with mild skin hyperemia. Ultrasonography showed herniated mesenteric fat and bowel loops passing through a fascial defect measuring approximately 2.5 cm. Reduction could not be achieved with probe compression, and weak vascular signals at low PRF suggested strangulation. Emergency surgery was planned, and preoperative hematologic optimization was performed with erythrocyte suspension transfusion and platelet replacement. After hemoglobin and platelet levels reached acceptable surgical ranges, the patient underwent surgery.

Results: During exploration, dense purulent fluid confined within the hernia sac and surrounded by omentum without surrounding spread was observed. The appendix was identified within the sac, and perforation was detected in its distal segment. These findings were consistent with Amyand's hernia containing perforated appendicitis (Losanoff–Basson Type 3). An appendectomy was performed, and due to contamination, mesh was avoided and primary tissue repair using the Bassini technique was preferred.

Conclusion: Although Amyand's hernia is rare, it should be considered in the differential diagnosis, particularly in patients presenting with incarcerated inguinal hernia. Preoperative imaging is often not definitive, and diagnosis is frequently established intraoperatively. In the presence of perforation, mesh repair is contraindicated because of infection risk, and primary tissue repair should be preferred. Furthermore, appropriate preoperative hematologic optimization is crucial in high-risk patients with hematologic comorbidities to reduce perioperative complications. The diagram illustrates the four types of Amyand's hernia according to the Losanoff-Basson classification. Type 1 involves a normal appendix within the hernia sac and may be managed with hernia repair with or without appendectomy. Type 2 consists of acute appendicitis within the sac and requires appendectomy with primary tissue repair. Type 3 is characterized by perforated appendicitis with peritonitis or sepsis and should be treated with appendectomy and primary repair without mesh. Type 4 describes Amyand's hernias associated with additional intra-abdominal pathology. The lower panel shows a resected perforated appendix specimen.

Keywords: Amyand's hernia, incarcerated inguinal hernia, perforated appendicitis

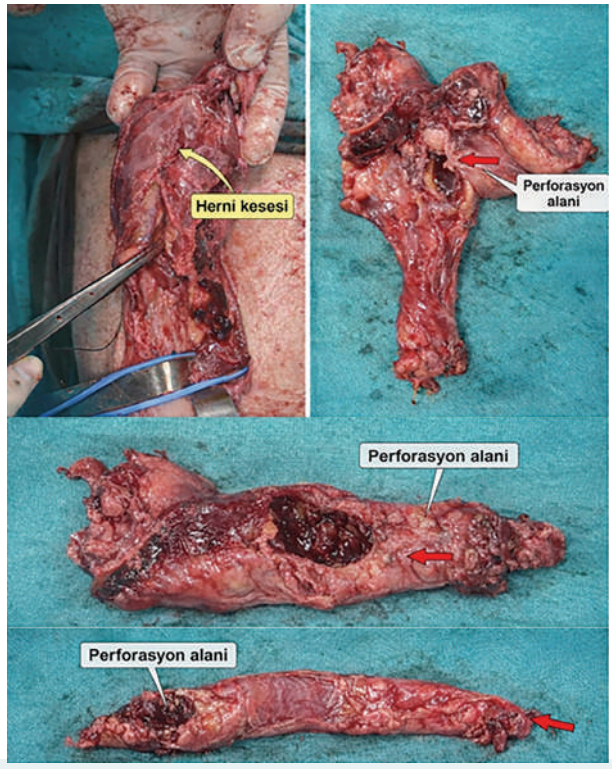


Figure 1. Intraoperative and macroscopic views of Amyand's hernia specimen. (A) Intraoperative view of the appendix located within the hernia sac; the yellow arrow indicates the hernia sac. (B) Resected specimen showing the perforation site marked with a red arrow. (C) Gross specimen demonstrating a perforation localized to the distal segment of the appendix.

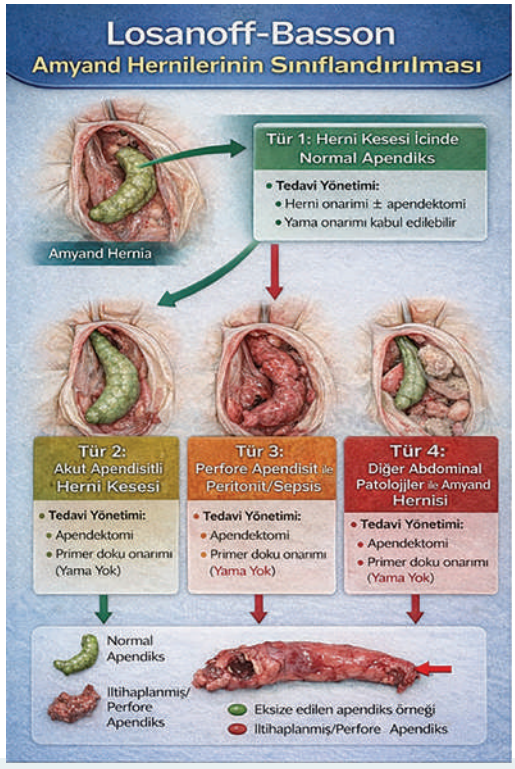


Figure 2. Losanoff–Basson classification of Amyand's hernias and recommended surgical management.

[P-511]

Unexpected diagnosis of gastric AA-type secondary amyloidosis in a patient undergoing distal gastrectomy for suspected gastric cancer: A case report

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Objective: A portion of gastric tumors occur not as primary adenocarcinomas but as secondary manifestations of systemic diseases or metastases from distant neoplasms. These cases may closely resemble primary gastric malignancies on endoscopic and radiologic evaluation, making histopathological and immunohistochemical confirmation essential. Among patients presenting with upper gastrointestinal bleeding, common causes include peptic ulcer disease, gastric cancer, and varices; rarely, gastric amyloidosis caused by amyloid deposition in the gastric wall may be responsible. Secondary (AA-type) amyloidosis develops in the context of chronic inflammatory or infectious diseases and can cause ulceration and bleeding due to amorphous protein deposits in the mucosa and submucosa. Reports of gastric amyloidosis mimicking gastric carcinoma are rare.

Material and Methods: This study presents a single case. The diagnostic workup included upper gastrointestinal endoscopy with biopsy and colonoscopy, followed by contrast-enhanced abdominal CT to assess gastric involvement. Because of uncontrolled bleeding and hemodynamic instability, emergency open distal gastrectomy with Billroth II reconstruction and D2 lymph node dissection was performed. The specimen underwent hematoxylin-eosin, crystal violet, and Congo red staining, and the amyloid type was determined immunohistochemically.

Results: A male patient in his seventies with a history of chronic kidney disease and chronic cardiac disease presented with melena. Upper gastrointestinal endoscopy revealed an ulcerovegetative mass in the gastric antrum, and biopsies were reported as gastritis. Colonoscopy showed no pathological findings. Computed tomography demonstrated irregular transmural wall thickening in the gastric antrum, which was interpreted in favor of primary gastric cancer. Histopathological examination of the gastrectomy specimen revealed dense eosinophilic amorphous deposits in the gastric mucosa and submucosa, with focal extension into the muscularis propria and vascular walls. Amyloid deposition was confirmed by crystal violet and Congo red staining. Immunohistochemical analysis demonstrated amyloid A positivity, establishing the diagnosis of AA-type secondary gastric amyloidosis. Postoperatively, further evaluation for the underlying etiology was planned; however, the patient died on postoperative day five due to cardiac causes, and comprehensive systemic evaluation could not be performed.

Conclusion: Gastric AA-type amyloidosis is a rare condition that may present with upper gastrointestinal bleeding and mimic gastric cancer clinically and radiologically. Awareness of this entity is crucial, as insufficient preoperative biopsy sampling may result in unnecessary extensive surgery. Careful histopathological evaluation and systemic assessment are essential when amyloid deposition is suspected.

Keywords: Gastric mass, amyloidosis, gastrointestinal bleeding

[P-512]

Delayed Meckel's diverticulum perforation and drug-induced toxic hepatitis following acute perforated appendicitis: A case report of a complication chain

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Objective: To present a case of delayed Meckel's diverticulum perforation and subsequent toxic hepatitis developing during follow-up after surgery for acute appendicitis, and to emphasize the importance of complication management.

Material and Methods: The demographic data, laboratory findings, imaging results, intraoperative findings, and postoperative clinical course of the patient who presented to the Emergency Department of Şanlıurfa Training and Research Hospital with abdominal pain and was operated on with a diagnosis of acute appendicitis based on clinical, laboratory, and radiological evaluations were retrospectively reviewed through the hospital information management system. Details of the surgical interventions, developed complications, and applied treatment approaches were recorded. The obtained data were evaluated in the context of the literature and organized in the format of a case report.

Results: A 21-year-old male patient presented with abdominal pain persisting for four days. Laboratory findings revealed leukocytosis (27,550/mm³) and markedly elevated CRP (>429 mg/L). The patient was operated on with a preliminary diagnosis of perforated appendicitis. Diffuse purulent content was observed intraoperatively, and an appendectomy was performed. A Meckel's diverticulum was identified approximately 100 cm proximal to the ileocecal valve; as it appeared macroscopically intact, no resection was performed. Although initial clinical improvement was observed in the postoperative period, a marked increase in acute phase reactants and right lower quadrant pain developed on postoperative day six. Computed tomography demonstrated a loculated collection with air-fluid levels suggestive of perforation. At reoperation, perforation was identified at the mid-segment of the Meckel's diverticulum with formation of a localized abscess. Segmental small bowel resection including the diverticulum with primary anastomosis and abscess drainage was performed. The patient showed clinical improvement. After discharge, the patient presented with right upper quadrant pain and marked elevation of transaminases (AST 895 U/L, ALT 612 U/L). Imaging findings were normal. Antibiotic and analgesic treatments were discontinued, and supportive therapy was initiated. Liver enzyme levels rapidly decreased, and the condition was interpreted as toxic hepatitis. Despite these complications, the patient was discharged in good health.

Conclusion: This case highlights the importance of intraoperative evaluation of concomitant Meckel's diverticulum in complicated appendicitis and the multidisciplinary management of postoperative surgical and medical complications.

Keywords: Meckel's diverticulum, toxic hepatitis, complicated appendicitis

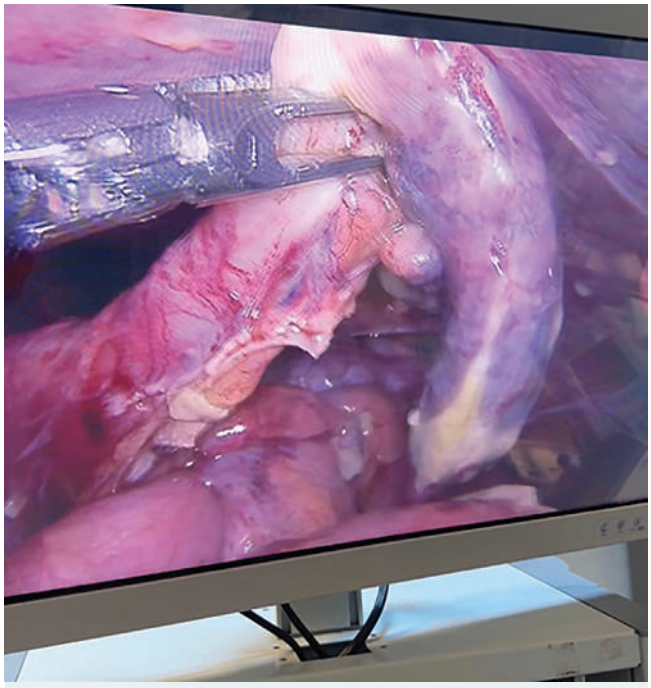


Figure 1. Appendicitis.



Figure 2. Meckel's diverticulum.

[P-513]

Application of FAST in a patient with foot ulcers due to Buerger's disease

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Objective: Buerger's disease, also known as thromboangiitis obliterans, is a segmental, non-atherosclerotic, occlusive vasculitis affecting small and medium-sized arteries and veins of the extremities, particularly prevalent in young adults. The most significant risk factor for Buerger's disease is smoking. Treatment for Buerger's disease requires a multidisciplinary approach. In cases unsuitable for revascularization and presenting with severe pain due to critical limb ischemia, neuromodulation techniques such as spinal cord stimulation have been reported to provide promising results for pain control and limb preservation.

Material and Methods: A forty-seven-year-old male patient presented with discoloration and pain in the third toe of his right foot. Approximately three years prior, he had undergone traumatic amputation of his right fourth toe, followed by the development of ulcerative lesions and persistent pain in the third toe during the post-amputation period. He reported pain with a visual analog scale (VAS) score of 9-10. Computerized tomography angiography revealed occluded bilateral tibialis anterior and posterior arteries. In accordance with these findings, medical treatment was initiated for circulatory palliation and pain control, and interventional angio procedures were performed. After failing to benefit from medical treatment and interventional angio procedures, the patient was consulted to the algology clinic. A lumbar sympathetic block was performed for pain palliation and to enhance circulation. Although a temporary reduction in pain was achieved after the procedure, the pain recurred within two days. Subsequently, it was decided to apply spinal cord stimulation (SCS) for the patient. The patient's VAS scores were assessed before permanent implantation and 15 minutes after electrode placement. The implants used were narrow-spaced (31 mm) 8-contact and wide-spaced (52 mm) 8-contact electrode systems. During electrode placement, paresthesia was achieved to cover the patient's painful areas. Following paresthesia optimization, the fast-acting sub-perception therapy (FAST) program was activated, and the perception threshold was reduced by approximately 70% (pulse width: 280–320 µs, frequency: 90 Hz).

Results: The patient, who showed a significant reduction in VAS scores during the procedure, continued to use the FAST program. At 24 hours postoperatively, the VAS score was recorded as 2. In our four-month follow-up, the VAS score remained at 0-1, and an increase in wound healing rate was observed.

Conclusion: Despite many treatment methods, the FAST program is one of the effective and current methods that can be preferred for pain palliation and wound healing support, alongside interventional and medical treatment, in Buerger's disease patients with severe pain that cannot be controlled.

Keywords: Buerger's disease, spinal cord stimulation, fast-acting sub-perception therapy (FAST)

[P-514]

Morgagni hernia in adulthood: Case report

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Objective: Morgagni hernia is a rare congenital defect located in the anterior-retrosternal portion of the diaphragm and is infrequently diagnosed in adulthood. Due to its nonspecific clinical presentation, diagnosis may be delayed. In this case report, we aimed to present the diagnostic process and laparoscopic surgical management of Morgagni hernia in an adult patient presenting with long-standing respiratory symptoms.

Material and Methods: Clinical, radiological, and surgical data of a 52-year-old male patient who presented with dyspnea and chest pain were retrospectively evaluated. Posterior-anterior chest radiography and thoracic computed tomography findings were reviewed. The surgical approach, intraoperative findings, and postoperative follow-up outcomes were analyzed.

Results: Laboratory findings were within normal limits. Posterior-anterior chest radiography revealed a suspicious mass or consolidation in the right lower lung zone. Thoracic computed tomography demonstrated herniation of a colonic segment into the thoracic cavity through a wide defect in the right diaphragm. Preoperative respiratory exercises and medical treatment were administered. The patient underwent laparoscopic surgery. Intraoperatively, a diaphragmatic defect measuring approximately 6×7 cm was identified on the right side, containing herniated omentum and colon. The herniated organs were reduced into the abdominal cavity. The defect was repaired primarily and reinforced with a dual mesh to reduce the risk of recurrence. No postoperative complications were observed. The patient was discharged on the fourth postoperative day. At the 12th-day and one-month follow-up visits, the patient's respiratory symptoms had completely resolved.

Conclusion: Although Morgagni hernia is rare in adults, it should be considered in the differential diagnosis of patients presenting with long-standing and unexplained respiratory symptoms. Computed tomography is the main diagnostic modality. Laparoscopic repair is a safe and effective treatment option with low morbidity, short hospital stay, and improved patient comfort.

Keywords: Adult, diaphragmatic hernia, Morgagni's hernia

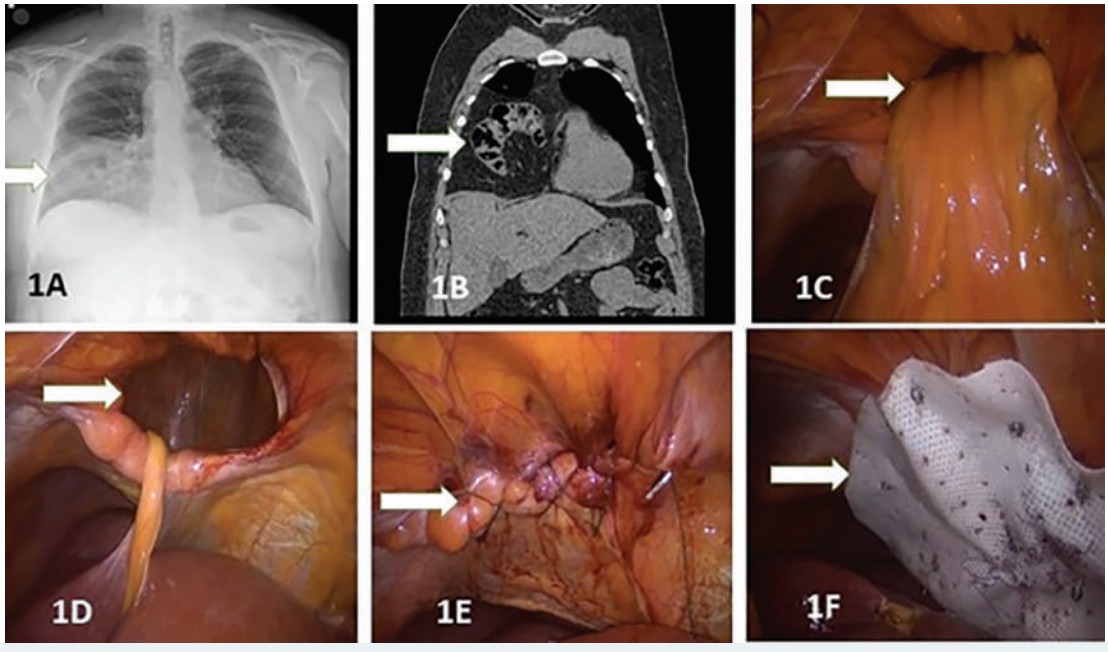


Figure 1. Radiological and intraoperative images. (A) Posterior–anterior chest radiograph showing an opacity in the right lower lung zone suspicious for a mass or consolidation; (B) thoracic computed tomography demonstrating herniation of a colonic segment into the thoracic cavity through a right diaphragmatic defect; (C) intraoperative laparoscopic view showing the diaphragmatic defect and herniated omentum; (D) reduction of the herniated omentum and colon into the abdominal cavity; (E) primary suturing of the diaphragmatic defect; (F) final view after reinforcement of the diaphragmatic repair with dual mesh.

[P-517]

Nuck canal cyst in women: A multicenter approach to the diagnostic and surgical management of a rare pathology

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Objective: Nuck canal cyst is a rare congenital anomaly resulting from incomplete obliteration of the processus vaginalis during embryologic development in women. Clinically, it presents as painful or painless inguinal swelling and is frequently misdiagnosed as indirect inguinal hernia, lymphadenopathy, lipoma, or round ligament endometriosis. This study aimed to retrospectively evaluate adult female patients diagnosed and surgically treated at three centers, focusing on diagnostic challenges, radiologic features, and surgical outcomes of Nuck's canal cysts.

Material and Methods: Five adult female patients diagnosed with Nuck's canal cyst and treated surgically in three general surgery centers between 2023 and 2025 were retrospectively analyzed. The mean age was 41.6 years (range: 36-51). Four patients had right-sided and one had left-sided involvement. All patients presented with a palpable inguinal mass. Ultrasonography was used as the initial imaging modality in all cases, while magnetic resonance imaging was performed in one patient to better define anatomical extension. All patients underwent complete cyst excision via open surgery, with simultaneous inguinal reinforcement using Lichtenstein or mesh plug repair.

Results: Radiologic evaluation revealed well-circumscribed, thin-walled, anechoic cystic lesions measuring 3-6 cm in diameter in the inguinal region. Histopathological examination confirmed the diagnosis of Nuck's canal cyst in all cases. No early or late postoperative complications, seroma formation, or recurrence were observed during a mean follow-up period of 8 months. The demographic characteristics, side predominance, radiologic findings, and surgical management were consistent with the largest adult case series reported in the literature, particularly those by Prodromidou et al. and Kohlhauser and Pirsch. All cases involved adult women, with right-sided involvement in three and left-sided involvement in one. The most common reason for presentation was painless swelling in the groin area. All patients were treated with open surgery, and no postoperative complications or recurrence were observed.

Conclusion: Although rare, Nuck's canal cyst should be considered in the differential diagnosis of inguinal masses in adult female patients. Ultrasonography is a practical and accessible first-line diagnostic tool, while MRI provides additional value in assessing lesion extent and identifying associated hernia components. Surgical excision is a safe and definitive treatment with excellent outcomes. This multicenter experience contributes to the limited literature on adult cases and highlights the importance of clinician awareness to ensure accurate diagnosis, appropriate surgical planning, and avoidance of unnecessary extensive procedures.

Keywords: Nuck's canal cyst, female, inguinal cyst, diagnostic difficulty, ultrasonography, magnetic resonance imaging, surgical excision, Lichtenstein repair, multicenter study

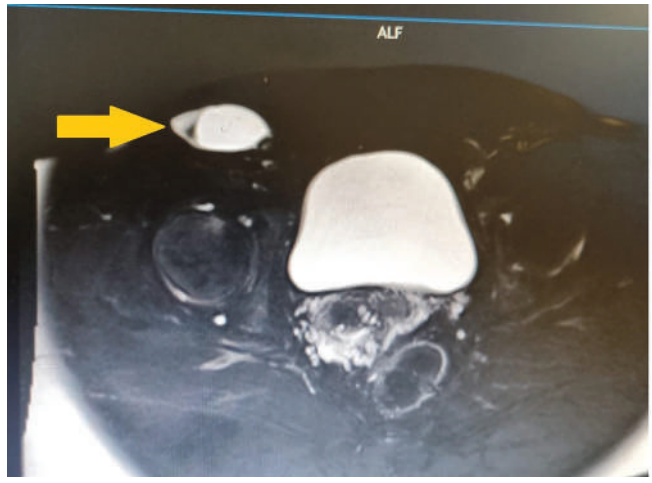


Figure 1. MRI image. Marked area femoral Nuck canal cyst.
MRI: Magnetic resonance imaging.



Figure 2. Intraoperative appearance of the cyst.

Table 1. Nuck duct cysts in women: comparative review with the literature

Source	Number of cases	Age (average or range)	Bias (right/left)	Imaging methods used	Accompanying Hernia	Surgical approach	Repair method applied	Recurrence or complication status
The current work (this series)	5	41.6 (36-51)	4/1	Resonance imaging was added in one case.	1 case of indirect inguinal hernia	Open surgery in all cases.	Lichtenstein repair in all cases.	No recurrence or complications were observed in any patient.
Prodromidou et al., 2020	16	35.1 (±3.2)	13/3	Ultrasonography (6 cases), computed tomography (3 cases), magnetic resonance imaging (6 cases)	Hernia was associated with 5 cases.	13 cases underwent open surgery, and 3 cases underwent laparoscopic surgery.	Simultaneous hernia repair in 5 cases.	No recurrence or complications were reported.
Kohlhauser and Pirsch, 2022	1 (case report) + review	38 (single case)	Right side	Ultrasonography and magnetic resonance imaging	Not reported	Open surgery	Closing the channel	No recurrence reported.
Venkateswaran et al., 2024	20	27.8±8.3	Not reported	Ultrasonography and magnetic resonance imaging	Hernia association in 11 cases (55%).	10 cases were treated with transabdominal preperitoneal (laparoscopic) surgery, and 10 cases with open surgery.	Patch repair according to the approach.	No recurrence reported.
Adhikari et al., 2023	5	Not reported	Not reported	Ultrasonography, and in some cases magnetic resonance imaging may be used in addition.	Not reported	Open surgery	Not reported	No recurrence or complications were reported.
Keeratib harat et al., 2022	Compilation	Not reported	Not reported	Ultrasonography is the primary diagnostic tool, while magnetic resonance imaging provides additional diagnostic benefits.	Not reported	Both open and laparoscopic approaches have been reported.	Not reported	Not reported

Table 2. Clinical features and surgical findings of Nuck canal cyst cases

Cases	Age (years)	Side	Application complaint	Imaging method	Cyst size (cm)	Accompanying hernia	Surgical approach/ repair	Postoperative condition
Case 1	36	Right	Painless groin swelling	USG	3.0	None	Open excision + Lichtenstein	Smooth recovery
Case 2	40	Right	Painful groin swelling	USG	4.5	Right indirect hernia	Open excision + Lichtenstein	No recurrence/complications.
Case 3	43	Left	Painless femoral swelling	USG	5.0	None	Open excision + Mesh plug	Smooth recovery
Case 4	51	Right	Painful groin swelling	USG + MRI	6.0	None	Open excision + Lichtenstein + Mesh plug	No recurrence/complications.
Case 5	38	Right	Painless femoral swelling	USG	3	None	Open excision + Mesh plug	No recurrence/complications.

[P-518]

Intraductal carcinoma arising from the epithelial component of a fibroadenoma as a rare breast tumor

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Objective: Fibroadenomas are the most common benign solid tumors of the breast and are usually observed in younger age groups. These lesions consist of epithelial and stromal components, and epithelial atypia or malignant transformation within a fibroadenoma is extremely rare. The development of ductal carcinoma *in situ* (DCIS) within a fibroadenoma has been reported in less than 1% of cases in the literature. In this case report, we present a rare case of DCIS arising from the epithelial component of a fibroadenoma.

Material and Methods: Clinical and pathological data of a patient who underwent surgery at our center were retrospectively evaluated.

Results: A 27-year-old woman with a family history of breast cancer presented with a progressively enlarging painless mass in the right breast. Following physical examination and imaging studies, the lesion was classified as BI-RADS 4A, and a tru-cut biopsy was performed (Figure 1). Ultrasonographic image of the right breast showing an isoechoic solid lesion measuring 15×7×18 mm, located 3 cm from the nipple at the 11 o'clock position, with its long axis parallel to the skin, focal contour irregularities, microlobulations, and no vascular signal on color Doppler imaging. Due to the detection of epithelial atypia on pathological examination, an excisional biopsy was performed. The surgical specimen was evaluated histopathologically and immunohistochemically. Histopathological examination revealed low-grade, solid-type DCIS arising in a background of fibroadenoma. Immunohistochemical analysis demonstrated diffuse estrogen receptorpositivity and loss of CK5/6 staining, while myoepithelial cells were preserved with calponin and p63 staining (Figure 2). Surgical margins were negative. Following discussion at the multidisciplinary oncology council, adjuvant radiotherapy and tamoxifen therapy for five years were planned. No residual or recurrent disease was detected during follow-up.

Conclusion: Since fibroadenomas are typically observed in younger patients, the possibility of malignancy should always be considered in older patients presenting with presumed fibroadenomas. Given the impracticality of examining every fibroadenoma and the potential associated morbidity, this issue raises important questions regarding breast cancer surveillance in women with multiple fibroadenomas. Tru-cut biopsies often fail to sample the entire lesion, and the increasing reliance on core needle biopsy for the diagnosis of fibroadenomas should raise awareness of the risk of overlooking epithelial atypia. Patients with microcalcifications on imaging, a positive family history, BI-RADS 4 lesions, and atypia on biopsy—as in our case—should be considered high risk, and excisional biopsy should be recommended rather than relying solely on tru-cut biopsy.

Keywords: Fibroadenoma, Ductal carcinoma *in situ*, tru-cut biopsy

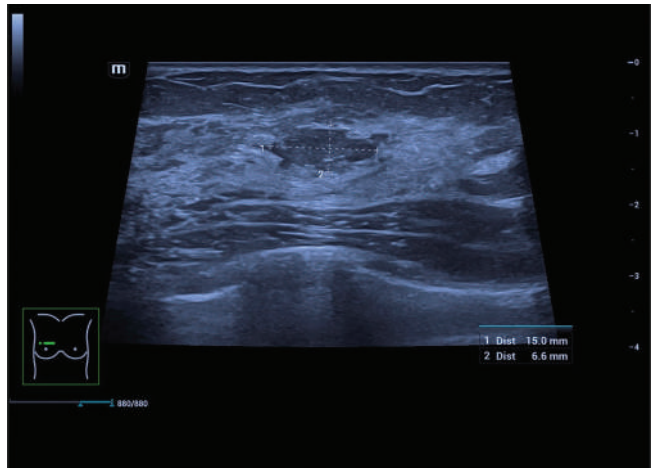


Figure 1. Ultrasonographic image of the right breast showing an isoechoic solid lesion measuring 15×7×18 mm, located 3 cm from the nipple at the 11 o'clock position, with its long axis parallel to the skin, focal contour irregularities, microlobulations, and no vascular signal on color Doppler imaging.

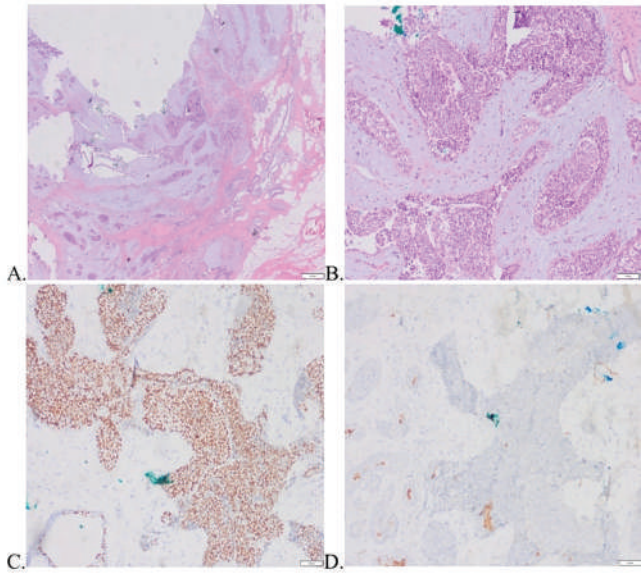


Figure 2. A: Fibroadenoma composed of stromal and glandular components. B: Intraductal carcinoma showing a monomorphic appearance with solid growth pattern, completely filling the ductal lumen in the epithelial component (H&E, ×10). C: Diffuse and strong immunohistochemical expression of estrogen receptor (ER) in the intraductal carcinoma area (×10). D: Loss of immunohistochemical CK5/6 expression in myoepithelial cells within the intraductal carcinoma area (×10).

[P-519]

Isolated colonic metastasis developing five years after primary cutaneous malignant melanoma

Berat Ünal, Turgay Sayın, Bahattin Bayar, Hamza Hattab, Gıyasettin Başakıncı, Özge Kaya Korkmaz, Ebru Çılbır, Ahmet Oğuz Hasdemir

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Objective: Malignant melanoma is an aggressive malignancy that can metastasize to regional lymph nodes in the early period and exhibits an unpredictable metastatic pattern in advanced stages. Gastrointestinal system metastases are clinically detected rarely, and colonic involvement is reported to be extremely uncommon. In this study, a rare case of isolated colonic metastasis developing approximately five years after the diagnosis of primary cutaneous malignant melanoma is presented. Although lymph nodes, lungs, liver and brain are the most common metastatic sites, the gastrointestinal tract is an important and often overlooked target, with postmortem involvement reported in 50-60% of advanced cases, while clinically symptomatic disease is uncommon. Gastrointestinal involvement most frequently affects the small intestine, whereas colonic metastases are rare and usually present with obstruction, bleeding or anemia, leading to diagnosis at advanced stages. Rarely, isolated asymptomatic colonic metastases are detected incidentally. This case report highlights the diagnostic and clinical features of colonic metastases of melanoma.

Material and Methods: Five years after wide excision with grafting and axillary dissection for stage III malignant melanoma of the volar right wrist (Figure 1), a 56-year-old man receiving adjuvant dabrafenib + trametinib showed increased metabolic activity in the appendix, cecum and ascending colon on follow-up ^{18}F-FDG PET/CT (Figure 2). Colonoscopy revealed two polypoid masses at 130 cm in the hepatic flexure and a polyp in the transverse colon (Figure 3), and biopsies demonstrated colonic mucosa infiltrated by malignant melanoma. The patient was diagnosed with isolated colonic metastasis and underwent right hemicolectomy. Pathology showed ulcerated polypoid malignant melanoma with biphenotypic morphology, melanoma infiltration of the appendix, and 0/15 tumor-free regional lymph nodes (Figure 4). The tumor was present as three polypoid foci limited to the mucosa and submucosa, with sparing of the muscularis propria, subserosa and serosa. No postoperative complications occurred, and follow-up ^{18}F-FDG PET/CT confirmed removal of all metabolically active lesions.

Results: Gastrointestinal metastases of malignant melanoma reflect the aggressive nature of the disease, and colonic metastases are diagnostically challenging because of their rarity and often asymptomatic or nonspecific presentation. In patients with a history of melanoma, late-detected colonic lesions should raise suspicion for metastasis. Although CT, PET-CT and colonoscopy are useful, definitive diagnosis is based on histopathological and immunohistochemical evaluation. In isolated organ metastasis, surgical treatment may provide a survival benefit, while immunotherapy requires careful patient selection because of gastrointestinal adverse effects.

Conclusion: In conclusion, metastatic disease should be considered in atypical colonic lesions in melanoma patients, and a multidisciplinary approach is essential.

Keywords: Malignant melanoma, colonic metastasis



Figure 1. a) Malignant melanoma on the right forearm b) Grafted appearance after wide excision c) Conglomerated axillary lymphadenopathy package.

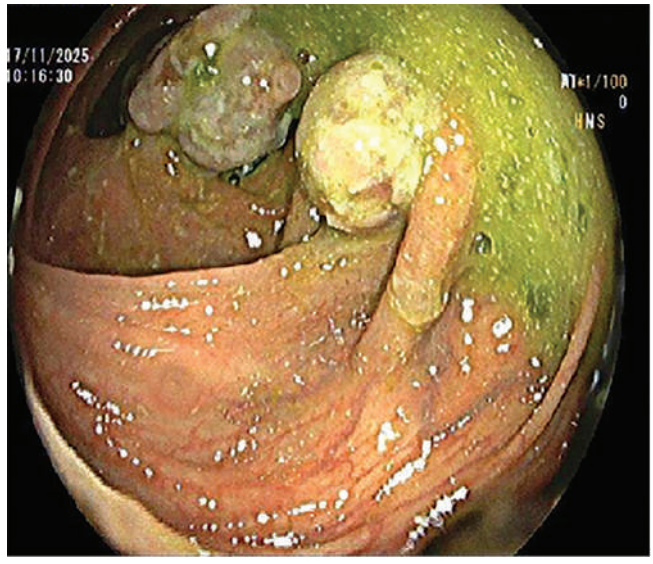


Figure 2. Polypoid-appearing malignant melanoma metastases detected at colonoscopy.

[P-522]

A breath-restricting mass: Mesenteric desmoid tumor

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Objective: Desmoid tumors (aggressive fibromatosis) are rare fibroblastic/myofibroblastic neoplasms characterized by the absence of metastatic potential but a tendency for locally invasive behavior. Their annual incidence is approximately 2-4 per million, accounting for nearly 3% of all soft tissue tumors.Intra-abdominal lesions most commonly originate from the mesentery and are more frequently observed in young women. Imaging findings are non-specific and may mimic mesenteric cysts, gastrointestinal stromal tumors, or other benign lesions

Material and Methods: A 19-year-old female presented with left-sided thoracic pain and difficulty during inspiration. Thoracic CT revealed mild pleural effusion. As symptoms persisted despite drainage, abdominal CT and ultrasonography were performed. Due to progressive pain, the patient underwent surgery. The mesenteric mass was completely excised with negative surgical margins (R0 resection). The diagnosis was confirmed by histopathological and immunohistochemical examination.

Results: Abdominal CT demonstrated a well-circumscribed cystic lesion in the left upper quadrant. Ultrasonography revealed a heterogeneous, mildly vascularized solid mesenteric mass measuring approximately 7 cm. Histopathological analysis confirmed a desmoid tumor (aggressive fibromatosis) with nuclear β-catenin positivity. Postoperatively, the patient's symptoms resolved. Following multidisciplinary evaluation, active surveillance was recommended. No recurrence was detected during follow-up.

Conclusion: Although desmoid tumors exhibit benign histology, they demonstrate locally aggressive behavior, with reported local recurrence rates ranging from 20% to 40%. Mutations in β-catenin (CTNNB1) play a significant role in their pathogenesis. Current guidelines recommend an initial active surveillance strategy for asymptomatic or stable patients. However, surgery remains an appropriate treatment option in symptomatic, progressive, or organ-compressing cases. Achieving negative surgical margins reduces recurrence risk, although the prognostic impact of microscopically positive margins remains controversial. In the present case, atypical thoracic onset symptoms and the initial cystic appearance on imaging were potential factors that could delay diagnosis. Due to symptomatic mesenteric involvement and progressive pain, surgical intervention was preferred. Following R0 resection, no adjuvant treatment was required. This approach is consistent with current literature. Desmoid tumors should be considered in the differential diagnosis of chronic abdominal pain and abdominal mass in young women. Imaging findings may be misleading; definitive diagnosis relies on histopathological examination. In symptomatic mesenteric cases, R0 resection represents an effective treatment option.

Keywords: Desmoid tumor,mesenteric mass, surgical resection

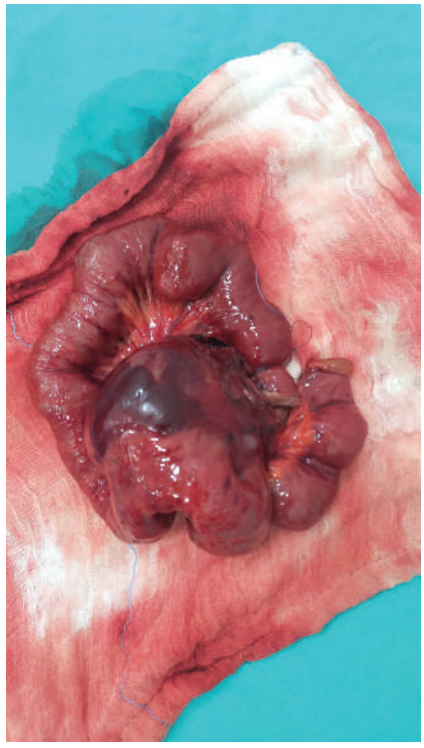


Figure 1. Desmoid tumor; A 10 cm mass was identified, filling the mesentery of an approximately 50 cm intestinal segment beginning 10 cm distal to the ligament of Treitz, with focal invasion of the small bowel serosa.

[P-523]

Surgical approach in an alkali cement burn with delayed presentation: A case report

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Objective: This study aimed to present a case of chemical burn caused by exposure to wet cement that required surgical treatment due to delayed presentation, and to discuss the clinical characteristics of cement burns. Although chemical burns are less common than thermal burns, they represent an important clinical problem because their alkaline nature can lead to deep and progressive tissue damage. Wet cement forms a highly alkaline environment as a result of the hydration of the calcium oxides it contains, causing liquefaction necrosis and allowing the injury to progress for hours or even days.

Material and Methods: The presented case was a 54-year-old male who initially received conservative treatment at an outside medical center for wounds that developed after both lower extremities remained in wet cement for approximately one hour during construction work. However, due to the lack of healing over a period of about 40 days, he was referred to our burn unit. Upon evaluation, the total burn surface area was calculated as 8% and was consistent with deep dermal burns.

Results: Following hospitalization, nutritional support was provided, and regular wound cleansing along with autolytic debridement was performed. Due to the presence of chronic inflammation in the wound bed and insufficient epithelialization, tangential excision and skin grafting were carried out on the 9th day of admission. The postoperative course was uneventful, with satisfactory graft take observed, and the patient was discharged with recommendations for appropriate wound care and moisturizing therapy. No additional complications developed during follow-up.

Conclusion: Cement burns are often recognized late because they typically present with a painless onset, and in many cases this leads to the need for surgical intervention. Early recognition of exposure, prompt irrigation with copious amounts of water, removal of contaminated clothing, and appropriate wound management are the key factors determining prognosis. This case highlights the importance of increasing awareness among individuals at occupational risk and demonstrates the critical role of timely treatment in reducing morbidity.

Keywords: Alkali burn, chemical burn, tangential excision and skin grafting



Figure 1. Burn areas at hospital presentation; the burn areas at the patient's presentation to our unit are shown in the attached image.



Figure 2. Postoperative burn areas; the burn areas on postoperative day 7 are shown in the attached image.

[P-527]

Radiation-induced partial liver injury following right breast radiotherapy: A rare case presenting as hepatic metastasis

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[2]*Department of Surgical Oncology, University of Health Sciences Türkiye, Dr. Abdurrahman Yurtaslan Ankara Oncology Training and Research Hospital, Ankara*

Objective: Breast cancer is the most common malignancy among women worldwide and requires a multidisciplinary treatment approach including surgery, systemic therapy, and radiotherapy. While radiotherapy-related toxicities most commonly affect the skin and soft tissues, adjacent organs may also be exposed to unintended radiation. Although the liver is generally considered a low-risk organ in right breast radiotherapy, especially in lower quadrant tumors and tangential field techniques, liver segments IV-VIII may receive low-to-moderate radiation doses. Partial radiation-induced liver disease (RILD) is a rare but clinically misleading condition that may mimic hepatic metastasis.

Material and Methods: Case report.

Results: A 50-year-old premenopausal woman with pT1cN0, ER (+), PR (+), HER2 (–), Ki-67 60% pleomorphic invasive lobular carcinoma underwent: •Oncoplastic breast-conserving surgery •Sentinel lymph node biopsy •4 cycles of TC chemotherapy •Adjuvant radiotherapy: 50 Gy/25 fractions to the right breast •16 Gy boost to the tumor bedTwo weeks after completion of radiotherapy, the patient presented with right upper quadrant pain. Imaging and laboratory findingsct scan: a newly developed 68×18 mm hypodense lesion adjacent to liver segments IV-VIII (suspicious for metastasis). PET-CT: SUV_{max}: 3.73 (mild-to-moderate FDG uptake). Liver biopsy: •Inflammatory cell infiltration •Young fibrous tissue •No evidence of malignancy. Notably, liver function tests (AST, ALT, ALP, bilirubin) remained within normal limits throughout the entire course.

Conclusion: Radiation-induced liver injury is primarily dose-volume dependent and may present as: •Segmental hypodense lesions •Mild FDG uptake on PET •Early onset (2 weeks to 4 months post-RT) •Clinical symptoms without significant laboratory abnormalitiesIn this case: ✔Lesion localized adjacent to the radiotherapy field ✔ Onset at the 2nd week post-RT ✔Mild SUV uptake ✔Normal liver enzymes ✔Negative biopsy for malignancy. These findings strongly support radiation-induced partial liver injury rather than metastatic disease. Importantly, the absence of elevated liver enzymes differentiates this case from classic RILD and highlights the diagnostic difficulty. Newly detected hepatic lesions after right breast radiotherapy should not be immediately considered metastatic. Radiation-induced partial liver injury must be included in the differential diagnosis, particularly when: •The lesion is adjacent to the radiation field •Symptoms develop early after RT •FDG uptake is mild •Liver enzymes are normal. Awareness of this entity may prevent unnecessary systemic treatment and invasive interventions.

Keywords: Breast cancer, radiotherapy, liver injury following radiotherapy

[P-547]

Isolated colonic metastasis developing five years after primary cutaneous malignant melanoma

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Objective: Malignant melanoma is an aggressive malignancy that can metastasize to regional lymph nodes in the early period and exhibits an unpredictable metastatic pattern in advanced stages. Gastrointestinal system metastases are clinically detected rarely, and colonic involvement is reported to be extremely uncommon. In this study, a rare case of isolated colonic metastasis developing approximately five years after the diagnosis of primary cutaneous malignant melanoma is presented. Although lymph nodes, lungs, liver and brain are the most common metastatic sites, the gastrointestinal tract is an important and often overlooked target, with postmortem involvement reported in 50-60% of advanced cases, while clinically symptomatic disease is uncommon. Gastrointestinal involvement most frequently affects the small intestine, whereas colonic metastases are rare and usually present with obstruction, bleeding or anemia, leading to diagnosis at advanced stages. Rarely, isolated asymptomatic colonic metastases are detected incidentally. This case report highlights the diagnostic and clinical features of colonic metastases of melanoma.

Material and Methods: Five years after wide excision with grafting and axillary dissection for stage III malignant melanoma of the volar right wrist, a 56-year-old man receiving adjuvant dabrafenib + trametinib showed increased metabolic activity in the appendix, cecum and ascending colon on follow-up 18F-FDG PET/CT. Colonoscopy revealed two polypoid masses at 130 cm in the hepatic flexure and a polyp in the transverse colon, and biopsies demonstrated colonic mucosa infiltrated by malignant melanoma. The patient was diagnosed with isolated colonic metastasis and underwent right hemicolectomy. Pathology showed ulcerated polypoid malignant melanoma with biphenotypic morphology, melanoma infiltration of the appendix, and 0/15 tumor-free regional lymph nodes. The tumor was present as three polypoid foci limited to the mucosa and submucosa, with sparing of the muscularis propria, subserosa and serosa. No postoperative complications occurred, and follow-up 18F-FDG PET/CT confirmed removal of all metabolically active lesions.

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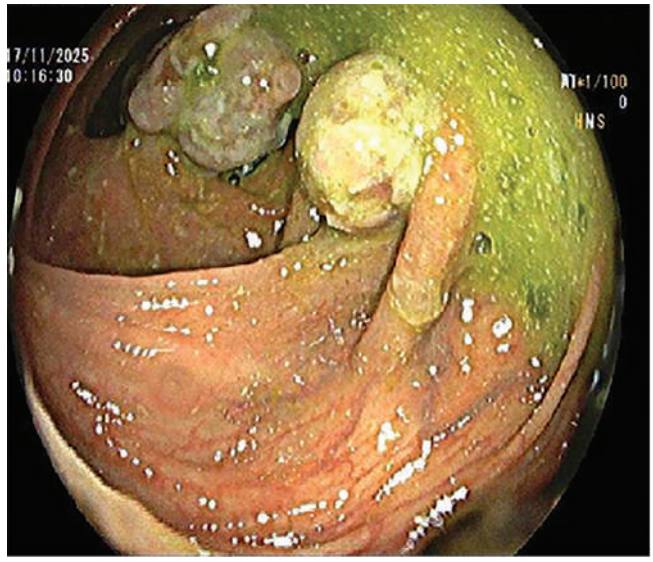


Figure 2. Polypoid-appearing malignant melanoma metastases detected at colonoscopy. Submucosal malignant melanoma of the colon.

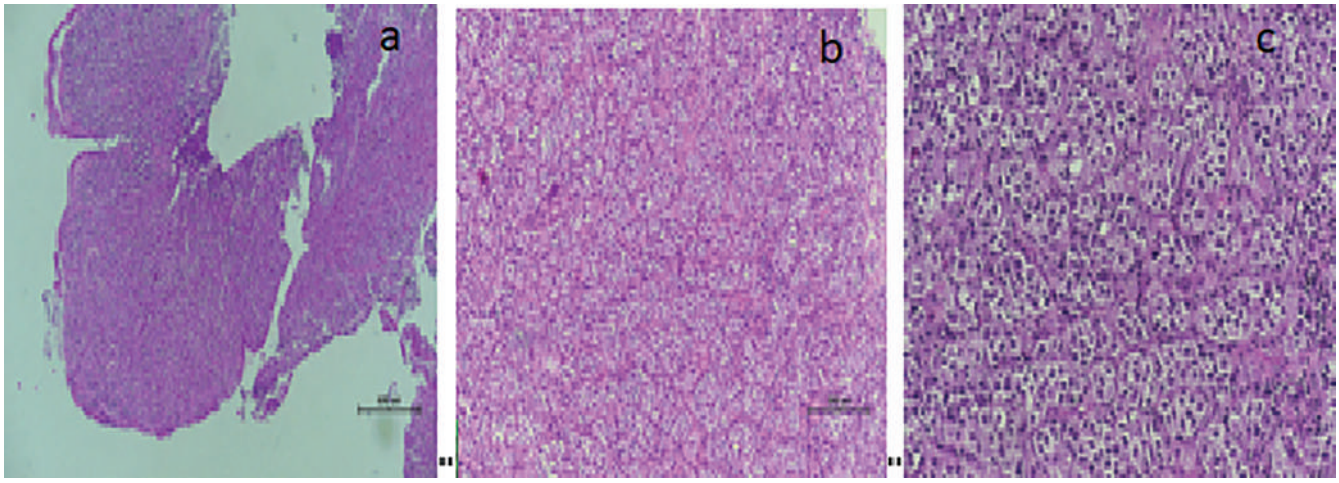


Figure 3. Submucosal malignant melanoma of the colon. a) Partial ulceration is observed in the overlying colonic mucosa, and the tumor is seen to be predominantly located in the submucosa (×4). b) Expansion of the submucosa by the tumor beneath the ulcerated mucosa is observed (×10). c) Atypical melanocytic tumor cells showing marked cytological pleomorphism (×20) (H&E).

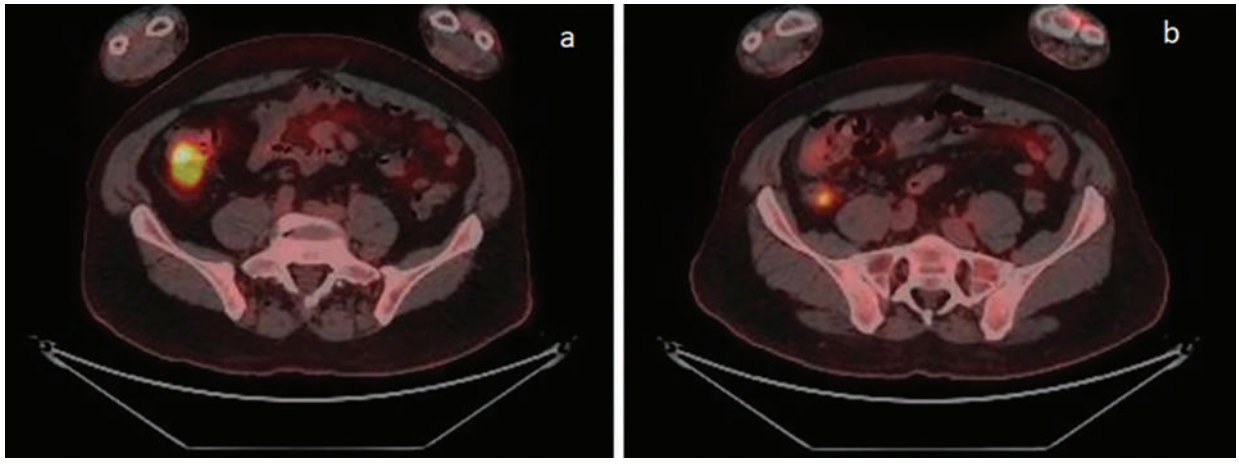


Figure 4. PET-CT. a) Involvement of the ascending colon. b) Involvement of the appendix.

[P-548]

Two cystic teratomas mimicking mesenteric cysts

Üsame Yıldız, Abdullah Sami Maden, İsmail Hasırcı, Abdülhalim Serden Ay, Mehmet Ali Eryılmaz

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Objective: Intraabdominal and abdominopelvic masses are common in general surgical practice; however, when they reach large dimensions, they may create diagnostic uncertainty. Although cross-sectional imaging supports evaluation, the precise origin of large cystic lesions cannot always be clearly defined preoperatively. In some cases, cysts of gynecologic origin may not be recognized as ovarian and may be referred to surgical clinics with a preliminary diagnosis of mesenteric cyst. Mature cystic teratomas can similarly mimic mesenteric masses. We present two cases initially suspected to be mesenteric cysts but ultimately diagnosed as ovarian mature cystic teratomas after surgical exploration and histopathological assessment, and we outline the diagnostic and surgical management process.

Material and Methods: This retrospective single-center case series included two patients operated on for presumed intraabdominal masses and subsequently diagnosed histopathologically with mature cystic teratoma. Clinical, radiological, laboratory, and operative findings were reviewed.

Results: The first patient, a 49-year-old woman, was initially asymptomatic and presented with a large cystic mass extending to the left upper quadrant. Computed tomography showed an approximately 15 cm lesion containing fat and calcifications; CA 19-9 was elevated, whereas other tumor markers were normal. The second patient, aged 38 years, presented with abdominal pain. Imaging studies reported a 16 cm lesion interpreted as a mesenteric mass. In both cases, the exact origin of the lesion could not be definitively established preoperatively. After multidisciplinary evaluation, laparotomy was performed to obtain diagnostic clarity and exclude malignancy. Intraoperative exploration demonstrated a large cystic mass arising from the left ovary and extending from the pelvis toward the upper abdomen. Due to the potential risk of gynecologic malignancy, the gynecologic oncology team was invited intraoperatively, and the procedure continued in a multidisciplinary setting. To reduce the risk of cyst rupture and chemical peritonitis, aspiration was avoided, and the mass was removed with preservation of capsular integrity. Left salpingo-oophorectomy was performed in both patients. Frozen-section analysis indicated a benign lesion, and final histopathology confirmed mature cystic teratoma without malignant or immature components. Postoperative recovery was uneventful.

Conclusion: Giant mature cystic teratomas, despite their benign nature, may mimic mesenteric cysts when presenting as intraabdominal masses and complicate preoperative diagnosis. Multidisciplinary assessment, careful surgical planning, and intact resection are essential for safe management. Ovarian mature cystic teratoma should be considered in the differential diagnosis of large intraabdominal cystic masses in general surgical practice.

Keywords: Mesenteric cyst, mature cystic teratoma

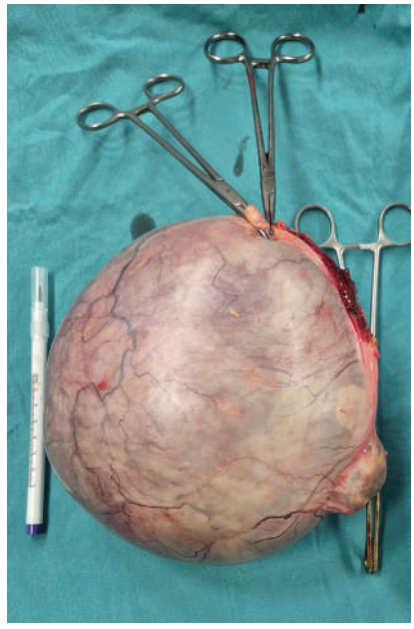


Figure 1. Intraoperative image.

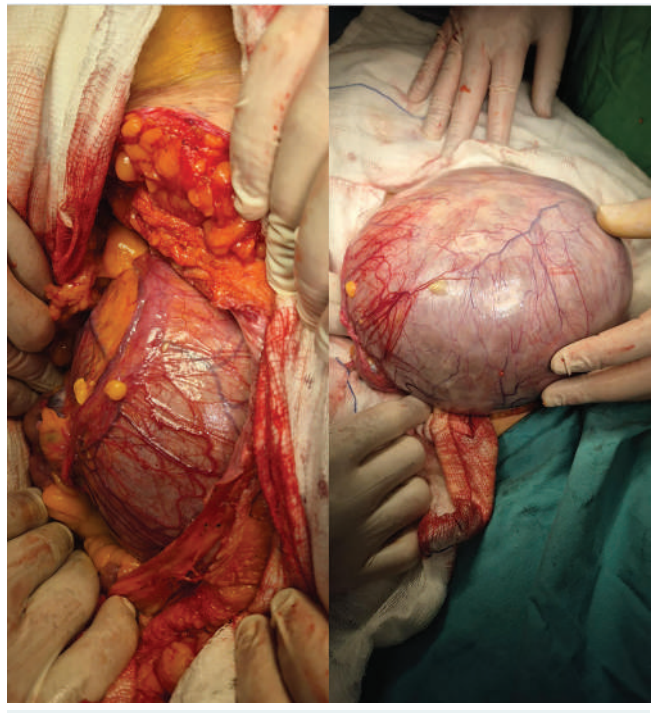


Figure 2. Intraoperative image.

[P-549]

Retroperitoneally located epidermoid cyst: A rare case report

Erdi Aydın[1], Surat Khalıqzade[2], Muhammed Emin Birgün[2], Müjdat Turan[2], Şevket Barış Morkavuk[1], Mehmet Ali Gülçelik[1]

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Objective: Primary cystic lesions arising in the retroperitoneal space independent of retroperitoneal organs are extremely rare and have been reported in limited numbers in the literature. Most of these cysts originate from congenital ectodermal remnants and are classified as epidermoid cysts. The incidence of retroperitoneal epidermoid cysts is reported to be less than 1 in 40,000, and they are most commonly located in the presacral region. Localization behind the pancreatic neck or at the root of the mesenteric vessels is considerably rarer. These lesions are usually asymptomatic; however, when symptoms occur, they are generally non-specific and related to the size, location, or complications such as hemorrhage, infection, or rupture. Radiologically, they may be confused with other retroperitoneal cystic lesions, pancreatic cystic tumors, or gynecological masses. Definitive diagnosis is established by histopathological examination.

Material and Methods: A 55-year-old female patient presented with intermittent nausea and abdominal pain for approximately 4-5 months. There were no specific aggravating or relieving factors. She had no known comorbidities, previous abdominal surgery, trauma, or history of pancreatitis. Physical examination revealed minimal tenderness in the left upper quadrant and epigastric region. Abdominal ultrasonography demonstrated a 9×5 cm multiloculated cystic mass located in the retroperitoneum. Contrast-enhanced computed tomography revealed a 57×43 mm cystic lesion extending from the pancreatic tail region toward the posterior aspect of the aorta, along with an adjacent 50×35 mm bilobulated cystic lesion. Endoscopic ultrasonography (EUS) showed a 6 cm cystic lesion adjacent to the pancreas without any solid component. The pancreatic duct was not dilated, and the pancreatic parenchyma appeared normal. Surgical excision was planned with a preliminary diagnosis of a retroperitoneal cyst.

Results: Total excision of the cyst was achieved using blunt and sharp dissection techniques. No invasive relationship with the pancreas or major vascular structures was observed intraoperatively. The postoperative course was uneventful, and the patient was discharged on postoperative day six without complications. Histopathological examination revealed a cyst wall lined by stratified squamous epithelium, with the lumen filled with keratinized material and cellular debris, accompanied by chronic inflammatory findings. These features were consistent with an epidermoid cyst.

Conclusion: Retroperitoneal epidermoid cysts are rare benign lesions that may be confused with other retroperitoneal cystic masses in the preoperative period. Imaging modalities have limited specificity. Definitive diagnosis relies on histopathological evaluation. Total surgical excision remains the most appropriate approach for both diagnosis and treatment.

Keywords: Retroperitoneal epidermoid cyst, retroperitoneal cystic mass, surgical excision

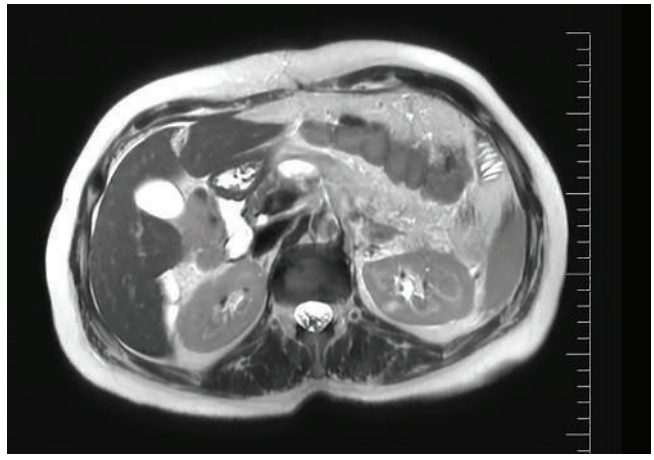


Figure 1. Magnetic resonance imaging sections. A 24×8 mm fluid-density area is present anterior to the head of the pancreas. In the tail region, a 5×3 cm fluid collection, considered secondary to prior surgery, is observed.

[P-550]

Management of a secondary perirectal abscess associated with rectal adenocarcinoma prior to neoadjuvant therapy: A transrectal internal drainage strategy

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Objective: Tumor-associated perirectal abscess formation in rectal cancer represents a rare but clinically significant complication that may delay neoadjuvant chemoradiotherapy (nCRT) and substantially increase the risk of sepsis. In such cases, opting for transrectal internal drainage rather than conventional external drainage is a crucial strategy, as it preserves oncological principles while minimizing the risk of chronic malignant fistula formation within the radiotherapy field.

Material and Methods: This case manages the clinical management of a 45-year-old female patient with rectal cancer who developed a peritumoral abscess secondary to the rectal tumor.

Results: A 45-year-old female patient presented with diarrhea and abdominal pain. Colonoscopic evaluation revealed a circumferential rectal adenocarcinoma extending from 1-1.5 cm above the anal verge to 8 cm proximally. Staging positron emission tomography-computed tomography (PET-CT) demonstrated a 47×40 mm hypermetabolic, necrotic perirectal collection adjacent to the tumor on the right lateral aspect of the rectum. As total neoadjuvant therapy (TNT) was planned, surgical intervention was undertaken to eradicate the infectious focus prior to oncological treatment. Under lithotomy position, examination using an anal retractor identified a fluctuant area at the 9 o'clock position, approximately 5 cm proximal to the anal verge, corresponding to the tumor level. A cruciate intraluminal rectal incision was performed to achieve internal drainage, resulting in evacuation of approximately 50 cc of purulent material. The abscess cavity was thoroughly irrigated with normal saline, and a drain was placed into the rectal lumen. Postoperatively, the patient was closely monitored. On postoperative day 3, a marked reduction in inflammatory markers (CRP and WBC) was observed, allowing safe drain removal and discharge. Following successful control of the infection, the patient proceeded to the planned nCRT regimen.

Conclusion: Transrectal internal drainage for tumor-associated perirectal abscesses offers high clinical efficacy by enabling rapid infection control, early normalization of inflammatory parameters, and timely initiation of TNT. By avoiding the creation of an external cutaneous opening, this approach eliminates the risks of radiation-induced dermatitis and chronic malignant fistula formation during radiotherapy, thereby serving as a safe and effective bridge to nCRT. In conclusion, transrectal internal drainage of perirectal abscesses adjacent to low rectal tumors represents a reliable surgical option with low morbidity that prevents delays in oncological management.

Keywords: Rectal cancer, perirectal abscess, transrectal drainage

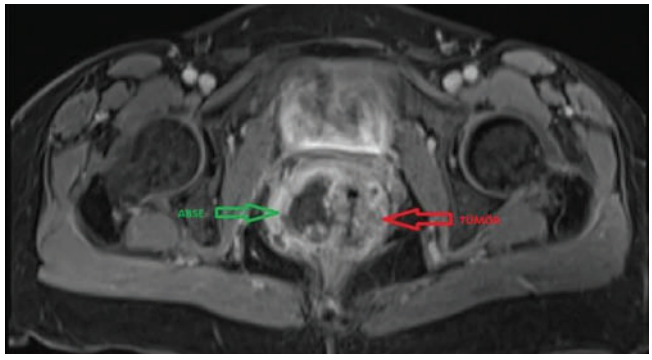


Figure 1. T1 postcontrast secans. The appearance of the abscess on the patient's MRI imaging.

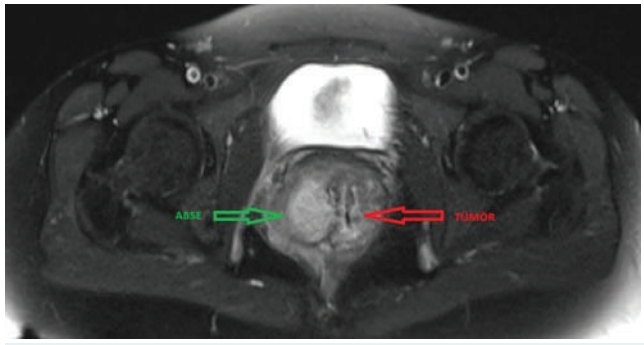


Figure 2. T2 secans. The appearance of the abscess on the patient's MRI imaging T2.

Table 1. Blood count

	Preoperative	Postoperative
WBC	12400	13300
Neutrophil (%)	83%	78%
CRP	100	40

[P-552]

Colon fistulization as a complication of ventriculo-peritoneal shunt: A rare case report and literature review

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Objective: Ventriculoperitoneal (V-P) shunting is considered one of the gold standard surgical methods in the treatment of hydrocephalus. Although complications such as infection, mechanical obstruction, and dysfunction are frequently reported in the literature, migration of the catheter into the gastrointestinal system and subsequent colon perforation are among the extremely rare but serious complications. In this report, we present a case where a V-P shunt fistulized into the rectal lumen following a sigmoid colon perforation.

Material and Methods: A 19-year-old male patient with a known history of meningomyelocele and spina bifida had previously undergone V-P shunt placement for hydrocephalus. His first shunt revision was performed in 2022 due to dysfunction. In 2024, the patient presented with the complaint of a foreign object emerging from the rectal area during defecation. Physical examination and laboratory parameters revealed no signs of acute abdomen. Computed tomography (CT) imaging identified that the shunt catheter had penetrated the sigmoid colon wall and terminated within the rectal lumen.

Results: During emergency surgical exploration, the shunt, which was found free on the anterior surface of the rectum and posterior to the bladder, was removed. In a concurrent evaluation with the neurosurgery team, the shunt identified under the fascia was tracked; it was confirmed to be fistulized to the sigmoid colon and was exteriorized via blunt dissection. The perforation site was repaired with primary sutures and covered with a small bowel mesenteric flap. The existing shunt system was converted to an external ventricular drain. Postoperatively, the patient remained clinically stable and followed a complication-free course under appropriate antibiotic therapy with cerebrospinal fluid penetration.

Conclusion: Complications of V-P shunts associated with colon perforation are exceedingly rare, accounting for 0.01-0.07% of all V-P shunt complications. The literature indicates that these complications typically manifest in the late period and may remain asymptomatic in some cases; therefore, early diagnosis is of critical importance. Successful outcomes can be achieved through surgical repair and appropriate antibiotic therapy. This case report highlights a rare but clinically significant dimension of V-P shunt complications.



Figure 1. Sagittal abdominal CT scan demonstrating the extension of the ventriculoperitoneal shunt catheter into the pelvic cavity and the localization of its distal tip within the rectosigmoid region.

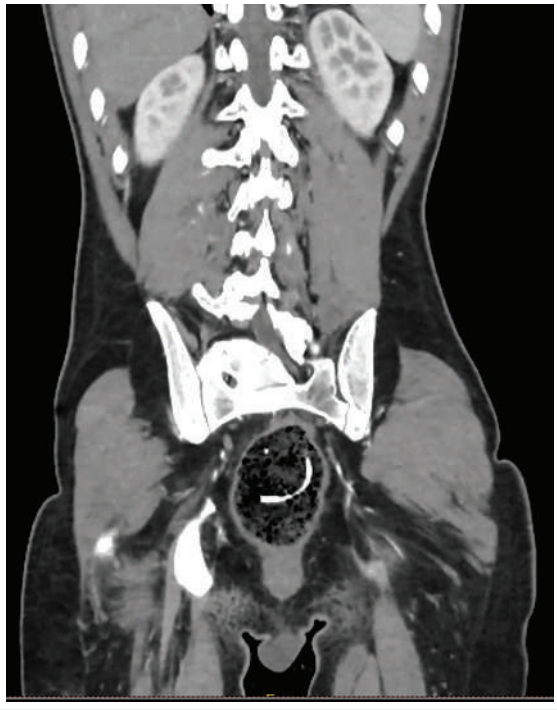


Figure 2. Coronal plane abdominal CT scan; shows the shunt catheter passing through the sigmoid colon wall and reaching the rectal area.

[P-553]

Ileocecal intussusception secondary to appendiceal mucocele: A minimally invasive surgical approach

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Objective: Intussusception is a rare clinical entity in adults, accounting for approximately 5% of all cases. Unlike pediatric cases, adult intussusception is usually secondary to an underlying organic pathology, most commonly neoplasms. Ileocecal intussusception caused by appendiceal mucocele is particularly uncommon. In this report, we present the laparoscopic management of ileocecal intussusception secondary to an appendiceal mucocele.

Material and Methods: Laparoscopic exploration revealed a mass lesion of the appendix causing ileocecal intussusception. Given the extension of the lesion to the appendiceal base and suspicion of malignancy, a laparoscopic right hemicolectomy with total mesocolic excision was performed to avoid the risk of reoperation. The ileocolic side-to-side anastomosis was constructed extracorporeally. The postoperative course was uneventful, and the patient was discharged on postoperative day five. Final histopathological examination confirmed appendiceal mucocele without evidence of malignancy. In the literature, this rare condition is most commonly managed by open surgical approaches.

Results: A 36-year-old female presented with a 2-3-day history of right lower quadrant abdominal pain, nausea, and loss of appetite. She had no vomiting and maintained active bowel movements and flatus passage. Physical examination revealed tenderness in the right lower quadrant. Laboratory findings showed no leukocytosis, while C-reactive protein was mildly elevated. Contrast-enhanced abdominal computed tomography demonstrated an approximately 6 cm invaginated segment in the ileocecal region. As there were no signs of peritonitis at admission, initial conservative observation was undertaken. However, due to the development of rebound tenderness, an increase in acute phase reactants, and persistent intussusception on follow-up imaging, surgical intervention was indicated.

Conclusion: Although rare, ileocecal intussusception in adults is frequently associated with an underlying organic lesion. Appendiceal mucocele should be considered in the differential diagnosis. In selected patients, laparoscopic management is a safe and effective alternative, providing the advantages of minimally invasive surgery.

Keywords: Intussusception, appendiceal mucocele, minimally invasive surgery

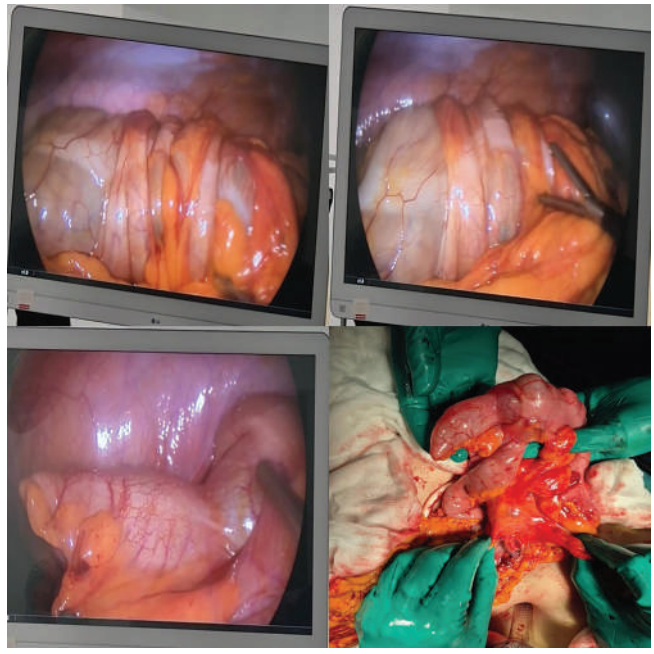


Figure 1. Intraoperative case images.

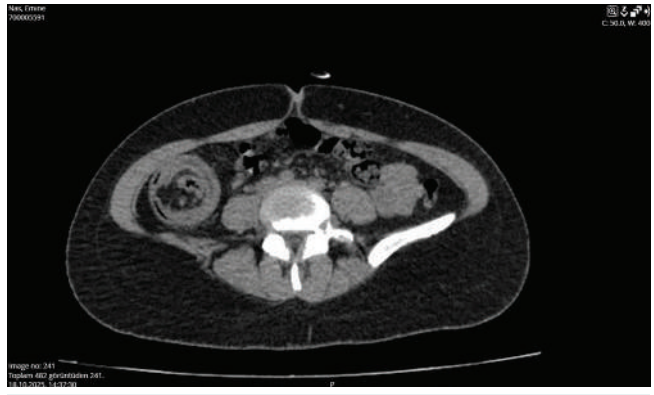


Figure 2. Preoperative CT images.

[P-554]

Rapidly growing inverted follicular keratosis in the anal region: A rare localization - case report

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Objective: Anal region lesions are most commonly benign in nature, and pathologies such as hemorrhoids, fibroepithelial polyps, and condyloma are usually considered in the differential diagnosis. However, lesions demonstrating rapid growth and atypical exophytic macroscopic features may raise suspicion for malignant or premalignant processes. Inverted follicular keratosis (IFK) is a benign epidermal proliferation showing squamous differentiation, typically observed on the face and scalp. Anal localization is extremely rare and may clinically mimic squamous cell carcinoma.

Material and Methods: A detailed medical history and physical examination were performed in a patient presenting with a rapidly growing anal lesion. There was no history of suspicious sexual contact. No family history of dermatological disease was reported. Due to the rapid growth and atypical appearance of the lesion, total excision under local anesthesia was planned. The lesion was excised with clear surgical margins and sent for histopathological examination.

Results: A 34-year-old male patient presented with an anal mass that had been present for approximately one month and had shown significant growth in recent weeks. Physical examination revealed an exophytic lesion approximately 1 cm in diameter, located adjacent to the anal verge, with a grape-like appearance. Macroscopic examination described a 2×1.5×0.5 cm polypoid excision specimen covered with mucosa. Microscopic evaluation demonstrated parakeratosis on the surface and an endophytic growth pattern of squamous cell proliferation extending from the epidermis into the dermis. The lesion was noted to extend to the surgical base margin. Immunohistochemical analysis showed focal weak p16 positivity and basal cell staining with Ki-67. The findings were reported as consistent with IFK.

Conclusion: Although malignancy is often suspected in rapidly growing exophytic anal lesions, rare benign entities should also be considered in the differential diagnosis. Anal localization of IFK is extremely uncommon and may clinically mimic malignant lesions. Therefore, excisional biopsy provides both diagnostic and therapeutic benefit. In our case, due to involvement at the surgical base margin, close clinical follow-up was recommended.

Keywords: Inverted follicular keratosis, anal lesion, excisional biopsy

[P-555]

What can we do if we cannot repair peritoneal defects? Case presentation: A patient who underwent bilateral TEP and laparoscopic cholecystectomy

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Objective: In TEP and TAPP inguinal hernia repairs, peritoneal opening is common. When using standard prolene mesh, the defect must be closed to prevent mesh-bowel contact. Various closure methods have been described depending on defect size and surgeon preference (energy sealing, suturing, clipping). In recurrent hernias, the peritoneal defect may be large and standard techniques may be insufficient. This study presents a patient undergoing elective surgery for bilateral inguinal hernia (right recurrence) and symptomatic gallstones.

Material and Methods: The patient's data was reviewed from digital records and surgical images were used.

Results: The patient had no abdominal surgery other than a previous open right inguinal hernia repair. A subumbilical incision was made, and the preperitoneal space was created for TEP. Before dissection, a large rightsided peritoneal defect caused by adhesions was identified. The direct and indirect hernia sacs were reduced. Closure of the defect was evaluated but deemed unfeasible due to its size and tissue fragility, so intraperitoneal assessment was performed. Leftsided hernia sacs were dissected, and a prolene patch was placed. The subumbilical port was advanced intraperitoneally. Because the peritoneal opening could not be closed with standard techniques, it was left open, and a composite mesh was positioned in the preperitoneal space. The patient was placed in reverse Trendelenburg, and laparoscopic cholecystectomy was completed without complications. Mesh position was confirmed, pneumoperitoneum was ended, and the 120 minutes procedure concluded uneventfully. At one year followup, the patient had no complaints or recurrence.

Conclusion: We were unable to close the uncontrolled peritoneal defect using the described techniques, forcing us to seek an alternative approach. We opted for repair using a composite patch, known not to cause problems when in contact with intra-abdominal organs. The fact that the affected side had previously undergone repair using an open surgical technique influenced our decision. On the other hand, the patient's second surgery had not yet been performed. We concluded the case in this manner due to the absence of acute cholecystitis and the lack of complicated gallbladder surgery. In the event of complicated gallbladder surgery, we might have reconsidered our decision during the operation due to the risk of infection of the patch. Such challenging situations may arise due to patient- or operator-related reasons. To determine whether this approach can be safely used when it is not possible to close the peritoneal defect, multiple case series are required.

Keywords: Inguinal hernia, minimally invasive surgery

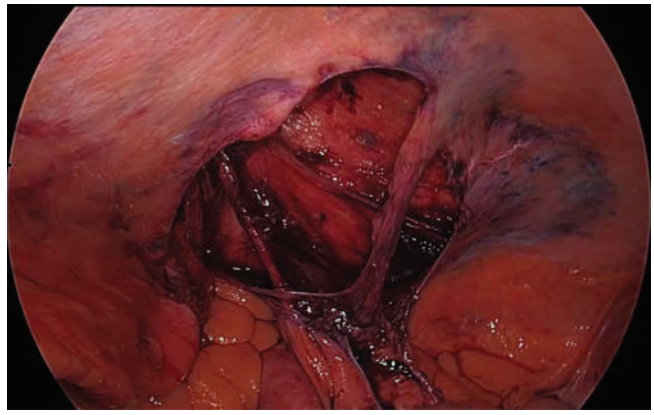


Figure 1. Image of the peritoneal defect from inside the abdomen.

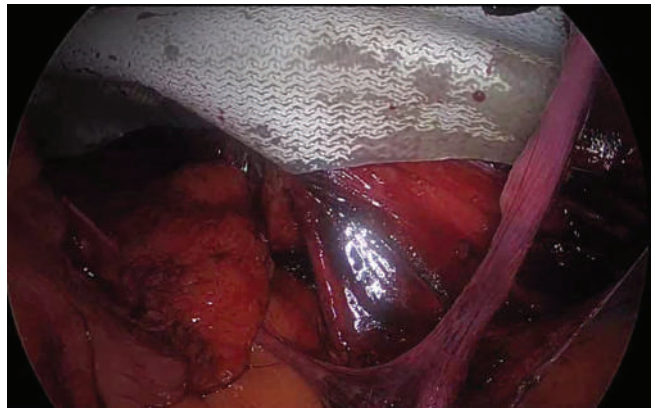


Figure 2. Position of the composite mesh within the peritoneal defect.

[P-556]

Use of a probe (PTeye) in minimally invasive parathyroidectomy: A case report

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Objective: Hyperparathyroidism is a condition characterized by excessive secretion of parathyroid hormone (PTH) by the parathyroid glands. The most common cause is primary hyperparathyroidism, and approximately 80-85% of these cases are due to a parathyroid adenoma. Surgery remains the gold standard treatment. Parathyroid detectors refer to devices and techniques used intraoperatively during thyroid and parathyroid surgery to identify and preserve parathyroid glands or to localize parathyroid adenomas when present. Rather than a single device, various systems based on different technologies are currently available for this purpose.In this study, we aimed to present a case in which PTeye autofluorescence technology was used during minimally invasive parathyroidectomy, representing a novel application method that, to our knowledge, has not yet been reported in the literature.

Material and Methods: A 50-year-old male patient with no known comorbidities presented with a three-month history of muscle pain and fatigue. Laboratory investigations revealed elevated serum calcium (10.9 mg/dL) and PTH levels (150 pg/mL). Neck ultrasonography and parathyroid scintigraphy demonstrated a lesion consistent with a parathyroid adenoma located adjacent to the inferior pole of the right thyroid lobe. The patient was informed about the procedure, and written informed consent was obtained.

Results: Preoperatively, the planned skin incision of approximately 1.5 cm was marked under ultrasonographic guidance corresponding to the adenoma localization. Reference measurements were obtained using PTeye before reaching the parathyroid tissue. With the assistance of PTeye, the parathyroid adenoma located at the right inferior pole was identified. Measurements confirmed the tissue to be parathyroid in origin, and parathyroidectomy was performed. The operative time was approximately 35 minutes. Intraoperative rapid PTH (quick PTH) measurement showed a decrease to 87.6 pg/mL, confirming successful excision of the adenoma.

Conclusion: Minimally invasive techniques are increasingly preferred in parathyroid surgery. The PTeye system, a next-generation parathyroid detector, may facilitate minimally invasive parathyroidectomy by enabling quicker and more reliable identification of parathyroid tissue while also providing superior cosmetic outcomes.

Keywords: Minimally invasive surgery, parathyroid adenoma, PTeye

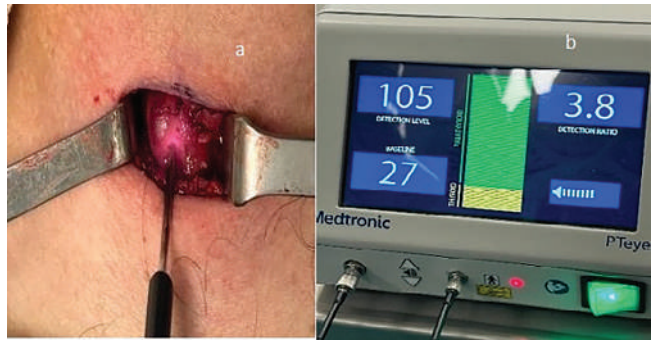


Figure 1. Intraoperative use of PTeye. Use in PTeye and real-time monitoring of adenoma detection.

[P-557]

A silent neuroendocrine tumor: A case of pancreatic somatostatinoma detected at an early stage

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Objective: Somatostatinoma is a rare pancreatic neuroendocrine tumor (NET) that often presents with non-specific clinical symptoms, frequently leading to delayed diagnosis. Although a classic triad of diabetes mellitus, steatorrhea, and cholelithiasis has been described in functional cases, these findings may not coexist in every patient. This report aims to present the clinical course, preoperative evaluation, surgical treatment, and pathological findings of a histopathologically confirmed somatostatinoma located in the pancreatic head, treated at the Department of General Surgery, University of Health Sciences Türkiye, Ankara Etlik City Hospital.

Material and Methods: The case of a patient diagnosed with somatostatinoma and operated on at University of Health Sciences Türkiye, Ankara Etlik City Hospital was evaluated retrospectively. Demographic data, presenting symptoms, functional findings, laboratory values, imaging modalities, preoperative localization success, surgical approach, operative time, postoperative complications, length of stay, and histopathological parameters (tumor diameter, localization, WHO NET grade, Ki-67 proliferation index, surgical margin status, and presence of metastasis) were examined.

Results: A 47-year-old female (BMI: 21 kg/m^2, ASA 2) presented with abdominal pain for six months. Functional evaluation revealed achlorhydria without steatorrhea, diabetes, or cholelithiasis. Fasting glucose was 121 mg/dL, and serum somatostatin was 233 pg/mL. Contrast-enhanced CT and MRI localized an 11 mm tumor in the pancreatic head without distant metastasis. The patient underwent robotic pancreaticoduodenectomy (operative time: 360 min). No postoperative complications or fistulas occurred (Clavien-Dindo 1); the hospital stay was 10 days with complete symptomatic resolution. Histopathology confirmed a WHO Grade G1 NET (Ki-67: 2%) with R0 resection. No recurrence or mortality was noted at 1 month follow-up.

Conclusion: Somatostatinoma is prone to diagnostic delay due to its rarity and non-specific presentation, with many cases reaching advanced stages and limiting curative options. This case highlights that early-stage (11 mm) pancreatic somatostatinomas carry curative potential when surgically resected. While the surgical approach depends on tumor location (e.g., pancreaticoduodenectomy for head lesions, distal pancreatectomy for distal ones), the primary goals are accurate staging to exclude metastasis and achieving R0 resection. In this case, the combination of low-grade histology (G1), low Ki-67 (2%), absence of metastasis, and R0 status provides strong pathological indicators for a favorable prognosis. In conclusion, somatostatinoma should be considered in the differential diagnosis; early diagnosis and appropriate surgical strategies can yield successful oncological outcomes in selected cases.

Keywords: Functional neuroendocrine tumor, pancreatic neuroendocrine tumor, rare pancreatic tumors, Somatostatinoma, WHO NET classification

Table 1. Somatostatinoma (pancreatic/duodenal origin)-comparison of present case with selected literature

Çalışma	Tasarım	Primer odak	Fonksiyonel bulgular (triad)	Ki-67 / Grade	Metastaz (tanı anı)	Tedavi yaklaşımı	Ana mesaj
Patel ve ark., 2022	Olgu sunumu	**Pankreas**	DM + Gİ semptomlar (sendrom değişken)	Bildirilmiş (olgu bazlı)	Olgu bazlı	Cerrahi/olgusal yönetim	Somatostatinoma klinik olarak heterojen; tanı çoğu zaman sendromu taklit ederek gelir.
Kos-Kudła ve ark., 2022	Derleme / güncelleme	PanNEN bağlamı	Fonksiyonel tümörlerde tablo değişken	Ki-67/Grade prognostik	Evre prognozu belirler	Lokalize hastalıkta cerrahi temel	Prognozda proliferasyon (Ki-67/grade) ve evre belirleyicidir.
Wahba ve ark., 2024	Derleme	Pankreas/duodenum	DM, steatore, safra taşı vb. değişken	Sınıflama vurgusu	Evreye bağlı	Lokalize hastalıkta cerrahi, metastatikte medikal/onkolojik	Somatostatinoma nadir; **lokalize hastalıkta cerrahi ana tedavidir**, semptomlar her zaman klasik değildir.
Albers ve ark., 2024	Nadir fonksiyonel pNEN serisi	**Pankreas (fonksiyonel nadir grup)**	Sendromlar heterojen	R0 + düşük evre iyi	Karaciğer tutulumu kritik	R0 rezeksiyon + seçilmiş olgular	Hastalıksız seyirde **R0 rezeksiyon** ve **başlangıçta karaciğer tutulumu olmaması** öne çıkar.
StatPearls, 2025	Kanıta dayalı özet	Pankreas/duodenum	Triad her zaman tam değil	NET sınıflaması	Sık geç yakalanabilir	Lokalize hastalıkta cerrahi	Nadirlik + non-spesifik semptomlar tanıyı geciktirir; erken yakalanırsa küratif potansiyel vardır.
Bizim olgumuz (Etlik Şehir Hast., 2026)	Tek olgu	**Pankreas başı**	Hipoklorhidri var; **DM/steatore/safra taşı yok**	**G1, Ki-67 %2**	**Yok**	Lokalizasyona uygun rezeksiyon (baş yerleşimi nedeniyle pankreatikoduodenektomi), robotik	Klasik triad olmadan da somatostatinoma olabilir; **erken evre + düşük Ki-67** ile rezeksiyon küratif potansiyel taşır.

[P-558]

Emergency spleen-preserving distal pancreatectomy for traumatic distal pancreatic transection after blunt abdominal trauma: A case report

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Objective: Pancreatic injuries, although rare in blunt abdominal trauma due to their retroperitoneal location, are high-morbidity clinical conditions presenting significant challenges in diagnosis and treatment. Surgical treatment is often unavoidable, particularly in distal pancreatic injuries affecting the main pancreatic duct. However, with appropriate patient selection, spleen-sparing surgical approaches are important for preserving immune function in young patients. This case report presents a patient who underwent emergency spleen-sparing distal pancreatectomy due to distal pancreatic detachment following a heavy fall.

Material and Methods: Case report: A 24-year-old male patient was referred to our emergency department from an external center after a heavy block fell on him at a construction site.

Results: The patient was conscious and had stable vital signs upon admission. Physical examination revealed tenderness and rebound tenderness in the right quadrant of the abdomen. Laboratory investigations showed significantly elevated amylase and lipase levels. Contrast-enhanced abdominal computed tomography scans performed at other centers and our hospital showed free fluid in the pelvis, but pancreatic injury was not initially reported. Due to continued clinical suspicion, the images were re-evaluated by a radiology specialist, revealing a near-complete laceration in the distal pancreas. The patient underwent emergency laparotomy, and exploration revealed approximately three-quarters separation of the distal pancreas. Splenic-sparing distal pancreatectomy and Wirsung duct repair were performed, preserving the splenic vessels and spleen. In the postoperative period, the patient required intensive care monitoring, developed a pancreatic collection, underwent drainage by interventional radiology, and performed endoscopic retrograde cholangiopancreatography due to ongoing pancreatitis. The patient was discharged after clinical improvement and underwent elective surgery for incisional hernia during long-term follow-up.

Conclusion: In pancreatic injuries due to blunt abdominal trauma, diagnosis may be delayed, and computed tomography may not always be sufficient. With high clinical suspicion, early surgical decision, and appropriate patient selection, spleen-sparing distal pancreatectomy can be a safe and effective treatment option for distal pancreatic injuries.

Keywords: Pancreatic trauma, distal pancreatectomy, spleen-sparing surgery, blunt abdominal trauma

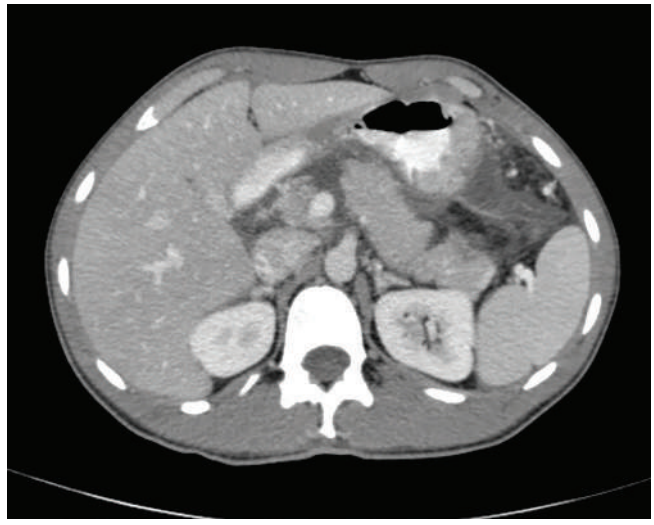


Figure 1. CT imaging shows distal pancreatic injury.
CT: Computed tomography.



Figure 2. Distal pancreatectomy specimen.

[P-559]

An unusual adhesion-related ileus at the right inferolateral border of the liver: A case report

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Objective: Adhesive small bowel obstruction (SBO) accounts for approximately 60-70% of all mechanical SBOs and is most commonly caused by pelvic or mesenteric adhesions. Perihepatic adhesions leading to mechanical ileus are extremely rare, with a reported incidence of less than 1%. Mechanical obstruction caused by fibrotic bands originating from the inferolateral surface of the liver has been described only in a limited number of cases in the literature. This case report aims to present a rare cause of SBO resulting from a fibrotic band arising from the right inferolateral border of the liver.

Material and Methods: A patient presenting with acute ileus was retrospectively evaluated in terms of clinical presentation, laboratory findings, radiological imaging, intraoperative findings, and postoperative course. Diagnostic evaluation included contrast-enhanced computed tomography (CT) and serial upright abdominal radiographs. Following failure of conservative management, surgical exploration was performed. Operative findings and clinical outcomes were analyzed.

Results: A 34-year-old female patient with no known comorbidities had previously undergone emergency laparotomy for acute abdomen following cesarean section in 2023, during which right hemicolectomy with ileocolic anastomosis was performed due to severe colonic dilatation and torsion at the hepatic flexure. Six-teen months later, she was admitted with abdominal distension and tenderness consistent with mechanical ileus. Laboratory parameters showed no evidence of bowel ischemia. Contrast-enhanced CT demonstrated marked dilatation of proximal small bowel loops with normal-caliber distal segments, supporting the diagnosis of mechanical obstruction. Serial upright abdominal radiographs revealed multiple air-fluid levels. As conservative management failed, surgical intervention was undertaken. During median laparotomy, dense intra-abdominal adhesions were dissected. Exploration revealed a thin, fibrotic band approximately 1 cm in length originating from the right inferolateral border of the liver and extending to the small bowel mesentery, causing mechanical obstruction approximately 100 cm distal to the ligament of Treitz. Proximal bowel loops were dilated, distal segments were normal, and bowel viability was preserved. The fibrotic band was divided, and bridotomy was performed without the need for bowel resection.

Conclusion: Mechanical SBO caused by fibrotic bands originating from the right inferolateral border of the liver is an exceptionally rare entity and may be difficult to diagnose preoperatively. Atypical perihepatic adhesions may not produce a clear transition zone on imaging studies. Therefore, perihepatic bands should be considered in patients with SBO who fail conservative treatment. Surgical bridotomy is a safe and effective approach that can result in rapid clinical recovery, as demonstrated in this case.

Keywords: Perihepatic adhesion, bridotomy, mechanical small bowel obstruction, explorative laparotomy, adhesion

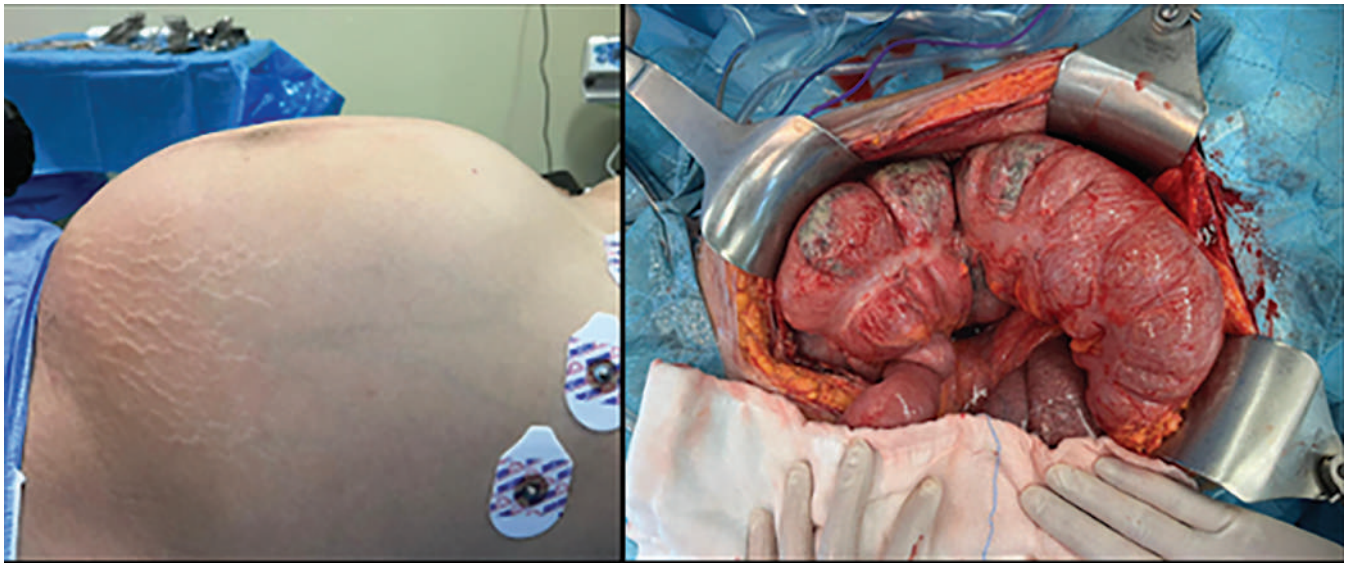


Figure 1. Abdomen before and after emergency laparotomy.

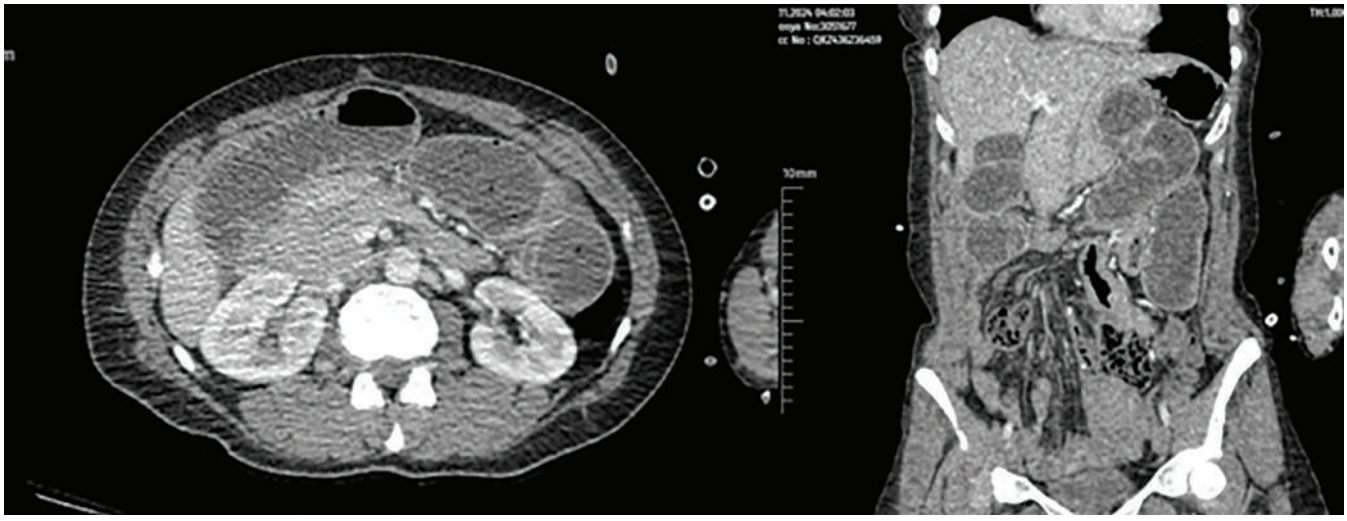


Figure 2. Preoperative contrast-enhanced CT image.

Marked dilatation of the proximal small bowel loops was observed, while the distal segments were of normal caliber, favoring a mechanical obstruction.

CT: Computed tomography.

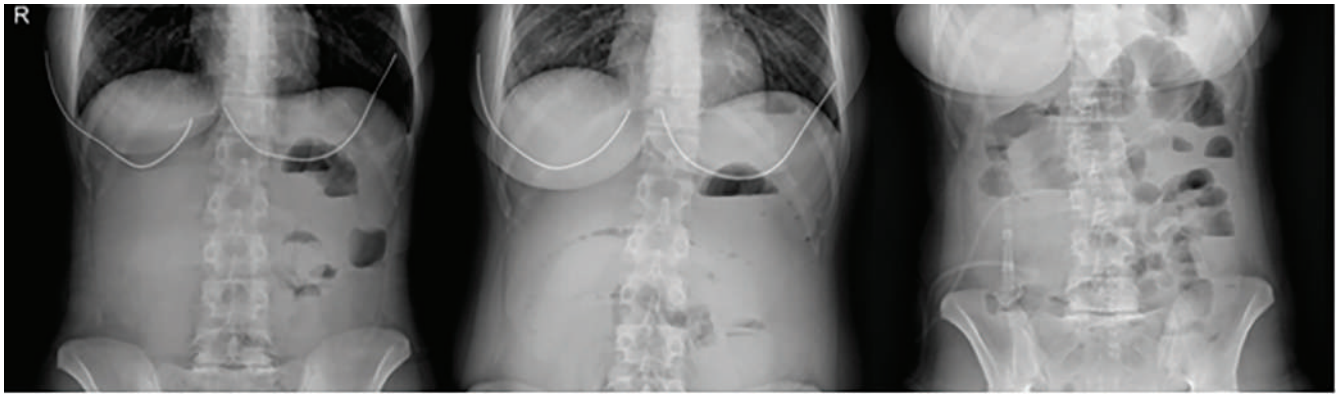


Figure 3. Upright abdominal radiograph series.

The presence of prominent air-fluid levels on serial upright abdominal radiographs supported the diagnosis of mechanical ileus.



Figure 4. Intraoperative brid images.

Approximately 100 cm distal to the ligament of Treitz, a thin fibrotic band measuring about 1 cm in length originating from the right inferolateral border of the liver was identified, extending to the small bowel mesentery and causing mechanical obstruction; proximal bowel loops were dilated, distal segments were normal, bowel viability was preserved, and the band was divided by bridotomy without additional pathology.

[P-560]

Atypical presentation and emergency surgical management of spontaneous hepatic rupture in amyloidosis: A case report

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Objective: Systemic amyloidosis is a rare disease characterized by extracellular amyloid fibril deposition. While hepatic involvement is generally asymptomatic, amyloid infiltration increases liver parenchyma and vascular fragility, predisposing patients to spontaneous hepatic rupture a rare but fatal complication. This report presents a patient with amyloidosis who underwent emergency surgery for spontaneous hepatic rupture and hemorrhagic shock triggered by severe coughing fits.

Material and Methods: A 60-year-old male with systemic amyloidosis presented to the emergency department with nausea, vomiting, and dizziness. His history included intermittent liver function test elevations, non-nephrotic proteinuria, and chronic kidney disease. Notably, he reported severe coughing for the past week. Initially hypotensive, he received intravenous fluids, achieved hemodynamic stability, and was discharged. Hours later, he returned with a deteriorating condition, confusion, tachycardia, and a blood pressure of 70/40 mmHg. Laboratory tests revealed a hemoglobin level of 5.1 g/dL. Due to hemodynamic instability and acute abdomen, a non-contrast abdominal CT was performed, showing hemorrhagic free fluid in the subhepatic, perihepatic, and right paracolic regions. The patient was taken for emergency laparotomy. Approximately 1000 cc of hemorrhagic fluid was aspirated. A massive rupture with active bleeding was observed in the right liver lobe. Because the amyloid-infiltrated liver tissue was extremely fragile, making primary suturing impossible, perihepatic packing was applied for hemorrhage control. After receiving 3 units of packed red blood cells, the abdomen was closed, and the intubated patient was transferred to the ICU.

Results: Spontaneous hepatic rupture in systemic amyloidosis is rare but carries a high acute-phase mortality rate (30-70%). Amyloid fibril accumulation impairs vascular elasticity, causing extreme fragility. In our case, the sudden intra-abdominal pressure increase from a week of severe coughing fits created mechanical stress on the fragile liver and Glisson's capsule, triggering the rupture. The patient's initial presentation with non-specific symptoms and fluid-responsive transient hypotension demonstrates how amyloidosis-related bleeding can be insidious. While transarterial embolization is the first-line treatment for hemodynamically stable patients, emergency laparotomy is life-saving for those presenting with hemorrhagic shock. Because amyloid-infiltrated liver tissue cannot hold sutures, perihepatic packing—as successfully applied here—is the safest and most effective surgical maneuver to achieve hemostasis, avoiding the risks of primary suturing or resection.

Conclusion: In patients with known amyloidosis or unexplained hepatomegaly, spontaneous hepatic rupture must be considered if sudden hypotension and anemia develop following Valsalva-like maneuvers. In hemodynamically unstable patients, prompt laparotomy and perihepatic packing are life-saving.

Keywords: Spontaneous hepatic rupture, amyloidosis, packing

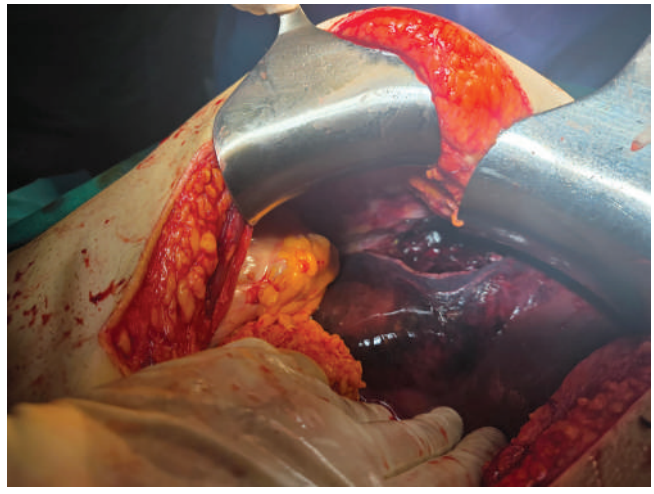


Figure 1. Spontaneous hepatic rupture intraop photo.

[P-564]

A rare cause of anal polypoid lesion: Perianal hidradenoma papilliferum

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Objective: Hidradenoma papilliferum is a rare benign tumor which is thought to originate from apocrine glands or anogenital mammary-like glands. It is most commonly seen in middle-aged women and usually located in the vulvar and perianal regions. Clinically, it generally presents as a slow-growing, well-circumscribed solitary nodule and may be confused with hemorrhoids, anal polyps, or other benign anal lesions. Malignant transformation is extremely rare; however, definitive diagnosis can only be made by histopathological examination. In this study, we aimed to present a rare case of hidradenoma papilliferum located in the perianal region.

Material and Methods: A 42-year-old female patient presented with a complaint of a swelling in the anal region for approximately 3-4 years. The patient reported intermittent bleeding and pain from time to time. On physical examination of the anal region, a polypoid lesion originating from the anal verge was observed. No additional pathology was detected. Rectosigmoidoscopy revealed no abnormal findings. Surgical excision of the anal polypoid lesion was planned. In the operating room, the lesion was totally excised under spinal anesthesia (Figures 1, 2).

Results: The patient was discharged uneventfully on the postoperative first day. No complications or recurrence were observed during follow-up. Histopathological examination of the excised specimen was reported as hidradenoma papilliferum. The macroscopic and clinical appearance of the lesion was similar to other benign anal tumors, and a specific preoperative diagnosis could not be established. Consistent with the literature, the definitive diagnosis was achieved after surgical excision and histopathological evaluation.

Conclusion: Hidradenoma papilliferum is a rare benign anogenital tumor most commonly observed in the vulvar and perianal regions. Since it may clinically mimic hemorrhoids and other benign anal lesions, it should be considered in the differential diagnosis of benign anal masses. Complete surgical excision is sufficient for both diagnosis and treatment, and the prognosis is generally favorable. Proctologists should keep hidradenoma papilliferum in mind during the evaluation of benign anal lesions.

Keywords: Hidradenoma papilliferum, perianal polyp, benign anal tumor



Figure 1. Preoperative view of the polypoid perianal lesion located at the anal verge.



Figure 2. Early postoperative appearance after total excision of the lesion.

[P-565]

Ulcerative giant breast cancer: Case report

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Objective: Large, ulcerated breast lesions are a rare and bothersome consequence of advanced breast cancer. The most significant factors in the etiology include patient denial of the illness, delayed diagnosis, psychological distress, low socioeconomic status, social isolation, and male gender. This means the condition can be seen not only in developing countries but also in developed ones.

Material and Methods: Patients typically present to healthcare facilities with complaints of uncontrolled bleeding, recurrent infections, chronic pain, aesthetic concerns, and, most importantly, foul odor. In this case report, we aim to present a breast cancer patient with a locally advanced, giant ulcerated wound, along with a review of the literature.

Results: A 42-year-old female patient presented to our clinic with complaints of discharge and bleeding from her left breast. Her medical history revealed no prior examination or imaging studies related to breast diseases. Physical examination revealed an ulcerated lesion approximately 15x20 cm in size, covered with fibrin, with occasional purulent discharge and bleeding in the left breast. A tru-cut biopsy was performed for pathological diagnosis. The pathology result was consistent with isolated Her2^{+} invasive ductal cancer, and a screening for distant organ metastases was performed. Lung and femur metastases were detected, and a multidisciplinary council decided on mastectomy due to the patient's uncontrollable bleeding and infection. The patient underwent salvage mastectomy with axillary sampling. The pathology report showed negative hormone levels, positive Her2^{+}, and a Ki67 index of 40%. The patient experienced no complications during postoperative follow-up and was discharged with oncology recommendations.

Conclusion: Patients with ulcerative tumors constitute a particularly challenging group due to the complexities in managing tumor-related symptoms such as pain, exudative discharge, foul odor, bleeding, infections, and aesthetic concerns. Individuals with ulcerative breast tumors experience a significant impairment in quality of life. This may be due to delays and disruptions in the healthcare system, but it can also be primarily attributed to psychological reluctance to accept their condition, advanced age, and male gender. Currently, there is no standard treatment approach for this patient group. Therefore, discussing optimal management within a multidisciplinary team is crucial. The primary approach in patient management is usually surgical intervention, total or modified radical mastectomy, or palliative procedures aimed at reducing tumor thickness.

Keywords: Ulcerative, breast cancer

[P-567]

Isolated heel pressure injury following peripheral arterial bypass surgery: A case report

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Objective: Pressure injuries are difficult clinical problems to heal, especially in the elderly and in the presence of diabetes mellitus (DM). Microvascular disorders associated with DM, peripheral neuropathy, and the risk of infection negatively affect wound healing. The heel region is one of the high-risk areas due to bone protrusions and constant exposure to pressure.

Material and Methods: This case report aims to evaluate the effectiveness of current wound care methods and position changes on wound healing in the treatment of a pressure ulcer that developed on the heel of a patient with DM who underwent bypass surgery.

Results: A 69-year-old male patient with a history of hypertension, DM, and right femoropopliteal bypass graft presented to the Chronic Wound Care Clinic with a 4*5 cm unstaged stage 2 pressure ulcer in the right heel area. The wound margin was dry, and calluses were present on both heels. The patient was on insulin and smoked. He stated that he had undergone bypass surgery one month prior and presented to us with a complaint of a non-healing wound on his right heel due to immobility during the postoperative period. The patient's blood glucose level was 319 mg/dL, and HbA1C level was 7%. The wound was primarily treated with an autolytic debridement product and surgical debridement procedures, and necrotic tissue was removed from the wound. A barrier cream was applied to the dry edges of the wound. After preparing the wound bed, a topical growth factor was used to promote granulation and epithelialization. During this process, regular position changes were implemented to protect the foot from pressure, and metabolic control was ensured by monitoring blood glucose levels, which positively supported the healing process. The patient's wound healed in approximately 4 months under outpatient conditions; the patient and their family were informed about protective measures and foot care to prevent the recurrence of pressure injuries.

Conclusion: The combined use of autolytic debridement and topical growth factor is an effective approach in the treatment of heel pressure injuries in elderly patients with DM. Comprehensive treatment focused on wound bed preparation accelerated the healing process and prevented the development of complications. This combined approach can be considered a viable treatment option in similar patient groups. Applications focused on pressure protection, especially in high-risk patient groups, play a key role in reducing morbidity by preventing the development of pressure ulcers.

Keywords: Pressure ulcer, chronic wound, bypass surgery, heel ulcer



Figure 1. The course of treatment for pressure ulcers developing on the heel.

[P-570]

Use of a nanocellulose-based wound dressing in second-degree facial burns: Two case reports

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Objective: Burn injuries are among the traumatic conditions that lead to significant morbidity at both individual and societal levels. The frequent involvement of the head and neck region, along with the critical functional and aesthetic importance of the face, makes the management of burns in this area particularly challenging. Due to the complex anatomical structure of the face, resulting deformities may cause not only physical impairment but also psychosocial problems.

Material and Methods: In this study, the effectiveness of a nanocellulose-based wound dressing was evaluated in two patients with second-degree facial burns.

Results: In both cases, standard wound cleansing and topical antimicrobial therapy were applied in the early period, followed by continued treatment with a nanocellulose-based wound dressing. Granulation tissue formation was observed at an average of six days, and no infection, allergic reaction, or additional complications were detected.

Conclusion: No pathological scar formation was observed during the follow-up period. Our findings suggest that the nanocellulose-based wound dressing is a safe and effective biomaterial that supports tissue healing in facial burns.

Keywords: Facial burn, nanocellulose wound dressing, second-degree burn



Figure 1. Burn areas of case 1.



Figure 2. Burn areas of case 2.

[P-571]

Isolated endometrioid adenocarcinoma developing on the abdominal wall on the basis of endometriosis: A case report and current literature review

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Objective: Endometriosis predominantly develops during obstetric and gynecological procedures due to iatrogenic transplantation of endometrial tissue. Malignant transformation in endometriosis is exceedingly rare (0.3-1%). Cases of ectopic endometriosis demonstrating malignant transformation are even rarer.

Material and Methods: In this study, we report such a case and review previous literature. All studies addressing cases of ectopic endometriosis showing malignant transformation reported in the literature to date have been reviewed, and the study has been completed.

Results: This study presents a case of isolated endometrioid adenocarcinoma developing on the anterior abdominal wall on the basis of endometriosis, unrelated to surgical scars. A well-defined, fixed, and firm mass measuring 3-4 cm deep subcutaneously to the right of the umbilicus was identified in a 29-year-old female patient. The mass with a preliminary diagnosis of desmoid tumor was removed en bloc. Pathology result showed endometrioid adenocarcinoma. As a result of further examinations, no other focus was detected in the patient. Similarly, 54 cases were identified in the literature.

Conclusion: It is essential for clinicians to keep in mind that carcinomas may develop on the basis of endometriosis.

Keywords: Endometrioid adenocarcinoma, endometriosis, malignant transformation, abdominal wall



Figure 1. Computed tomography image.

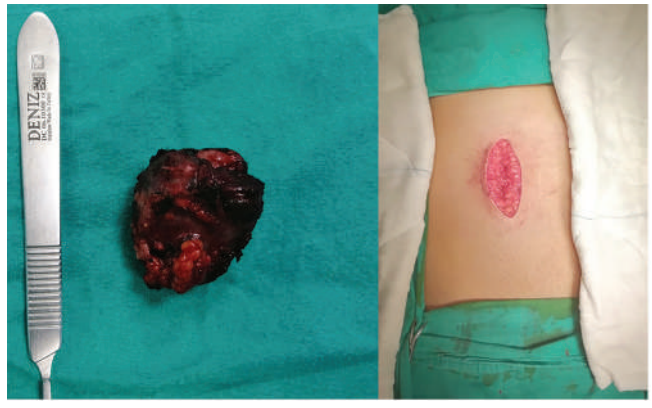


Figure 2. Macroscopic view of the mass.

[P-572]

Clinical importance of inhalation injury in burn patients: A case report

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Objective: Inhalation injury is an important clinical condition that describes damage to the respiratory tract and lung parenchyma caused by the inhalation of hot gases, smoke, and toxic chemicals, and it significantly increases morbidity and mortality in burn patients. Particularly when associated with flame burns, early recognition and appropriate management are of vital importance due to the risk of airway edema, impaired gas exchange, and a systemic inflammatory response.

Material and Methods: A 55-year-old male patient with a known history of hypertension and diabetes mellitus presented to the emergency department with flame burns involving the face, neck, anterior trunk, and left hand after being set on fire following the pouring of a flammable substance over him.

Results: The patient, whose total burn surface area was calculated as 12%, was intubated early and admitted to the intensive care unit for close monitoring due to inhalation injury and the development of laryngeal edema. Bronchodilator therapy, systemic corticosteroids, appropriate fluid resuscitation, and anticoagulant prophylaxis were administered. Fluid therapy was arranged according to the Parkland formula, and the patient was closely monitored with hourly urine output and clinical parameters. A multidisciplinary treatment plan was established with the involvement of ophthalmology, otorhinolaryngology, pulmonology, and psychiatry departments. Local wound care included antiseptic cleansing and the use of enzymatic and autolytic debridement methods; no infection developed during follow-up. The patient was successfully extubated after five days of intubation, and pulmonary complications were prevented with respiratory exercises. In the later course of hospitalization, tangential excision and grafting were performed, and the patient was discharged in stable condition.

Conclusion: In conclusion, in burn patients with inhalation injury, early establishment of airway security, controlled fluid resuscitation, effective pulmonary care, and a multidisciplinary approach improve treatment outcomes. This case demonstrates that timely intervention and coordinated clinical management play a critical role in preventing complications.

Keywords: Burn, inhalation injury, airway management

[P-575]

A rare case with pathology reported as giant distal esophageal diverticulum- leiomyoma with a diameter of 15 cm

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Objective: Esophageal diverticula are rare pathologies, most commonly measuring 2-5 cm in diameter. Lesions exceeding 10 cm are defined as giant esophageal diverticula and represent an extremely uncommon clinical entity. Giant diverticula may clinically and radiologically mimic gastric or other intra-abdominal masses, leading to diagnostic challenges. In rare instances, biopsies obtained from the diverticular wall may be interpreted as leiomyoma due to smooth muscle hypertrophy, irregular fasciculation of muscle fibers, and focal muscular thickening. Such findings may result in diagnostic confusion and necessitate careful clinicopathological correlation. In this report, we present a rare case of a 15×15 cm giant distal esophageal diverticulum with pathological findings reported as leiomyoma.

Material and Methods: A 55-year-old male patient with no known comorbidities presented to the emergency department with nausea, vomiting, epigastric discomfort, and inability to tolerate oral intake. Detailed clinical examination, laboratory investigations, radiological imaging, and endoscopic evaluations were performed. The patient's medical history, including previous surgical interventions and pathological reports, was thoroughly reviewed. Based on the overall assessment, a diagnosis of giant distal esophageal diverticulum was established, and the patient was scheduled for surgical treatment.

Results: Physical examination revealed epigastric tenderness. Laboratory tests showed a leukocyte count of 24,000/mm^3 and a CRP level of 22 mg/L. Approximately 2000 cc of dilatation fluid was aspirated via a nasogastric tube. Contrast-enhanced abdominal and pelvic computed tomography demonstrated an extra-gastric pouch-like structure.The patient's history revealed that three years earlier he had undergone emergency Graham patch repair for perforated peptic ulcer. During that operation, a giant intra-abdominal mass was observed and biopsied, and the pathology was reported as leiomyoma. Subsequent gastroscopy revealed a 40-cm-long esophagus and a distal esophageal diverticulum, after which the patient was referred for surgery. Intraoperative exploration demonstrated a giant diverticulum originating from the distal esophagus with a markedly hypertrophic muscular layer measuring approximately 15×15 cm. The diverticulum was excised, and an esophagogastric anastomosis was performed using a circular stapler, followed by pyloroplasty. Postoperatively, the patient tolerated oral intake well and was discharged in good condition.

Conclusion: Giant esophageal diverticula often present with non-specific gastrointestinal symptoms, including nausea, vomiting, early satiety, and intolerance to oral intake. In symptomatic cases, conservative management is usually inadequate. Surgical treatment serves both diagnostic and therapeutic purposes. Therefore, early surgical intervention is essential to relieve symptoms, prevent complications, and improve patient quality of life.

Keywords: Esophageal surgery, giant esophageal diverticulum, leiomyoma, upper gastrointestinal surgery



Figure 1. Surgical excision of a giant esophageal diverticulum giant esophageal diverticulum.

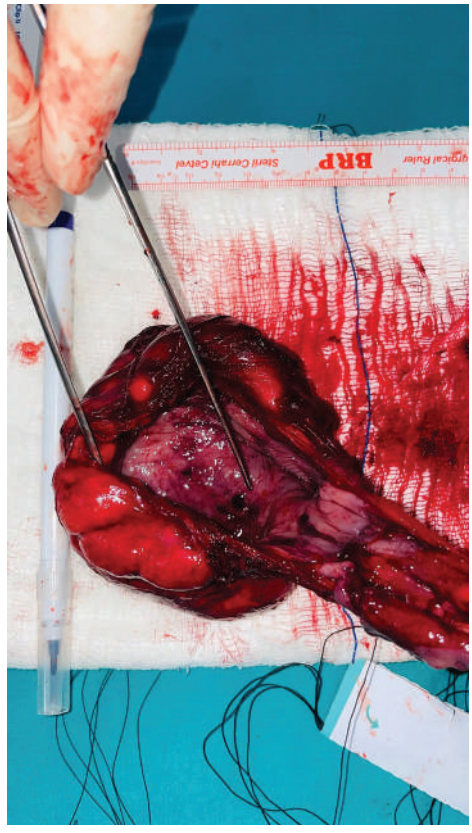


Figure 2. Surgical excision of a giant esophageal diverticulum.

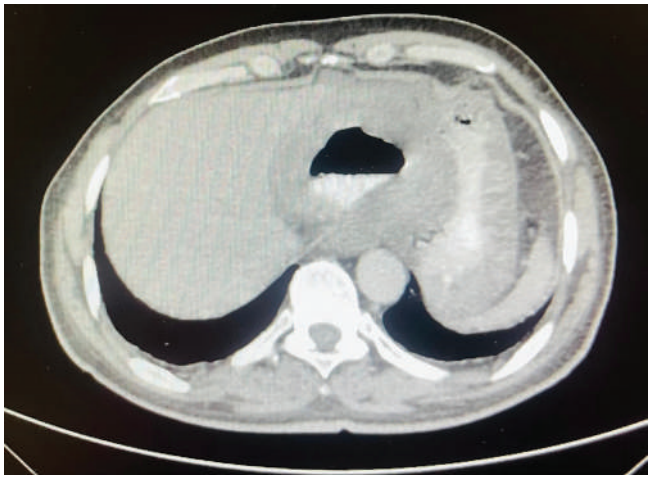


Figure 3. Giant esophageal diverticulum CT scan image.

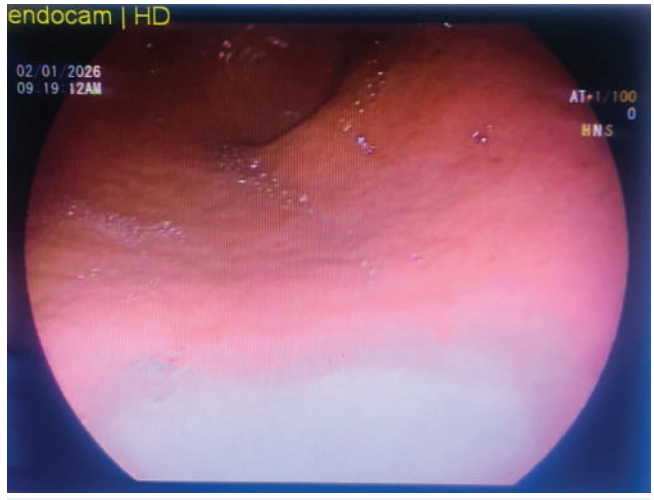


Figure 4. Giant esophageal diverticulum endoscopic image.

[P-576]

A giant sacrococcygeal chordoma: A case report

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Objective: Chordomas are rare, malignant, primary bone tumors with poor prognosis. They only account for 1-4% of all primary bone tumors which are thought to arise from ectopic embryonic notochord remnants along the neuroaxis. Although, not common, chordoma is the most frequent primary malignant neoplasm of the sacrum. It has been reported that the most common sites are the sacrum (40-50%), spheno-occipital area (35-40%), and the vertebral bodies (15%-20%). Although, histologically considered to be a benign neoplasm, chordomas have a malignant potential due to a remarkable recurrence. Anterior invasion to the rectum is uncommon due to presacral fascia.

Material and Methods: In this case report, we aim to present a case of sacral chordoma approximately 25 cm in size, along with a review of the literature.

Results: A 62-year-old male patient presented to our clinic with complaints of tenesmus and constipation. Physical examination revealed no pathological findings. Rectal examination revealed a well-defined mass 4 cm proximal to the anal verge, without disrupting mucosal integrity. Colonoscopy was planned. Colonoscopy showed an external compression image of the rectum extending approximately 10 cm proximally from the dentate line. CT scan revealed a 25x10 cm soft tissue lesion with smooth contours in the presacral area, clearly visible in relation to the rectum. Trucut biopsy was performed, and the result was reported as consistent with "well-differentiated chordoma". The patient underwent surgery in conjunction with neurosurgery. Initial extremity and anal sphincter neuromonitoring was performed. Sacrectomy was performed at the S2 level, the chondroma was excised, and a colostomy was created. Postoperatively, the patient had extremity movement, but no muscle tone was detected on rectal examination. The patient was referred to medical oncology based on the pathology results.

Conclusion: Chordoma is a rare, slow-growing but locally invasive tumor. It accounts for less than 5% of all primary bone neoplasms. Since chordoma is poorly sensitive to chemotherapy and radiotherapy, surgery is the treatment of choice. For the preoperative evaluation, CT scan is necessary to identify the local bony extension and MRI is used to determine the sacrectomy level. It is important to protect the lumbosacral trunks and sciatic nerves as much as possible.

Keywords: Sacrococcygeal chordoma, giant, sacrectomy

[P-578]

Squamous cell carcinoma secondary to pilonidal cyst: A case report

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Objective: Pilonidal sinus (PS) is a disease characterized by recurrent abscess formation and chronic inflammation, usually seen in the sacrococcygeal region.Although rare, recurrent chronic cases may carry a risk of malignant transformation. Squamous cell carcinoma (SCC) may present as a rare but serious complication of PS. This article presents a case of chronic PS with a history of recurrent abscesses, in which SCC was diagnosed.

Material and Methods: A 58-year-old male patient presented to us with painful swelling in the anal region. The medical history revealed a history of recurrent abscesses and drainage due to chronic PS. It was learned that he had had a weeping wound adjacent to the anal opening on his right gluteal region for 2 months. Physical examination revealedextensive granulation tissue and signs of infection in the wound area. Based on clinical evaluation andimaging findings, he underwent surgery with a preliminary diagnosis of Fournier's gangrene. Infected and necrotic tissues were debrided, and a biopsy was taken from the wound area. Pathology results confirmed a diagnosis of SCC. The patient was referred to a plastic surgery council for a multidisciplinary approach. Based on the council's decision, it was decided to administer chemotherapy and radiotherapy after surgical excision.

Results: Patients with chronic PS experience recurrent abscesses and pain. There is no universally accepted classification to determine the severity of pilonidal disease, but factors such as the number, size, and location of the sinuses and the presence of abscesses may influence the treatment approach. Malignant degeneration, a rare but serious complication of PS, may occur in cases that have been neglected for a long time. The average age of patients with SCC described in the literature is 52. Malignant degeneration, a rare but serious complication of PS, may occur in cases that have been neglected for a long time. The literature reports high recurrence rates (39%) and mortality rates in patients diagnosed with SCC. Early diagnosis and aggressive treatment in the presence of SCC can improve survival rates.

Conclusion: Although malignant transformation is a rare complication in patients with PS,this risk should not be overlooked in long-term and recurrent cases. Chronic inflammation andrecurrent infections may play a triggering role in SCC development. Therefore, careful clinical evaluation and histopathological examination are important in long-term follow-ups. A multidisciplinary approach is critical in determining and implementing the optimal treatment strategy for patients diagnosed with SCC. In SCC, the use of radiotherapy in addition to surgery may reduce recurrence ratesand have positive effects on long-term survival.

Keywords: Squamous cell carcinoma, pilonidal cyst, malignant transformation



Figure 1. Squamous cell carcinoma appearance formed on the basis of a pilonidal sinus.

[P-590]

Spindle cell mesenchymal tumor of the lower extremity: Case report

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Objective: Soft tissue sarcomas are a heterogeneous group of neoplasms that mostly originate from embryonic mesoderm cells, i.e., connective tissue, muscle, joints, fat, blood vessels, and peripheral nerves. Spindle cell neoplasms originate from mesenchymal cells that make up the body's connective tissue system. These cells include nerve, fibroblast, myofibroblast, epithelial, or vascular tissue.

Material and Methods: Spindle cell sarcomas are generally deep-seated lesions originating from large nerves along the extremity and predominantly exhibiting local recurrence. In this case report, we aim to present a case of a malignant spindle cell mesenchymal tumor of approximately 10 cm located at the femoral-patella junction in the lower extremity, along with a review of the literature.

Results: A 56-year-old female patient presented to our clinic with complaints of a palpable mass and limited range of motion in her left leg. Physical examination revealed a palpable lesion extending from the distal femur to the patella; it was firm, fixed, immobile, but showed movement with joint movement. A CT scan of the extremity showed a soft tissue lesion extending to the patellar tendon, including the distal rectus femoris muscle of the left foot, with a spiculated extension that was not clearly defined by the vastus lateralis muscle. A mesenchymal tumor was suspected, and thoracic and abdominal CT scans were performed to rule out distant organ metastasis. No evidence of metastasis was found, and excision was performed, including the skin and rectus femoris tendon. The pathology report stated "High-grade pleomorphic and spindle cell malignant mesenchymal tumor." The patient was discharged with a postoperative physical therapy and rehabilitation plan and oncology recommendations.

Conclusion: Spindle cell neoplasms encompass a wide spectrum of clinical presentations, ranging from benign lesions to high-grade malignant tumors. These tumors typically originate in connective tissue layers, extending between muscle layers and encircling organs, forming a mass image. In the early stages, they are localized and generally do not spread beyond the encapsulated form. However, they can also develop malignant potential. The incidence of these tumors is three per 3.5 million, with a 2:1 predisposition in women compared to men. The preferred treatment for extremity spindle cell sarcoma is wide local excision, including the biopsy site. Wide local excision involves 1-2 cm of surrounding normal tissue and a narrower margin if there are large, unaffected critical neurovascular structures near the tumor. Postoperative radiotherapy may be supportive.

Keywords: Spindle cell, mesenchymal tumor

[P-591]

Retroperitoneal giant leiomyosarcoma: Case report

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Objective: Soft tissue sarcomas constitute less than 1% of all cancers. They originate from mesenchymal stem cells found in muscle, fat, and connective tissues. Soft tissue sarcomas most commonly develop in the extremities. The incidence in intra-abdominal and retroperitoneal areas is 40%. The most common intra-abdominal and retroperitoneal soft tissue sarcomas are gastrointestinal stromal tumors, leiomyosarcomas (LMS), and liposarcomas. LMS accounts for up to 25% of all newly diagnosed soft tissue sarcomas.

Material and Methods: In this presentation, we aim to present a case of extensive retroperitoneal leiomyosarcoma, along with a review of the literature.

Results: A 69-year-old female patient presented to our clinic with a complaint of a palpable mass in the right inguinal region and lower quadrant of the abdomen. Physical examination revealed a firm, approximately 20 cm lesion extending from the umbilicus to the lower quadrant. Oral and intravenous contrast computed tomography showed a well-defined mass originating in the right retroperitoneal region, invading the right renal capsule, and extending into the iliac fosa. Lung CT scan showed no pathological findings, and laparotomy was planned. Excision of a 4.5 kg, 21x18x19 cm mass consistent with retroperitoneal sarcoma was performed. The patient was discharged with no postoperative complications and recommendations. Pathology was reported as epithelioid type, consistent with high-grade leiomyosarcoma. Mitotic rate was >30 per 10 BBA.

Conclusion: LMS constitute less than 10% of all soft tissue sarcomas. With an incidence of 20%, they are the second most common type of retroperitoneal sarcoma. They are twice as common in women and are generally more frequent in the 50-70 age group. Due to their slow growth and anatomical location, retroperitoneal tumors usually reach large sizes by the time of diagnosis. Patients with retroperitoneal sarcoma have a low life expectancy. Low-grade tumors offer a 50% survival advantage compared to high-grade tumors. The primary goal in the treatment of retroperitoneal LMS is excision with clear surgical margins.

Keywords: Leiomyosarcoma, retroperitoneal

[P-592]

Clinical evaluation of thyroid surgery in a patient with congenital breast Absence compatible with Poland syndrome: A case report

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Objective: Poland syndrome is a rare congenital anomaly first described by Alfred Poland in 1841. It is typically characterized by unilateral hypoplasia or aplasia of the pectoralis major muscle, accompanied by ipsilateral absence of breast tissue and upper extremity anomalies. The condition most commonly affects the right side. In female patients, breast absence may lead to significant cosmetic and psychosocial concerns. The most widely accepted etiological theory suggests a disruption of subclavian artery blood flow during the embryonic period.

Material and Methods: Case report: A 23-year-old female patient presented to the general surgery clinic with a thyroid nodule. Her medical history revealed congenital absence of the right breast. Physical examination demonstrated absence of right breast tissue, including underdevelopment of the areola and nipple. Marked hypoplasia of the right pectoral region was noted. No obvious skeletal or digital anomalies of the upper extremity were detected. These findings were considered consistent with Poland syndrome. Thyroid ultrasonography revealed a nodule in the right lobe suspicious for malignancy. Fine-needle aspiration biopsy suggested a follicular neoplasm, and surgical intervention was indicated. Preoperative evaluation revealed no additional cardiopulmonary pathology. The patient underwent total thyroidectomy under general anesthesia. No intraoperative or postoperative complications occurred. Serum calcium levels and vocal cord functions remained normal throughout follow-up. The patient was discharged without complications. Postoperative histopathological examination revealed follicular variant papillary thyroid carcinoma.

Results: Discussion: The incidence of Poland syndrome has been reported to range between 1 in 30.000 and 1 in 50.000 live births. The clinical spectrum is broad, varying from mild pectoral muscle hypoplasia to severe chest wall and limb deformities. In female patients, breast aplasia is often the most prominent clinical feature. Diagnosis is primarily clinical, while imaging modalities assist in evaluating associated anomalies. In this case, the syndrome was re-evaluated during assessment for thyroid pathology. Although no direct association between Poland syndrome and thyroid disease has been established, awareness of chest wall anatomy is important for surgical planning. A multidisciplinary approach is particularly valuable when reconstructive procedures are considered.

Conclusion: Although Poland syndrome is rare, it may present with congenital breast absence, especially in female patients. Careful physical examination is essential in patients presenting to different specialties for unrelated conditions. This case demonstrates that thyroid surgery can be safely performed in patients with Poland syndrome. Multidisciplinary evaluation and individualized surgical planning are key to achieving optimal outcomes.

Keywords: Congenital absence of breast, Poland syndrome, thyroid surgery



Figure 1. Patient with Poland syndrome.

[P-593]

A rare case of Graves' disease treated with therapeutic plasmapheresis as a preoperative rescue therapy for antithyroid and lithium-resistant disease

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Objective: Antithyroid drugs are used as first-line treatment in the vast majority of patients with hyperthyroidism. If antithyroid drugs used in the treatment of thyrotoxicosis cannot be used due to their side effects, or if adequate hormone suppression cannot be achieved despite high-dose use, or if there is a rapidly developing clinical condition such as thyroid storm, plasmapheresis can be used as an alternative treatment method. This article presents a case of Graves' disease in which therapeutic plasmapheresis was used as a preoperative rescue treatment.

Material and Methods: A 36-year-old female patient presented to our university's endocrinology clinic with a history of approximately 3 years of antithyroid (propylthiouracil) medication use. Agranulocytosis was detected during follow-up, and propylthiouracil was discontinued, followed by initiation of lithium carbonate 300 mg (oral 2x1) treatment. Surgery was recommended, but sufficient hormone suppression could not be achieved, so preoperative plasmapheresis was planned.

Results: The patient's TSH: 0.001 mIU/L, sT3: 9.32 pg/mL, and sT4: 4.18 ng/dL before lithium carbonate treatment, and TSH: 000.1 mIU/L, sT3: 6.7 pg/mL, sT4: 2.17 ng/dL before plasmapheresis. Following 2 units of plasmapheresis, the TSH was found to be 0.001 mIU/L, sT3: 4.0 pg/mL, and sT4: 1.67 ng/dL. With these values and anesthesia approval, the patient underwent surgery. No postoperative complications occurred in this case of bilateral total thyroidectomy, and the pathology report was consistent with Graves' disease.

Conclusion: Preoperative therapeutic plasmapheresis emerges as an alternative treatment method for patients with thyrotoxicosis. It should always be kept in mind that it can be an effective treatment method, particularly in cases of inadequate hormonal suppression response or side effects associated with antithyroid drugs, and for rapidly achieving adequate hormonal suppression prior to surgical interventions.

Keywords: Graves, antithyroid drug, plasmapheresis

[P-594]

Pylorus-preserving total pancreatectomy for a giant pancreatic cystic lesion of uncertain preoperative origin: A case report

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Objective: Giant cystic pancreatic lesions are often asymptomatic but may rarely cause obstructive jaundice due to compression of the hepatic hilum or duodenum. Although hepatocyte-specific magnetic resonance imaging (MRI) has high sensitivity for detecting biliary involvement, it may not always clearly differentiate between pancreatic and biliary origins. The management of large cystic lesions with uncertain origin poses significant diagnostic and surgical challenges. This report presents a case of a giant cystic pancreatic lesion presenting with obstructive jaundice and hyperosmolar hyperglycemic state (HHS), managed with pylorus-preserving total pancreatectomy (PP-TP).

Materiald and Methods: Clinical presentation, laboratory findings, radiological imaging, intraoperative findings, and postoperative course were retrospectively evaluated. Diagnostic workup included contrast-enhanced computed tomography (CT) and hepatocyte-specific MRI. Perioperative metabolic disturbances were managed using a multidisciplinary approach.

Results: A 58-year-old female patient presented with right upper quadrant pain, abdominal distension, dark-colored urine, and pruritus. Laboratory evaluation revealed findings consistent with obstructive jaundice and HHS. CT and MRI demonstrated a giant thin-walled cystic lesion measuring approximately 14×11×11 cm adjacent to the pancreatic head, causing latero-inferior displacement of the duodenum and marked intrahepatic bile duct dilatation. Hepatocyte-specific MRI showed no contrast uptake within the cyst, and biliary communication could not be demonstrated. A robotic surgical approach was initially attempted; however, due to significant anatomical distortion at the hepatic hilum, conversion to open surgery was required. Following portal triad dissection, PP total pancreatectomy was performed, and reconstruction was achieved with hepaticojejunostomy and gastrojejunostomy. Histopathological examination revealed a pancreatic pseudocyst with no evidence of malignancy. Postoperatively, rapid improvement in liver function tests and metabolic parameters was observed, and no major complications occurred.

Conclusion: Giant pancreatic pseudocysts may present with severe clinical manifestations such as obstructive jaundice and HHS, closely mimicking malignant or biliary pathologies. In selected patients with large cystic lesions of uncertain origin and complex anatomical relationships, PP total pancreatectomy represents a safe and effective surgical option. Successful outcomes depend on careful patient selection, multidisciplinary perioperative management, and early initiation of endocrine and exocrine replacement therapy.

Keywords: Giant pancreatic cyst, hyperosmolar hyperglycemic state, pylorus-preserving total pancreatectomy, hepatocyte-specific MRI, robotic surgery

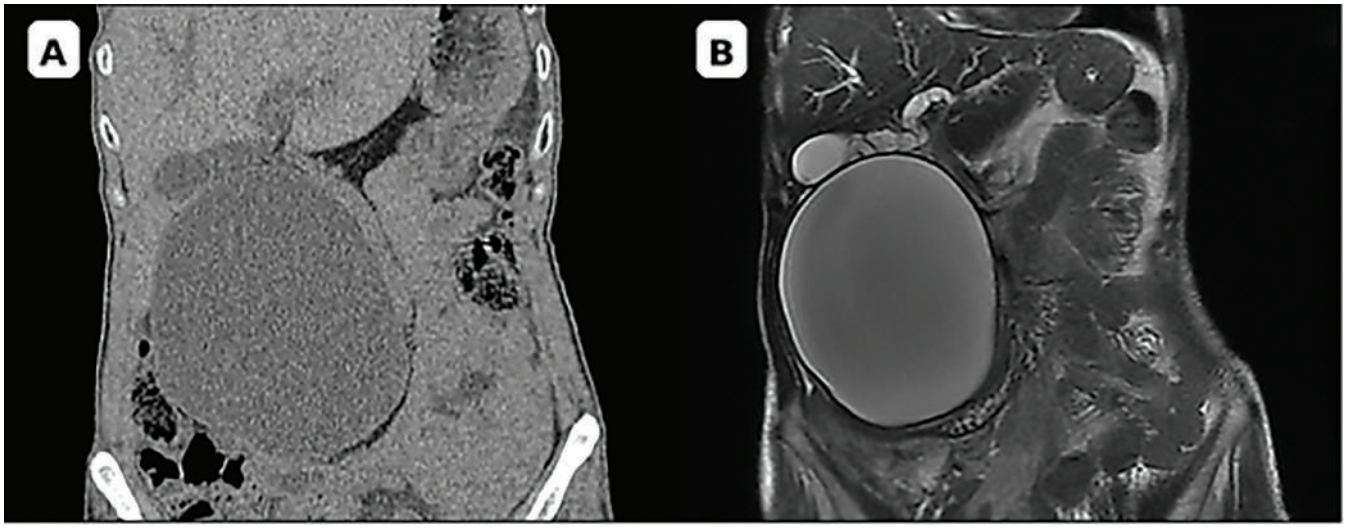


Figure 1A. Abdominal CT (coronal view) Figure 1B: MRI, T2-Weighted (coronal view).

Figure 1A. Abdominal CT (coronal section): A giant thin-walled cystic lesion measuring approximately 14×11×11 cm with clear fluid content is observed in the right upper quadrant, causing latero-inferior displacement of the duodenum and dilatation of the intrahepatic bile ducts. Figure 1B. T2-weighted MRI (coronal section): The cystic lesion demonstrates a homogeneous hyperintense appearance with marked mass effect on adjacent organs; no contrast enhancement of the cyst wall is observed.

MRI: Magnetic resonance imaging.

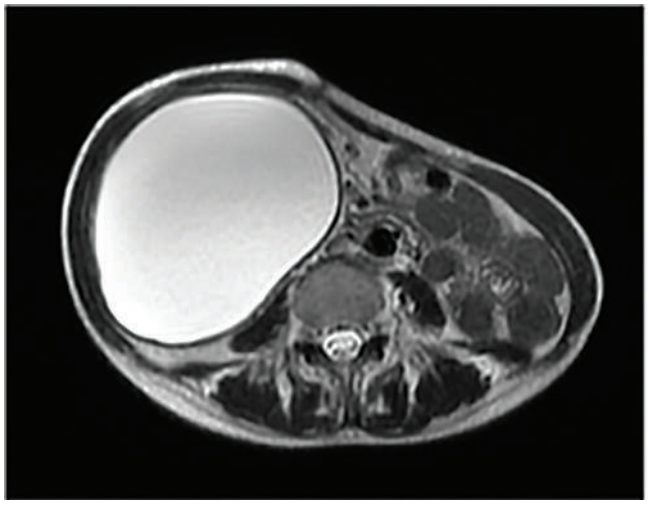


Figure 2. Hepatocyte-specific MRI (axial).

No contrast enhancement was detected within the cyst, thereby excluding the possibility of biliary communication. MRI: Magnetic resonance imaging.

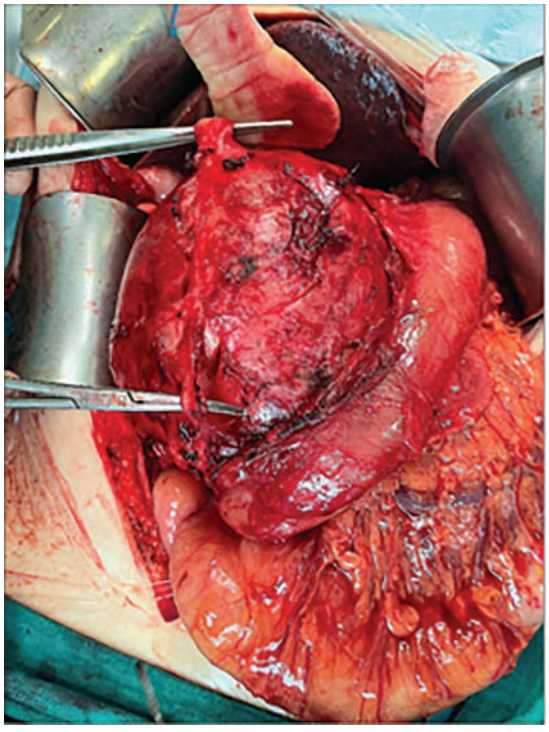


Figure 3. Intraoperative view.

Intraoperative view showing a giant cystic lesion originating from the pancreatic head causing compression of the hepatoduodenal region, prior to portal triad dissection.

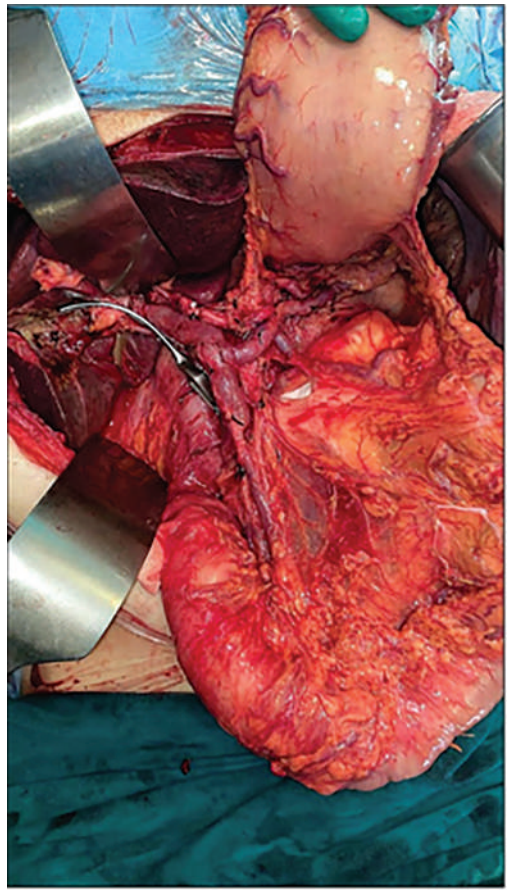


Figure 4. Intraoperative view.

Intraoperative view demonstrating elongation and thinning of the common hepatic duct (marked with clamps) due to cyst compression, during the preparatory stage prior to hepaticojejunostomy.

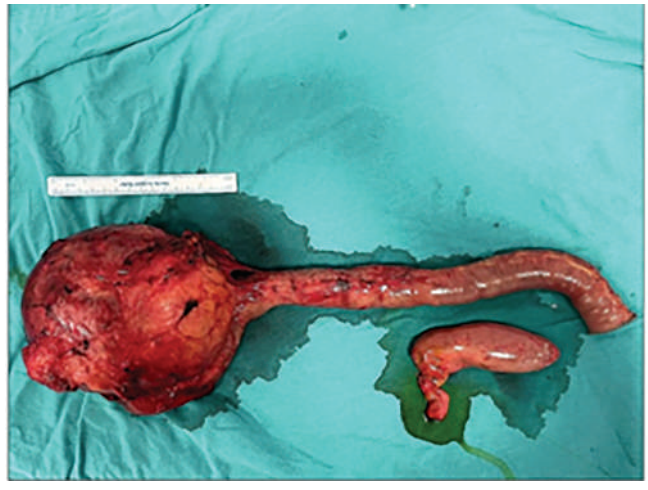


Figure 5. Resection specimen (macroscopic).

Macroscopic appearance of the giant cystic component extending along the pancreas in the pylorus-preserving total pancreatectomy specimen.

Table 1. Laboratory trend during hospitalization

Parameter	Preop	POD 1	POD 4	Discharge
AST (U/L)	177	3148	262	41
ALT (U/L)	231	2182	889	62
ALP (U/L)	855	1782	436	298
GGT (U/L)	3172	5110	441	210
Total bil (mg/dL)	13.9	9.2	3.91	1.4
Direct bil (mg/dL)	12.8	8.6	3.38	1.2
CRP (mg/L)	42	88	36	9
Glucose (mg/dL)	749	236	158	112
WBC ($\times 10^3/\mu L$)	12.4	9.8	7.3	6.4
Hemoglobin (g/dL)	12.1	10.6	11.2	12.4

POD: Postoperative day, AST: Aspartate aminotransferase, ALT: Alanine aminotransferase, ALP: Alkaline phosphatase, GGT: Gamma-glutamyl transferase, CRP: C-reactive protein, WBC: White blood cell count.

[P-595]

Surgical management of ectopic opening of the common bile duct (EOCBD): A report of two rare cases

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Objective: Ectopic opening of the common bile duct (EOCBD) is an exceedingly rare biliary anomaly arising from the early division of the hepatic diverticulum (Boyden's hypothesis). Its incidence ranges from 0.1% to 2.7%. The absence of the sphincter of Oddi in EOCBD leads to alkaline reflux, predisposing patients to chronic gastritis, refractory duodenal ulcers, apical stenosis, and recurrent cholangitis.

Material and Methods: Two rare cases treated surgically for recurrent peptic ulcer fibrosis and biliary stasis are presented with a literature review.

Results: Case 1: A 49-year-old male presented with a 4-day history of jaundice, fever, and abdominal pain. Laboratory results showed cholestatic enzyme elevation and hyperbilirubinemia. MRCP revealed intrahepatic duct dilatation and 16 mm stones in the distal common bile duct (CBD). Gastroscopy identified a "choledochobulbar fistula" at the bulbar level, where the pancreatic and CBD orifices opened separately. During ERCP, the CBD was cannulated via this atypical orifice with difficulty due to bulbar stenosis. After failed balloon dilatation, an 8.5F pigtail stent was placed. Following the resolution of cholangitis, the patient underwent cholecystectomy and Roux-en-Y hepaticojejunostomy. He was discharged on postoperative day 14. Case 2: A 60-year-old male with a history of cholecystectomy presented with abdominal pain and rigors. CT showed left portal vein thrombosis and a characteristic "hook-shaped" angulation of the distal CBD. MRCP measured the CBD at 20 mm with duodenal narrowing. Gastroscopy revealed an atypically located papilla. During ERCP, a 25 mm dilated CBD was cannulated via the atypical papilla, and a stent was placed. Surgery was performed for EOCBD and gastric outlet obstruction. Following Roux-en-Y hepaticojejunostomy and gastroenterostomy, the patient was discharged on day 16 without complications.

Conclusion: EOCBD should be suspected when the normal papilla is absent and the pylorus-papilla distance is <50 mm. The "hook-shaped" distal CBD is a key radiological criterion. The lack of a sphincter mechanism causes duodenal reflux, leading to recurrent stones and cholangitis. Endoscopic extraction often fails (40-70%) due to anatomical challenges. In cases of recurrent cholangitis or failed ERCP, Roux-en-Y hepaticojejunostomy remains a curative surgical option.

Keywords: Ectopic opening of the common bile duct, gastric outlet obstruction, biliary anomaly, peptic ulcer, hepaticojejunostomy

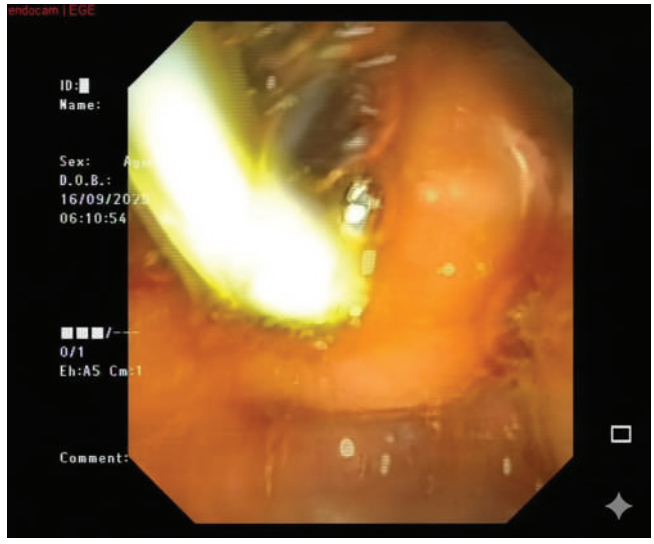


Figure 1. Preoperative ERCP image.

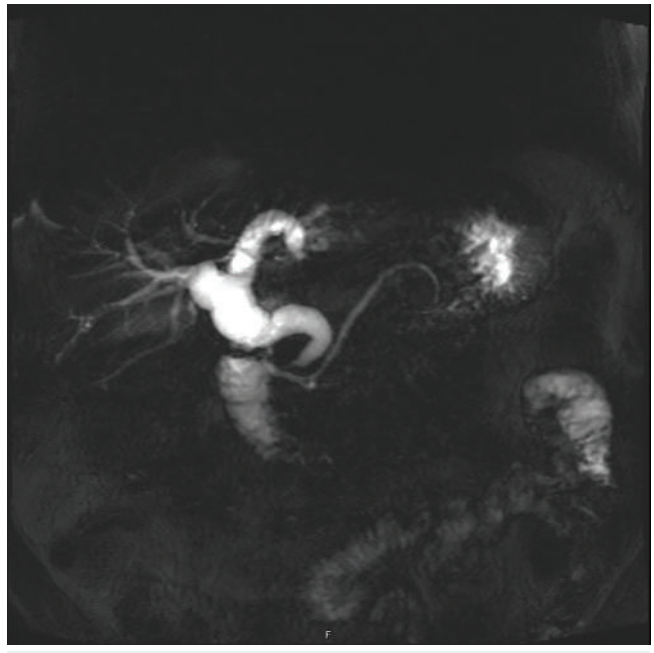


Figure 2. Preoperative MRCP image.

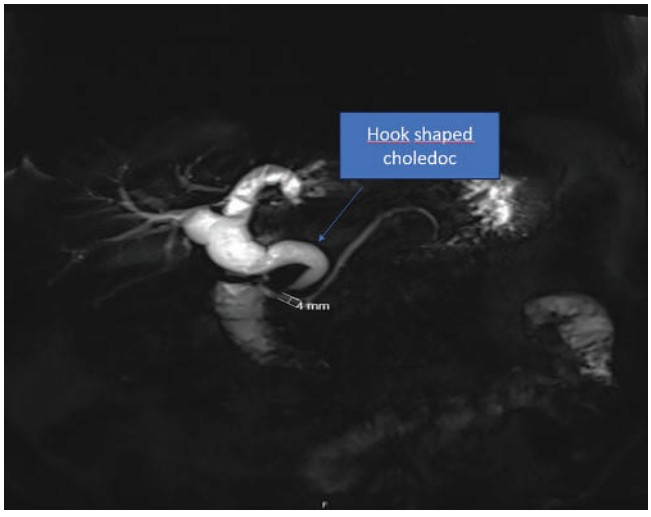


Figure 3. Preoperative MRCP image-2.



Figure 4. Preoperative ERCP image-2.

[P-596]

Abdominal epilepsy: Diagnosis and follow-up results in an adult case

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Objective: Abdominal epilepsy is a rare form of epilepsy that is difficult to diagnose because epileptic seizures are accompanied by primarily gastrointestinal symptoms. It presents with recurrent abdominal pain, nausea, vomiting, and autonomic symptoms, while the absence of motor seizure findings can lead to diagnostic delays. Although it is mostly diagnosed in childhood, an increasing number of cases are being reported in the adult age group.

Material and Methods: A 54-year-old female patient with recurrent abdominal pain attacks for approximately 20 years was evaluated for increasingly frequent and particularly severe abdominal pain, nausea, vomiting, and autonomic symptoms occurring at night in recent years. Given the stereotypical nature of the attacks, their termination with marked fatigue suggestive of a postictal period, and the absence of organic pathology on comprehensive gastrointestinal investigations, abdominal epilepsy was considered as a preliminary diagnosis. Although routine electroencephalography (EEG) was normal, lamotrigine treatment initiated based on the clinical picture resulted in a marked reduction in attacks, and the patient became completely asymptomatic during one year of follow-up.

Results: Abdominal epilepsy is a rare form of focal epilepsy characterised by recurrent abdominal pain, nausea-vomiting, and autonomic symptoms, and often results in delayed diagnosis due to its tendency to mimic gastrointestinal disorders. During the diagnostic process, the paroxysmal and stereotypical nature of the attacks, the presence of accompanying autonomic or neurosensory symptoms, the exclusion of other gastrointestinal causes, and the clinical response to antiepileptic treatment are of great importance. The diagnostic sensitivity of electroencephalography is limited, and normal EEG findings are frequently observed, particularly during the interictal period. This is explained by the fact that epileptic activity may originate from deep cortical or autonomic networks. In the presented case, the typical clinical pattern, the history of long-standing stereotypical attacks, and the complete clinical improvement that began shortly after lamotrigine treatment and became permanent in the long term strongly supported an epileptic aetiology despite normal EEG findings. Therefore, clinical evaluation should be prioritised in the diagnosis of abdominal epilepsy.

Conclusion: Abdominal epilepsy must always be considered in the differential diagnosis of unexplained and recurrent abdominal pain attacks, particularly in adult patients. Normal EEG findings should not rule out the diagnosis; clinical features, the stereotypical nature of the attacks, and the response to antiepileptic treatment should be decisive in the diagnostic process. With early diagnosis and appropriate treatment, significant and lasting clinical improvement can be achieved in patients.

Keywords: Abdominal epilepsy, recurrent abdominal pain attacks

[P-597]

Psoas abscess presenting with atypical symptoms: Case report

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Objective: Psoas abscess was first described by Mynter in 1881. It can be classified as primary or secondary depending on the presence or absence of an underlying disease. Primary psoas abscesses develop hematogenously, usually from an infection focus in another part of the body, particularly in immunocompromised patients. The most common cause of secondary psoas abscesses is Crohn's disease. Its classic presentation is characterized by fever, back pain, and pain in the thigh and groin area. In this presentation, we aim to present a case of atypical psoas abscess diagnosed with the symptom of difficulty walking, along with a review of the literature.

Material and Methods: Different causes are implicated in the etiology of primary and secondary psoas abscesses. Patients usually describe their symptoms with abdominal pain, flank pain,weakness, high fever, sweating, weight loss, limping, and lower back and leg pain.

Results: A 50-year-old male patient presented to the emergency department with fever, weakness, weakness in the right leg, and difficulty walking. Physical examination revealed no pathological findings on the abdominal examination. However, increased temperature and edematous skin tissue (cellulitis) were detected in the right lateral quadrant. The patient had a high fever, with a WBC of 21,000 and a CRP of 212 mg/L. Plastron appendicitis was suspected, and abdominal ultrasound revealed a fluid collection consistent with a dense abscess in the right psoas region. CT scan showed a prominent 76x81 mm abscess in the right psoas region containing air densities. The patient was hospitalized, and a percutaneous drainage catheter was placed. Approximately 500 cc of abscess was drained. Broad-spectrum antibiotic therapy was initiated, and post-drainage physical examination showed improvement in the motor loss in the right leg and a decrease in WBC and CRP levels. The patient, who showed no signs of infection in urinary and gastrointestinal examinations, underwent Brucella antibody and PPD tests. The patient, whose general condition remained stable, was discharged after recovery.

Conclusion: Psoas abscess is a rare disease that develops secondary to inflammation in the psoas muscle and iliac muscle fascia. The incidence of psoas abscess is three times higher in men than in women. Patients typically present with abdominal pain, flank pain, weakness, fever, sweating, weight loss, limping, lower back pain, and leg pain. Treatment of psoas abscess involves antibiotic therapy and abscess drainage. Abscess drainage is recommended as percutaneous drainage with surgical or radiological guidance. In secondary psoas abscess, treatment should include drainage along with treatment of the primary disease causing the abscess.

Keywords: Percutaneous drainage, psoas abscess

[P-598]

A rare gastric schwannoma presenting as a suspected gastrointestinal tumor

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Objective: Gastric schwannomas are rare benign mesenchymal tumors originating from Schwann cells of the peripheral nerve sheath and account for a small proportion of gastrointestinal mesenchymal neoplasms. They are most commonly located in the stomach and are often detected incidentally. Due to significant overlap in radiological and endoscopic features, they are frequently misdiagnosed preoperatively as gastrointestinal stromal tumors (GISTs). Unlike GISTs, which carry malignant potential, gastric schwannomas typically follow a benign clinical course. Therefore, accurate diagnosis is essential for appropriate management and prognosis.

Material and Methods: A 71-year-old male patient presented with nausea and vomiting. His medical history was significant only for hypertension. Physical examination and laboratory findings were unremarkable. Contrast-enhanced computed tomography revealed a 26×18 mm well-circumscribed, homogeneous hypodense solid mass on the lesser curvature of the stomach. Upper gastrointestinal endoscopy demonstrated a 1.5 cm submucosal lesion in the gastric corpus. Based on imaging findings, GIST was suspected. The patient underwent laparoscopic wedge resection of the stomach.

Results: The postoperative course was uneventful, and the patient was discharged on postoperative day five. Macroscopic examination of the specimen revealed a 2.5 cm gray-white solid tumor. Histopathological analysis showed spindle cell proliferation. Immunohistochemical staining demonstrated strong S-100 positivity and negativity for CD34, SMA, desmin, and DOG1, confirming the diagnosis of gastric schwannoma. Surgical margins were negative.

Conclusion: Although rare, gastric schwannomas should be considered in the differential diagnosis of gastric submucosal tumors. Preoperative distinction from GIST is challenging, and definitive diagnosis relies on immunohistochemical evaluation. Complete surgical resection with negative margins is curative, and the prognosis is excellent. This case highlights the importance of accurate pathological diagnosis in guiding appropriate treatment and follow-up strategies.

Keywords: Gastric schwannoma, gastrointestinal stromal tumor (GIST), gastric submucosal tumor

[P-599]

Foreign body ingestion in adults with intellectual disability: A rare case of pacifier-induced jejunal perforation

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Objective: Foreign body ingestion in adults is common, with 80-90% passing spontaneously and less than 1% requiring surgical intervention. Pacifier ingestion causing bowel obstruction has been reported in children but never documented in adults with resulting jejunal necrosis and perforation.

Material and Methods: A 23-year-old male with intellectual disability and epilepsy presented with acute abdominal pain and vomiting. Clinical examination revealed peritonitis. Computed tomography demonstrated small bowel obstruction with a non-radiopaque foreign body and pneumoperitoneum. Emergency laparotomy revealed a pacifier lodged in the jejunum 100 cm distal to the ligament of Treitz, causing segmental necrosis and a 3-cm perforation. The patient underwent segmental jejunal resection with primary hand-sewn anastomosis. Histopathology confirmed transmural necrosis. The postoperative course was uncomplicated, with resumption of oral intake on day 2 and discharge on postoperative day 4. Antiepileptic therapy continued throughout hospitalization without seizure recurrence.

Results: This represents the first documented case of pacifier-induced jejunal perforation in an adult. The jejunum is an uncommon perforation site due to lack of anatomical narrowing. Non-radiopaque plastic objects pose diagnostic challenges requiring high clinical suspicion and computed tomography imaging. Primary anastomosis in jejunal resections demonstrates excellent outcomes with leak rates of 0.6-3%, substantially lower than colonic anastomoses. Individuals with intellectual disability and epilepsy face elevated risk for foreign body ingestion, necessitating preventive supervision strategies.

Conclusion: Pacifier ingestion in adults with intellectual disability can cause life-threatening jejunal complications. Early recognition, computed tomography diagnosis, and prompt surgical intervention with primary anastomosis achieve favorable outcomes.

Keywords: Intestinal obstruction, foreign bodies, jejunal perforation



Figure 1. Jejunum perforation. Jejunum perforation due to foreign body.

[P-600]

A rare case report of delayed colon perforation due to blunt trauma

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Objective: In abdominal trauma, perforations of hollow organs and injuries to solid organs such as the liver and spleen may be observed. Although hollow organ perforations are more commonly seen in penetrating injuries, they can also occur in hollow organs following high-energy blunt trauma. While perforation usually occurs in the early period after trauma, in some cases it may also present in a delayed phase.

Material and Methods: A 29-year-old male patient presented to the emergency department of our hospital due to a fall from an electric scooter that occurred 6 days earlier. Upon further history taking, it was learned that after falling from the scooter, he struck the left side of his abdomen against stone bollards. The patient stated that he came to the hospital because of pain in the left lower quadrant and reported that the pain was not severe. On abdominal examination, no abnormal findings were noted except for tenderness in the left lower quadrant. No acute pathology was observed on the radiographs obtained.

Results: The patient evaluated by our team was hemodynamically stable. On abdominal examination, no significant findings were detected except for tenderness in the left lower quadrant. Laboratory investigations revealed elevated infectious markers: WBC 14.2 (normal range: 4.01-9.75), CRP 79.8 (normal range: 0-5), and procalcitonin 6.06 (normal range: 0-0.5). Due to the elevationhan elevated infectious markers and left lower quadrant tenderness on abdominal examination, a computed tomography (CT) scan was performed for further evaluation. The CT findings were reported as follows: "A suspicious wall defect is present in the proximal sigmoid colon and distal descending colon. Inflammatory stranding is observed in the surrounding adipose tissue. Mesenteric fat stranding and millimetric free air are noted distal to the sigmoid colon."

Conclusion: The patient was admitted to the ward for surgical management due to a perforation secondary to trauma that had occurred 6 days earlier. A millimetric perforation was identified in the sigmoid colon, and the omentum was observed to be covering the perforated area.Due to colonic distension and intra-abdominal contamination, it was decided that a safe anastomosis could not be performed; therefore, a colostomy was created and a Hartmann procedure was performed. Oral intake was started at the 8th postoperative hour. The patient passed gas from the colostomy on postoperative day 1 and had stool output on postoperative day 2. After completion of antibiotic therapy, the patient was discharged from our ward.

Keywords: Blunt trauma, perforation

[P-603]

A rare case: Low-grade (Grade 1) dedifferentiated liposarcoma in a giant intra-abdominal mass and surgical management

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Objective: Liposarcomas are the most common subtype of retroperitoneal and intra-abdominal soft tissue sarcomas. Dedifferentiated liposarcoma (DDLPS) typically exhibits high-grade malignancy and an aggressive course. However, rarely, the dedifferentiated component may display low-grade (FNCLCC score 3) features. We present the surgical management of a giant Grade 1 DDLPS case requiring partial cystectomy, which was initially considered inoperable at an external center.

Material and Methods: A 69-year-old male patient presented with abdominal swelling lasting for 6 months. External center imaging revealed a 30x30 cm mass filling the abdomen and causing bilateral Grade 3 hydronephrosis. After placement of bilateral nephrostomy and DJ stents, the patient was referred to our surgery clinic following oncology board evaluation. After preoperative preparation, the patient underwent surgery. A midline incision revealed a giant, lobulated, septated, fixed mass containing cystic and solid areas, originating from the anterior abdominal wall and displacing the intestines laterally.

Results: The mass was separated from the peritoneum and intra-abdominal organs with careful dissection. The lower lobe was observed to be adherent to the bladder and vascular structures, invading the bladder. The upper lobe was removed with its capsule. Since the posterior capsule of the lower lobe was adherent to vascular structures, it was resected over the capsule, preserving vital structures. Due to bladder invasion, partial cystectomy was performed en-bloc with the mass, and the bladder was repaired. Bilateral ureters were preserved. Histopathological examination revealed dedifferentiated liposarcoma. According to FNCLCC scoring, the total score of tumor differentiation, mitosis, and necrosis was reported as 3 (Grade 1). The patient had an uneventful postoperative course and was discharged.

Conclusion: Giant intra-abdominal liposarcomas are surgically challenging cases due to their close proximity to vascular structures and urinary system organs. As in this case, management of urological compression signs (hydronephrosis) in the preoperative period and achieving complete clearance with organ resections (partial cystectomy) if necessary during surgery are vital. Encountering a rare score like “Grade 1” despite the pathological diagnosis of “Dedifferentiated” contributes to the literature in terms of demonstrating the biological behavioral diversity of these tumors.

Keywords: Dedifferentiated liposarcoma, intra-abdominal mass

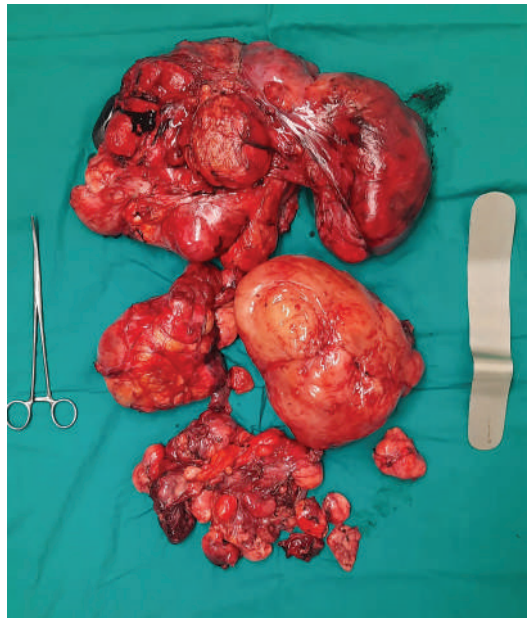


Figure 1. Macroscopic view of the resected giant mass. Heterogeneous structure with lobulated contours containing solid and cystic areas.

NUMUNE TÜRÜ:	Bağ dokusu, sütkutan doku ve diğer yumuşak dokular, BBT	**NUMUNE ALIM ŞEKLİ**	EKSİZYONEL BİOPSİ - AMELİYAT MATERYALİ
KLİNİK BİLGİ:	batın içi kitle		
MAKROSKOPİ:	Büyüğü 42x22x17 cm ölçülerde, küçüğü 5.2x4.3x4 cm ölçülerde olan çok sayıda krem pembe renkli dokulardır. Kesitlerinde büyük doku kesit yüzünün kirli krem renkli yer yer hemorajik alanlar içerdiği dikkati çekti. Dokulardan birinin iç ve dış yüzü parlak pembe-krem renkli, jelatinöz kıvamdadır. Bir kısmından 10p10k örneklendi. 29.12.25 Dr Cansu YP 15 parça 15 kaset alındı. dr.cansu 5.12.25		
MİKROSKOPİ:			
TANI:	**DEDİFERANSİYE LİPOSARKOM, DERECE 1 (FNCLCC skor:3); batın içi kitle, rezeksiyon.**		
ICD-O KODU :	8858/3 Dediferansiye liposarkom		
UYGULANAN ÖZEL YÖNTEMLER:	Eksternal kontroller eşliğinde çalışılan immunhistokimyasal testlerde tümör hücreleri S100 ile yaygın sitoplazmik ve nükleer, CDK4 ile yaygın nükleer pozitiftir. SOX10 ve MDM2 negatiftir. Ki67 proliferasyon indeksi yaklaşık %1-2 olarak değerlendirilmiştir.		

Figure 2. Pathology report. Pathology report confirming the histopathological diagnosis (dedifferentiated liposarcoma) and FNCLCC score (Grade 1).

[P-604]

Massive gastrointestinal bleeding due to a dieulafoy lesion: A rare case report

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Objective: Dieulafoy lesion is a rare but potentially life-threatening cause of gastrointestinal bleeding, resulting from erosion of an abnormally large submucosal artery through the mucosa. It accounts for approximately 1-2% of cases of acute gastrointestinal bleeding. Approximately 70-80% of Dieulafoy lesions are located in the stomach, with the most common site being the lesser curvature. Less frequently, Dieulafoy lesions may be observed in the duodenum, jejunum, colon, and rectum. Its presentation with sudden-onset, intermittent, and massive bleeding episodes may complicate the diagnostic process. Although endoscopic therapy is the first-line treatment, surgical intervention may be required in cases of massive and uncontrolled bleeding.

Material and Methods: A 77-year-old female patient presented to the emergency department with complaints of hematemesis that began overnight. Her medical history included diabetes mellitus, hypertension, congestive heart failure, and rivaroxaban (Xarelto) use. She had no prior history of gastroscopy or colonoscopy. After insertion of a nasogastric tube, dilated gastric contents with clotted hemorrhage were aspirated. Initial laboratory evaluation revealed hemoglobin/hematocrit levels of 8.5 g/dL and 26.7%, respectively, a platelet count of 264×10^3/L, and an INR of 1.4. During follow-up and erythrocyte suspension replacement, the patient developed intermittent episodes of bright red rectal bleeding. At times, abundant hemorrhage reaching 500-600 cc was observed. Despite transfusion therapy, hemoglobin and hematocrit levels decreased to 6.2 g/dL and 19.8%. In total, 7 units of erythrocyte suspension and 3 units of fresh frozen plasma were transfused. Although a transient increase in hemoglobin was achieved, recurrent massive bleeding episodes accompanied by clinical deterioration, hypotension, and tachycardia developed. Inotropic agent support was initiated, and the patient underwent emergency surgery with the diagnosis of massive gastrointestinal bleeding.

Results: Intraoperative exploration revealed an actively spurting Dieulafoy lesion located on the anterior wall of the gastric bulb. The bleeding vessel was ligated, and the lesion was excised. Postoperatively, the patient was transferred intubated to the intensive care unit. During ICU follow-up, inotropic support was discontinued, and vital signs stabilized.**Conclusion:** The patient was transferred to the surgical ward, tolerated oral intake, and showed no further decrease in hemoglobin levels, allowing discharge in stable condition. This case emphasizes that Dieulafoy lesions should be considered in the differential diagnosis of elderly patients receiving anticoagulant therapy who present with massive gastrointestinal bleeding mimicking both upper and lower sources, and that timely surgical intervention can be lifesaving when bleeding is uncontrollable.

Keywords: Dieulafoy lesion, massive upper gastrointestinal bleeding, emergency surgery



Figure 1. Dieulafoy lesion.

An atypically located Dieulafoy lesion on the anterior wall of the gastric bulb.

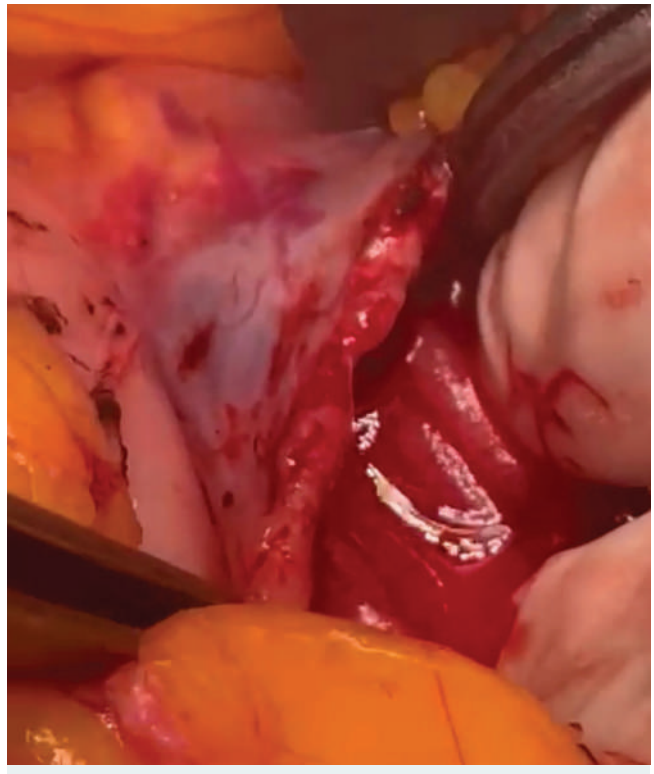


Figure 2. Dieulafoy lesion.

Abnormal submucosal vasculature.

[P-610]

Isolated sister Mary Joseph's nodule allowing curative resection in cecal adenocarcinoma: A rare case and review of the literature

Aytaç Selman, Elif Elgiz Aktarı, Emre Berat Akçay, Enver Açıkgöz, Meryem Günay Gürleyik

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Objective: Sister Mary Joseph's nodule (SMJN) is a rare clinical finding that typically indicates advanced intra-abdominal malignancy and is associated with a poor prognosis. However, in uncommon circumstances, it may present as an isolated metastasis amenable to curative resection. It is most commonly related to gastrointestinal and gynecological cancers and usually reflects disseminated disease. Here, we present a rare case of cecal adenocarcinoma in which an isolated SMJN was the initial clinical manifestation and permitted curative surgical treatment.

Material and Methods: A 76-year-old male patient presented with a painful umbilical mass that had persisted for several weeks. His medical history revealed an unintentional weight loss of approximately 8 kg over the preceding four months, without nausea, vomiting, or changes in bowel habits. Physical examination demonstrated a firm and tender umbilical mass measuring approximately 2 cm in diameter; no additional pathological findings were detected on abdominal examination.Abdominal computed tomography revealed a mass lesion in the cecum consistent with a primary tumor, along with an isolated lesion in the umbilical region. Tumor markers (AFP, CEA, and CA 19-9) were within normal limits. Biopsy of the umbilical mass demonstrated metastatic adenocarcinoma consistent with colorectal origin (CK20 positive, CK7 negative). FDG-PET/CT showed no evidence of distant organ metastasis or diffuse peritoneal involvement apart from the cecal and umbilical lesions. Colonoscopy revealed an ulcerovegetative mass in the cecum. Based on the clinical and radiological findings, curative surgical resection was planned.

Results: The patient underwent a right hemicolectomy with simultaneous umbilical metastasectomy. The operation and postoperative course were uneventful, and the patient was discharged on postoperative day 6. Histopathological examination revealed a moderately differentiated cecal adenocarcinoma invading the visceral peritoneum (pT4a), with metastases in five regional lymph nodes (pN2a). The umbilical lesion was consistent with metastatic adenocarcinoma (pM1a). Surgical margins were negative. The patient was referred to the oncology department for planned adjuvant chemotherapy.

Conclusion: Although SMJN is generally regarded as a sign of advanced and disseminated malignancy, it may rarely present as an isolated metastasis amenable to curative resection. This case underscores the importance of thorough staging and careful patient selection, as early recognition of this rare presentation may allow potentially curative surgical treatment.

Keywords: Sister Mary Joseph's nodule, umbilical metastasis, colorectal cancer

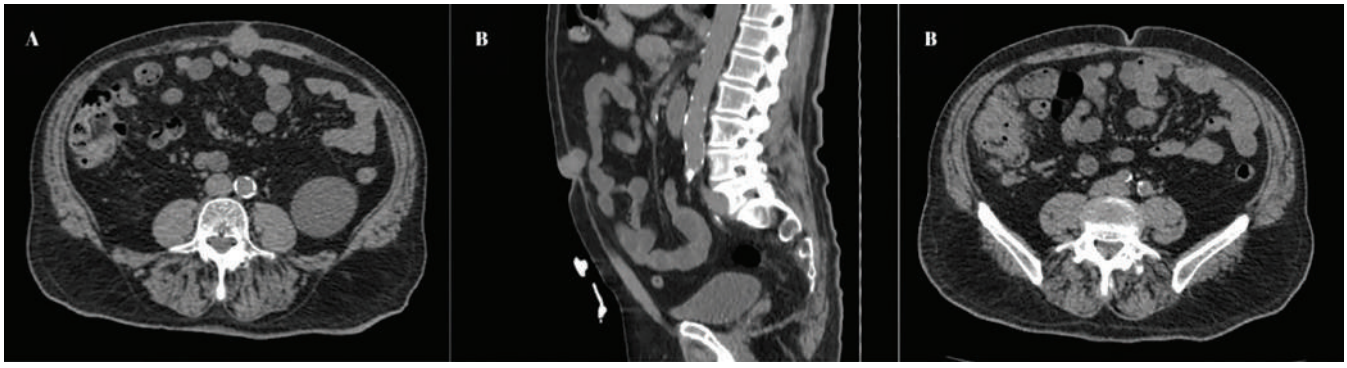


Figure 1. Contrast-enhanced abdominal computed tomography demonstrating (A) theprimary cecal adenocarcinoma and (B) the isolated umbilical metastatic lesion consistent withSister Mary Joseph's nodule.

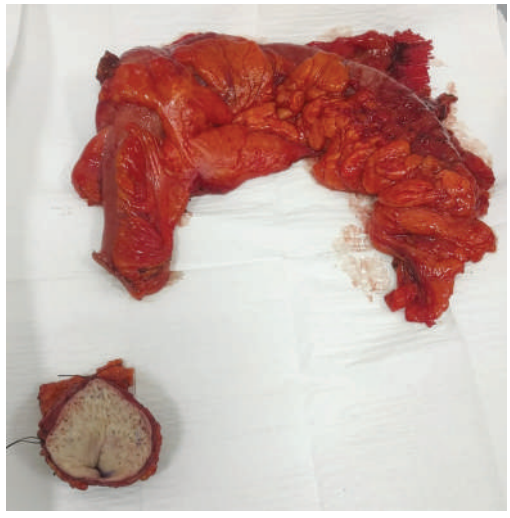


Figure 2. Gross surgical specimen following right hemicolectomy with synchronous resectionof the umbilical metastatic lesion.

[P-611]

Mechanical ileus caused by a degenerated hydatid cyst: A case report

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Objective: Hydatid disease is a zoonotic infection caused by the parasite Echinococcus granulosus. It most commonly affects the liver and lungs. Rarely, intraabdominal hydatid cysts may lead to complications and cause gastrointestinal obstruction. In this report, we present a rare case of mechanical ileus due to a degenerated hydatid cyst.

Material and Methods: Case presentation patient information -83-year-old male- Abdominal pain for 2 days -ınability to pass gas or stool physical examination -abdominal distension -diffuse tenderness -no guarding or rebound tenderness -decreased bowel sounds -empty rectal ampulla on digital rectal examination -laboratory findings -leukocytosis: 11,050 $\times 10^9$/L -CRP: 8.5 mg/L -liver function tests: within normal limits -sodium: 126 mmol/L radiological findings abdominal CT scan: -sigmoid colon displaced anteriorly -diffuse colonic dilatation with closed -loop obstruction (possible sigmoid volvulus) -multiple intraabdominal calcified lesions suggestive of degenerated hydatid cyst -obstruction likely related to a 5 cm lesion in the left lower quadrant. Treatment and surgical findings -the patient underwent emergency surgery with a preliminary diagnosis of mechanical ileus.

Results: Intraoperative findings: -sigmoid colon twisted around a degenerated hydatid cyst located in the sigmoid mesocolon -colon diameter reached 7-8 cm -Hartmann procedure was performed. Hydatid disease is usually asymptomatic but may cause complications such as rupture, infection, or compression. Degenerated mesenteric hydatid cysts are a rare cause of mechanical ileus. Abdominal CT is highly valuable for diagnosis. Treatment typically includes surgical excision and antiparasitic therapy.

Conclusion: Degenerated hydatid cysts, although rare, should be considered in the differential diagnosis of mechanical ileus. Early diagnosis and surgical intervention are critical to reduce morbidity.

Keywords: Hydatid cyst, mechanical ileus, mesenteric involvement

[P-612]

Advanced appendiceal adenocarcinoma in a patient presenting with unexplained abdominal pain and weight loss: The role of diagnostic laparoscopy in staging

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Objective: Appendiceal adenocarcinoma is a rare malignancy among gastrointestinal system cancers and usually presents with non-specific clinical findings. This often complicates the diagnostic process and may result in detection at an advanced stage. In patients with unexplained abdominal pain and systemic symptoms, diagnostic laparoscopy may provide significant contribution to both diagnosis and staging.

Material and Methods: A 62-year-old male patient presented with long-standing abdominal pain and unintentional weight loss. Due to the detection of anemia and elevated tumor markers during initial evaluation, the patient was hospitalized for further investigation. Laboratory analysis revealed a hemoglobin level of 8.2 g/dL, CA 19-9 level of 18,569 U/mL, and CEA level greater than 995 ng/mL. Abdominal computed tomography demonstrated marked thickening of the appendiceal wall, luminal dilatation up to 12 mm, contrast enhancement, and paracecal lymph nodes. Colonoscopy revealed no pathological findings. As no definitive diagnosis could be established clinically or radiologically, the patient was evaluated at a multidisciplinary tumor board and diagnostic laparoscopy was planned. Laparoscopic exploration revealed a firm and distended appendix, along with diffuse flat lesions on the peritoneal surfaces suggestive of widespread involvement. Appendectomy was performed using a linear stapler to include the entire palpable lesion, and peritoneal biopsies were obtained.

Results: Histopathological examination revealed a moderately differentiated (G2) adenocarcinoma measuring 7 cm in greatest dimension, involving the entire appendix with transmural invasion including the serosa. Lymphovascular and perineural invasion were present. The proximal and mesenteric surgical margins were reported as positive. The tumor was staged as pT4a according to the AJCC 8th edition. Peritoneal biopsies were consistent with metastatic adenocarcinoma.

Conclusion: Appendiceal adenocarcinoma may present with unexplained abdominal pain and systemic symptoms, leading to diagnostic challenges. Diagnostic laparoscopy is an important modality for determining disease extent and guiding appropriate oncological treatment planning. In this case, laparoscopic assessment revealed peritoneal metastasis, and the patient was referred for chemotherapy followed by HIPEC.

Keywords: Appendectomy, diagnostic laparoscopy, appendiceal adenocarcinoma

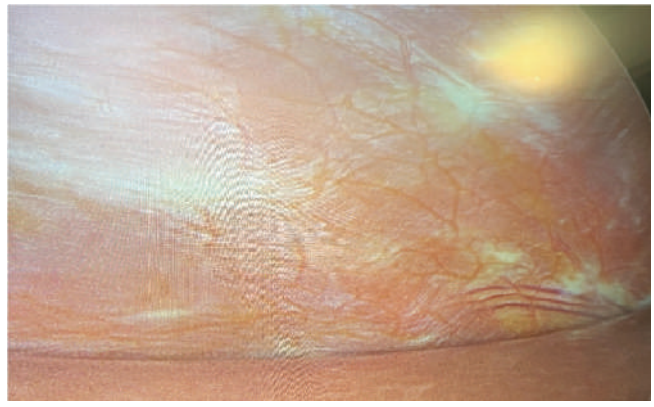


Figure 1. Peritoneal involvement.

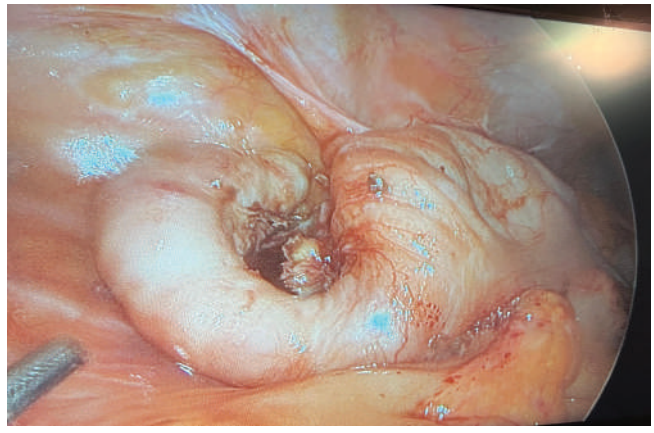


Figure 2. Appendix.

[P-613]

A rare case of upper gastrointestinal bleeding: Our clinical experience

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Muğla Sıtkı Koçman University Faculty of Medicine, Muğla

Objective: Gastrointestinal stromal tumors (GISTs) are mesenchymal neoplasms originating from interstitial Cajal cells and constitute approximately 1-2% of all gastrointestinal cancers. While most commonly found in the stomach and small intestine, duodenal localization is quite rare, accounting for only about 3% of all GIST cases. Duodenal GISTs present unique challenges in surgical management due to their close anatomical relationship with the papilla of Vater and the head of the pancreas. Therefore, balancing oncological competence with organ-preserving approaches is of paramount importance in treatment planning.

Material and Methods: A 71-year-old male patient was evaluated for gastrointestinal bleeding. Abdominal computed tomography revealed a mass lesion in the descending duodenum, approximately 6 cm in diameter, with well-defined and heterogeneous features, suggestive of GIST (gastrointestinal stimulation). Upper gastrointestinal endoscopy showed a subepithelial lesion in the second portion of the duodenum, with visible vascular structures in the center.

Results: Based on the current clinical, radiological, and endoscopic findings, the patient was diagnosed with duodenal GIST and surgical treatment was planned. Considering the location of the tumor between the third and fourth segments of the duodenum and its possible anatomical relationship with the papilla of Vater, the need for pancreaticoduodenectomy was evaluated; however, due to the appropriate patient and tumor characteristics, an organ-conserving surgical approach was preferred. Accordingly, the patient underwent duodenal wedge resection. Lymph node dissection was not performed due to the low tendency of GISTs to metastasize lymphadically. In the patient's postoperative follow-up, no anastomotic leakage or surgical complications occurred, and the patient, whose clinical course was uneventful, was discharged in good health.

Conclusion: Duodenal GISTs present surgical challenges due to their rarity and close association with critical anatomical structures. Pancreaticoduodenectomy may be unavoidable, particularly in cases with close association with the papilla of Vater or the head of the pancreas. However, the literature reports that organ-preserving surgical approaches such as wedge resection or limited duodenal resection can be safely applied in appropriately selected cases. These approaches reduce surgical morbidity while maintaining adherence to oncological principles. The presented case is important because it demonstrates that organ-preserving surgery, with careful preoperative evaluation and surgical planning, can be an effective option in duodenal GISTs.

Keywords: Upper GI bleeding, duodenal GIST, gastrointestinal stromal tumor

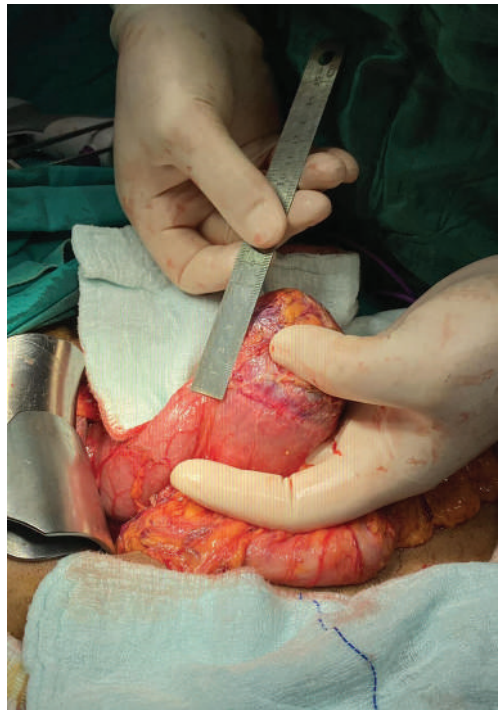


Figure 1. Duodenal GIST.

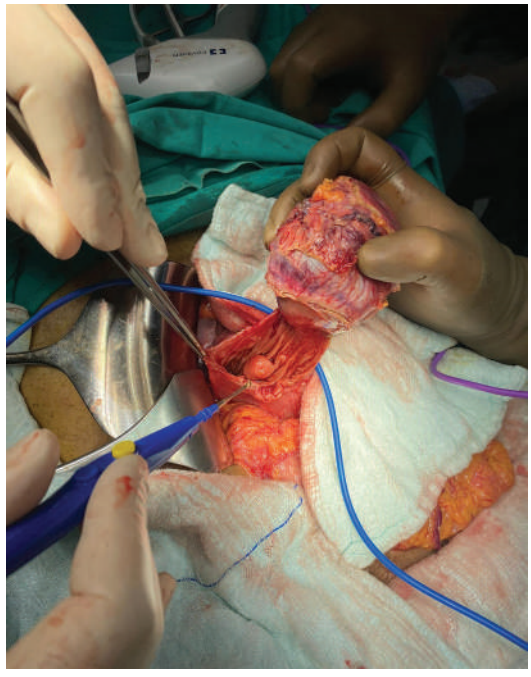


Figure 2. Duodenal gist wedge resection.

[P-614]

A rare cause of ileus: Ileus due to compression from an abdominal aortic aneurysm

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Objective: Ileus can occur as a slowing or cessation of normal intestinal motility, and it may also be caused by internal or external compression of the bowel. Mechanical causes are usually mass lesions. Although rare, ileus may also occur due to compression of the intestines by an abdominal aortic aneurysm.

Material and Methods: A 75-year-old male patient presented to our hospital's emergency department with complaints of nausea, vomiting, and abdominal pain. His medical history included hypertension, angina pectoris, and cysts in the right kidney. He had previously undergone graft surgery for the abdominal aorta and iliac arteries due to an abdominal aortic aneurysm (AAA). The patient had not passed gas for one day and had no bowel movements for two days. Because of his pain and tenderness, especially in the epigastric region, an upright abdominal radiograph was obtained, which did not show any significant pathology.

Results: He had tenderness in the epigastric region and minimal abdominal distension. WBC 10.19 (4.01-9.75), CRP 14.7 (0-5), potassium 5.11 (3.5-5.1). A CT scan was performed to investigate the cause of the ileus. The CT findings were reported as follows: "The stomach appears markedly distended. Additionally, dilation up to 5 cm with air-fluid levels was observed in the first and second parts of the duodenum. The transition zone is located in the third part of the duodenum adjacent to the AAA sac". The patient was admitted to our ward with a diagnosis of ileus due to compression of the third part of the duodenum by the AAA. An NG tube was placed, and over 24 hours it drained approximately 1.000 cc of bile- and gastric fluid-mixed content. Despite 24 hours of medical treatment, the patient's symptoms did not improve and his distension persisted. The patient underwent a laparoscopic gastrojejunostomy for duodenal obstruction caused by the AAA in the third part of the duodenum.

Conclusion: In our review of the literature and case reports, only a few studies were found describing ileus caused by compression from an AAA due to intestinal malrotation in adults. Intestinal malrotation is usually diagnosed in the neonatal period, but studies have shown that its incidence in adults is approximately 0.2%. Although malrotation was not present in this case, the patient developed ileus due to duodenal compression by an AAA. As the ileus did not resolve with medical treatment, a gastrojejunostomy was performed and the patient was discharged in complete remission.

Keywords: Abdominal aortic aneurysm, ileus



Figure 1. X-ray. Preoperative upright abdominal radiograph.

[P-617]

Double pyramidal lobe of the thyroid gland: Report of two consecutive cases with surgical and oncologic implications

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Objective: The thyroid gland typically consists of two lateral lobes connected by an isthmus. A pyramidal lobe (PL), derived from the thyroglossal duct remnant, may extend superiorly toward the hyoid bone and is reported in up to 40-65% of individuals. Because of this frequency, the PL is often regarded as a common anatomical component. We present two consecutive surgically documented cases of DPL, one associated with papillary thyroid carcinoma and the other with benign multinodular goiter, emphasizing the surgical and oncologic implications of this rare anatomical variant.

Material and Methods: Case 1: Fifty one old woman with chronic kidney diseaseand hypertension was referred for evaluation of a thyroid nodule. Her surgical history included cervical spine surgery, multiple renal stone operations, and cesarean sections. Family history revealed multiple thyroid surgeries for benign disease. Preoperative evaluation neck ultrasonography demonstrated a 19×13 mm hypoechoic nodule with lobulated margins and internal microcalcifications in the posterior mid-zone of the left thyroid lobe (TI-RADS 4-5). Fine-needle aspiration biopsy reported suspicion for malignancy; papillary carcinoma could not be excluded. No PL was identified on imaging. Surgery total thyroidectomy with central lymph node dissection was performed. During routine cervical exploration, two distinct PLs arising from the superior aspect of the isthmus and extending cranially toward the infrahyoid region were incidentally identified and completely excised. Case 2A: Fifty five-year-old man with a history of asthma underwent thyroidectomy for multinodular goiter. He had no history of thyroid malignancy. Preoperative evaluation. Neck ultrasonography revealed an enlarged thyroid gland with heterogeneous parenchyma and multiple solid nodules. Bilateral cervical lymph nodes were reactive in appearance. No PL was reported on imaging. Surgery during routine cervical exploration, two distinct PLs arising from the superior aspect of the isthmus were clearly identified.

Results: Failure to recognize and excise PLs may have significant clinical consequences. Residual thyroid tissue following total thyroidectomy can lead to recurrence of benign disease and may present years later as a midline cervical mass. In patients with differentiated thyroid carcinoma, remnant pyramidal tissue may compromise oncologic completeness and interfere with postoperative radioactive iodine therapy by acting as a competing site for iodine uptake. Furthermore, secondary surgery in the central neck carries an increased risk of complications compared to meticulous primary resection.

Conclusion: Double pyramidal lobe (PL) is an extremely rare thyroid anatomical variation. Two consecutive cases were identified within a short time interval. One case was associated with papillary thyroid carcinoma and nodal metastasis. Preoperative imaging failed to identify the PLs in both patients. Systematic prelaryngeal exploration is crucial during thyroidectomy.

Keywords: Double pyramidal lobe, thyroid gland, papillary thyroid carcinoma, anatomical variation, thyroidectomy

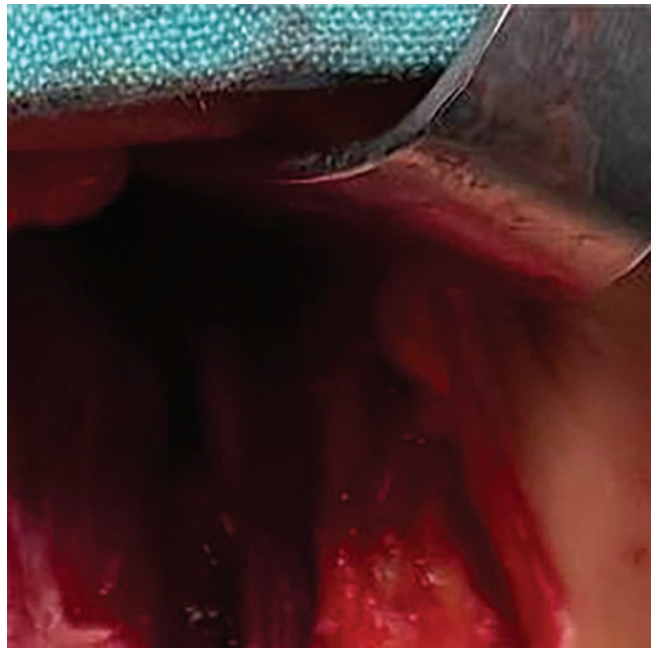


Figure 1.

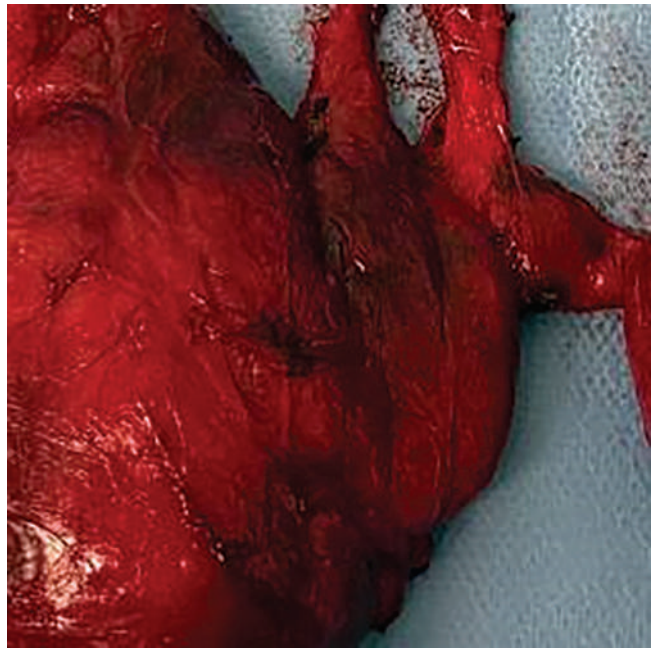


Figure 2.

Table 1. Result

Double pyramidal lobe (PL) is an extremely rare thyroid anatomical variation.
Two consecutive cases were identified within a short time interval.
One case was associated with papillary thyroid carcinoma and nodal metastasis.
Preoperative imaging failed to identify the PLs in both patients.
Systematic prelaryngeal exploration is crucial during thyroidectomy.

[P-618]

Giant retroperitoneal liposarcoma: Diagnosis and en block resection in a 59-year-old male patient

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Objective: Liposarcomas are rare malignancies originating from primitive mesenchymal cells rather than mature adipose tissue. Although they constitute less than 0.2% of all malignancies, they make up approximately 40-50% of retroperitoneal sarcomas. More than half of the masses are larger than 20 cm at the time of diagnosis. The main goal in treatment is radical surgical resection with negative surgical margins.

Material and Methods: A 59-year-old male patient presented with complaints of abdominal swelling and intermittent abdominal pain, which he had noticed for approximately three months, without any known chronic disease or history of previous abdominal surgery. Detailed physical examination revealed a palpable, well-defined mass in the right quadrant of the abdomen. The patient was scheduled for a complete blood count, extensive biochemistry and tumor markers, along with abdominal ultrasonography and contrast-enhanced abdominopelvic computed tomography. On abdominal ultrasonography, the pancreas, midline, and abdominal aorta could not be visualized due to high echogenicity. A hyperechoic solid/fatty mass lesion measuring 273x186 mm at its largest dimension was reported in this echogenic area, with no significant vascular signal.

Results: The definitive treatment of RPLSs is complete surgical resection. In giant tumors, the rate of invasion of surrounding organs can reach up to 80%. In these cases, in order to reduce the risk of recurrence and increase local control, en bloc resection of organs such as the kidney, colon, or spleen may be necessary in selected patients. Local recurrence is the most fundamental problem responsible for a large part of mortality in cases where distant metastasis does not develop. According to the World Health Organization classification, histological subtype is the most critical determinant of prognosis. While well-differentiated liposarcomas carry a low metastatic risk but a high potential for local recurrence, dedifferentiated liposarcomas may show a more aggressive clinical course. Although aggressive surgical approach has been shown to reduce recurrence, its effect on overall survival continues to be debated in the literature.

Conclusion: En bloc resection is the key step in achieving cure in giant retroperitoneal liposarcomas. Due to the rarity of the disease and the complexity of the surgery, a multidisciplinary approach and management by an experienced surgical team are crucial. Long-term and close follow-up of patients is necessary due to the high potential for local recurrence.

Keywords: Liposarcoma, retroperitoneum, giant

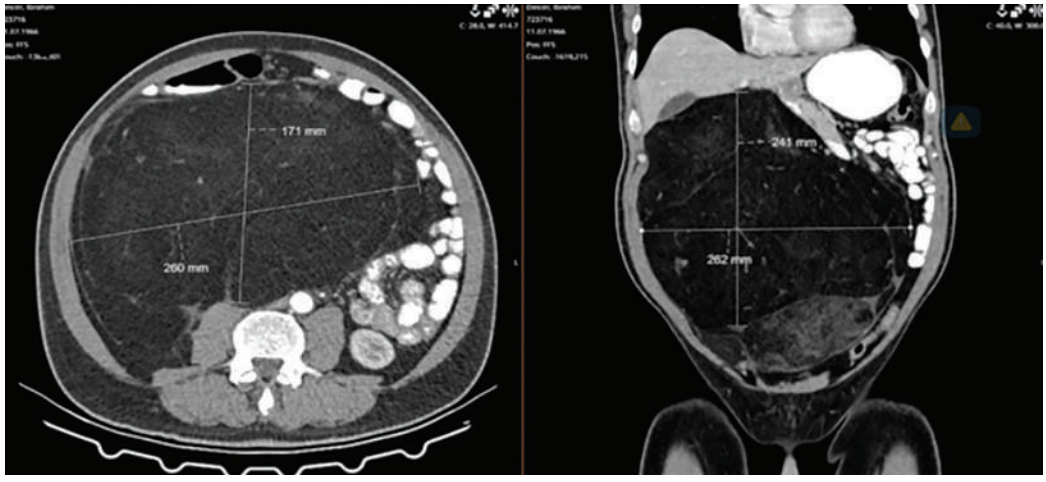


Figure 1. Axial and coronal section CT scan.

[P-620]

Peritoneal loose body in a 66-year-old male patient: A case report

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Objective: Peritoneal loose body (PLB), also known as a peritoneal mouse, is a rare intra-abdominal condition. Most cases are asymptomatic and are incidentally detected during radiological imaging. PLBs are usually smaller than 2-3 cm in diameter, although in rare cases they may grow to several centimeters. They are most commonly thought to originate from torsion of an epiploic appendage or from small intra-abdominal fat necrosis.

Material and Methods: A 66-year-old male patient was referred to our university hospital with decreased urine output, benign prostatic hyperplasia (BPH), and glob vesicale managed with catheterization. The patient had no complaints of abdominal pain, constipation, or palpable mass. Contrast-enhanced computed tomography (CT) performed for evaluation of his urinary symptoms incidentally revealed a well-defined, nodular lesion measuring approximately 40×27 mm, showing heterogeneous contrast enhancement, located between the bowel loops adjacent to the right lateral aspect of the urinary bladder (Figure 1). An open surgical procedure for BPH was planned by the urology department, and the general surgery team accompanied the operation. During surgery, a freely mobile, white, ovoid mass was identified between the urinary bladder and the bowel loops, floating freely within the mesentery. The mass was removed from the abdominal cavity without the need for dissection (Figure 2). No additional intra-abdominal pathology was detected during exploration.

Results: Peritoneal loose bodies are rare benign entities, and their true incidence worldwide remains unknown. Although their exact etiopathogenesis has not been fully elucidated, they are most commonly believed to result from torsion of epiploic appendages followed by ischemia, fat necrosis, and subsequent calcification. PLBs are more frequently observed in male patients and are generally asymptomatic. However, when the mass enlarges or exerts pressure on adjacent organs, symptoms such as urinary retention, constipation, or small bowel obstruction may occur. CT and magnetic resonance imaging (MRI) are helpful diagnostic tools, and the mobility of the lesion—demonstrated by changes in position on serial imaging—may be a distinguishing feature.In the present case, the patient was male and had no symptoms suggestive of an intra-abdominal mass. His urinary complaints were attributed to pre-existing prostatic enlargement. The PLB was incidentally detected during surgery and was easily removed without the need for dissection.

Conclusion: Peritoneal loose bodies are most often diagnosed incidentally through radiological imaging. Evaluation by an experienced radiologist can facilitate accurate diagnosis and differentiation from other intra-abdominal pathologies. Surgical removal is recommended once the diagnosis is established. Subsequent histopathological examination is important to exclude malignancy.

Keywords: Peritoneal loose body, peritoneal mouse, case report, incidental finding, intra-abdominal mass



Figure 1.

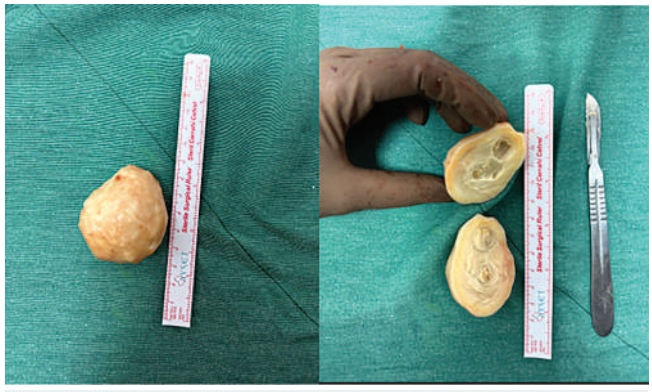


Figure 2.

[P-628]

A rare ileus in adults: Jejunal intussusception

Kubilay Kenan Özlük[1], Şevket Barış Morkavuk[1], Sema Horasan Hatipoğlu[2], Bilgi Karakaş[2], İbrahim Burak Bahçecioğlu[1], Mehmet Ali Gülçelik[1]

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Objective: Intussusception is the penetration of the proximal bowel segment into the distal bowel segment. Intussusception is a pathology usually seen in children. It is also rarely encountered in adults. It constitutes 1-5% of all bowel obstructions. In this presentation, we aim to present a case of jejunal intussusception along with a review of the literature.

Material and Methods: Adult intussusception cases are seen on average in the 5th decade. Unlike in children, intussusception in adult patients almost always occurs due to a secondary pathology.

Results: A 20-year-old male patient presented to the emergency department with sudden onset of severe abdominal pain, nausea, and vomiting. Physical examination revealed tenderness in all quadrants of the abdomen, particularly prominent in the left upper quadrant. The patient described enteritis, and rectal examination revealed liquid stool contamination. Laboratory evaluation showed no pathological findings except for a WBC count of 17.3x10³ µL. An upright plain abdominal X-ray showed air-fluid levels consistent with ileus in the proximal segments. Oral and IV contrast-enhanced abdominal CT scans revealed intussusception in the proximal jejunal segments, involving approximately 10 cm, consistent with the target sign. No further pathological findings were detected, and the patient was hospitalized. He underwent NG decompression, fluid resuscitation, and antibiotic therapy. On the second day after admission, spontaneous gas and stool discharge was observed. Follow-up X-rays showed regression of ileus findings, and the patient was discharged with an appointment for MR enterography.

Conclusion: The general consensus regarding the treatment of intussusception is that non-operative reduction is the primary approach. However, the main treatment for adult intussusception is surgical resection. This is because the likelihood of an underlying predisposing factor causing intussusception is higher in adult patients compared to pediatric patients. CT scan is the radiological method with the highest diagnostic accuracy rate. The most common symptom at presentation is abdominal pain. Bloody diarrhea and signs of obstruction are other symptoms.

Keywords: Intussusception, jejunum

[P-629]

Tailgut cyst case report

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Objective: Tailgut cyst is a benign lesion that is rarely seen in the abdominal region and is often asymptomatic. Referred to as "tailgut cyst" in various sources, it is generally a congenital anomaly and is classified among "developmental cystic lesions". Tailgut cyst develops during the embryonic period, particularly as a result of an epithelial malformation originating from endodermal tissues. Clinical symptoms are usually absent; however, as the cyst enlarges, abdominal pain, a palpable mass, and, rarely, complications (e.g., infection or cyst rupture) may be observed. Tailgut cyst is often identified incidentally through radiological imaging methods. Imaging studies provide important information about the cyst's content, localization, and its relationship with surrounding tissues. Early diagnosis is critical in terms of enabling surgical intervention and preventing potential complications. Treatment generally consists of surgical excision, depending on the size of the cyst and the presence of symptoms. Management of these cysts may require a multidisciplinary approach.

Material and Methods: A 32-year-old female patient had previously presented to different medical centers with complaints of intermittent abdominal pain persisting for eight years, which did not significantly affect her daily life. During her gynecology consultation, a pelvic MRI was requested with a preliminary diagnosis of endometriosis. After imaging findings consistent with a tailgut cyst were identified on pelvic MRI, she was referred to our department.

Results: She had no known comorbidities and no history of prior surgery. On physical examination, minimal tenderness was noted in the suprapubic region. No pathological findings were detected in laboratory tests. On the follow-up MRI requested by our department, a lesion measuring approximately 66×37×52 mm was identified in the retrorectal space, surrounding the rectum, with no apparent relationship to adjacent structures. The imaging findings were primarily consistent with a tailgut cyst.

Conclusion: In this case, consistent with the general consensus in the literature, a follow-up strategy rather than surgical intervention was considered appropriate for an asymptomatic and small tailgut cyst. This approach allows for the management of potential complications before they develop and helps avoid unnecessary surgery.

Keywords: Tailgut, cyst, semptomq

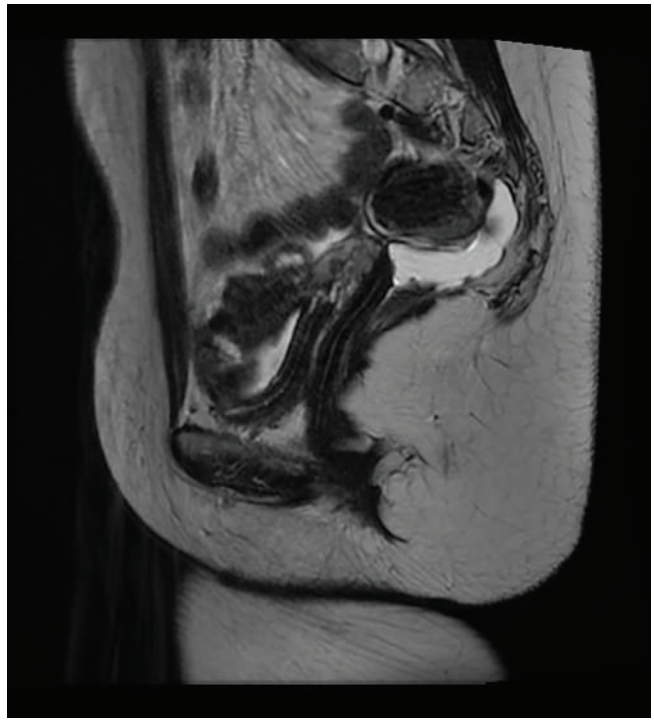


Figure 1. Radiological imaging.

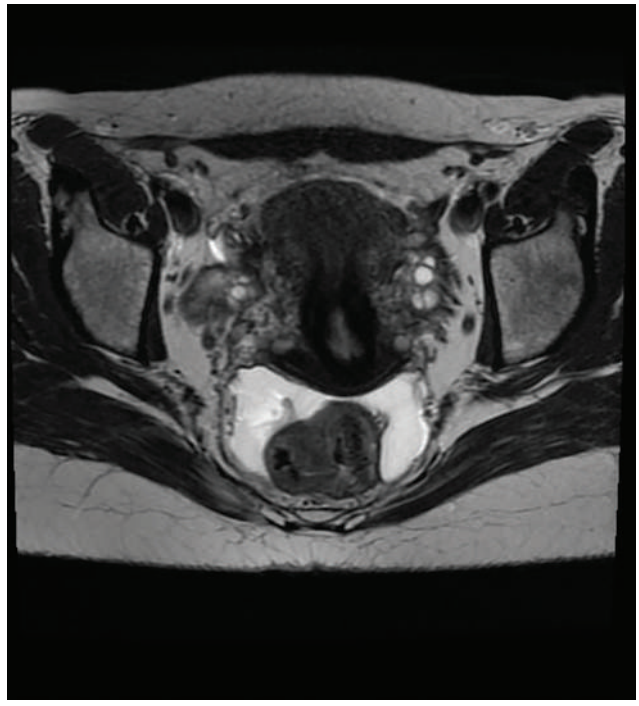


Figure 2. Radiological imaging.

24th NATIONAL CONGRESS OF SURGERY ABSTRACTS

POSTER PRESENTATIONS

[P-001]

A rare mechanical obstruction cause mimicking irritable bowel syndrome: Abdominal coza syndrome

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Objective: Abdominal cocoon syndrome (idiopathic sclerosing peritonitis) is a very rare clinical condition that develops as a result of the external wrapping of small or large bowel loops by fibrotic peritoneal bands or a thickened membrane. Clinical findings are often non-specific. It may present as recurrent abdominal pain, nausea, vomiting, abdominal distension, and subileus attacks. Due to diagnostic difficulties, patients may be diagnosed with functional gastrointestinal disorders, particularly irritable bowel syndrome (IBS), for a long time. A definitive diagnosis is often made by surgical exploration.

Material and Methods: The clinical, radiological, surgical, and pathological findings of a 58-year-old female patient who had intermittent gastrointestinal symptoms for approximately twenty years and had previously been followed up with an IBS diagnosis were retrospectively evaluated.

Results: The patient presented with recurrent episodes of nausea, vomiting, abdominal distension, and inability to pass gas or stool over the past year. Computed tomography and magnetic resonance imaging studies revealed no specific pathology explaining the obstruction. Colonoscopy was normal. Surgical exploration for a subileus attack revealed that the small and large bowel loops were externally wrapped by diffuse fibrotic peritoneal bands, with markedly restricted loop mobility and a cocoon-like appearance. Laparoscopy was converted to open surgery, and all fibrotic bands were excised, and a bridectomy was performed. Pathological examination revealed findings consistent with fibro-connective tissue proliferation and sclerosing peritonitis. No complications developed in the postoperative period, and the patient was discharged on the third day.

Conclusion: Abdominal cocoon syndrome should always be considered in the differential diagnosis of patients who have been followed up with an IBS diagnosis for a long time and who experience recurrent subileus attacks. In cases where radiological findings are insufficient, surgical exploration offers both a diagnostic and therapeutic approach.

Keywords: Abdominal coarctation syndrome, sclerosing peritonitis, mechanical bowel obstruction, subileus, irritable bowel syndrome

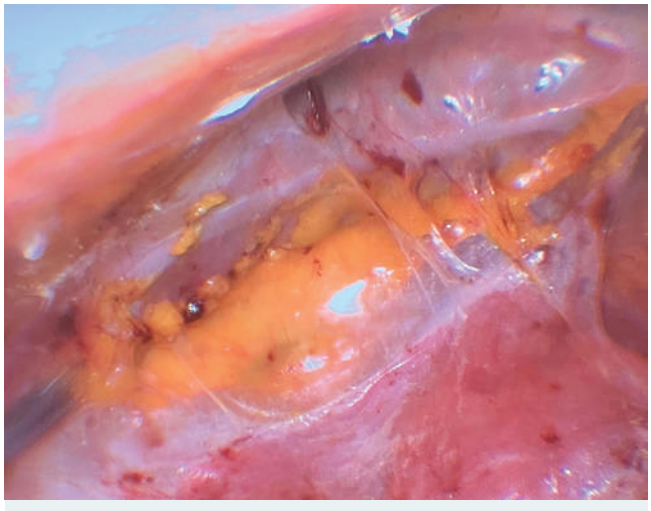


Figure 1. Intraoperative findings. The small and large bowel loops are surrounded externally by widespread peritoneal fibrotic bands and adhesions, giving them a cocoon-like appearance.

[P-002]

Mesenteric vascular disease at a young age: Suspecting the disease; maybe not everything, but it can mean a lot

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Objective: Acute mesenteric ischemia (AMI) is a rare cause of acute abdomen and often occurs due to embolism or thrombosis in the mesenteric vascular structures. Despite advances in diagnosis and treatment, the disease still carries a mortality rate of 50-70%. Since there are no specific physical examination (PE) findings, clinical suspicion at the time of presentation is extremely important for diagnosis and especially for early treatment. Therefore, although the outcome was fatal, we aimed to draw attention to the importance of suspecting this disease at the time of diagnosis by presenting a young case that may highlight this issue.

Material and Methods: Our case was a 25-year-old previously healthy male who presented to the emergency department with sudden-onset, severe abdominal pain that began at night and persisted. He had no passage of gas or stool since the pain started and experienced nausea and vomiting. He smoked one pack per day, and his family history included cerebrovascular disease and deep vein thrombosis in second-degree relatives. He was evaluated with physical examination, laboratory tests, and radiological imaging.

Results: The abdomen was minimally distended with generalized tenderness but no guarding or rebound. The white blood cell count was 26,000/μL. The contrast-enhanced abdominal CT reported through outsourced service as normal; however, due to pain disproportionate to examination findings, we re-evaluated the images and detected a thrombus at the root of the superior mesenteric artery (Figure 1). After radiology consultation, AMI was diagnosed, and tissue plasminogen activator was administered. As the patient did not improve, laparotomy was performed 24 hours later, revealing necrosis of most of the small intestine, right colon, and gallbladder (Figure 2). Following Fogarty catheter thrombectomy, bowel resections and anastomoses were completed. Postoperatively, heparin infusion was initiated, and hematology and genetics consultations were obtained. At second-look surgery 48 hours later, necrosis involved all remaining intestinal segments and the distal stomach, and the operation was terminated. Further tests showed deficiencies of protein C, protein S, and antithrombin III, heterozygous factor II and factor V Leiden mutations, and homozygous MTHFR mutation. The patient died one week after the second-look procedure.

Conclusion: AMI is caused by the sudden interruption of intestinal blood flow. Early diagnosis and treatment are life-saving, and clinical suspicion is essential. Severe abdominal pain disproportionate to PE findings strongly suggests AMI and should be considered the diagnosis until proven otherwise.

Keywords: Abdominal pain, ischemia, mesentery



Figure 1. Thrombus at the origin of the SMA (indicated by the white arrow).



Figure 2. Small intestines with extensive necrosis.

[P-003]

Top 5 ultra-rare intra-abdominal tumors: A clinical review

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Objective: General surgeons frequently manage common abdominal pathologies; however, ultra-rare intra-abdominal tumors present unique diagnostic and therapeutic challenges. These entities often mimic more common conditions, such as gastrointestinal stromal tumors (GIST) or common adenocarcinomas, leading to significant diagnostic delay and complex surgical requirements. This study reviews the clinical presentation and management of five of the rarest documented intra-abdominal malignancies: desmoplastic small round cell tumor (DSRCT), extraosseous ewing sarcoma (EES) of the mesentery, primary retroperitoneal melanoma (PRM), malignant gastric glomus tumor, and primary peritoneal serous carcinoma (PPSC).

Material and Methods: A comprehensive review of surgical literature and pathological case series was conducted to identify intra-abdominal tumors with an incidence typically lower than 1 case per million or those with fewer than 100 documented cases. Data were synthesized focusing on anatomical location, specific immunohistochemical markers required for differentiation, and the extent of surgical resection necessary for local control.

Results: The identified tumors exhibit distinct biological behaviors requiring specialized interventions. DSRCT primarily affects young males and is characterized by the t(11;22)(p13;q12) translocation, requiring aggressive cytoreductive surgery (CRS). EES of the mesentery necessitates wide local excision and is identified via strong CD99 positivity, distinguishing it from GIST. PRM represents a diagnostic enigma, occurring in the retroperitoneum without a detectable cutaneous primary, requiring S100 and HMB-45 staining for confirmation. Malignant gastric glomus tumors are rare variants of perivascular neoplasms that present as submucosal masses, requiring gastrectomy when mitotic activity is high. Finally, PPSC involves widespread peritoneal "caking" while sparing the ovaries, managed through extensive cytoreduction and HIPEC. Across all five entities, R0 resection remains the primary determinant of long-term survival, though the aggressive nature of these tumors often necessitates multi-visceral resection.

Conclusion: Ultra-rare intra-abdominal tumors represent a frontier in general surgery where standardized protocols are often unavailable. Because preoperative imaging is rarely definitive, the surgeon must be prepared for unexpected findings during laparotomy. A multidisciplinary approach involving advanced molecular testing and specialized surgical techniques like CRS/HIPEC is essential. While surgical resection remains the cornerstone of treatment, prognosis remains guarded due to the late presentation and high recurrence rates characteristic of these obscure pathologies.

Keywords: Glomus tumour, melanoma, sarcoma

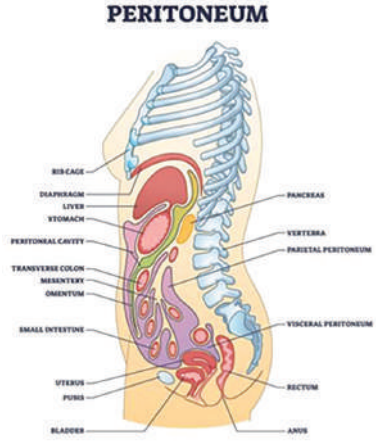


Figure 1. Peritoneal cavity.

[P-004]

Should routine cholecystectomy be performed during total gastrectomy? A retrospective analysis of gastric cancer patients

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Objective: It is well known that gallstone formation and related biliary complications increase after total and subtotal gastrectomy performed for gastric cancer. Vagotomy, rapid weight loss, and impaired gallbladder motility are considered the main contributing factors. Therefore, the necessity of performing concomitant cholecystectomy during gastrectomy remains controversial. This study aimed to evaluate the effect of simultaneous cholecystectomy on biliary complications in patients undergoing gastrectomy for gastric cancer.

Material and Methods: Sixty patients who underwent total or subtotal gastrectomy for gastric cancer at our center between 2023 and 2025 were retrospectively analyzed. Patients were divided into two groups: those who underwent concomitant cholecystectomy (n=15) and those who did not (n=45). The development of biliary complications and mortality rates during follow-up were evaluated. Data were analyzed using percentages (%) and patient numbers (n).

Results: Of the 60 patients, 25% (n=15) underwent concomitant cholecystectomy during gastrectomy, while 75% (n=45) did not. No biliary complications were observed in 100% (n=15) of patients who underwent simultaneous cholecystectomy during the follow-up period. In the group without cholecystectomy, 4.4% (n=2) of patients developed acute cholecystitis. One patient presented to the emergency department in the second postoperative month and the other in the first postoperative year with right upper quadrant pain, fever, and signs of acute abdomen. All patients who developed acute cholecystitis were in the non-cholecystectomy group. The overall mortality rate was 8.3% (n=5). The causes of death were not related to biliary complications.

Conclusion: Concomitant cholecystectomy during gastrectomy for gastric cancer may be considered a safe approach to prevent biliary complications. The absence of biliary complications in patients who underwent cholecystectomy in this study is noteworthy. The decision for routine cholecystectomy should be individualized, taking into account surgical risks and patient characteristics. Larger patient cohorts and longer follow-up periods are required to clarify the effectiveness of this approach.

Keywords: Total gastrectomy, cholecystectomy, gastric cancer, biliary complications, retrospective analysis

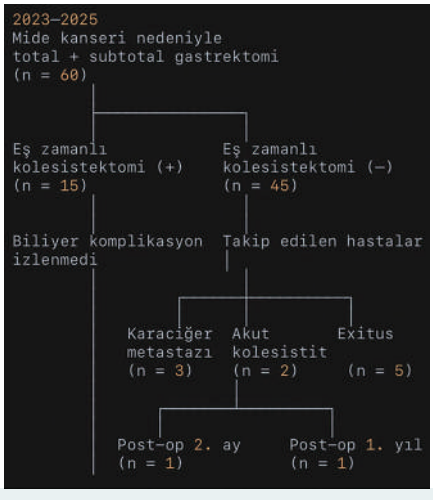


Figure 1. Results.

[P-005]

Time-dependent analgesic effects of botulinum toxin and topical glyceryl trinitrate after excisional hemorrhoidectomy: A systematic review and meta-analysis

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Objective: Postoperative pain following excisional hemorrhoidectomy remains a significant clinical problem, adversely affecting patient comfort, recovery, and return to daily activities. Internal anal sphincter spasm is considered a major contributing factor, along with other multifactorial mechanisms. Chemical sphincter relaxation strategies, including botulinum toxin and topical glyceryl trinitrate (GTN), have been proposed to reduce postoperative pain. However, their time-dependent efficacy has not been clearly established. This study aimed to evaluate and compare the effectiveness of botulinum toxin and GTN in postoperative pain control using a systematic review and meta-analysis.

Material and Methods: This systematic review and meta-analysis was conducted in accordance with PRISMA 2020 guidelines. PubMed was systematically searched for randomized controlled trials evaluating botulinum toxin or topical GTN for pain control after excisional hemorrhoidectomy. Studies involving stapled hemorrhoidopexy or Doppler-guided techniques were excluded. Pain outcomes were standardized to a 0-10 visual analog scale (VAS). Mean differences (MD) with 95% confidence intervals (CI) were calculated using a random-effects model for postoperative days 1, 3, and 7.

Results: Nine randomized controlled trials were included in the systematic review, and eight studies comprising 452 patients were eligible for meta-analysis. On postoperative day 1, GTN significantly reduced pain compared to controls (MD -0.72, 95% CI -1.18 to -0.26; p=0.002; I^2=48%), whereas botulinum toxin showed no significant effect (MD -0.21, 95% CI -0.58 to 0.16; p=0.26). On postoperative day 3, both GTN (MD -0.64, 95% CI -1.09 to -0.19; p=0.005; I^2=52%) and botulinum toxin (MD -0.68, 95% CI -1.12 to -0.24; p=0.003; I^2=46%) significantly reduced pain scores. On postoperative day 7, botulinum toxin demonstrated a greater and more consistent analgesic effect (MD -1.12, 95% CI -1.63 to -0.61; p<0.001; I^2=34%), while GTN was not statistically significant (MD -0.38, 95% CI -0.82 to 0.06; p=0.09). Headache was the most common adverse event with GTN, occasionally leading to discontinuation. Botulinum toxin was not associated with increased serious adverse events.

Conclusion: Chemical sphincter relaxation demonstrates time-dependent effects on postoperative pain following excisional hemorrhoidectomy. GTN provides superior pain relief in the early postoperative period, whereas botulinum toxin offers more sustained analgesia in later stages. Considering its single-dose administration and favorable safety profile, botulinum toxin may represent a more durable analgesic option. Further high-quality randomized controlled trials are required to determine optimal treatment strategies.

Keywords: Botulinum toxin, excisional hemorrhoidectomy, postoperative pain

[P-006]

Inflammatory breast cancer: A single-center experience

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Objective: Inflammatory breast cancer is a disease that requires a multidisciplinary approach due to its aggressive biology and high risk of metastasis. Currently, the standard treatment consists of a trimodality approach including neoadjuvant systemic therapy, surgery, and adjuvant radiotherapy. In recent years, advancements in systemic therapies have led to a significant increase in pathological response rates. This development has raised questions regarding the traditional use of modified radical mastectomy in inflammatory breast cancer. The aim of this study was to evaluate the outcomes of patients with inflammatory breast cancer treated with contemporary trimodality therapy.

Material and Methods: In this retrospective study, 24 patients diagnosed with inflammatory breast cancer between 2021 and 2025 were included. Demographic data, clinical and pathological characteristics, disease progression, recurrence, metastatic status, and survival data were obtained from patient medical records.

Results: All patients received neoadjuvant chemotherapy followed by modified radical mastectomy and adjuvant radiotherapy, achieving trimodality treatment. The mean age of the patients was 54.3 years (range: 36-74). The mean follow-up period was 28.6 months (range: 0.7-60.5). Pathological complete response was achieved in 7 patients (29.2%). Axillary evaluation revealed node-negative disease in 45.8% of patients. One patient developed local axillary recurrence, and distant metastases were detected in three patients. Patients who developed metastases died in the second postoperative year.

Conclusion: Trimodality treatment provides significant pathological response rates in patients with inflammatory breast cancer. The pCR rate of 29.2% observed in our series is consistent with the literature and supports the effectiveness of neoadjuvant therapy. High rates of axillary node negativity support current discussions in the literature suggesting that axillary surgery may be limited in selected patients. Further studies with larger cohorts are needed to re-evaluate the axillary approach in inflammatory breast cancer.

Keywords: Inflammatory breast cancer, trimodality treatment, pathological complete response

[P-007]

Vocal cord paralysis after total thyroidectomy: A bibliometric analysis of the global literature

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Objective: Vocal cord paralysis after total thyroidectomy is a significant complication that directly affects patient quality of life and surgical outcomes. This study aims to bibliometrically analyze the historical evolution, productivity patterns, leading countries, institutions, authors, and thematic trends of the scientific literature on vocal cord paralysis following total thyroidectomy.

Material and Methods: In this bibliometric analysis, studies published in the PubMed database between 1978 and 2025 were reviewed. The search strategy used the keywords: "total thyroidectomy" AND ("vocal cord paralysis" OR "recurrent laryngeal nerve palsy") AND ("complication" OR "postoperative"). Data were analyzed using the Bibliometrix (R) software, evaluating annual publication trends, Bradford's and Lotka's laws, country and institutional productivity, author networks, keyword frequencies, and thematic trends over time.

Results: A total of 536 publications, 202 sources, and 2,565 authors were analyzed. Annual output increased markedly after 2010, with an annual growth rate of 7.72% (Figure 1). The leading contributing countries were Italy, Türkiye, China, France, and the United States. The University of Pisa, the University of Palermo, and the University of Wisconsin-Madison were among the most productive institutions. Bradford's law identified World Journal of Surgery, International Journal of Surgery, and Surgery as core journals (Figure 2). Keyword analysis showed dominance of "humans," "female," "male," "middle aged," "retrospective studies," and "thyroidectomy/methods". Trend analysis indicated an early focus on anatomy and etiology, while recent studies emphasize intraoperative neuromonitoring, prevention strategies, and patient-centered outcomes.

Conclusion: This bibliometric analysis reveals not only the quantitative growth but also the conceptual and methodological evolution of the literature on vocal cord paralysis after total thyroidectomy. The findings show that early research primarily focused on anatomical descriptions and etiological observations, whereas recent studies increasingly emphasize prevention strategies, intraoperative neurophysiological monitoring, standardization of surgical techniques, and patient-centered outcome measures. By systematically identifying the countries, institutions, and journals driving this transition, the study delineates the intellectual hubs and core publication channels of the field. Moreover, keyword and trend analyses indicate a paradigm shift in which vocal cord paralysis is no longer viewed as an inevitable complication but as a predictable, preventable, and manageable surgical outcome. Beyond a descriptive overview of past literature, this analysis provides a strategic roadmap for future clinical research, quality improvement initiatives, and guideline development, offering a robust reference point for advancing surgical outcomes in total thyroidectomy practice.

Keywords: Recurrent laryngeal nerve injury, total thyroidectomy, vocal cord paralysis

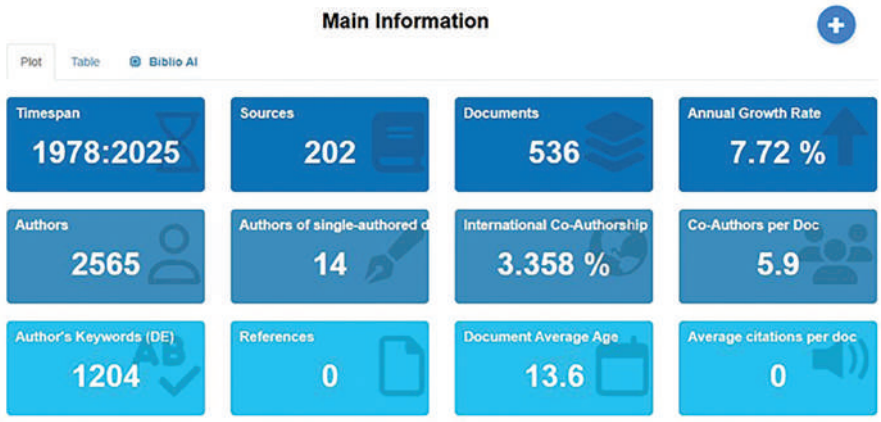


Figure 1. Bibliometric main indicators of the literature on vocal cord paralysis after total thyroidectomy (1978-2025).

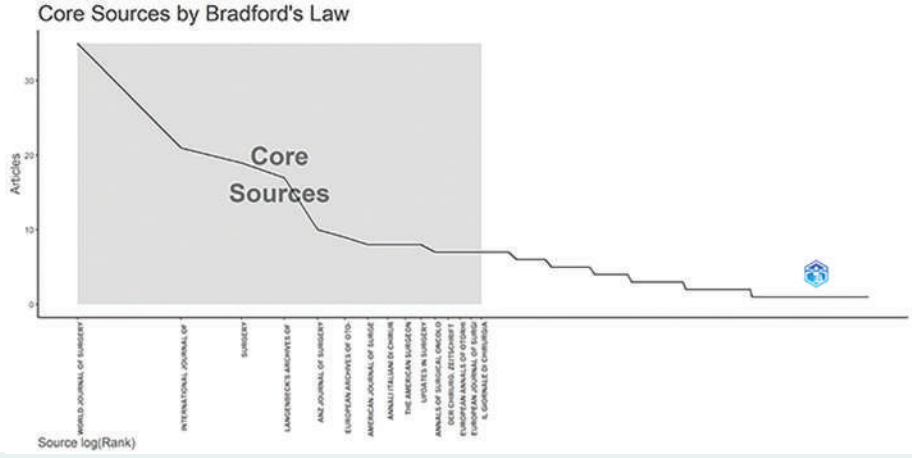


Figure 2. Distribution of core journals in the literature on vocal cord paralysis after total thyroidectomy based on Bradford's law.

[P-008]

Surgical management of complications of endoscopic cystogastrostomy: 7 years of tertiary center experience and technical analysis

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Objective: Endoscopic cystogastrostomy is used as a minimally invasive method for draining peripancreatic collections. However, serious complications can develop during endoscopic cystogastrostomy; which may require "rescue surgery" as an emergency surgical intervention in a field dominated by intense inflammation and anatomical distortion. This study analyzes the surgical management strategies and clinical outcomes of life-threatening complications occurring after endoscopic cystogastrostomy that could not be managed via endoscopic techniques.

Material and Methods: A total of 58 endoscopic cystogastrostomy performed on 49 patients at our hospital between 2019 and 2025 were reviewed; 9 patients (5 males, 4 females) who required surgical exploration due to procedural complications were retrospectively analyzed. Complications were classified as early-stage perforation and late-stage necrotizing/fistulizing processes. The surgical techniques applied, the need for resection, infection control strategy, postoperative morbidity, mortality, and length of hospital stay were examined.

Results: The mean age of the patients was 53.7 years. The most frequent surgical indication was gastric perforation with necrotizing pancreatitis (44.4%), these cases were treated with necrosectomy and open primary gastric repair. In isolated gastric perforation, laparoscopic primary gastric repair was performed (11.1%). In more complex cases, segmental colon resection+splenectomy+gastric wedge resection (11.1%) was performed due to gastrocolic fistula. For duodenal perforation, antrectomy+loop gastrojejunostomy+ choledochal T-tube drainage (11.1%) was performed. In cases of isolated widespread infected necrosis where endoscopic cystogastrostomy was unsuccessful, necrosectomy (11.1%) and necrosectomy+Bogota bag (11.1%) with open abdomen follow-up were performed. In the postoperative period, 22.2% of patients died due to septic shock and multiple organ failure. The average hospital stay for surviving patients was determined to be 15.6 days.

Conclusion: Although endoscopic cystogastrostomy is a minimally invasive approach with high success rates, serious complications following endoscopic cystogastrostomy are high-risk situations requiring rapid intervention. Perforations due to stent migration and vascular/visceral injuries can be fatal. Early surgery is life-saving in gastric perforations; however, in cases complicated by late-stage necrotizing processes, "rescue" procedures, including aggressive organ resections, are the most critical factor in limiting mortality. As seen in our study, perforation and sepsis management form the basis of surgical success. The high surgical success rate in our series is based on early recognition of the complication and aggressive surgical debridement strategies. Surgical management is one of the key factors determining the prognosis of these patients, and timely surgical intervention is the gold standard. To ensure the successful management of endoscopic cystogastrostomy complications, it is recommended that the procedure be performed in advanced multidisciplinary centers where general surgery and gastroenterology departments operate in coordination.

Keywords: Endoscopic cystogastrostomy, pancreatic pseudocyst, complication management

[P-009]

Scalpel, numbers, and facts: A 22-month surgical experience of 2. 778 cases from a city hospital general surgery department

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Objective: Regular analysis of surgical departmental activity is essential for quality assurance, resource allocation, and continuous improvement of surgical training programs. This study aims to present a comprehensive statistical analysis of operations performed by four general surgeons (surgeon A, B, C, D) at a city hospital general surgery department.

Material and Methods: Operative notes from all general surgery procedures performed between April 2024 and February 2026 (22 months) were retrospectively reviewed. A total of 2.778 operative notes were extracted from digital records and converted into a structured dataset. For each case, surgeon identity, procedure type, surgical approach (laparoscopic vs. open), urgency status (elective vs. emergency), malignancy status with tumor localization, and perioperative complications were recorded. Emergency cases were further subclassified by indication. Procedures were classified into main categories, and surgeon-specific distributions, year-over-year comparisons, laparoscopic surgery rates, and oncological surgery profiles were analyzed.

Results: The distribution of 2,778 cases among surgeons was: Surgeon A 1.086 (39.1%), surgeon B 997 (35.9%), surgeon C 470 (16.9%), and surgeon D 225 (8.1%). The most common procedures were hernia repair (n=677, 24.4%), cholecystectomy (n=613, 22.1%), thyroid surgery (n=246, 8.9%), appendectomy (n=218, 7.8%), and breast surgery (n=154, 5.5%). Of all cases, 86.9% (n=2,413) were elective and 13.1% (n=365) were emergency procedures. Emergency cases: Acute appendicitis 118 (32.3%), ileus/obstruction 88 (24.1%), acute cholecystitis 67 (18.4%), gastrointestinal perforation 33 (9.0%), and other causes including incarcerated hernia and trauma 59 (16.2%). In cases amenable to laparoscopic approach (cholecystectomy, appendectomy, hernia repair), the overall laparoscopic rate was 64.6%. Procedure-specific laparoscopic rates were 95.9% for cholecystectomy, 79.8% for appendectomy, and 36.6% for hernia repair. Twenty- nine patients (4.2%) had perioperative complications including conversion to open surgery and organ injury. A total of 173 cases (6.2%) involved malignant pathology. Malignancies were breast (n=93, 53.8%), colorectal (n=45, 26.0%), thyroid (n=8), skin/soft tissue (n=6), and gastric (n=5). The monthly average surgical volume increased from 113.3 cases in 2024 to 130.7 in 2025 (a 15.3% increase), while laparoscopic rates remained stable (66.5% vs. 67.9%).

Conclusion: Our department performed a high volume of operations spanning both benign and malignant pathologies over the 22-month study period. The laparoscopic cholecystectomy rate of 95.9% is consistent with current literature standards. The finding that 79.8% of malignant cases were of breast and colorectal origin reflects the department's oncological surgical experience. The low perioperative complication rate (4.2%) and increasing operative volume over time indicate effective and safe surgical practice. Laparoscopic hernia repair was identified as an area for further development.

Keywords: General surgery, surgical activity analysis, laparoscopic surgery, emergency surgery, oncological surgery, perioperative complications

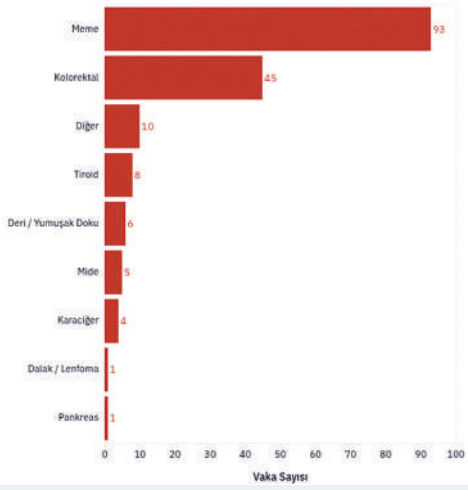


Figure 1. Distribution of the emergency cases.

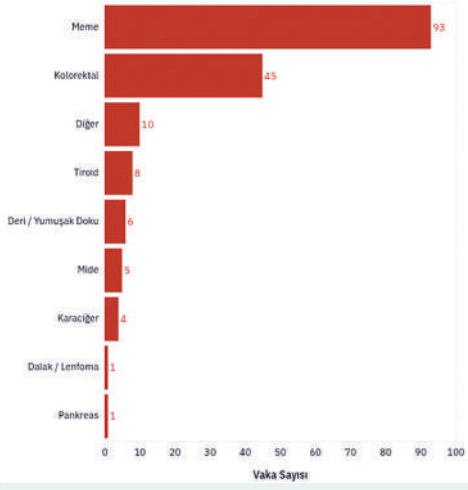


Figure 2. Distribution of the malignant cases.

[P-021]

Clinical, radiological, and histopathological analysis of emergency department-admitted Meckel's diverticulitis cases: A single-center retrospective study

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Objective: Meckel's diverticulitis is a rare congenital gastrointestinal anomaly that may require surgical treatment when complicated. It often presents with an acute abdomen and may mimic other abdominal pathologies. This study aimed to evaluate the demographic, clinical, radiological, and histopathological characteristics of patients with Meckel's diverticulitis who were admitted to the emergency department and treated surgically.

Material and Methods: Patients who were admitted to the emergency department and diagnosed with Meckel's diverticulitis intraoperatively at the General Surgery Clinic of University of Health Sciences Türkiye, Ankara Etlik City Hospital between October 2022 and August 2025 were retrospectively analyzed. In most cases, the preoperative diagnosis was not Meckel's diverticulitis, and acute appendicitis or other causes of acute abdomen were initially suspected. Age, sex, presenting complaints, physical examination findings, computed tomography (CT) reports, and histopathological results were evaluated. Patients who underwent elective surgery were excluded from the study.

Results: A total of 19 patients were included in the study. The mean age was 39.9±18.8 years (18-74) (Table 1). The most common presenting symptoms were abdominal pain, nausea, and vomiting (15.8%). The most frequent physical examination finding was minimal tenderness in the right lower quadrant (26.3%). CT reports suggested Meckel's diverticulitis in only 3 cases (15.8%), whereas other acute abdominal pathologies were reported in the remaining cases (Table 2). Histopathological examination revealed ectopic gastric mucosa in 4 cases and ectopic pancreatic tissue in 1 case. In many cases, necrosis, hemorrhage, and active inflammation were observed. Histopathological analysis played a decisive role in confirming the diagnosis and identifying ectopic tissue and associated complications.

Conclusion: Although Meckel's diverticulitis is rare, it represents an important cause of acute abdomen and can clinically and radiologically mimic acute appendicitis. Consistent with the literature, the rate of preoperative diagnosis using CT was low; in this study, correct preoperative diagnosis was achieved in only 15.8% of cases (Table 3). Therefore, systematic intraoperative evaluation of the ileal loops is critical, particularly when the appendix appears normal. Histopathological examination not only confirms the diagnosis but also reveals ectopic tissue and associated complications such as necrosis, hemorrhage, and active inflammation, thereby supporting clinical management. In conclusion, Meckel's diverticulitis should be considered in the differential diagnosis of acute abdomen, and careful intraoperative assessment combined with histopathological confirmation may reduce diagnostic delay and morbidity.

Keywords: Acute abdomen, emergency surgery, histopathology, Meckel's diverticulitis, retrospective study

Characteristic	Value
Number of patients (n)	19
Age, mean ± SD (min–max)	39.9 ± 18.8 (18–74)
Most common presenting complaint	Abdominal pain, nausea, and vomiting (15.8%)
Most frequent physical examination finding	Minimal tenderness in the right lower quadrant (26.3%)

Characteristic	Value
Number of cases diagnosed as Meckel's diverticulitis preoperatively by CT	3 (15.8%)
Number of cases with alternative acute abdomen diagnoses on CT	16 (84.2%)
Ectopic gastric mucosa on histopathology	4 cases
Ectopic pancreatic tissue on histopathology	1 case
Necrosis, hemorrhage, and active inflammation on histopathology	Observed in multiple cases

Figure 1. Demographic and clinical characteristics, radiological and histopathological findings.

Study	Design / Population	n	Predominant Clinical Presentation	Preoperative Diagnosis (Imaging)	Ectopic Tissue (Pathology)	Main Message
Hernández et al., 2023 (Frontiers in Surgery)	2004–2022, adults; symptomatic = incidental Meckel	27	Abdominal pain predominant (symptomatic cases)	Very low preoperative diagnostic rate in symptomatic cases (~9%); diagnosis mostly intraoperative	Ectopic gastric mucosa 53% (symptomatic cases)	Preoperative diagnosis is challenging in adults; systematic intraoperative evaluation and pathology are critical
Domínguez et al., 15-year series (complicated Meckel)	Single center, mostly adults; complicated cases	25	Right lower quadrant syndrome 80%	Preoperative diagnosis rare (2 cases) and achieved by CT	Gastric epithelium + ectopic pancreas reported in 1 case	Appendicitis mimicry is frequent; CT may be diagnostic but many cases are missed
TJCL DergiPark, 2023 (Adult symptomatic Meckel, single center)	Adult symptomatic Meckel; clinicopathological analysis	22	Pain 72.7%; nausea–vomiting 50%; bleeding 22.7%	Variable use of US/CT; emphasis on CT in complicated cases	Heterotopic tissue 40.9%; gastric 31.8%; pancreas 4.5%	Ectopic tissue is common; pathology is essential for diagnosis and complication assessment
Dong et al., 2020 (Indian Journal of Surgery)	Emergency adult complicated Meckel; CT-focused	23	Spectrum of inflammation/bleeding/obstruction	Diagnostic yield improved by identifying "blind-ending pouch" patterns on CT	Limited pathology data reported	CT findings are polymorphic; pattern recognition is critical in acute abdomen
Won et al., 2016 (MDCT – Meckel-related SBO)	Small bowel obstruction due to Meckel; MDCT findings	10	All cases presented with SBO	Diverticulum visualized in 50% on MDCT (diagnostic when visible)	Not primary focus	If diverticulum is not visualized, preoperative diagnosis remains difficult; pelvic midline transition zone may provide clues
Bennett et al., 2004 (AJR – CT series)	CT findings of Meckel's diverticulitis	11	Acute abdomen / RLQ–midabdomen pain	Blind-ending pouch and surrounding inflammation on CT	—	Radiological morphological signs facilitate diagnosis
Lequet et al., 2017 (Adult Meckel review)	Review	—	Bleeding/obstruction/inflammation	Diagnosis difficult; imaging limited even in complicated cases	—	Clinical suspicion and intraoperative exploration emphasized
Our study (Etlik City Hospital, 2022–2025)	Emergency admissions; intraoperatively diagnosed Meckel's diverticulitis; retrospective	19	Acute abdomen, appendicitis mimicry; minimal RLQ tenderness prominent	Direct CT diagnosis rate: 15.8% (3/19)	Gastric: 4; pancreas: 1; frequent necrosis/hemorrhage/active inflammation	Consistent with literature: low preoperative diagnostic rate; systematic intraoperative final evaluation and pathology are decisive

Figure 2. Comparison with current literature.

[P-022]

Long-term follow-up results after rectal cancer surgery

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Objective: Rectal cancer is among the most common malignancies worldwide and continues to be a significant public health problem. Significant advances have been made in surgical techniques and multimodal treatment strategies over the last decade. This study aimed to evaluate the clinicopathological features and long-term oncological outcomes of patients who underwent surgical resection for rectal cancer at a single center, focusing on five-year follow-up data.

Material and Methods: Patients who underwent surgical resection for rectal cancer at our institution between January and December 2020 were retrospectively evaluated. Demographic data, surgical procedures performed, oncological treatment protocols, pathological staging, tumor grade, lymph node involvement, and tumor status at the distal and peripheral resection margin (CRM) were analyzed. Five-year survival and recurrence data were recorded during periodic follow-ups. Statistical analyses were performed using R software; Student's t-test was used for continuous variables, Fisher's exact test for categorical variables, and the Cox proportional hazards model was applied to determine factors affecting survival. $P<0.05$ was considered statistically significant.

Results: A total of 61 patients were included in the study [median age: 69 years (39-98)]; 39 (64%) were male and 22 (36%) were female. 34% of the patients received neoadjuvant chemoradiotherapy, while 56% received adjuvant therapy. Pathological evaluation revealed T3-T4 tumors in 62% of patients and lymph node positivity in 41%. During the five-year follow-up period, the local recurrence rate was 10%, and the distant metastasis rate was 23%. 71% of recurrences occurred within the first 24 months. The five-year disease-free survival (DFS) rate was calculated as 67%. In Cox proportional hazard analysis, advanced age (HR: 1.04; $p=0.05$) and recurrence (HR: 6.31; $p<0.005$) were identified as independent risk factors for mortality. Recurrence emerged as the strongest predictor of overall survival. Furthermore, CRM positivity, N2b lymph node status, and vascular invasion were strongly associated with disease progression and mortality. Advanced age was consistently associated with increased hazard ratios in all models. Recurrences were observed mostly within the first 24 months, particularly in patients with advanced T and N stages.

Conclusion: Long-term oncological outcomes after rectal cancer surgery are closely related to accurate pathological staging and adherence to multidisciplinary treatment protocols. Given that recurrences are particularly concentrated in the first two years in high-risk patients, stricter and more intensive follow-up strategies are necessary for this patient group.

Keywords: Rectal cancer, 5-year follow-up, LAR, APR, disease-free survival

[P-023]

The role of colonoscopic decompression and surgery in patients with sigmoid volvulus: A single-center experience

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Objective: Sigmoid volvulus is a significant cause of acute mechanical intestinal obstruction and is associated with considerable morbidity and mortality, particularly in elderly patients and those with multiple comorbidities. Management strategies vary depending on the patient's clinical condition, bowel viability, and the presence of complications. Colonoscopic decompression is recommended as the initial treatment in hemodynamically stable patients without signs of peritonitis; however, the optimal timing and role of surgery remain controversial. The aim of this study was to compare the outcomes of colonoscopic decompression and surgical treatment in patients presenting with sigmoid volvulus and to evaluate the effectiveness of different treatment strategies.

Material and Methods: This retrospective, single-center study included 37 patients diagnosed with sigmoid volvulus between January 2021 and December 2025. Demographic data, clinical presentation, treatment modality, length of hospital stay, postoperative complications, and mortality were reviewed. Colonoscopic decompression was performed as the initial treatment in 11 patients (29.7%), while 26 patients (70.3%) underwent primary surgical intervention. The success rate of colonoscopic decompression and the need for conversion to surgery were analyzed. In surgically treated patients, the type of resection—resection with primary anastomosis or Hartmann's procedure—and stoma formation were evaluated.

Results: Successful colonoscopic decompression was achieved in 9 of 11 patients (81.8%). Two patients (18.2%) required early surgical intervention due to failure of endoscopic reduction. Among the 26 patients who underwent surgical treatment, resection with primary anastomosis was performed in 8 patients (30.8%), whereas Hartmann's procedure was performed in 18 patients (69.2%). The mean length of hospital stay was 4.2 days in the colonoscopic decompression group and 8.6 days in the surgical group. The complication rate was lower in the colonoscopic group compared with the surgical group (9.1% vs. 23.1%). The overall mortality rate was 5.4%, and all deaths occurred in the surgical treatment group.

Conclusion: Colonoscopic decompression is a safe and effective initial treatment option in appropriately selected patients with sigmoid volvulus, offering shorter hospital stays and lower complication rates. Surgical intervention remains indispensable in cases of bowel ischemia, perforation, peritonitis, or failed endoscopic decompression. Individualized treatment planning based on patient characteristics and clinical findings is essential to reduce morbidity and mortality in patients with sigmoid volvulus.

Keywords: Acute intestinal obstruction, colonoscopic decompression, Hartmann's procedure, sigmoid volvulus, surgical treatment

Table 1. Treatment modalities and clinical outcomes in patients with sigmoid volvulus

Variables	Colonoscopic Decompression (n=11)	Surgical Treatment (n=26)
Initial treatment modality	11 (29.7%)	26 (70.3%)
Successful clinical outcome*	9 (81.8%)	26 (100%)
Treatment failure / change of modality	2 (18.2%)	–
Surgical technique applied	–	Resection with primary anastomosis: 8 (30.8%) Hartmann's procedure: 18 (69.2%)
Mean length of hospital stay (days)	4.2	8.6
Patients with complications	1 (9.1%)	6 (23.1%)
Mortality	0 (0%)	2 (7.7%)

[P-025]

Surgical treatment outcomes in siewert type III esophagogastric junction tumors: A single-center experience

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Objective: Esophagogastric junction (EGJ) tumors constitute a distinct group of patients from a surgical perspective due to their anatomical location and biological behavior. The Siewert classification serves as a guide in treatment planning for these tumors, and type III tumors are subcardial carcinomas considered to be of gastric origin, with the tumor center located 2-5 cm distal to the EGJ. The aim of this study was to evaluate the clinical characteristics and surgical outcomes of patients with Siewert type III EGJ tumors who were surgically treated at our center.

Material and Methods: Between 2024 and 2025, 18 patients who underwent surgical treatment at our clinic with a diagnosis of Siewert type III EGJ tumor were retrospectively analyzed. Patients' demographic data, pathological stages, surgical procedures performed, postoperative complications, and follow-up outcomes were evaluated. All patients underwent total gastrectomy with D2 lymph node dissection and transhiatal distal esophageal resection. Splenectomy was performed only in patients with involvement of the splenic hilum.

Results: Eleven patients were male (61%) and seven were female (39%), with a mean age of 62.4±8.1 years. According to pathological staging, 56% of the patients were stage III, 33% were stage II, and 11% were stage I. The mean number of harvested lymph nodes was 31±6, and R0 resection was achieved in all patients. The postoperative major complication rate was 11%, with no observed mortality. The mean length of hospital stay was 9.2 days, and the mean follow-up period was 24 months. During this period, the overall survival rate was determined to be 72%.

Conclusion: In Siewert type III EGJ tumors, a surgical approach based on gastric cancer principles provides effective and reliable outcomes with acceptable morbidity rates. A multidisciplinary approach and appropriate surgical technique are decisive factors in achieving treatment success.

Keywords: D2 lymphadenectomy, esophagogastric junction, gastric cancer, siewert type III, total gastrectomy

[P-026]

Assessment of malignancy risk in proliferative breast lesions

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Objective: In our study, we examined clinical and radiological findings to predict the risk of malignancy in proliferative breast lesions.

Material and Methods: Patients who underwent breast tru-cut biopsy at our clinic between August 2020 and 2025 were examined. Fifty cases undergoing wide local excision among patients with biopsy results indicating proliferative breast lesions were included in our study. Patients were evaluated based on four different variables. First, patients with histopathology showing *in situ* or invasive carcinoma were assigned to the malignant group, while patients with other histopathological results were assigned to the benign group. Second, patients were divided into those aged 50 years and older and those younger than 50 years. Third, patients were divided according to the BIRADS category in the mammography findings. Fourth, patients were divided into those with breast density classification A-B and those reported as C-D.

Results: According to histopathological results, the number of patients with malignancy was n=12/50 (24%), and benignity was n=38/50 (76%), and proliferative lesions of the breast were associated with an increased risk of malignancy. In terms of age group, the malignancy rate was n=9/27 (33%) in 27 cases over the age of 50 and n=3/23 (13%) in 23 cases under the age of 50. An increase in malignancy risk was observed with increasing age. The number of patients according to the BIRADS category was BIRADS-0 n=12/50 (24%), BIRADS-3 n=6/50 (12%), BIRADS-4 n=32/50 (64%), while the malignancy rate in the subgroups was BIRADS-0 n=0/12 (0%), BIRADS-3 n=2/6 (33%), BIRADS-4 n=10/32 (31%). The increase in the BIRADS category was parallel to the increase in breast cancer risk. In breast density classification, the number of patients was found to be: A-B pattern n=10/50 (20%), C-D pattern n=40/50 (80%). The incidence of proliferative lesions in the breast was higher in the C-D pattern patient group. Malignancy rates were n=3/10 (30%) in the A-B pattern and n=9/40 (22.5%) in the C-D pattern, with a higher increase in malignancy risk detected in A-B pattern breasts.

Conclusion: Proliferative lesions in the breast increase the risk of breast cancer and are more common in older patients, those with a high BIRADS category, and those with breast density in the C-D pattern. Our study highlights that proliferative lesions in breasts rich in fatty tissue and with an A-B pattern carry a high risk of malignancy. It is recommended that proliferative lesions detected in low-density breasts be evaluated more carefully for malignancy.

Keywords: Proliferative breast lesions, breast density, breast mammography

[P-027]

Our experience with multivisceral resection in retroperitoneal liposarcomas: Surgical management and short-term outcomes of a case series

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Objective: Although retroperitoneal, intraabdominal giant liposarcomas are rare among soft tissue sarcomas, they are among the most challenging tumor groups from a surgical perspective due to their large size, late onset of symptoms, and close anatomical relationship with vital neighboring organs. In particular, dedifferentiated and myxoid histopathological subtypes are characterized by aggressive biological behavior, high local recurrence rates, and frequent multiple organ invasion. This necessitates extensive resection and combined organ resection in surgical treatment. Current literature reports that complete surgical resection is the most important prognostic factor determining survival. This study presents the surgical management and short-term clinical outcomes of giant liposarcoma cases with different histopathological subtypes requiring multiple resection.

Material and Methods: Three giant liposarcoma cases with tumor diameter ≥20 cm, operated on at our clinic between 2021, 2025, were evaluated. The patients' demographic characteristics, tumor location and size, surgical procedures performed, concomitant organ resections, perioperative complications, and pathological findings were analyzed in detail. The primary goal of surgical treatment in all cases was to achieve complete or maximal cytoreductive resection by ensuring the widest possible surgical margins. A multidisciplinary approach was adopted in the surgical planning and implementation process; simultaneous urological and gastrointestinal reconstructions were performed when necessary.

Results: The patients' ages ranged from 26 to 71 years, and all patients were male. The tumors were retroperitoneal and/or intraabdominal, with the largest mass measuring 39 cm in diameter. The basic characteristics of the patients are summarized in Table 1. Colon resection was performed in two cases, small bowel resection in two cases, and ureter reconstruction in two cases (Figure 1). Debulking surgery was performed in one case that had undergone seven previous operations due to multicentric recurrences (Figure 2). Pathological examination revealed high-grade undifferentiated liposarcoma in one case and low-grade myxoid liposarcoma in two cases (Figure 3). In the postoperative period, anastomotic leakage and sepsis developed in one patient, which was successfully controlled with a second surgical intervention. All patients were discharged.

Conclusion: Surgical resection is the primary approach in the treatment of giant liposarcomas; however, due to the tumor's close relationship with adjacent organs, multiple organ resections are often necessary in most cases. Therefore, a multidisciplinary approach is essential in the surgical planning and implementation process. Multidisciplinary management is critical for optimizing surgical outcomes and effectively managing perioperative complications. Furthermore, due to the high risk of local recurrence, long-term and close oncological follow-up is mandatory in these patients and may require sequential surgical interventions.

Keywords: Giant retroperitoneal liposarcoma, multivisceral resection, surgical management, soft tissue sarcoma, short-term outcomes

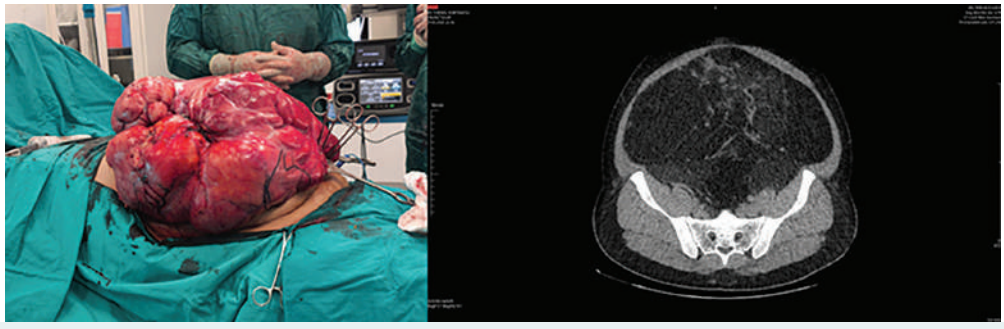


Figure 1. Case 1 magnetic resonance imaging and surgical specimen photos.

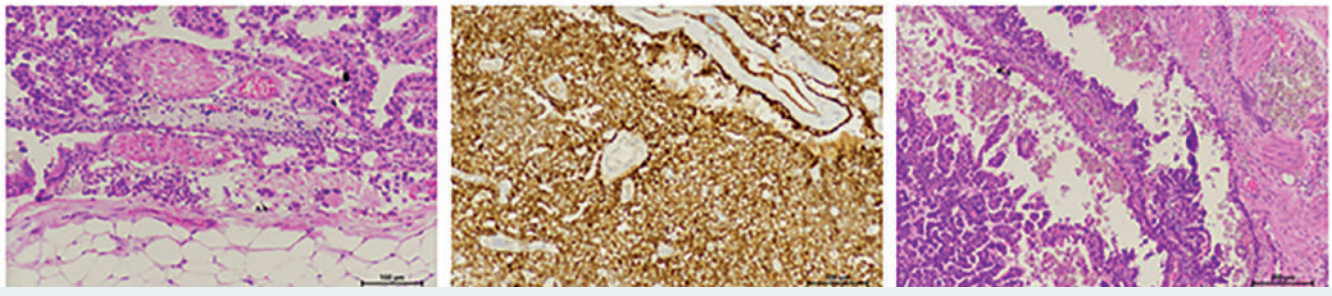


Figure 2. Pathology specimens.

Table 1. Patient characteristics			
Variable	**Case 1**	**Case 2**	**Case 3**
Age/gender	**30/male**	**71/male**	**26/female**
Histopathology	Undifferentiated liposarcoma (G2)	Undifferentiated liposarcoma (high grade)	Low-grade myxoid liposarcoma
Tumor size (cm)	39×29	30×25	Largest 23×22 multiple
Associated resections	Ureteroureterostomy, appendectomy	Hemicolectomy, ureter repair	Hemicolectomy + jejunum excision
Surgical margins	R0	R0	Debulking
Adjuvant therapy	None	None	Yes
Clinical outcome	Alive, disease-free	Exitus (MI, 9th month)	Stable under treatment

[P-028]

Demographic and clinical analysis of cases tested for *BRCA1* and BRCA2 in breast cancer screening and treatment in the Şanlıurfa Region

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Objective: This study aims to evaluate the relationship between demographic characteristics, genetic test results, and breast cancer molecular subtypes in individuals who underwent *BRCA1* and *BRCA2* gene testing due to a diagnosis of breast cancer or a family history in the Şanlıurfa region.

Material and Methods: A total of 266 individuals who underwent *BRCA1* and *BRCA2* gene testing at the Harran University Faculty of Medicine, Department of Medical Genetics between 2022 and 2025 were retrospectively analyzed. The cases were classified into those diagnosed with breast cancer and those with a family history. *BRCA1* and *BRCA2* positivity, variant of uncertain significance (VUS) status, mean ages, and breast cancer molecular subtypes were analyzed.

Results: Of the 266 cases included in the study, 110 (41.4%) were diagnosed with breast cancer, and 156 (58.6%) were individuals tested due to family history. Pathogenic variants were detected in *BRCA1* in eight cases and in *BRCA2* in twelve cases. Among the *BRCA1*-positive cases, four were breast cancer patients, and all were of the triple-negative subtype. Of the five *BRCA2*-positive breast cancer cases, one was triple-negative, two were Luminal A, and two were Luminal B. The mean age was found to be 38 years for *BRCA1*-positive cases and 40 years for *BRCA2*-positive cases. A *BRCA1* VUS was detected in one case (45 years old, Luminal B subtype). *BRCA2* VUS was detected in six cases, three of whom had breast cancer; the mean age was 44 years. Of the *BRCA2* VUS-positive breast cancer cases, two were triple-negative, and one was Luminal B.

Conclusion: The strong association between *BRCA1* mutations and triple-negative breast cancer in the Şanlıurfa region is noteworthy. Conversely, *BRCA2* mutations are associated with more heterogeneous molecular subtypes. The expansion of regional genetic screening programs and long-term clinical follow-up of BRCA VUS cases are of great importance.

Keywords: Breast cancer, *BRCA1*, *BRCA2*, genetic screening

[P-029]

Cholecystoenteric fistulas: A two-center retrospective analysis

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Objective: Cholecystoenteric fistulas are rare clinical entities that usually develop secondary to chronic gallbladder diseases and are often difficult to diagnose. This study aimed to evaluate the clinical characteristics and surgical outcomes of patients treated for cholecystoenteric fistulas in two centers.

Material and Methods: Patients treated for cholecystoenteric fistulas between 2012 and 2025 at Göztepe Prof. Dr. Süleyman Yalçın City Hospital, İstanbul Medeniyet University, and Ümraniye Training and Research Hospital, University of Health Sciences Türkiye, were retrospectively analyzed. A total of 47 patients were included in the study. Demographic characteristics, fistula types, diagnostic modalities, surgical approaches, operative time, and postoperative outcomes were evaluated.

Results: There were 25 males and 22 females. The mean age was 63 years (range: 27-91). Cholecystoduodenal fistula was detected in 25 patients, 7 of whom had concomitant gallstone ileus. Cholecystogastric fistula was present in 8 patients, cholecystocolonic in 9, cholecystocoloduodenal in 3, cholecystogastroduodenal in 1, and cholecystocutaneous fistula in 1 patient. In the preoperative evaluation, ultrasonography was performed in 26 patients, computed tomography in 9, and magnetic resonance imaging in 6, while 7 patients underwent more than one imaging modality. Preoperative suspicion of a fistula was reported in only 5 patients, whereas the diagnosis was established intraoperatively in the remaining cases. Regarding the surgical approach, open surgery was performed in 10 patients and laparoscopic surgery in 8 patients, while conversion from laparoscopy to open surgery was required in 29 patients. The mean operative time was 140 minutes. Early postoperative complications occurred in five patients; bile leakage was observed in two patients and duodenal leakage in one patient. Three patients died in the postoperative period due to comorbidities.

Conclusion: Cholecystoenteric fistulas are rare clinical conditions that are difficult to diagnose and are frequently identified intraoperatively. Although a laparoscopic approach is feasible, conversion rates remain high. Appropriate surgical planning and perioperative management by an experienced and multidisciplinary team are crucial in the management of these patients.

Keywords: Cholecystoduodenal fistula, cholecystoenteric fistula, chronic cholecystitis

[P-030]

A rare surgical emergency: Diagnosis, surgical strategy, and clinical outcomes in cecal volvulus

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Objective: Although rare among colonic volvuluses, cecal volvulus is a surgical emergency that can lead to severe clinical consequences, including intestinal ischemia, perforation, and sepsis, if diagnosis is delayed. This study aims to evaluate the clinical characteristics, surgical management, and postoperative outcomes of cecal volvulus cases treated at the University of Health Sciences Türkiye, Ankara Etlik City Hospital, Department of General Surgery, and to discuss these findings in light of the current literature.

Material and Methods: In this retrospective observational study, four patients who presented to the emergency department between October 2022 and October 2025 and were intraoperatively diagnosed with cecal volvulus were evaluated. All patients underwent surgical treatment. Demographic characteristics, presenting symptoms, laboratory and imaging findings, intraoperative surgical approaches, and postoperative clinical outcomes were analyzed retrospectively. Continuous variables were presented as mean ± standard deviation and median (IQR), while categorical variables were expressed as frequencies and percentages.

Results: The mean age of the patients was 48.0±27.7 years, and 50% were female (Table 1). All patients presented via the emergency department, with a median interval of 2.5 days from admission to surgery. Computed tomography (CT) provided an accurate preoperative diagnosis in all cases (Table 2). Intraoperative evaluation revealed 360 °C cecal rotation in all patients; ischemic bowel was present in 75%, necrosis in 50%, and perforation in 25%. All patients underwent bowel resection: 75% received a right hemicolectomy and 25% an ileocolic resection. A stoma was created in half of the patients (Table 3). The postoperative complication rate was 50%, with a Clavien-Dindo Grade III complication rate of 25%. No 30-day or 90-day mortality occurred (Table 4).

Conclusion: This study demonstrates that despite its rarity, cecal volvulus is a surgical emergency with high rates of intestinal ischemia, necrosis, and resection requirements, offering low tolerance for delay. Consistent with the literature, CT provided high diagnostic accuracy, significantly facilitating the surgical decision-making process. The absence of 30-day and 90-day mortality in our series highlights the decisive role of timely intervention. In the presence of ischemic or necrotic bowel, a resection-based surgical strategy stands out as a safe and effective option with acceptable morbidity. Consequently, early diagnosis, prompt surgical decision, and an appropriate resection strategy based on intraoperative findings are the fundamental elements determining patient prognosis.

Keywords: Bowel ischemia, cecal volvulus, colonic volvulus, emergency surgery, right hemicolectomy

Tablo 1. Hastaların bazal demografik ve klinik özellikleri (n=4)

PARAMETRE	DEĞER
Cinsiyet (Erkek / Kadın)	2 (%50) / 2 (%50)
Yaş (yıl)	48.0 ± 27.7; 43.5 (28.0–63.5); 22–83
Vücut kitle indeksi (kg/m²)	22.3 ± 7.5; 21.1 (17.4–26.1); 14.8–32.0
Hipertansiyon	1 (%25)
Diyabet	0 (%0)
Kalp yetmezliği	0 (%0)
KOAH	0 (%0)
Malignite öyküsü	0 (%0)
Mental retardasyon	0 (%0)
Önceki karın cerrahisi	1 (%25)
Antikoagülan kullanımı	0 (%0)
Steroid kullanımı	0 (%0)

Tablo 2. Başvuru ve preoperatif bulgular (n=4)

PARAMETRE	DEĞER
Başvuru süresi (gün)	2.8 ± 2.2; 2.5 (1.8–3.5); 1–6
Başvuru şekli (Acil / Sevk)	4 (%100) / 0
Karın ağrısı	4 (%100)
Kusma	3 (%75)
Gaz–gaita çıkışı olmaması	3 (%75)
Abdominal distansiyon	4 (%100)
Nabız (/dk)	96 ± 18; 92 (84–110); 78–124
Hemodinamik durum	Stabil: 2 (%50); Pre-şok: 1 (%25); Şok: 1 (%25)
Lökosit (×10³/L)	13.2 ± 4.6; 12.4 (10.8–15.7); 8.9–19.1
CRP (mg/L)	78 ± 61; 55 (32–120); 18–162
Laktat (mmol/L)	2.6 ± 1.4; 2.2 (1.7–3.1); 1.4–4.8
Kreatinin (mg/dL)	1.1 ± 0.4; 1.0 (0.9–1.3); 0.7–1.8
BT çekilme	4 (%100)
BT tanısal doğruluk	4 (%100)
BT'de serbest sıvı	2 (%50)
BT iskemi bulgu skoru (0–4)	2.3 ± 1.0; 2.0 (1.5–3.0); 1–4

Tablo 3. Intraoperatif bulgular ve cerrahi özellikler (n=4)

PARAMETRE	DEĞER
Cerrahi giriş yolu	Açık: 3 (%75); Laparoskopi→dönüş: 1 (%25)
Çekum rotasyon derecesi	360°: 4 (%100)
İskemik bağırsak	3 (%75)
Nekroz	2 (%50)
Gangren uzunluğu (cm)	18 ± 9; 16 (12–24); 8–32
İntraoperatif serbest sıvı	3 (%75)
Perforasyon	1 (%25)
Operasyon süresi (dk)	132 ± 28; 125 (115–150); 105–170
Detorsiyon uygulanması	4 (%100)
Çekopeksi / fiksasyon	1 (%25)
Rezeksiyon	4 (%100)
Rezeksiyon tipi	Sağ hemikolektomi: 3 (%75); İleokolik: 1 (%25)
Anastomoz tipi	Stapler: 3 (%75); El ile: 1 (%25)
Stoma açılması	2 (%50)

Tablo 4. Postoperatif sonuçlar (n=4)

PARAMETRE	DEĞER
Yoğun bakım ihtiyacı	2 (%50)
Yoğun bakım süresi (gün)	2.5 ± 1.3; 2 (2–3); 1–4
Vazopressör ihtiyacı	1 (%25)
İlk gaz çıkışı (gün)	3.0 ± 1.2; 3 (2–4); 2–5
İlk gaita çıkışı (gün)	4.3 ± 1.7; 4 (3–5); 2–7
Oral alım başlama (gün)	4.5 ± 1.9; 4 (3–6); 2–8
Postop komplikasyon	2 (%50)
Clavien–Dindo ≥ III	1 (%25)
Anastomoz kaçağı	0 (%0)
Cerrahi alan enfeksiyonu	1 (%25)
Postop ileus	1 (%25)
Reoperasyon	1 (%25)
Hastanede yatış süresi (gün)	9.8 ± 4.1; 9 (7–12); 5–16
30-gün mortalite	0 (%0)
90-gün mortalite	0 (%0)
Rekürrens	0 (%0)
Stoma kapama	1/2 (%50)

[P-031]

Urachal cyst: A single-center retrospective clinical and surgical experience

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Objective: Urachal cyst is a rare congenital anomaly that may become symptomatic in adulthood or be detected incidentally. This study aimed to evaluate the clinical, surgical, and pathological characteristics and postoperative outcomes of patients who underwent surgery for urachal cyst at the Clinic of General Surgery, University of Health Sciences Türkiye, Ankara Etlik City Hospital between October 2022 and August 2025.

Material and Methods: Twenty-two patients who underwent excision for urachal cyst were retrospectively analyzed. Demographic data, symptoms, surgical approach, performance of umbilectomy, histopathological findings, and postoperative complications were evaluated according to the Clavien-Dindo classification. Descriptive statistics were presented as frequency, percentage, mean ± standard deviation, and median (min-max).

Results: The mean age of the patients was 63.4±14.0 years, and 77.3% were male. The most common presenting symptom was pain (68.2%), followed by hematuria (18.2%) and discharge (9.1%). All patients underwent open surgery, and umbilectomy was performed in 13.6% of cases. Histopathological examination revealed benign pathology in 95.5% and malignancy in 4.5% of patients. Lesions were non-infected in 90.9% and infected in 9.1% of cases. In the postoperative period, Clavien-Dindo Grade I complications were observed in 77.3% of patients, while Grade II (4.5%), Grade III (4.5%), and Grade IV (13.6%) complications were rare. No recurrence was detected. The mean length of hospital stay was 17.5±21.3 days, with a median of 14 (3-100) days.

Conclusion: The detection of malignancy in only one patient (4.5%) among 22 cases suggests that malignant transformation, although rare, should be considered in urachal cysts. Therefore, surgical excision of urachal cysts is important for both diagnostic and therapeutic purposes. The absence of recurrence and the predominance of minor complications (Clavien-Dindo Grade I, 77.3%) support the safety of surgical intervention. Despite being a single-center study with a limited sample size, satisfactory outcomes with low complication rates highlight the effectiveness and reliability of urachal cyst surgery and emphasize the indispensable role of histopathological evaluation in clinical management.

Keywords: Congenital anomalies, postoperative complications, umbilectomy, urachal cyst

Table 1. Demographic characteristics, clinical and surgical characteristics, and postoperative outcomes

Characteristic	Value
Number of patients	22
Age (mean ± SD)	63.4 ± 14.0
Age (median, min–max)	66 (18–79)
Sex	Male: 17 (77.3%), Female: 5 (22.7%)

Characteristic	n (%)
Symptoms	
– Pain	15 (68.2)
– Hematuria	4 (18.2)
– Discharge	2 (9.1)
– Pain + Discharge	1 (4.5)
Surgical approach	
Open	22 (100)
Umbilectomy	
Performed	3 (13.6)
Not performed	19 (86.4)
Pathology	
Malignant	1 (4.5)
Benign	21 (95.5)
Cyst status	
Infected	2 (9.1)
Non-infected	20 (90.9)

Characteristic	n (%)
Complications (Clavien–Dindo)	
– Grade I	17 (77.3)
– Grade II	1 (4.5)
– Grade III	1 (4.5)
– Grade IV	3 (13.6)
Recurrence	Not observed (0/22)
Length of hospital stay	Mean: 17.5 ± 21.3 days; Median: 14 (3–100) days

Table 2. Comparison of surgical experiences in urachal cyst and urachal pathologies

Author (Year)	Center	Sample Size (n)	Mean Age	Surgical Approach	Malignancy (%)	Umbilectomy	Recurrence	Key Findings
Ashley et al. (2006)	Multicenter	130	58	Open + Laparoscopic	51	Selected	Present	Aggressive surgery and umbilical resection recommended in urachal malignancies
Siefker-Radtke et al. (2012)	Single center	42	61	Open	100*	Routine	Present	Impact of wide resection on survival in malignant urachal tumors
Molina et al. (2015)	Single center	29	54	Predominantly laparoscopic	7	Selected	None	Minimally invasive surgery safe in benign cases
Yu et al. (2018)	Multicenter	67	56	Open / Laparoscopic	9	Selected	Low	Surgical excision recommended in symptomatic urachal cysts
Blichert-Toft & Nielsen (2019)	Review	–	–	–	1–10	–	–	Malignant transformation rare but possible
Qureshi et al. (2021)	Single center	24	59	Laparoscopic	4	No	None	Laparoscopic excision feasible with low morbidity
Kim et al. (2023)	Multicenter	81	60	Open + Laparoscopic	6	Selected	Very low	Histopathology decisive in clinical management
Our study (2025)	Single center	22	63.4	Open	4.5	13.6%	None	Low complication rate, no recurrence, histopathology critical

[P-032]

Prognostic role of histopathological features on survival in gallbladder cancer: A single-center retrospective study

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Objective: Gallbladder cancer (GBC) is a rare gastrointestinal malignancy characterized by aggressive behavior, frequent diagnosis at advanced stages, and poor prognosis. Although surgical resection is the only potentially curative treatment, survival outcomes vary considerably depending on histopathological features. However, reliable prognostic histopathological parameters remain limited. This study aimed to evaluate the prognostic impact of histopathological features on survival in patients undergoing surgery for gallbladder tumors.

Material and Methods: Patients who underwent cholecystectomy for gallbladder lesions between 2021 and 2025 were retrospectively analyzed. Cases with biliary intraepithelial neoplasia (BilIN) and non-epithelial tumors were excluded. In patients with invasive GBC, histological type, tumor stage (pT), lymph node status (pN), surgical margin status, lymphovascular invasion (LVI), and perineural invasion (PNI) were recorded. Overall survival (OS) was defined as the time from the start of postoperative follow-up to death or last follow-up. Survival was analyzed using the Kaplan-Meier method and compared using the log-rank test. Due to the small sample size, Cox regression analyses were considered exploratory.

Results: A total of 12 patients were evaluated; 9 with invasive GBC were included in the survival analysis. Histologically, 66.7% were adenocarcinoma, 22.2% adenosquamous carcinoma, and 11.1% carcinosarcoma. Tumors were classified as pT3 in 66.7% of patients. Lymph node metastasis was detected in 33.3%, and positive surgical margins (R1) in 55.6%. Lymphovascular invasion was present in 44.4% and perineural invasion in 66.7% of patients. Among 8 patients with available OS data, 5 deaths occurred during follow-up, and the median OS was 257 days (approximately 8.5 months). Although shorter survival was observed in patients with advanced stage (pT3), positive margins, lymph node metastasis, and PNI, these associations were not statistically significant ($p>0.05$).

Conclusion: This single-center retrospective study suggests that adverse histopathological features, including advanced tumor stage, positive surgical margins, lymph node involvement, and perineural invasion, may be associated with poorer survival in GBC. Although statistical significance was not achieved, the findings are clinically relevant and consistent with the literature. Further multicenter studies with larger cohorts are needed to confirm these results.

Keywords: Gallbladder, gallbladder cancer

[P-041]

Complex hepatic resection for alveolar echinococcosis: A single-center experience with vascular reconstruction in 14 patients

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Objective: Alveolar echinococcosis (AE) is a rare zoonosis caused by the larval form of Echinococcus multilocularis, but it has a high mortality rate if left untreated. This study evaluated the epidemiological characteristics, radiological findings, surgical approaches, and early outcomes of hepatic AE cases operated on at our center.

Material and Methods: This retrospective, single-center cohort study included patients over 18 years of age who underwent elective liver resection for hepatic AE at Acıbadem Ankara Hospital between 2019 and 2024. Patients who received only medical treatment were excluded. All cases were evaluated in a multidisciplinary council, and preoperative staging was performed according to the WHO-IWGE PNM classification. Surgical margins, need for vascular and biliary reconstruction, complications (Clavien-Dindo), and length of hospital stay were analyzed.

Results: A total of 14 patients were included in the study. The mean age was 32.8±9.1 years, and the mean BMI was 25.2±4.5 kg/m²; 42.8% of the patients were female. All cases were referred from Kyrgyzstan, and 50% had recurrent disease. The mean tumor diameter was 11.1±3.3 cm. Local invasion of adjacent organs was detected in 35.7%, and major vascular invasion in 71%. One patient (7.1%) had pulmonary metastasis. Segmentectomy (50%) was the most frequently performed procedure among resection types. Vascular reconstruction was frequently necessary; there were cases where inferior vena cava and/or portal vein repair was performed. Biliary reconstruction was performed in 35.7% of cases. The mean hospital stay was 7.5 days (5-15). Three patients (21%) developed early major complications. Histopathologically, AE was confirmed in all cases; R1 resection was present in 92.8%. All patients received postoperative albendazole treatment.

Conclusion: Complete resection is the only curative treatment option for hepatic AE when possible; however, advanced stage and vascular invasion are common. Multidisciplinary evaluation and aggressive surgical approach with major vascular/biliary reconstruction when necessary can be safely applied. Long-term postoperative albendazole treatment plays a critical role in disease control, especially in the presence of positive surgical margins. Early diagnosis and appropriate surgical planning in young patient populations from endemic regions can improve long-term survival.

Keywords: Alveolar echinococcosis, hepatectomy, vascular reconstruction

[P-042]

Safety, efficacy, and outcomes of percutaneous endoscopic gastrostomy (PEG) performed under local anesthesia in ASA III-IV patients

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Objective: Percutaneous endoscopic gastrostomy (PEG) is an effective method for providing long-term enteral nutritional support in patients who are unable to receive adequate and safe oral nutrition. However, due to advanced age, high ASA scores, and accompanying comorbidities, the use of sedation may pose significant risks in this patient population. The aim of this study was to evaluate the safety, efficacy, and complication rates of PEG performed under local anesthesia in ASA III-IV patients and to identify potential risk factors associated with the procedure.

Material and Methods: In our clinic, 196 patients in ASA III-IV risk group who underwent PEG after indication was determined between 2024 and 2025 were retrospectively analyzed. Thirty eight patients who could not tolerate topical pharyngeal anesthesia and required sedation during the procedure were excluded from the study, leaving 158 patients for analysis. In all cases, upper gastrointestinal endoscopy was performed under topical pharyngeal anesthesia. After identifying the appropriate entry site, local infiltrative anesthesia with lidocaine and adrenaline was administered to the anterior abdominal wall, and the PEG catheter was placed using the standard pull technique. Demographic characteristics, body mass index (BMI), procedure duration, hospitalization unit, comorbidities, and early and late complications were recorded. Factors associated with complications were analyzed using univariate and multivariate statistical methods.

Results: The mean age of the patients was 81.6±9.7 years, and the mean BMI was 24.7±3.6 kg/m². The average procedure duration was 15.4±3.6 minutes. Of the patients, 29.7% were hospitalized in the intensive care unit, while 70.3% were followed in palliative care units. Early complications occurred in 7.0%, late complications in 13.3%, and the overall complication rate was 19.6%. No statistically significant association was found between complication development and age, hospitalization unit, comorbidities, or procedure duration ($p>0.05$). While the presence of a tracheostomy did not affect complication rates, procedure duration was significantly longer in patients with tracheostomy (19.0±2.4 minutes). No significant correlation was observed between BMI and procedure duration. Furthermore, triple analyses did not identify any independent predictors of complication development.

Conclusion: Performed under local anesthesia, the PEG procedure is a safe and feasible procedure with procedure times similar to those reported in the literature and acceptable complication rates. In patient populations at high risk for sedation, a local anesthesia-based PEG approach represents an effective and strong alternative in clinical practice.

Keywords: PEG, local anesthesia, ASA 3-4

[P-043]

Deep learning-based detection of perianal fistula on pelvic MRI using a transfer learning approach

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Objective: Accurate detection of perianal fistula on pelvic MRI is critical for surgical planning and recurrence prevention. Deep learning-based image analysis may provide objective support for radiologic assessment; however, capturing complex or subtle fistulous tracts using only two-dimensional (2D) images remains a significant challenge.

Material and Methods: In this retrospective study, pelvic MRI images from patients with suspected perianal fistula were labeled according to expert radiologic evaluation. The dataset was divided into training (n=312), validation (n=39), and independent test (n=39) sets. Individual MRI slices were classified using a transfer learning approach based on a pretrained ResNet18 architecture. Model performance on the independent test set was evaluated using accuracy, sensitivity (recall for fistula), specificity, area under the receiver operating characteristic curve (AUC-ROC), precision, and F1-score. The confusion matrix for the test set is presented in Figure 1.

Results: On the independent test set (n=39), the model achieved an overall accuracy of 64.1% and an AUC-ROC of 0.772. Sensitivity for fistula detection was 54% (14/26), and specificity was 85% (11/13). Precision was 0.88 and the F1-score was 0.67. The model demonstrated higher specificity than sensitivity, indicating better performance in ruling out fistula absence (Figure 1). Training and validation loss and accuracy curves showed stable convergence without evident overfitting (Figure 2). The relatively low sensitivity may reflect limitations inherent to slice-based 2D analysis; in some cases, fistulous tracts were not clearly visualized on individual slices due to their tortuous course and plane dependency. An example of a perianal fistula MRI image (left: original; right: annotated) is shown in Figure 3.

Conclusion: The transfer learning-based CNN demonstrated moderate diagnostic performance in detecting perianal fistula on 2D pelvic MRI slices, with particularly strong specificity and acceptable discriminative ability (AUC-ROC). This approach may serve as an adjunct tool for radiologic assessment, particularly in excluding fistula presence. However, limited sensitivity highlights the constraints of single-slice classification in fully representing complex fistula anatomy. Future improvements may include multi-slice or 3D volumetric analysis, incorporation of additional MRI sequences, and more advanced architectures. Larger, multicenter validation studies are warranted.

Keywords: Perianal fistula, deep learning, artificial intelligence in surgery

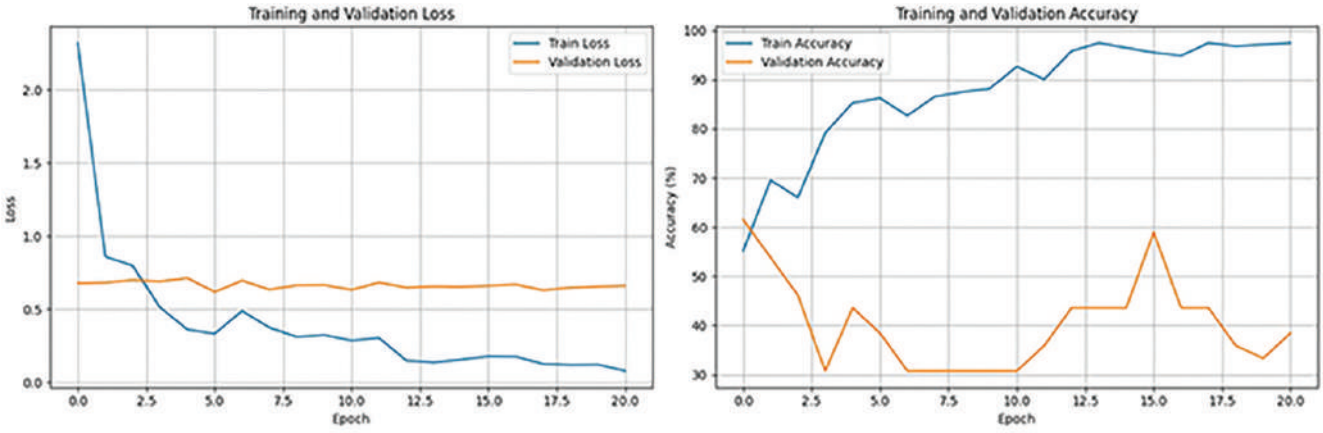


Figure 1. Training and validation accuracy.

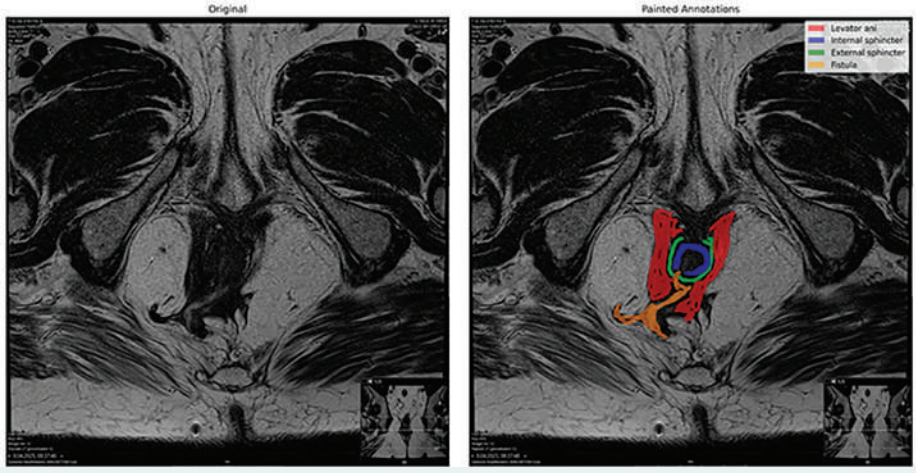


Figure 2. Training and validation accuracy sample patient.

[P-044]

A rare cause of mechanical ileus: Small intestine epithelioid mesothelioma

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Objective: Mesothelioma is a rare and aggressive malignancy that primarily affects the pleura and peritoneum. Peritoneal mesothelioma usually presents with diffuse involvement. Focal involvement of the small bowel is extremely rare and may present with mechanical ileus. Rare malignancies should be considered in the differential diagnosis of mechanical ileus cases developing in patients without a history of abdominal surgery. This case presents a mechanical ileus due to an epithelioid-type mesothelioma located in the ileum.

Material and Methods: The clinical, imaging, endoscopic, and surgical findings, as well as the histopathological result, of a 67-year-old male patient with intermittent cramping abdominal pain, abdominal distension, vomiting, and constipation for approximately two months were retrospectively evaluated.

Results: The patient had no history of abdominal surgery. Physical examination revealed abdominal distension and widespread tenderness. Rebound tenderness and abdominal guarding were not observed. Laboratory values were within normal limits. Contrast-enhanced abdominal computed tomography (CT) showed a mass consistent with asymmetric wall thickening at the ileal level. Significant small bowel dilatation was observed proximally. Enteroscopy revealed a semianular stricture in the distal ileum that significantly narrowed the lumen, which was marked with a hemoclip. Surgical exploration for mechanical ileus revealed a methylene blue-marked ileal mass and proximal dilatation. Two implants were also identified adjacent to the mass. Segmental small bowel resection and primary anastomosis were performed to include the mass and implants. Histopathological examination showed that the mass and implants were consistent with epithelioid-type mesothelioma. Intestinal function improved on the third postoperative day, and the patient was discharged without complications on the sixth day.

Conclusion: Small bowel epithelioid mesothelioma is an extremely rare malignancy that can present with mechanical ileus. Rare malignancies should be considered in the differential diagnosis of patients presenting with unexplained mechanical ileus findings and no history of surgery. Surgical resection is the primary diagnostic and therapeutic approach in these cases.

Keywords: Small intestine, mechanical ileus, peritoneal mesothelioma, epithelioid type, ileal mass

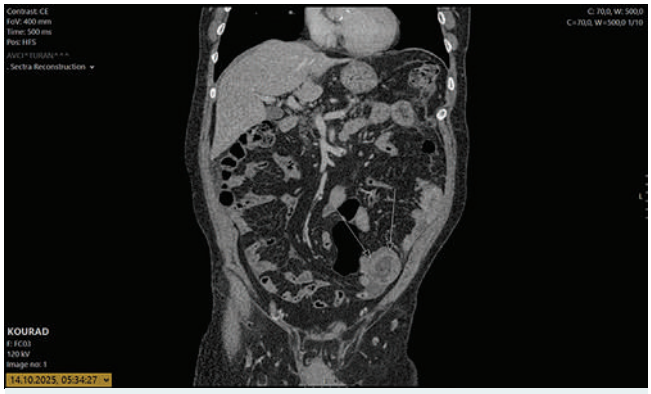


Figure 1. Preoperative contrast-enhanced abdominal CT scan findings 1a. Coronal section; air-fluid levels in small bowel loops proximal to the lesion, increased mucosal thickness and marked dilation 1a.

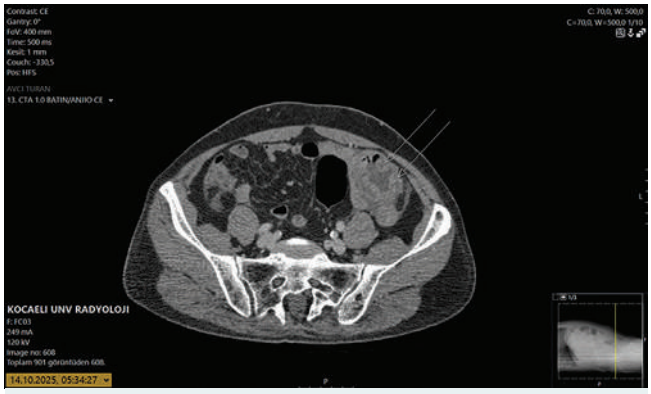


Figure 2. Preoperative contrast-enhanced abdominal CT scan findings 2a. Axial section; asymmetric wall thickness increase in small intestine segment 2a.



Figure 3. Preoperative contrast-enhanced abdominal CT scan findings 3a. Axial section; multiple clips were observed in the ileal loops, and thickening of the small bowel walls was observed at this level 3a.



Figure 4. Intraoperative Findings 4a. Ileal mass labeled with methylene blue 4a.



Figure 5. Intraoperative Findings 5a. Ileal mass labeled with methylene blue, proximal dilation 5a.

[P-045]

Carcinoid tumors detected after appendectomy: A single-center experience of 11 cases

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Objective: Although incidental detection of carcinoid tumors after emergency appendectomy performed for acute appendicitis is rare, it is of critical importance in determining the appropriate post-pathological treatment strategy. This study aimed to comprehensively evaluate the clinical, surgical, and histopathological characteristics of patients diagnosed with carcinoid tumors following appendectomy at our institution.

Material and Methods: Patients who underwent surgery with a preliminary diagnosis of acute appendicitis at University of Health Sciences Türkiye, Ankara Etlik City Hospital General Surgery Department between October 2022 and October 2025 and were diagnosed with carcinoid tumors on histopathological examination were retrospectively analyzed. Demographic characteristics, presenting symptoms, surgical technique, tumor localization and size, histological grade, Ki-67 proliferation index, presence of lymphovascular and perineural invasion, and surgical margin status were evaluated.

Results: A total of 11 patients (3 males, 8 females) were included in the study (Table 1). The mean age was 30.5±12.4 years, with a median age of 25 years. The most common presenting symptom was right lower quadrant tenderness (Table 2). Laparoscopic appendectomy was performed in 9 patients (82%), while open appendectomy was performed in 2 patients (18%). Tumor size was ≤1 cm in 2 patients, 1-2 cm in 5 patients, and ≥2 cm in 4 patients (Table 3). Most tumors were located distally. The Ki-67 proliferation index was below 5% in 91% of cases. No lymphovascular or perineural invasion was detected. Surgical margins were negative in all patients, and no additional resection was required.

Conclusion: Incidental carcinoid tumors detected after appendectomy for acute appendicitis are more commonly observed in young female patients and small-sized lesions. Low proliferative activity and absence of invasive features eliminate the need for additional surgical intervention in most cases. These findings are consistent with current guidelines and large case series reporting that the majority of appendiceal neuroendocrine tumors are low-grade and low-proliferative, and appendectomy alone is usually sufficient in patients without risk factors (Table 4). Our results emphasize the indispensable role of routine histopathological evaluation of appendectomy specimens in diagnosis and treatment planning.

Keywords: Carcinoid tumor, histopathology, incidental tumor, Ki-67 proliferation index, neuroendocrine tumor



Tablo 1. Akut apandisit nedeniyle opere edilen ve patolojide karsinoid tümör saptanan 11 olgunun özet klinik ve histopatolojik özellikleri

Değişken	Bulgular
Toplam hasta sayısı	11
Yaş (ortalama ± SS, medyan)	30,5 ± 12,4 (medyan: 25)
Cinsiyet	3 erkek (%27), 8 kadın (%73)
Cerrahi teknik	Laparoskopik apendektomi: 9 (%82), Açık apendektomi: 2 (%18)
Tümör boyutu	≤1 cm: 2 hasta (%18), 1–2 cm: 5 hasta (%45), ≥2 cm: 4 hasta (%36)
Tümör yerleşimi	En sık distal yerleşim (proksimal yerleşim yok)
Ki-67 proliferasyon indeksi	%5'in altında: 10 hasta (%91), yüksek: 1 hasta (%9)
Lenfovasküler invazyon	Izlenmedi
Cerrahi sınır durumu	Tüm olgularda intakt
Ek rezeksiyon gereksinimi	Gerekmemiş

Table 1. Summary of Clinical and Histopathological Characteristics of 11 Patients

Variable	Findings
Total number of patients	11
Age (mean ± SD, median)	30.5 ± 12.4 (median: 25)
Sex	3 male (27%), 8 female (73%)
Surgical technique	Laparoscopic appendectomy: 9 (82%), Open appendectomy: 2 (18%)
Tumor size	≤1 cm: 2 (18%), 1–2 cm: 5 (45%), ≥2 cm: 4 (36%)
Tumor localization	Predominantly distal (no proximal localization)
Ki-67 proliferation index	<5%: 10 patients (91%), High: 1 patient (9%)
Lymphovascular invasion	Not detected
Surgical margin status	Negative in all cases
Additional resection requirement	Not required

Tablo 2. Akut apandisit nedeniyle opere edilen ve patolojide karsinoid tümör saptanan olguların demografik ve klinik özellikleri

Değişken	Bulgular
Toplam hasta sayısı	11
Yaş grubu ≤18	3 hasta
Yaş grubu 19–40	6 hasta
Yaş grubu 41–60	0 hasta
Yaş grubu ≥61	2 hasta
Cinsiyet – Erkek	3 hasta (%27)
Cinsiyet – Kadın	8 hasta (%73)
Başvuru semptomu: Sağ alt kadran hassasiyeti	11 hasta (%100)
Başvuru semptomu: Bulantı / Kusma	9 hasta (%82)
Preoperatif karsinoid şüphesi – Var	0 hasta
Preoperatif karsinoid şüphesi – Yok	11 hasta

Table 2. Demographic and clinical characteristics of patients operated on for acute appendicitis in whom a carcinoid tumor was detected on histopathological examination

Variable	Findings
Total number of patients	11
Age group ≤18 years	3 patients
Age group 19–40 years	6 patients
Age group 41–60 years	0 patients
Age group ≥61 years	2 patients
Male	3 patients (27%)
Female	8 patients (73%)
Presenting symptom: Right lower quadrant tenderness	11 patients (100%)
Presenting symptom: Nausea / Vomiting	9 patients (82%)
Preoperative suspicion of carcinoid – Yes	0 patients
Preoperative suspicion of carcinoid – No	11 patients

Figure 1. Clinical, histopathological and demographic characteristics.

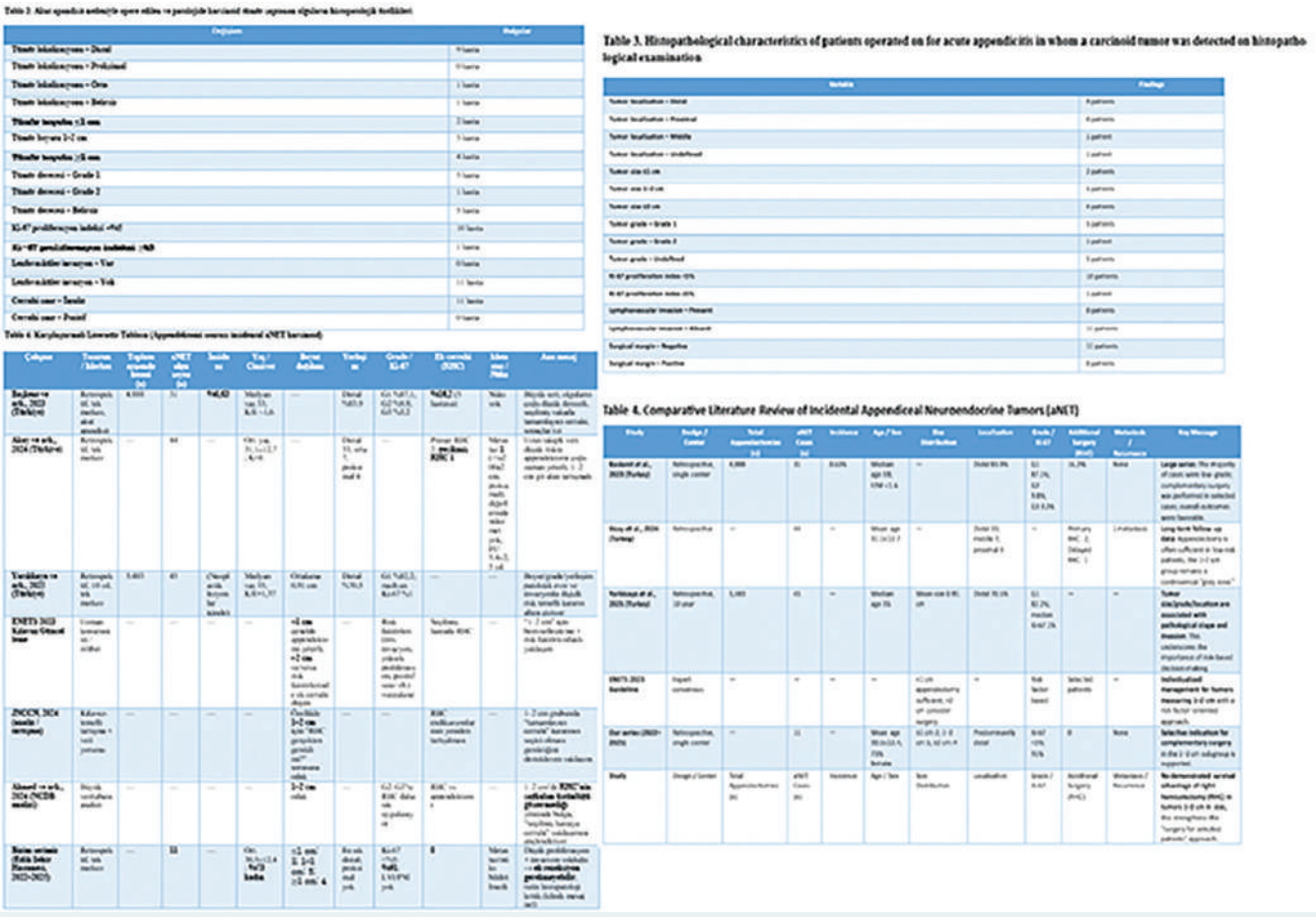


Table 3. Histopathological characteristics of patients operated on for acute appendicitis in whom a carcinoid tumor was detected on histopathological examination

Variable	Findings
Tumor localization – Distal	8 patients
Tumor localization – Proximal	6 patients
Tumor localization – Middle	2 patient
Tumor localization – Undefined	1 patient
Tumor size ≤1 cm	2 patients
Tumor size 1–2 cm	6 patients
Tumor size ≥2 cm	4 patients
Tumor grade – Grade 1	5 patients
Tumor grade – Grade 2	2 patient
Tumor grade – Undefined	9 patients
Ki-67 proliferation index <3%	13 patients
Ki-67 proliferation index ≥3%	3 patient
Lymphovascular invasion – Present	8 patients
Lymphovascular invasion – Absent	11 patients
Surgical margin – Negative	11 patients
Surgical margin – Positive	8 patients

Table 4. Comparative Literature Review of Incidental Appendiceal Neuroendocrine Tumors (aNET)

Study	Design / Center	Total Appendectomies (n)	aNET Cases (n)	Incidence	Age / Sex	Size Distribution	Localization	Grade / Ki-67	Additional Surgery (RHC)	Metastasis / Recurrence	Key Message
Bozkurt et al., 2020 (Turkey)	Retrospective, single center	5,000	31	0.62%	Median age 39; F/M ≈1.4	—	Distal 80.9%	G1 87.1%; G2 9.8%; G3 3.2%	16.2%	None	Large series. The majority of cases were low-grade; complete surgery was performed in selected cases; overall outcomes were favorable.
Akay et al., 2024 (Turkey)	Retrospective	—	44	—	Mean age 31.1±10.7	—	Distal 93; middle 5; proximal 6	—	Post-op RHC: 2; Delayed RHC: 1	2 refused/lost	Long-term follow-up data: Appendectomy is often sufficient in low-risk patients; the 1–2 cm group remains a controversial "gray zone."
Yurtkuran et al., 2025 (Turkey)	Retrospective, 10-year	5,000	45	—	Median age 35	Mean size 0.95 cm	Distal 91.1%	G1 82.2%; median Ki-67 2%	—	—	Tumor size/grade/location are associated with pathological stage and invasion. This underscores the importance of risk-based decision-making.
ENETS 2023 Guideline	Expert consensus	—	—	—	—	<1 cm: appendectomy sufficient; >2 cm: consider surgery	—	Risk factor–based	Selected patients	—	Individualized management for tumors measuring 1–2 cm with a risk factor–oriented approach.
Our series (2022–2025)	Retrospective, single center	—	11	—	Mean age 35 (22–51 y); 6/11 (54.5%) female	Predominantly distal	Distal >75%; 91%	8	6	None	Selective indication for complementary surgery in the 1–2 cm subgroup is supported.
Study	Design / Center	Total Appendectomies (n)	aNET Cases (n)	Incidence	Age / Sex	Size Distribution	Localization	Grade / Ki-67	Additional Surgery (RHC)	Metastasis / Recurrence	No demonstrated survival advantage of right hemicolectomy (RHC) in tumors 1–2 cm in size; this strengthens the "surgery for selected patients" approach.

Figure 2. Histopathological characteristics and literature comparison.

[P-046]

Sessile serrated adenoma in the etiology of acute appendicitis: Clinical and histopathological analysis of six cases

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Objective: Luminal obstruction is the most common etiological factor in the pathogenesis of acute appendicitis. In rare cases, neoplastic lesions located within the appendiceal lumen may also lead to acute appendicitis. Although sessile serrated adenoma (SSA) is recognized as an important precursor lesion in colorectal carcinogenesis, its association with appendicitis etiology has been reported only rarely. The aim of this study was to present cases of acute appendicitis associated with SSA along with their clinical, laboratory, and histopathological characteristics, and to discuss the potential implications for surgical practice.

Material and Methods: Patients who underwent appendectomy with a preliminary diagnosis of acute appendicitis between October 2022 and October 2025 and were found to have SSA on histopathological examination were retrospectively evaluated. Demographic data, clinical symptoms, laboratory parameters (WBC, CRP), imaging findings, macroscopic examination results, histopathological findings, presence of accompanying inflammation, postoperative colonoscopy findings, mortality, and follow-up data were analyzed.

Results: Six patients (three female and three male) were included. The mean age was 64.8±20.2 years, and the median age was 72.5 years. Presenting symptoms were typical in three cases and atypical in three cases. Imaging findings were consistent with acute appendicitis in five patients, while one patient exhibited atypical imaging features. Laboratory evaluation revealed the pattern "normal WBC - elevated CRP" (n=3); two patients had elevations in both WBC and CRP, whereas one patient had normal values for both parameters. Macroscopically, four cases demonstrated normal specimens, one case showed inflammatory changes, and one case exhibited a thick-walled cystic appearance.Histopathology revealed "SSA with low-grade dysplasia" in three cases and "SSA without dysplasia" in three cases. Accompanying inflammation was present in three patients. Postoperative colonoscopy was performed in all patients, and a polyp/lesion was detected in one patient. During follow-up, no recurrence or lesions were observed. One patient died during follow-up.

Conclusion: SSA represents a rare but significant cause of acute appendicitis. Our findings indicate these cases tend to occur at an older age than appendicitis, frequently present with elevated CRP levels in the presence of normal WBC values, and demonstrate a rate of low-grade dysplasia on histopathology. Furthermore, the detection of lesions on postoperative colonoscopy in one patient suggests that this patient population may carry an increased risk for colorectal neoplasia. These results emphasize, in cases of appendicitis, particularly in the presence of age, atypical clinical presentation, and elevated CRP levels, SSA should be considered, and all such patients should undergo postoperative colonoscopic surveillance following evaluation.

Keywords: Acute appendicitis, colorectal neoplasia, histopathology, luminal obstruction, sessile serrated adenoma

Tablo 1. Demografik Özellikler

Değişken	Değer
Hasta sayısı	6
Yaş (ortalama ± ss)	64,8 ± 20,2
Yaş (medyan [IQR])	72,5 [53,0 – 77,5]
Cinsiyet – Kadın	3
Cinsiyet – Erkek	3

Tablo 2. Klinik Bulgular

Kategori	Alt Grup	Sayı
Semptom tipi	Klasik apandisit	3
	Atipik	3
Görüntüleme	Apandisit ile uyumlu	5
	Atipik bulgular	1
Laboratuvar (WBC/CRP)	WBC normal – CRP yüksek	3
	WBC yüksek – CRP yüksek	2
	Normal	1

Table 1. Demographic Characteristics

Variable	Value
Number of patients	6
Age (mean ± SD)	64.8 ± 20.2
Age (median [IQR])	72.5 [53.0 – 77.5]
Sex – Female	3
Sex – Male	3

Table 2. Clinical Findings

Category	Subgroup	Number
Symptom type	Typical appendicitis	3
	Atypical	3
Imaging	Compatible with appendicitis	5
	Atypical findings	1
Laboratory (WBC/CRP)	Normal WBC – Elevated CRP	3
	Elevated WBC – Elevated CRP	2
	Normal	1

Figure 1. Demographic characteristics and clinical findings.

Tablo 3. Histopatoloji ve Makroskopik Bulgular

Kategori	Alt Grup	Sayı
Histopatoloji	SSA – Düşük dereceli displazili	3
	SSA – Displazisiz	3
Makroskopi	Normal appendix materyali	4
	İnflame appendix materyali	1
	Kalın duvarlı – kistik görünüm	1
Eşlik eden inflamasyon	Var	3
	Yok	3

Table 3. Histopathological and Macroscopic Findings

Category	Subgroup	Number
Histopathology	SSA – With low-grade dysplasia	3
	SSA – Without dysplasia	3
Macroscopy	Normal appendix specimen	4
	Inflamed appendix specimen	1
	Thick-walled – cystic appearance	1
Accompanying inflammation	Present	3
	Absent	3

Tablo 4. Postoperatif Bulgular ve Takip

Kategori	Alt Grup	Sayı
Kolonoskopi sonucu	Ek polip/lezon mevcut	1
	Ek lezyon saptanmadı	5
Mortalite	Yaşıyor	5
	Exitus	1
Takipte nüks/yeni lezyon	Yok	6

Table 4. Postoperative Findings and Follow-Up

Category	Subgroup	Number
Colonoscopy result	Additional polyp/lesion present	1
	No additional lesion detected	5
Mortality	Alive	5
	Deceased	1
Recurrence/new lesion during follow-up	None	6

Figure 2. Histopathological findings and postoperative follow-up.

[P-047]

In the treatment of pilonidal sinus, the distance from the pilonidal line for primary closure and flap techniques: 2 cm rule

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Objective: The basic principle accepted in the treatment of pilonidal sinus is to shift the line of gravity from the midline to the lateral side by performing asymmetric excision and primary closure or by applying a flap technique. However, primary closure is not possible in cases where the sinus pathways reach distant points. In this study, we wanted to present the techniques we applied in two different patient groups according to whether the sinus was located 2 cm below or above the midline.

Material and Methods: From January 2019 to December 2023, 104 patients with pilonidal sinus disease were operated on according to the distance of the sinus from the interglutealmedian line. We wanted to prospectively present the experiences of two general surgeons from a single center. In cases where pilonidal sinus openings were less than 2 cm from the intergluteal line, we applied the asymmetric excision and primary closure technique (group 1), and in cases where the sinuses were at least 2 cm away from the midline, we applied the flap technique (group 2). The demographic characteristics of the patients, postoperative course and recurrence rates were recorded. The average follow-up period was 24 months.

Results: In group I (N:67, 40M/27F), the mean age was 21 (range 18-35), and in group II (N:37, 30M/17F), it was 27 (range 18-51). There was no significant difference in terms of postoperative infection (5% vs. 3%), wound dehiscence (3% vs. 2%), and recurrence rate (2% vs. 1%). Hospital stay was longer in group 2.

Conclusion: The key point in pilonidal cyst treatment is to reposition the intergluteal line of gravity in a way that prevents recurrence.In cases where primary closure is difficult, and in pilonidal openings exceeding 2 cm from the midline, the flap technique, which prevents possible tension, wound dehiscence, and recurrence, can be reliably applied.

Keyword: New techniques in pilonidal sinus surgery

[P-048]

Our results of open lateral internal sphincterotomy performed under local anesthesia in the surgical treatment of chronic anal fissure

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Objective: Chronic anal fissure is one of the most frequently encountered diseases in general surgery outpatient clinics. Although many medical treatment options have been developed in recent years, open lateral internal sphincterotomy remains one of the best treatment options. This technique is performed under spinal anesthesia in most places, or less frequently under general anesthesia. The aim of this study is to evaluate our results of lateral internal sphincterotomy performed under local anesthesia.

Material and Methods: This study includes 94 patients who underwent surgery in the minor surgical intervention room of the Clinic of General Surgery at Kocaeli State Hospital between January 2021 and April 2023. 75 of the patients were women and 19 were men. These patients were operated on by two different specialists. Before the operation, patients were not asked to fast except for a rectal enema. In all patients, a silicone cushion-supported Sims position and band stretching were used. Before local anesthesia, a cream containing 25 mg lidocaine and 25 mg prilocaine, which provides a highly effective anesthetic to the mucous membranes, was applied (approximately 15 minutes beforehand). (This cream used before local anesthesia greatly relieved the anal local anesthesia). Afterwards, 4-quadrant anorectal anesthesia was applied. Along with LIS, anal papilla excision and possible external hemorrhoid packets were also excised. Patients were called for follow-up at certain intervals. The findings were recorded digitally.

Results: Demographic data, clinical complaints, surgical data, early and late complications, recurrence rates, and follow-up periods of the patients were recorded. The patients' incontinence status was evaluated using the Cleveland continence score. Only 1 patient experienced an early complication (perianal infection), while 1 patient experienced recurrence. Permanent incontinence was not observed in any patient.

Conclusion: Open lateral internal sphincterotomy performed under local anesthesia is an effective, outpatient procedure with an extremely low recurrence rate for the treatment of chronic anal fissures.

Keyword: Rapid relief with minimal procedures in the treatment of chronic anal fissures

[P-049]

Applicability of oncoplastic breast surgery at different technical levels and clinical outcomes: Findings from a tertiary care center

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Objective: Breast cancer is the most common malignancy in women, and surgery remains the primary treatment in eligible patients. In recent years, oncoplastic breast-conserving surgery (O-BCS), which preserves oncological safety while improving cosmetic outcomes, has gained increasing importance. O-BCS includes the techniques that allow adequate tumor excision with simultaneous reshaping of the breast. This study aimed to demonstrate the feasibility and present the clinical outcomes of oncoplastic surgery performed using different techniques and levels in a tertiary care center.

Material and Methods: Patients who underwent O-BCS at the 3rd Department of Surgery of University of Health Sciences Türkiye, Başakşehir Çam and Sakura City Hospital between August 1, 2022 and August 31, 2025 were retrospectively evaluated. Demographic characteristics, tumor laterality, operative time, length of hospital stay, pathological diagnosis, and surgical procedures were analyzed.

Results: A total of 69 patients were included, with a mean age of 55.07±12.55 years. Forty patients had left-sided, 27 right-sided, and 2 bilateral breast cancer. The mean operative time was 129.20±72.41 minutes and the mean hospital stay was 2.26±1.90 days. Pathological evaluation revealed invasive ductal carcinoma in 57 patients, invasive lobular carcinoma in 5, ductal carcinoma *in situ* in 2, angiosarcoma in 1, lobular carcinoma *in situ* in 1, mucinous carcinoma in 1, synchronous IDC + ILC in 1, and ILC + DCIS in 1 patient. Modified radical mastectomy was performed in 11 patients and breast-conserving surgery in 58. Among patients undergoing BCS, sentinel lymph node biopsy was performed in 52, axillary dissection in 4, and BCS alone in 2. Four patients underwent bilateral subcutaneous mastectomy with reconstruction (three implant-based and one DIEP flap). Considering all procedures, reconstruction was performed using a latissimus dorsi flap in 4 patients, prepectoral implant in 3, DIEP flap in 3, and racquet mammoplasty in 2, while volume displacement techniques were used in 29 patients.

Conclusion: O-BCS is based on three main principles: tumor excision within reduction mammoplasty patterns, the use of modified techniques to facilitate resection, and volume replacement with local perforator flaps. Optimal outcomes require a multidisciplinary approach involving breast and plastic surgeons or surgeons trained in both fields. Patients should be informed about the possible aesthetic and oncological changes and complications. O-BCS can be performed at different levels according to the surgeon's training and experience. In our clinic, oncoplastic procedures at all levels can be safely performed, with plastic surgery support particularly important for advanced techniques. In selected patients, O-BCS provides satisfactory oncological and cosmetic outcomes.

Keywords: Breast cancer, oncoplastic breast surgery, surgical techniques

Tablo 1. Rekonstrüksiyon ve onkoplastik teknikler

Teknik	n (%)
Latissimus dorsi flebi	4 (%5,8)
Prepektoral implant	3 (%4,3)
DİEP flebi	3 (%4,3)
Raket mamoplasti	2 (%2,9)
Doku kaydırma (volume displacement)	29 (%42,0)

[P-050]

Late-onset giant lateral metastasis of papillary thyroid carcinoma: The significance of dynamic surveillance in light of the 2025 ATA guidelines

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Objective: Although papillary thyroid carcinoma (PTC) is generally considered an indolent malignancy, it may manifest aggressive regional recurrences after latent periods exceeding a decade. Regardless of the initial staging, the 2025 ATA guidelines emphasize the importance of lifelong "dynamic risk stratification" and "individualized management" approaches. This case presents a giant metastatic recurrence emerging 11 years after primary surgery, encasing neurovascular structures and presenting with a cutaneous fistula, discussed in the context of current guideline principles.

Material and Methods: A 75-year-old female presented with a rapidly enlarging, painful neck mass on the left side, which had fistulized to the skin. Her medical history included bilateral total thyroidectomy and 100 mCi RAI therapy for PTC in 2011; however, she had been lost to follow-up in recent years due to pandemic-related conditions. Radiologic evaluations (CT and PET/CT) identified a necrotic mass approximately 7 cm in size at levels 3-4 on the left side, characterized by 360-degree encasement of the carotid artery, invasion of the internal jugular vein, and infiltration of the sternocleidomastoid muscle (SUV_{max}: 33.3) (Figure 1). Following confirmation of metastasis via FNAB and Tg-washout (1752 ng/mL), a radical left lateral neck dissection was performed (Figure 2).

Results: Histopathological examination revealed metastasis in 7 of the 40 resected lymph nodes. The largest metastatic focus measured 4.5 cm in diameter, with extensive extracapsular extension and soft tissue invasion. Immunohistochemical analysis demonstrated TTF-1 positivity, while the absence of thyroglobulin, PAX-8, and Napsin-A expression—combined with high metabolic activity—was interpreted as "aggressive biological transformation" or "dedifferentiation".

Conclusion: The 2025 ATA guidelines advocate for an "individualized dynamic surveillance" model based on temporal disease evolution rather than "static staging" in modern thyroid cancer management. This case proves that even patients previously categorized as having an "excellent response" can develop structural recurrences with vascular invasion risks more than ten years later. Specifically, a metastatic lymph node size exceeding 3-cm and the loss of Tg/PAX-8 expression are critical parameters indicating that the tumor has entered a dedifferentiation process and transformed into an aggressive phenotype resistant to standard therapies.In conclusion, a lack of follow-up, even in low-risk cases, delays the detection of recurrences and necessitates radical surgical procedures with high morbidity. In accordance with 2025 ATA principles, continuity of oncological surveillance and risk-adaptive approaches are vital for capturing recurrences while still within "resectability limits" and for preserving patient survival.

Keywords: Papillary thyroid carcinoma, 2025 ATA guidelines, dynamic risk stratification, late metastasis

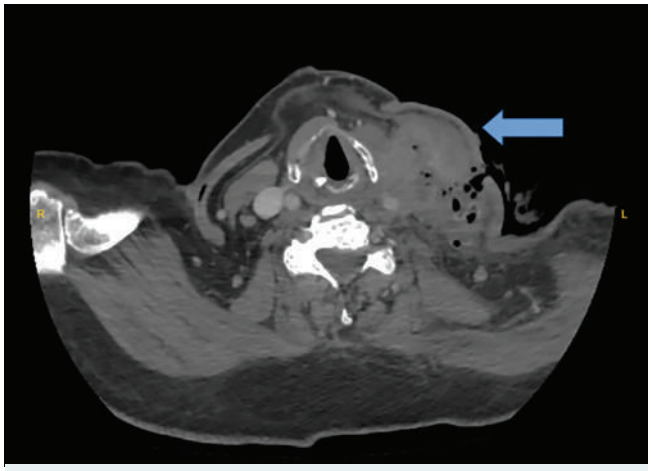


Figure 1. Axial contrast-enhanced neck CT scan demonstrating a giant metastatic focus in the left cervical region with 360-degree carotid artery encasement, internal necrotic air densities, and invasion of the sternocleidomastoid muscle with cutaneous fistulization.

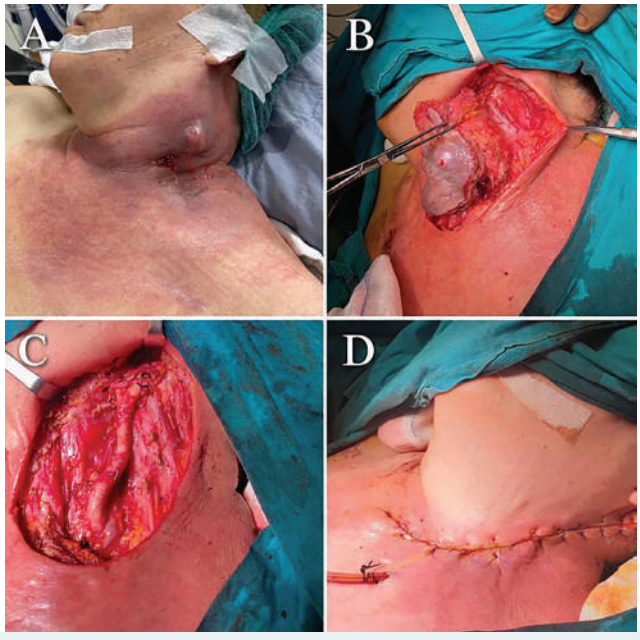


Figure 2. Giant exophytic mass in the left cervical region with cutaneous fistulization (A), Intraoperative view demonstrating deep tissue invasion and neurovascular proximity (B), Resection bed following radical lateral neck dissection (C), Early postoperative appearance after excision of the fistulized skin segment (D).

[P-051]

Effect of preoperative radiological imaging on surgical success in minimally invasive parathyroidectomy: A retrospective single-center experience

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Objective: Minimally invasive parathyroidectomy is an effective surgical approach for the treatment of primary hyperparathyroidism when appropriate patient selection is achieved. Accurate preoperative localization of the parathyroid adenoma is one of the most important determinants of surgical success. Ultrasonography, parathyroid scintigraphy, and advanced cross-sectional imaging techniques are commonly used; however, the impact of these modalities on surgical outcomes remains unclear. This study aimed to evaluate the effect of preoperative radiological imaging on surgical success in patients undergoing minimally invasive parathyroidectomy.

Material and Methods: This retrospective single-center study included patients who underwent minimally invasive parathyroidectomy for primary hyperparathyroidism at our institution within the last two years. Demographic data, biochemical parameters, and preoperative radiological imaging modalities (ultrasonography, parathyroid scintigraphy, and/or computed tomography) were recorded. Concordance between radiological localization and intraoperative findings was assessed. Surgical success was defined as postoperative normocalcemia with a significant decrease in parathyroid hormone (PTH) levels.

Results: A total of 96 patients were included in the study. The median age was 54 (46-63) years. Preoperative imaging correctly localized the parathyroid adenoma in 78 patients (81.3%). The surgical success rate was 94.9% in patients with accurate preoperative localization, compared to 76.5% in patients with inconclusive or discordant imaging findings. A significant association was observed between concordant preoperative imaging and surgical success.

Conclusion: Preoperative radiological imaging plays a significant role in determining surgical success in minimally invasive parathyroidectomy. Accurate localization of the parathyroid adenoma is critical for achieving optimal surgical outcomes. Appropriate imaging strategies may enhance the effectiveness of minimally invasive approaches.

Keywords: Minimally invasive parathyroidectomy, primary hyperparathyroidism, preoperative imaging, parathyroid adenoma, surgical success

[P-052]

Multimodal imaging-guided and intraoperatively verified resection of mediastinal ectopic parathyroid adenomas: A five-case series

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Objective: To present the diagnostic approach, surgical management, and early outcomes of patients with mediastinal ectopic parathyroid adenoma (MEPA) causing primary hyperparathyroidism.

Material and Methods: Between January 2015 and January 2025, among 458 patients who underwent surgery for a solitary parathyroid adenoma, cases of MEPA due to mediastinal location were retrospectively evaluated, and five cases (1%; n=5) were identified. Diagnostic evaluation included cervical ultrasonography, single-photon emission computed tomography/computed tomography (SPECT/CT), and computed tomography (CT). The surgical strategy was individualized according to lesion location and proximity to major vascular structures. Intraoperative confirmation was achieved using radioguided surgery, frozen section analysis, and intraoperative parathyroid hormone (ioPTH) monitoring. Patients were followed for one year with serial serum calcium and PTH measurements.

Results: The median age was 62 years (40-70), and three patients were female. Bone pain and fatigue were the most common presenting symptoms, while one patient was asymptomatic. Preoperative albumin-corrected serum calcium levels ranged from 11.24 to 13.43 mg/dL, and PTH levels ranged from 161 to 1493 pg/mL. Lesion sizes varied between 8×8 mm and 35×22 mm, with anterior mediastinal localization in four cases. Four patients were treated via J-shaped median sternotomy and one via a transcervical approach. The 10-minute ioPTH decline ranged from 48.3% to 85.5%. No major surgical complications were observed. All patients remained normocalcemic and clinically stable at one-year follow-up.

Conclusion: In MEPA cases, the combined use of functional and anatomical imaging, supported by multiple intraoperative confirmation modalities, may facilitate curative resection with low morbidity through individualized surgical strategies.

Keywords: Ectopic parathyroid adenoma, hyperparathyroidism, primary, mediastinum

[P-053]

Have surgical thresholds changed for IPMN with a 5-9 mm main pancreatic duct? A comparative analysis of the Fukuoka 2017, European 2018 and Kyoto 2024 guidelines

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Objective: Intraductal papillary mucinous neoplasms (IPMN) with a main pancreatic duct (MPD) diameter of 5-9 mm constitute a clinical "gray zone" with heterogeneous malignant potential. As recommendations for this range differ across guidelines, operative decision-making may vary between centers. We compared the surgical thresholds and decision frameworks proposed by the Fukuoka 2017, European 2018 and Kyoto 2024 IPMN guidelines for patients with MPD 5-9 mm dilatation and outlined potential implications for practice.

Material and Methods: Full-text versions of the three guidelines were reviewed using a structured comparative approach. We extracted how MPD 5-9 mm is categorized; definitions of surgical indications (high-risk features, "worrisome features", and relative indications); recommended downstream assessment [particularly endoscopic ultrasonography (EUS)]; and surveillance strategies. Additional risk markers embedded in the algorithms (mural nodules, serum CA19-9, symptoms, cyst growth dynamics, concomitant pancreatitis and new-onset diabetes) were mapped. Statements were tabulated in a standardized format and decision pathways were examined side-by-side; reported evidence grading, when available, was recorded.

Results: In Fukuoka 2017, MPD 5-9 mm is not a stand-alone indication for resection; it is addressed within the "worrisome features" framework and prompts further risk confirmation, most commonly with EUS. The European 2018 guideline defines MPD 5-9.9 mm as a "relative indication" for surgery and supports a lower operative threshold when additional risk factors coexist, including mural nodularity, elevated CA19-9, symptoms, or rapid growth. The Kyoto 2024 update frames MPD 5-9 mm as a heterogeneous risk category and shifts emphasis from a single morphologic cut-off to individualized, multiparametric risk assessment; surgical decision-making is positioned within multidisciplinary discussion integrating imaging, biomarkers, operative risk and patient preferences. These differences may influence EUS utilization, surveillance intensity, and the balance between overtreatment and missed malignancy in the MPD 5-9 mm subgroup.

Conclusion: Across guideline iterations, thresholds for MPD 5-9 mm IPMN have moved away from fixed duct-size cut-offs toward risk-based, individualized decision-making. MPD diameter should not be used in isolation; decisions should be guided by EUS findings, mural nodules, CA19-9, symptoms and longitudinal change, within a multidisciplinary and shared decision-making framework. Given that the underlying evidence base remains largely observational, prospective multicenter studies using standardized outcomes, structured EUS reporting and validated risk models are needed to refine operative thresholds, particularly in patients at higher surgical risk.

Keywords: IPMN, main pancreatic duct, guideline comparison

[P-054]

The changing definition of "elderly patient" and the problem of the future: Acute appendicitis in the geriatric population

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Objective: Globally, a growing elderly patient population has emerged, increasingly burdening healthcare services. The definition of the term "geriatrics" is somewhat complex. While traditionally 65 years and older were considered "elderly," WHO and the Japanese Geriatric Society now recommend 75 years and older as a threshold for old age due to increased physical capacity over the last 10-20 years. Based on this new definition of old age, geriatric emergencies managed in surgical departments are increasing,and appendectomy, the most frequently performed surgery worldwide, is becoming more common. In our study, we aimed to examine the outcomes of appendectomies due to acute appendicitis, which are increasingly performed in patients over 75 years of age, and to draw attention to the silent but rapid increase in geriatric emergency surgeries in our country.

Material and Methods: Data from patients over 65 years of age who underwent surgery for acute appendicitis at our institution between January 1, 2021, and January 1, 2026, were retrospectively reviewed. Demographic characteristics, type of operation, chronic diseases, presence of perforation, length of hospital stay, 30-day postoperative complications and pathology results were recorded.In this population group, data from patients over, and under 75 years of age were compared. Patients under 65 years of age and those without a 30-day postoperative follow-up result were excluded from the study.

Results: A total of 88 patients were included in the study, 30 of whom were over 75 years old (34%). The mean age was 72.2±6.06. 21 (23.9%) of the surgeries were performed laparoscopically. The rate of laparoscopy was 10% in those over 75 years old and 31% in those under 75 years old, and the difference was statistically significant (p<0.05). The most common chronic disease was in both patient groups was; hypertension. COPD was particularly prevalent in 23.3% of patients over 75 years old, while the rate was 10.3% in those under 75 years old (p>0.05). Appendix perforation was observed in 43.3% of patients over 75 years old, while this rate was 35.5% in the other group, but the difference wasn't significant (p>0.05). The development of complications was higher in those over 75 years of age, but the difference wasn't significant [(50-29.3%) (p>0.05)]. The mean length of hospital stay was significantly higher in patients over 75 years of age [6.8±10.43 vs. 3.48±4.07 days (p<0.05)].

Conclusion: Our current study shows that perforation rates and hospital stays are increased in patients over 75 years of age. It is thought that the tendency towards open surgery increases with age among surgeons. It should be remembered that in these patients with high comorbidities, speed can lead to complications; delay can lead to perforation.

Keywords: Acute appendicitis, appendectomy, elderly, geriatric emergencies

Table 1. Demographic data and general results

Age (mean ± SD)		**72.2±6.06**	
		n	**%**
Age	>75	30	34
	<75	58	66
Gender	Male	57	64.8
	Female	31	35.2
Type of surgery	Laparoscopic	21	23.9
	Open	67	76.1
Comorbidity	DM	18	20.5
	HT	58	65.9
	COPD	13	14.8
	CAD	28	31.8
Peroperative findings	Presence of perforation	33	37.5
Postoperative results	Complications presence	32	34.6
	SSI	26	29.5
Pathology results	Mucinous neoplasia and adenocarcinoma	5	5.7

DM: Diabetes mellitus, HT: Hypertension, COPD: Chronic obstructive pulmonary disease, SSI: Coronary artery disease, CAD: Coronary artery disease, SD: Standard deviation.

Table 2. Comparison of groups

Age		**≥75**		**<75**		
		n	**%**	**n**	**%**	**p**
Gender	Male	21	70	36	62.1	0.491*
	Female	9	30	22	37.9	
Type of surgery	Laparoscopic	3	10	18	31	**0.035***
	Open	27	90	40	69	
Comorbidite	DM	5	16.7	13	22.4	0.589*
	HT	22	73.3	36	62.1	0.348*
	COPD	7	23.3	6	10.3	0.122*
	CAD	11	36.7	17	29.3	0.482*
Peroperative findings	Presence of perforation	13	43.3	20	35.5	0.488*
Postoperative results	Complications presence	15	50	17	29.3	0.065*
	SSI	10	33.3	16	27.6	0.626*
Length of stay (mean ± SD) (day)		6.8±10.4		3.48±4.07		**0.036****

*: Chi-square, **: Student t-test, DM: Diabetes mellitus, HT: Hypertension, COPD: Chronic obstructive pulmonary disease, SSI: Coronary artery disease, CAD: Coronary artery disease, SD: Standard deviation.

[P-055]

Scientific response to the 2023 Kahramanmaraş earthquake: A bibliometric study

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Objective: On February 6, 2023, Türkiye experienced two devastating earthquakes with epicenters in Pazarcık and Elbistan, measuring 7.7 and 7.6 on the Richter scale. These earthquakes caused over 50,000 deaths and widespread destruction of infrastructure. The disaster triggered a large-scale humanitarian crisis, with significant medical and psychological challenges. Understanding the scientific response to such events is essential for improving future disaster preparedness and management.

Material and Methods: A systematic search was conducted in the Web of Science database using the terms "Kahramanmaraş earthquake," "Pazarcık earthquake," "Elbistan earthquake," and "Türkiye earthquake 2023" The search covered the period from February 6, 2023 and focused on medical literature. A total of 371 articles were initially identified, of which 350 were included after excluding geological, engineering, and social science studies. Bibliometric analysis was performed using the Bibliometrix package in R Studio and visualized with Biblioshiny. Key indicators analyzed included publication volume, citation count, author collaboration, and thematic clustering.

Results: The analysis identified 350 articles from 173 journals, involving contributions from 1,739 authors. The average number of co-authors per document was 6.03, indicating high collaboration, but only 5.429% of studies involved international authors. The annual growth rate of publications was -11.11%, reflecting a projected decline in research activity. The most cited article was Emergency Medicine Association of Türkiye Disaster Committee Summary of Field Observations of February 6th Kahramanmaraş Earthquakes, highlighting emergency response challenges. Psychological studies were more numerous, but emergency response and trauma care publications received higher citation counts. Keyword analysis revealed a focus on trauma care, PTSD, surgical management, and public health (Figure 1). The SAFE-QUAKE scoring system for predicting dialysis needs and the mangled extremity severity score (MESS) for amputation triage were notable clinical advancements (Figure 2).

Conclusion: The research response to the Kahramanmaraş earthquakes followed a clear pattern: Early focus on emergency response and public health, followed by injury and surgical management, and later emphasis on psychological recovery. Despite the strong domestic research effort, low international collaboration limits broader knowledge exchange. Sustained funding, enhanced global collaboration, and integrated mental health and trauma care strategies are essential for improving future disaster preparedness and healthcare resilience.

Keywords: Kahramanmaraş earthquake, disaster response, post-traumatic stress disorder, trauma care, bibliometric analysis

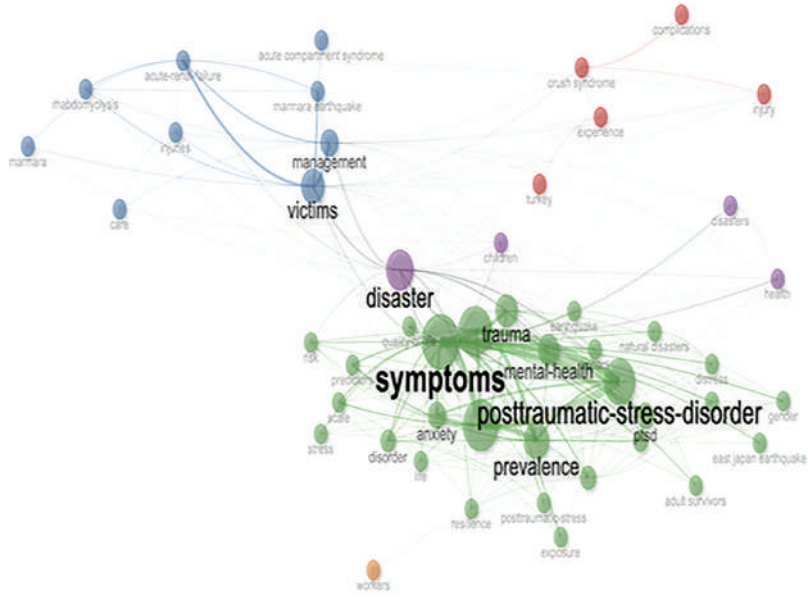


Figure 1.

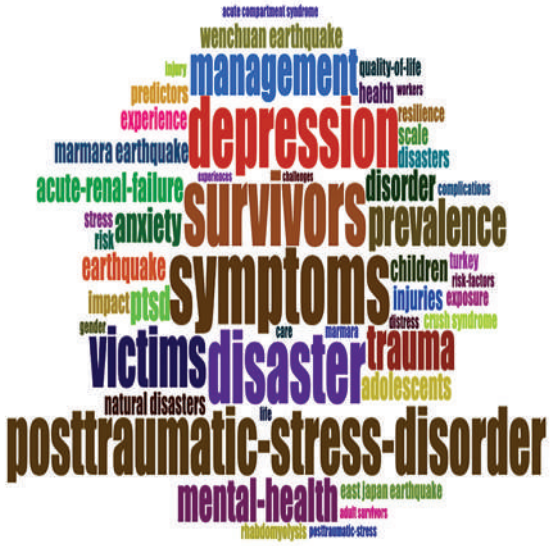


Figure 2.

[P-056]

Mortality by etiology in emergency-operated intestinal obstruction: A single-center experience

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Objective: Intestinal obstruction is a heterogeneous emergency surgical condition arising from diverse etiologies and pathophysiological mechanisms. Among patients presenting with similar clinical symptoms, the underlying cause of obstruction and the presence of concomitant ischemia or strangulation are the main determinants of prognosis. Therefore, etiology-based risk stratification plays a crucial role in guiding emergency triage, surgical timing, resuscitation strategies, and intensive care planning. This study aimed to evaluate the impact of etiology on 30-day mortality in patients undergoing emergency surgery for intestinal obstruction.

Material and Methods: A retrospective analysis was conducted on 94 adult patients (aged ≥18 years) who underwent emergency surgery for intestinal obstruction between January and December 2024. Cases and mortality data were classified according to etiology (Tables 1 and 2). Complication severity was assessed using the Clavien-Dindo classification. Length of hospital stay, requirement for intensive care, and 30-day mortality were recorded.

Results: Of the 94 patients included, 50 were male (53.2%) and 44 were female (46.8%). The mean length of hospital stay was 13.8 days. Postoperative intensive care was required in 31 patients (33.0%). Adhesions were the most common etiological factor, accounting for 63.8% of cases (n=60). The overall 30-day mortality rate was 11.7% (11/94). Mortality varied significantly by etiology and was highest in the mesenteric ischemia group (71.4%), followed by incarcerated hernia and malignancy-related obstruction. Our findings demonstrate that mortality in emergency-operated intestinal obstruction varies considerably according to etiology. Although adhesion-related obstruction was the most frequent cause, the mortality burden was predominantly concentrated in patients with mesenteric ischemia. These results are consistent with previous studies reporting high mortality rates in ischemic obstruction, while adhesion-related cases generally exhibit a more favorable prognosis. Early identification of ischemia or strangulation through clinical assessment, laboratory markers, and contrast-enhanced CT or CT angiography is essential for timely surgical intervention and improved outcomes.

Conclusion: Early etiology-oriented diagnosis, prompt surgical management, and prioritization of intensive care resources for high-risk patients are critical in the management of intestinal obstruction. Although limited by its single-center design, this study highlights the prognostic importance of etiology and supports the need for further multicenter investigations.

Keywords: Emergency surgery, obstruction, small intestine

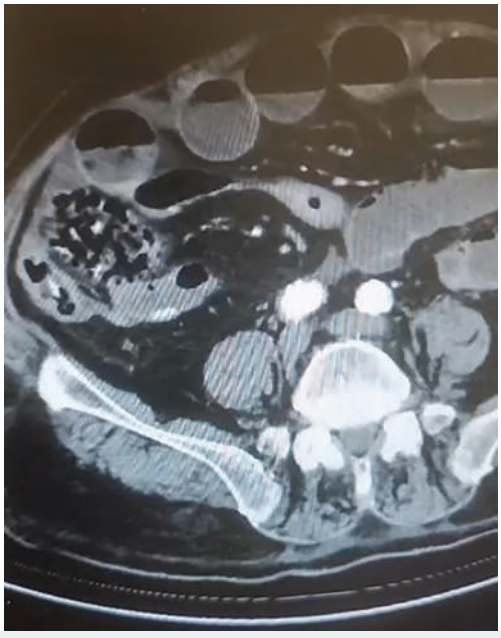


Figure 1.

Table 1. Etiology distribution

Etiology	n	%
Adhesions	60	63.8
Incarcerated hernia	10	10.6
Mesenteric ischemia	7	7.4
Internal herniation	4	4.3
Bezoar	3	3.2
Inflammatory bowel disease	3	3.2
Malignancy	2	2.1
Intussusception	2	2.1
Perforated appendicitis	2	2.1
Gallstone ileus	1	1.1

Table 2. Mortality

Group	n	Mortality n (%)
Mesenteric ischemia	7	5 (71.4%)
Adhesions	60	3 (5%)
Incarcerated hernia	10	2 (20%)
Malignancy	2	1 (50%)
Other etiologies	15	0 (0%)
Total cohort	94	11 (11.7%)

[P-075]

Evaluation of MSI study in colon adenocarcinoma

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Objective: Colon cancer is one of the most common malignancies worldwide. Microsatellite instability (MSI) is an important molecular subtype resulting from defects in the DNA mismatch repair system and has clinical significance in terms of prognosis, treatment response, and the identification of hereditary cancer syndromes. This study aimed to evaluate the application rate and results of MSI studies in colon cancer cases.

Material and Methods: The study included a total of 86 patients diagnosed with colon adenocarcinoma in the pathology archives within the last 5 years. MSI studies were performed in 34 of the cases, while 52 cases did not undergo MSI. In patients who underwent MSI, the expression of MLH1, PMS2, MSH2, and MSH6 proteins was evaluated using immunohistochemical methods. The obtained data were analyzed retrospectively.

Results: Of the 86 colon cancer cases, 39.5% underwent MSI testing, while 60.5% did not. Of those who underwent MSI, 6 (17.5%) had positive results. No defects were observed in 83.5%. An examination of the results and clinicopathological features of the cases that underwent MSI testing revealed that the test was applied to a limited number of patients. It was observed that a large proportion of the cases that did not undergo MSI testing had earlier diagnoses. Current guidelines recommend MSI or MMR assessment in all cases of colon cancer. The absence of MSI assessment in a significant proportion of the cases in our study suggests a potential deficiency, particularly in terms of Lynch syndrome screening and patient selection for immunotherapy.

Conclusion: In colon cancer cases, the MSI (mean scale indicator) test is an important parameter in terms of both prognostic and predictive aspects. Our study once again demonstrates the necessity of routinely applying the MSI test to all colon cancer patients.

Keywords: Adenocarcinoma, MSI, colon cancer, pathology, patient

[P-081]

Clinical, diagnostic, and surgical characteristics of phyllodes tumors: A single-center retrospective experience

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Objective: Phyllodes tumors are breast tumors that complicate clinical management due to their rarity, histopathological heterogeneity, and the inability of preoperative diagnostic methods to reliably predict tumor grade. The aim of this study was to evaluate the demographic, diagnostic, surgical, and pathological characteristics of patients who underwent surgical treatment for phyllodes tumors at the University of Health Sciences Türkiye, Ankara Etlik City Hospital; to investigate the concordance between preoperative imaging methods and tru-cut biopsy with final pathology; and to determine differences in surgical approach and clinical outcomes according to pathological grade.

Material and Methods: Fifty patients who underwent surgery with a diagnosis of phyllodes tumor at the General Surgery Clinic of University of Health Sciences Türkiye, Ankara Etlik City Hospital between January 2023 and November 2025 were retrospectively analyzed. Demographic data, preoperative imaging findings, tru-cut biopsy results, surgical procedures, surgical margin status, re-excision requirement, and follow-up outcomes were evaluated. According to final pathology, cases were classified as benign, borderline, and malignant phyllodes tumors. Comparative analyses were performed between benign and borderline/malign groups.

Results: All patients were female, with a mean age of 40.98±11.39 years. Final pathological distribution was 68% benign, 24% borderline, and 8% malignant phyllodes tumors. Tru-cut biopsy was performed in 84% of patients, and discordance between tru-cut biopsy and final pathology was observed in 34%. A substantial proportion of discordant cases resulted from undergrading on tru-cut biopsy, which was more prominent in borderline and malignant cases. Discordance between preoperative imaging and final pathology was observed in 16% of patients. Additionally, 28% of cases initially assessed as benign or suspicious in the preoperative period were diagnosed as borderline or malignant on final pathology. Wide local excision was the most frequently performed surgical procedure (72%). As pathological grade increased, mastectomy rates and re-excision requirements increased significantly. During a median follow-up period of 18.5 months, no local recurrence was observed.

Conclusion: This study demonstrates that preoperative diagnostic methods, including tru-cut biopsy and imaging, are limited in predicting final pathology in phyllodes tumors due to histopathological heterogeneity, particularly in borderline and malignant cases. In line with the literature, the tendency of tru-cut biopsy to undergrade tumors and imaging-pathology discordance may lead to misclassification of surgical risk. However, individualized surgical management based on pathological grade and adequate surgical margin control were associated with low local recurrence rates in short- and mid-term follow-up, even in borderline and malignant cases. These findings strongly support the need to actively consider preoperative diagnostic uncertainty and prioritize surgical margin safety in the management of phyllodes tumors.

Keywords: Breast tumors, phyllodes tumor, preoperative imaging, surgical margin, tru-cut biopsy

Table 1. Demographic and clinical characteristics of patients with phyllodes tumors and diagnostic process and preoperative evaluation findings

Variable	Value
Age (years), mean ± SD	40.98 ± 11.39
Age (years), median (min–max)	42 (18–65)
Sex, Female	50 (100.0%)
Side – Right	24 (48.0%)
Side – Left	24 (48.0%)
Side – Bilateral	2 (4.0%)
Location – Upper outer quadrant	16 (32.0%)
Location – Upper inner quadrant	16 (32.0%)
Location – Central	8 (16.0%)
Location – Lower outer quadrant	4 (8.0%)
Location – Lower inner quadrant	4 (8.0%)
Preoperative US performed	49 (98.0%)
US BI-RADS 3	7 (14.0%)
US BI-RADS 4	41 (82.0%)
US BI-RADS 5	1 (2.0%)
Largest diameter on US (cm), n	11
Largest diameter on US (cm), mean ± SD	7.09 ± 12.43
Follow-up duration (months), mean ± SD	16.78 ± 10.29
Follow-up duration (months), median (min–max)	18.5 (1–42)

Variable	n (%)
Tru-cut biopsy performed	42 (84.0%)
Tru-cut biopsy not performed	7 (14.0%)
Tru-cut result – Fibroadenoma	8 (19.0%)
Tru-cut result – Suspicious for phyllodes tumor	27 (64.3%)
Tru-cut result – Benign phyllodes tumor	6 (14.3%)
Tru-cut result – Borderline phyllodes tumor	1 (2.4%)
Tru-cut – concordant with final pathology	26 (52.0%)
Tru-cut – discordant with final pathology	17 (34.0%)
Tru-cut discordance (undergrading)	12 (24.0%)
Tru-cut discordance (overgrading)	7 (14.0%)
Preoperative imaging – concordant with final pathology	41 (82.0%)
Preoperative imaging – discordant with final pathology	8 (16.0%)
Preoperative benign/suspicious but final borderline–malignant	14 (28.0%)

Table 2. Comparison of clinical, diagnostic, and surgical characteristics according to final pathology

Variable	n (%)
Tru-cut biopsy performed	42 (84.0%)
Tru-cut biopsy not performed	7 (14.0%)
Tru-cut result – Fibroadenoma	8 (19.0%)
Tru-cut result – Suspicious for phyllodes tumor	27 (64.3%)
Tru-cut result – Benign phyllodes tumor	6 (14.3%)
Tru-cut result – Borderline phyllodes tumor	1 (2.4%)
Tru-cut – concordant with final pathology	26 (52.0%)
Tru-cut – discordant with final pathology	17 (34.0%)
Tru-cut discordance (undergrading)	12 (24.0%)
Tru-cut discordance (overgrading)	7 (14.0%)
Preoperative imaging – concordant with final pathology	41 (82.0%)
Preoperative imaging – discordant with final pathology	8 (16.0%)
Preoperative benign/suspicious but final borderline–malignant	14 (28.0%)

[P-082]

Gestational gigantomastia: Prolactin correlation in massive breast hypertrophy and surgical management strategy

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Objective: Gestational gigantomastia (GG) is an exceptionally rare phenomenon occurring in ~1/100,000 pregnancies, characterized by rapid, pathological breast tissue proliferation. Literature typically defines gigantomastia as requiring single-breast excision of ≥1500 g. Although its exact pathogenesis is not fully elucidated, hypersensitivity of estrogen, progesterone, and particularly prolactin receptors, alongside autoimmune processes, are hypothesized to trigger this growth. Beyond aesthetics, GG causes functional morbidities including spinal-deformities and neural-compression. This report discusses the outcomes of surgical management in a case of GG that persisted significantly into the postpartum period.

Material and Methods: A 39-year-old female patient presented with progressive breast enlargement that initiated during the 14th week of her first pregnancy and failed to regress during the 4-year postpartum period. The patient had no history of systemic disease, specific medication use, or family history of malignancy. Physical examination revealed bilateral massive ptosis and prominent subcutaneous venous dilatation (Figure 1). Anthropometric measurements showed a sternal notch-to-nipple (SN-N) distance of 32-cm on the right and 30-cm on the left (BMI: 26.8 kg/m²). Laboratory analysis revealed a significantly elevated prolactin level of 110 ng/mL (normal: 1.2-29.9 ng/mL). A pituitary MRI was performed to rule out prolactinoma. Radiological investigations confirmed bilateral massive hypertrophy and secondary flattening of cervical lordosis due to the extreme weight of the breast tissue.

Results: The patient underwent reduction mammoplasty using the inferior pedicle technique, resulting in the excision of a total of 2830 g of tissue (right: 1450 g, left: 1380 g). Histopathological examination documented complex hyperplastic processes, including sclerosing adenosis, microcalcifications, and papillary apocrine metaplasia accompanied by increased stromal vascularization. The patient was discharged without complications on the 2nd postoperative day. During follow-up, a dramatic regression in shoulder pressure and chronic back pain was observed, significantly improving the patient's quality of life and functional independence (Figure 2).

Conclusion: Gestational gigantomastia is a rare entity requiring multidisciplinary management, as hormonal and histopathological changes can persist long after pregnancy ends. The detected hyperprolactinemia of 110 ng/mL reflects the profound pathophysiological depth of the proliferative response in the target tissue. While a 1500 g resection threshold per breast is often used for diagnosis, the total material of 2830 g in this case, combined with the loss of cervical lordosis and an SN-N distance of 32-cm, confirms the diagnosis clinically and radiologically. In conclusion, where conservative follow-up is insufficient, inferior pedicle reduction mammoplasty remains the gold-standard treatment for both halting skeletal deformities and restoring the patient's functional autonomy.

Keywords: Gestational gigantomastia, reduction mammoplasty, hyperprolactinemia

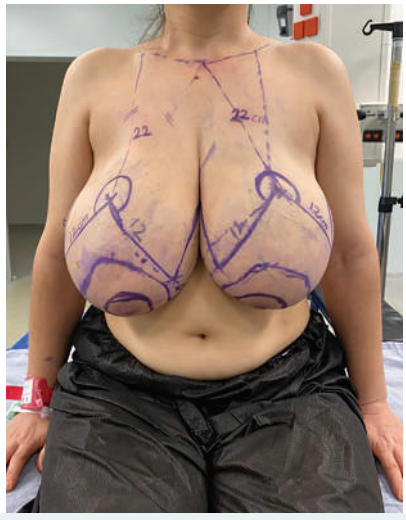


Figure 1. Preoperative appearance; bilateral massive breast hypertrophy, prominent subcutaneous venous structures, and severe ptosis (SN-N: 32-cm).

SN-N: Sternal notch-to-nipple.



Figure 2. Postoperative day 2; appearance and symptomatic improvement after inferior pedicle reduction mammoplasty.

[P-085]

Retrospective analysis of laparoscopic inguinal hernia repair in patients with prior lower abdominal surgery

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Objective: Inguinal hernia repair is one of the most frequently performed surgical procedures worldwide. Laparoscopic techniques, including total extraperitoneal (TEP) and transabdominal preperitoneal (TAPP) approaches, have gained widespread acceptance due to their advantages over open surgery, such as reduced postoperative pain, shorter hospital stay, and faster recovery. However, the feasibility and safety of laparoscopic inguinal hernia repair, particularly the TEP technique, in patients with a history of prior lower abdominal surgery remain a subject of debate. Prior lower abdominal surgeries can lead to adhesions and altered anatomical planes, potentially increasing the difficulty and risks associated with TEP repair. This study aimed to evaluate the safety and feasibility of TEP inguinal hernia repair in patients with prior lower abdominal surgery and to determine the necessity of conversion to open surgery.

Material and Methods: This retrospective study included 150 patients who underwent TEP inguinal hernia repair between 2020 and 2024. The cohort consisted of 25 females and 125 males, with 60 patients having a history of prior lower abdominal surgery. These surgeries included cesarean section, appendectomy, lower abdominal laparotomy, radical prostatectomy, total abdominal hysterectomy with bilateral salpingo-oophorectomy (TAH+BSO), and laparoscopic low anterior resection. All patients initially underwent the classic TEP procedure.

Results: Among the 90 patients without prior lower abdominal surgery (45 right, 45 left inguinal hernias), ten were converted to the TAPP method due to complications (nine scrotal hernias and one sliding hernia). In the 60 patients with prior lower abdominal surgery, 24 required conversion to TAPP. All cases were completed laparoscopically, negating the need for open conversion. The average operation time was 72 minutes (range: 32-134 minutes), and the average hospital stay was 1.2 days. Complications included hematoma in five patients and seroma in five.

Conclusion: TEP inguinal hernia repair is a safe option for patients with a history of prior lower abdominal surgery. Although the likelihood of conversion to TAPP may be higher in these patients, this risk decreases with experience. The study supports the use of laparoscopic techniques in such cases, eliminating the need for open surgery.

Keywords: Abdominal surgery, inguinal hernia, laparoscopic hernia repair

Table 1. Patient demographic data and surgical history

Feature	Total (n=150)	No prior lower abdominal surgery (n=90)	Prior lower abdominal surgery (n=60)
Gender (male/female)	125/25	82/8	43/17
Mean age (years) ± SD	47.6±16.7	44.3±16.6	52.6±15.7
Right inguinal hernia (n)	72	45	27
Left inguinal hernia (n)	78	45	33
Prior surgery type (n)			
- Cesarean section	12	-	12
- Appendectomy	15	-	15
- Lower abdominal laparotomy	14	-	14
- Radical prostatectomy	12	-	12
- Total abdominal hysterectomy + bilateral salpingo-oophorectomy (TAH+BSO)	3	-	3
- Laparoscopic low anterior resection	4	-	4

TAH+BSO: Total abdominal hysterectomy with bilateral salpingo-oophorectomy, SD: Standard deviation.

Table 2. Surgical outcomes and complications

Feature	Total (n=150)	No prior lower abdominal surgery (n=90)	Prior lower abdominal surgery (n=60)
Conversion from TEP to TAPP (n)	34	10	24
Average operation time (min) ± SD	72.7±31.4	TEP: 73.4±13.8, TAPP: 75.7±41.7	TEP: 66.3±22.0, TAPP: 70.0±14.2
Average hospital stay (days) ± SD	1.2±0.4	1.22±0.4	1.1±0.4
Hematoma (n)	5	0	5
Seroma (n)	5	3	2

TEP: Total extraperitoneal, TAPP: Transabdominal preperitoneal, SD: Standard deviation, min: Minimum.

[P-086]

The effect of long vs. short gastric pouch on bile reflux in mini gastric bypass surgery

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Objective: The impact of gastric pouch length created during mini gastric bypass (MGB) surgery on bile reflux remains controversial. This study aimed to compare the effects of gastric pouches longer than 18-cm (long pouch) and shorter than 18-cm (short pouch) on clinical and endoscopic bile reflux.

Material and Methods: A total of 120 patients who underwent mini gastric bypass surgery were included in the study. Patients were divided into two groups according to gastric pouch length:

• Long pouch group (≥18 cm): 80 patients.

• Short pouch group (<18 cm): 40 patients.

All patients were evaluated clinically and endoscopically. Clinical evaluation: Bile vomiting and reflux symptoms were assessed two hours after meals. Endoscopic evaluation:

• Presence of bile in the stomach.

• Observation of bilious content.

• Presence of reflux esophagitis.

Results: Clinical findings:

• Long pouch group (n=80): Bile reflux was detected in 5 patients (6.25%). In these patients, reflux symptoms occurred after consumption of fatty foods and resolved with dietary modification.

• Short pouch group (n=40): Bile reflux was detected in 32 patients (80%). Although symptoms were associated with dietary intake, they persisted despite dietary modification.

Endoscopic findings:

• Long pouch group (n=40 patients who underwent endoscopy): Bile was observed in the stomach in 22 patients (55%). No bile was detected in 18 patients (45%). Reflux esophagitis was identified in 2 patients (5%).

• Short pouch group (n=40): Bile was detected in the stomach in all patients (100%). Reflux esophagitis was identified in 10 patients (25%).

Conclusion: Gastric pouch length appears to be a significant factor in the development of bile reflux following mini gastric bypass surgery. In patients with a gastric pouch length of 18-cm or more, the rate of clinical bile reflux was significantly lower, and symptoms generally resolved with dietary modification. In contrast, patients with a pouch shorter than 18-cm exhibited markedly higher rates of both clinical and endoscopic bile reflux, and symptoms persisted despite dietary intervention. These findings suggest that creating a longer gastric pouch during mini gastric bypass surgery may be an effective surgical strategy to reduce bile reflux.

Keywords: Mini gastric bypass, bile reflux, gastric pouch lenght

[P-087]

What prolongs drain duration after breast cancer surgery? The role of reconstruction and nodal disease

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Objective: Drain placement is a standard practice in breast cancer surgery to prevent seroma and hematoma formation. However, the timing of drain removal may be influenced by patient-related factors such as tumor stage, obesity, and lymph node involvement, in addition to the surgical technique. The aim of this study was to compare drain removal times among different surgical procedures and to identify factors associated with prolonged drain duration.

Material and Methods: This single-center retrospective study included 226 patients who underwent breast cancer surgery in 2020-2025. Patients were divided into four groups: simple mastectomy (n=67), modified radical mastectomy (MRM) (n=87), implant-based reconstruction (n=32), and latissimus dorsi (LD) flap reconstruction (n=40). Demographic characteristics, tumor stage, body mass index (BMI), American Society of Anesthesiologists (ASA) score, and lymph node status were evaluated. Drain removal days were compared among groups.

Results: The mean drain removal time was 10.8±3.3 days in the simple mastectomy group, 11.4±4.7 days in the MRM group, 12.1±3.7 days in the implant-based reconstruction group, and 15.2±6.2 days in the LD flap reconstruction group. The difference among groups was statistically significant ($p<0.001$). Additional analyses revealed that higher tumor stage and positive lymph node status were significantly associated with prolonged drain duration, whereas BMI and ASA scores were comparable among groups.

Conclusion: Drain duration in breast cancer surgery is influenced not only by the type of surgical procedure but also by tumor stage and lymph node status. Prolonged drain duration is particularly observed in patients undergoing LD flap reconstruction and in those undergoing MRM with positive lymph nodes. These findings may contribute to improved postoperative patient management and more accurate discharge planning.

Keywords: Breast cancer, oncoplastic surgery, drain, mastectomy

[P-088]

Surgical management and outcomes of colonoscopy-related perforations: An eight-year single-center retrospective study

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Objective: Colonoscopy-related colonic perforation is a rare but potentially life-threatening complication associated with significant morbidity and mortality. This study aimed to evaluate the clinical characteristics and outcomes of patients who underwent surgical treatment for colonoscopy-related perforations.

Material and Methods: Between January 1, 2018, and December 31, 2025, 10,098 procedures performed in the general surgery endoscopy unit were evaluated. Patients who underwent surgery due to colon perforation related to colonoscopy were retrospectively examined. Clinical data, surgical approaches, and postoperative outcomes were analyzed.

Results: A total of 18 patients were included in the study. Most perforations were located in the sigmoid colon. Primary repair and segmental resection were the most commonly performed surgical procedures. Patients who developed sepsis demonstrated increased intensive care requirements, prolonged hospital stay, and higher mortality rates.

Conclusion: Early diagnosis and appropriate surgical management are critical in the treatment of colonoscopy-related perforations. Consistent with the literature, the sigmoid colon was the most frequent site of perforation in our cohort. The presence of sepsis was associated with significantly worse clinical outcomes. These findings emphasize the importance of rapid clinical assessment and timely surgical decision-making in patients with suspected perforation.

Keywords: Colonoscopy, colonic perforation, surgical treatment

[P-089]

Silent but dangerous: Clinical, laboratory, and management characteristics of toxic megacolon cases - A single-center experience

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Objective: Toxic megacolon is a life-threatening clinical condition that,although rare,requires early diagnosis and appropriate management due to its rapid progression and high risk of mortality. This study aimed to evaluate the demographic characteristics, clinical findings, laboratory dynamics, treatment approaches, and clinical outcomes of patients followed in our clinic with a diagnosis of toxic megacolon.

Material and Methods: In this retrospective observational study,four patients followed in our clinic with a diagnosis of toxic megacolon were evaluated. Demographic data, comorbidity burden (ASA score, Charlson comorbidity index), clinical findings (fever, tachycardia, hypotension, mental status, peritonitis), etiology, laboratory parameters (WBC, CRP_0-CRP_{24}, and ΔCRP, $lactate_0$-$lactate_{24}$, and Δlactate), timing of sepsis, treatments administered, intensive care unit requirement, complications, and mortality were recorded. Descriptive statistics were presented as median (interquartile range) or n (%).

Results: Four patients diagnosed with toxic megacolon were evaluated; 2 were female and 2 were male. The median age was 61.5 years, and the median BMI was 21.0 kg/m². The patients had a high-risk profile, with an ASA distribution of ASA-II in 25% and ASA-IV in 75%, while the Charlson comorbidity index varied among cases. At presentation, tachycardia and hypotension were not observed in any patient,and fever was present in only 25%; however, signs of peritonitis and altered mental status were noted in most cases. Imaging revealed marked colonic dilatation (median colon diameter: 9.25-cm) without free air. Laboratory evaluation showed elevated inflammatory markers, with considerable heterogeneity in 24-hour CRP and lactate dynamics among patients. Half of the patients were managed with emergency surgery and half with medical treatment; 50% required intensive care unit admission. Complications occurred in one patient (25%), and no mortality was observed.

Conclusion: This case series demonstrates that toxic megacolon may progress with severe clinical burden and a need for surgical intervention even in the absence findings such as fever, tachycardia, and hemodynamic instability. Although systemic inflammatory signs are highlighted in the literature as key diagnostic features of toxic megacolon,the relative absence of these findings in our study—contrasted with the predominance of peritonitis and altered mental status—is noteworthy. Furthermore, our observations suggest that short-term dynamic changes in inflammatory and perfusion markers (CRP and lactate), rather than their absolute values, may be more informative for clinical decision-making. This supports the importance of time-dependent monitoring strategies over static threshold-based assessments in the evaluation of toxic megacolon. The fact that half of the patients required emergency surgery and intensive care underscores the discrepancy between clinical "silence" and disease severity, which may increase the risk of delayed intervention in practice. In conclusion, the absence of classical systemic signs in patients with toxic megacolon should not create a false sense of clinical security. Altered mental status, signs of peritonitis, and dynamic laboratory trends should be regarded as decisive indicators for early and aggressive management. Our findings highlight the heterogeneous clinical spectrum of toxic megacolon and support the critical role of early recognition, close monitoring, and individualized treatment strategies in improving patient outcomes.

Keywords: Advanced age, altered mental status, ileus, peritonitis, toxic megacolon

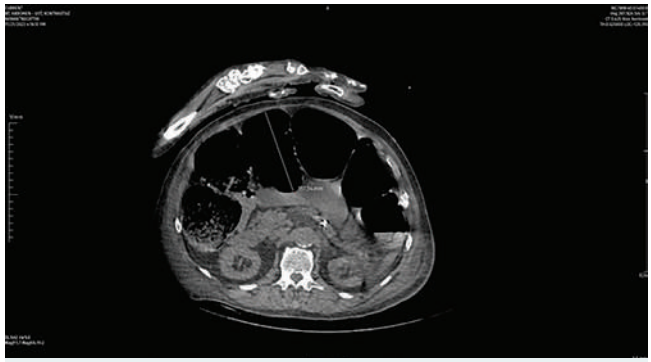


Figure 1. CT image of one of the cases.

CT: Computed tomography.

Table 1. Demographic characteristics and comorbidity burden (n=4)

Parametre	Değer
Yaş (yıl), Medyan (ÇAA/IQR)	61,5 (36,0–77,5)
Cinsiyet, n (%)	Kadın: 2 (%50) · Erkek: 2 (%50)
BKİ (kg/m²), Medyan (ÇAA/IQR)	21,0 (20,0–22,5)
ASA dağılımı, n (%)	ASA 2: 1 (%25) · ASA 4: 3 (%75)
Charlson dağılımı, n (%)	0: 1 (%25) · 2: 1 (%25) · 4: 1 (%25) · 12: 1 (%25)

Table 2. Clinical findings and physical examination characteristics (n=4)

Parametre	n (%)
Ateş	
Var	1 (%25)
Yok	3 (%75)
Taşikardi	
Var	0 (%0)
Yok	4 (%100)
Hipotansiyon	
Var	0 (%0)
Yok	4 (%100)
Mental durum değişikliği	
Var	1 (%25)
Yok	3 (%75)
Peritonit bulgusu	
Var	1 (%25)
Yok	3 (%75)
Etiyoloji	
İnflamatuvar barsak hastalığı ilişkili	4 (%100)

Table 3. Laboratory findings and dynamic variables (n=4)

Parametre	Değer
WBC (/mm³), Ort ± SS	14.718 ± 7.023
WBC, Medyan (Min–Maks)	13.650 (7.800–25.300)
Hemoglobin (g/dL), Ort ± SS	11,4 ± 1,7
Trombosit (/mm³), Ort ± SS	312.000 ± 96.000
Sodyum (mmol/L), Ort ± SS	134,5 ± 3,9
Potasyum (mmol/L), Ort ± SS	4,1 ± 0,6
CRP_0 (mg/L), Ort ± SS	49,8 ± 52,7
CRP_{24} (mg/L), Ort ± SS	99,9 ± 101,6
Δ CRP, Medyan (Min–Maks)	11,5 (0,5–184)
$Laktat_0$ (mmol/L), Ort ± SS	2,54 ± 2,10
$Laktat_{24}$ (mmol/L), Ort ± SS	1,88 ± 0,63
Δ Laktat, Medyan (Min–Maks)	0,65 (0,12–3,21)

Table 4. Treatment course, complications, and clinical outcomes (n=4)

Parametre	Değer
İmmünsüpresyon	
Yok	4 (%100)
Kan transfüzyonu	
Evet	1 (%25)
Hayır	3 (%75)
Sepsis	
Yok	2 (%50)
Başvuru anında	2 (%50)
Yoğun bakım yatışı	
Evet	2 (%50)
YBÜ yatış süresi (gün), Ort ± SS	4,0 ± 6,7
YBÜ yatış süresi, Medyan (Min–Maks)	1 (0–14)
Majör komplikasyon	
Var	1 (%25)
Yok	3 (%75)
Mortalite	
Var	0 (%0)

Table 5. Comparison of our toxic megacolon cases with the literature

Çalışma	Yıl	Popülasyon / Tasarım	Hasta sayısı (n)	Kolektomi / Cerrahi	Mortalite	Not
Ahmed ve ark.	2020	*C. difficile* ilişkili TM; çok merkezli/retrospektif (colectomy zamanlaması)	163	~%85 total abdominal kolektomi	**30-gün mortalite ~%39** (erken: %21 vs geç: %45)	"Septik şok gelişmeden erken kolektomi mortaliteyi azaltır."
Kuy ve ark. (JAMA Surgery)	2015 (online) / 2016 (cilt)	ABD ulusal veri; *C. difficile*-ilişkili megakolon	1051 TM (alt grupta CDI-megakolon)	Colectomy **%18,36** (CDI-megakolon)	**Hastane içi mortalite %24,45** (CDI-megakolon)	İnsidans ve mortalite artış trendi; büyük veri.
Watanabe ve ark.	2024	Ülseratif kolit ilişkili TM; tek merkez/retrospektif, cerrahi olgular	14	Cerrahi olgular (1985–2020)	Perforasyon varlığında mortalite **%50** (1/2); toplam 1 ölüm	SIRS kriterlerini karşılayan **%71,4**; qSOFA düşük yakalıyor (7,1%).
Desai ve ark. (derleme)	2020	Yönetim/klinik spektrum derlemesi	—	—	—	TM'de klinik kötüleşmeyle **ateş/taşikardi/hipotansiyon** gelişebileceği; bulgular steroid/analjezi ile maskelenebilir.
Bizim çalışmamız	2026	Tek merkez olgu serisi	**4**	**Acil cerrahi %50; kolektomi %50**	**%0**	Sistemik instabilite (taşikardi/hipotansiyon) yokken ağır klinik bulgular (peritonit/mental durum) baskın; CRP/laktat dinamikleri heterojen.

[P-092]

Feasibility of unsedated colonoscopy: A retrospective analysis of 296 patients

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Objective: Colonoscopy is commonly performed with sedation in most centers. Although sedation improves patient comfort, it may lead to cardiopulmonary depression, hypotension, hypoxia, prolonged recovery time, and, rarely, serious complications. Therefore, unsedated colonoscopy has emerged as an alternative approach in selected patients. This study aimed to evaluate the procedural success and feasibility of unsedated colonoscopy.

Material and Methods: A total of 296 patients who underwent unsedated colonoscopy were retrospectively analyzed. Patient demographics, including age and sex, as well as indications for colonoscopy, were recorded. Successful completion of the procedure was defined as cecal intubation.

Results: The mean age of the patients was 50.79±12.44 years. Of the patients, 163 were male and 133 were female. The indications for colonoscopy were anemia (n=79), lower gastrointestinal bleeding (n=69), abdominal pain (n=44), constipation (n=23), positive fecal occult blood test (n=19), detection of a mass on digital rectal examination (n=16), weight loss (n=5), and other causes (n=41). Cecal intubation was successfully achieved in 255 patients (86.1%), while the procedure could not be completed in 41 patients (13.9%). Among patients in whom the procedure was incomplete, 26 were male and 15 were female. No major complications were observed in any patient.

Conclusion: The cecal intubation rate in unsedated colonoscopy was 86.1%, and no major complications were detected. With appropriate patient selection and adequate operator experience, unsedated colonoscopy is a safe and feasible procedure.

Keywords: Endoscopy, colonoscopy, sedation

[P-093]

Is routine preoperative colonoscopy necessary before temporary stoma closure?

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Objective: Permanent or temporary stomas (ileostomy, colostomy) are frequently performed in general surgical practice for benign or malignant indications. Temporary stomas may be scheduled for closure after the recovery period or following adjuvant/systemic therapy. Prior to stoma closure, routine preoperative colonoscopic evaluation is commonly performed in many centers to assess colonic integrity, evaluate the colorectal anastomosis, and exclude recurrence or metachronous colorectal tumors. In this study, patients who underwent temporary stoma creation for any indication and subsequently had stoma closure following preoperative colonoscopic evaluation were retrospectively analyzed, and the necessity of routine colonoscopy prior to stoma closure was discussed, except for selected clinical criteria.

Material and Methods: A total of 147 patients who underwent stoma closure at University of Health Sciences Türkiye, Ankara Etlik City Hospital between January 2022 and July 2025 were identified. Thirty-one patients who underwent stoma closure without preoperative colonoscopic evaluation were excluded from the study. The demographic characteristics of the included patients (age and sex), indication for stoma creation (benign or malignant), type of stoma creation (emergency or elective), interval between stoma creation and closure, and the presence of pathologies that could preclude stoma closure detected during preoperative colonoscopy (such as anastomotic stricture or metachronous tumor) were retrospectively analyzed.

Results: A total of 116 patients who met the inclusion criteria were included in the study. The demographic and clinical characteristics of the patients are presented in Table 1, and conditions preventing stoma closure according to stoma indication are shown in Table 2. In the preoperative colonoscopic evaluation, no pathology preventing stoma closure was detected in 113 patients (97.4%), whereas only 3 patients (2.6%) had findings that contraindicated stoma closure. Of these patients, two had stomas created for benign indications and one for a malignant indication.

Conclusion: Stoma closure is generally performed before the expected time frame for local recurrence or development of metachronous secondary tumors following the primary surgery. Therefore, the clinical benefit of routine preoperative colonoscopic evaluation in asymptomatic patients remains controversial. In our study, the low rate of pathologies preventing stoma closure (2.6%) suggests that routine colonoscopy alters clinical management in only a limited subset of patients. However, colonoscopic evaluation should be selectively considered in patients with alarm symptoms, suspected anastomotic integrity issues, or in high-risk malignant patient groups. Routine preoperative colonoscopy rarely changes surgical decision-making in asymptomatic patients.

Keywords: Stoma closure, colonoscopy

Table 1. Demographic and clinical characteristics of patients (n=116)		
Variable	**n=116**	**%**
Sex		
Male	78	67.2
Female	38	32.8
Type of stoma creation		
Emergency	62	53.4
Elective	54	46.6
Indication for stoma		
Benign	47	40.5
Malignant	69	59.5
Time interval to stoma closure		
<6 months	44	37.9
6-12 months	45	38.8
>12 months	27	23.3
Colonoscopy findings		
No pathology	113	97.4
Pathology present	3	2.6

Table 2. Patients with identified contraindications according to stoma indication (n=116)			
Stoma indication	**No contraindication, n (%)**	**Contraindication present, n (%)**	**Total**
Benign	45 (95.7)	2 (4.3)	47
Malignant	68 (98.6)	1 (1.4)	69
Total	113	3	116

[P-094]

Low-grade mucinous neoplasms detected after appendectomy: A single-center retrospective evaluation

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Objective: A small proportion of patients undergoing surgery for acute appendicitis are histopathologically diagnosed with low-grade appendiceal mucinous neoplasms (LAMN). This study aimed to comprehensively evaluate the clinical, radiological, surgical, and histopathological characteristics of patients who underwent surgery with a preliminary diagnosis of acute appendicitis and were subsequently diagnosed with LAMN on postoperative pathological examination, and to discuss these findings in the context of the current literature.

Material and Methods: A total of 19 patients who underwent surgery with a preliminary diagnosis of acute appendicitis between October 2022 and October 2025 and were diagnosed with LAMN on pathological examination were retrospectively analyzed. Demographic characteristics, presenting symptoms, computed tomography (CT) findings, surgical technique, intraoperative macroscopic appearance, histopathological tumor size, surgical margin status, presence of extraluminal mucin, follow-up duration, and clinical outcomes were evaluated.

Results: The mean age of the patients was 60.7 years (range: 29-86), with 63% being female (n=12) and 37% male (n=7). Presenting complaints were consistent with acute appendicitis in 42% of cases, whereas 58% presented with other abdominal symptoms. On preoperative CT imaging, the mean appendiceal diameter was 21-mm; wall thickening was detected in 37% of cases, and a mucocele appearance was observed in 53%. Surgically, 53% of patients underwent open appendectomy and 47% underwent laparoscopic appendectomy. On pathological macroscopic examination, the mean tumor size was 7.1-cm, and positive surgical margins were observed in only 1 patient (5%). The presence of extraluminal mucin/pseudomyxoma peritonei was detected in 16% (n=3) of patients. The mean follow-up duration was 13 months. During follow-up, no recurrence was observed in 17 patients (89%), while 2 patients (11%) died.

Conclusion: LAMN is a neoplasm that may be incidentally detected among patients undergoing surgery for acute appendicitis, yet it is of critical importance in terms of clinical course and long-term prognosis. In our study, the presence of a mucocele appearance and increased wall thickness on preoperative CT imaging were identified as potentially valuable predictors in favor of LAMN. Surgical margin positivity and the presence of extraluminal mucin represent key determinants affecting prognosis and recurrence risk. Our findings demonstrate that histopathological examination following acute appendicitis surgery is indispensable not only for diagnostic purposes but also for prognostic assessment. Therefore, careful evaluation of surgical margins and the continuation of long-term oncological follow-up are essential in patients with LAMN.

Keywords: Acute appendicitis, emergency surgery, histopathology, LAMN, rare case

Table 1. Demographic characteristics and presenting findings

Tablo 1. Hastaların Demografik Özellikleri

Özellik	Değer
Toplam hasta sayısı	19
Yaş (ortalama, min–maks)	60,7 (29–86)
Cinsiyet	Kadın: 12 (%63) Erkek: 7 (%37)

Table 1. Demographic Characteristics of the Patients

Characteristic	Value
Total number of patients	19
Age (mean, min–max)	60.7 (29–86)
Sex	Female: 12 (63%) Male: 7 (37%)

Tablo 2. Başvuru ve Radyolojik Bulgular

Özellik	n	%
Başvuru şekli – Akut apandisit	8	42
Başvuru şekli – Diğer yakınmalar	11	58
Apendiks çapı (BT, ortalama)	21 mm	–
Duvar kalınlığı artışı (VAR)	7	37
Mukosel görünümü (VAR)	10	53

Table 2. Clinical Presentation and Radiological Findings

Characteristic	N	%
Mode of presentation – Acute appendicitis	8	42
Mode of presentation – Other complaints	11	58
Appendiceal diameter (CT, mean)	21 mm	–
Wall thickening (PRESENT)	7	37
Mucocele appearance (PRESENT)	10	53

Table 2. Surgical findings and follow-up findings

Tablo 3. Cerrahi Bulgular

Özellik	n	%
Cerrahi teknik – Açık	10	53
Cerrahi teknik – Laparoskopik	9	47
Makroskopik tümör boyutu (ortalama)	7,1 cm	–
Cerrahi sınır – Negatif	18	95
Cerrahi sınır – Pozitif	1	5

Table 3. Surgical Findings

Characteristic	N	%
Surgical technique – Open	10	53
Surgical technique – Laparoscopic	9	47
Macroscopic tumor size (mean)	7.1 cm	–
Surgical margin – Negative	18	95
Surgical margin – Positive	1	5

Tablo 4. Patoloji ve Takip Bulguları

Özellik	n	%
Ekstralüminal müsin / PMP – VAR	3	16
Ekstralüminal müsin / PMP – YOK	16	84
Ortalama takip süresi (ay)	13	–
Nüks – YOK	17	89
Eksitus	2	11

Table 4. Pathological and Follow-Up Findings

Characteristic	N	%
Extraluminal mucin / PMP – PRESENT	3	16
Extraluminal mucin / PMP – ABSENT	16	84
Mean follow-up duration (months)	13	–
Recurrence – ABSENT	17	89
Mortality	2	11

[P-095]

Adjunctive botulinum toxin injection with surgical repair for recurrent rectovaginal fistulas

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Objective: Rectovaginal fistula is an abnormal connection between the rectum and the vagina. Through this connection, passage of flatus or stool from the rectum to the vagina may occur. Patient history and physical examination are usually sufficient for diagnosis. Although many surgical options have been described (e.g., sphincteroplasty, advancement flap, muscle interposition, fibrin glue, plugs), fistula closure remains challenging due to high surgical failure rates. To report the outcomes of a novel treatment approach combining surgical repair with botulinum toxin injection into the lateral internal anal sphincter for the management of recurrent rectovaginal fistula.

Material and Methods: Between 2013 and 2019, eight patients with recurrent rectovaginal fistula underwent a total of ten surgical repairs combined with injection of 100 units of botulinum toxin. Patient characteristics, fistula etiology, prior surgical history, fistula size, and treatment outcomes were analyzed (Figure 1).

Results: Eight patients with recurrent rectovaginal fistula were treated. Etiologies included obstetric trauma (n=3), radiotherapy and rectal surgery (n=2), vaginal reconstruction (n=2), and Crohn's disease (n=1). The median number of previous operations was 1.5 (range: 1-3). Fistula size ranged from 0.5×1 cm to 2×3 cm. Following the combined approach, successful fistula closure was achieved in all cases (100%) (Figure 2).

Conclusion: Botulinum toxin injection into the lateral internal anal sphincter can be successfully used as an adjunct to surgical repair in the treatment of recurrent rectovaginal fistulas.

Keywords: Rectovaginal fistula, botulinum toxin

Table 1. Clinical characteristics of 8 patients with recurrent rectovaginal fistula

Age	BMI	Etiology	Prior operation for RVF	No of fistula repair	Size of Fistula (cm)	Location of RVF	Surgery Type	Additional disease	Chronic medication use
19	29	Neovagen operation	Seton +TVR ERAF	3	3x2	low	TVR 2 month later ERAF	Congenital	cortisone
54	28	RT+ Low Anterior resection	TVR TVR	2	2x2	low	ERAF 2 month ERAF	Rectum ca HT	RT
65	34	RT+ Low Anterior resection	TVR	1	1x1	high	ERAF	Rectum Ca DM + HT	RT
33	23	obstetrical trauma	TVR	1	2x1	low	TVR	no	no
25	23	Neovagen operation	Seton + TVR	2	2x2	high	ERAF	No	Estrogen
31	22	obstetrical trauma	TVR	1	2x1	low	ERAF	no	no
35	28	obstetrical trauma	TVR	1	1x0.5	low	TVR	Romotoit artrit + Multiple sclerosis	Cortisone
39	28	Chron disease + pelvic surgerey	Seton	1	2x1	Low	ERAF		Mesalazine Prednisolone /infliximap

Appriviations

RVF: Rectovaginal Fistula
TVR: Transvaginal Repair
ERAF: Endorectal Advancement flap
DM: diabetes
HT: Hypertension
RT: Radiation Therapy

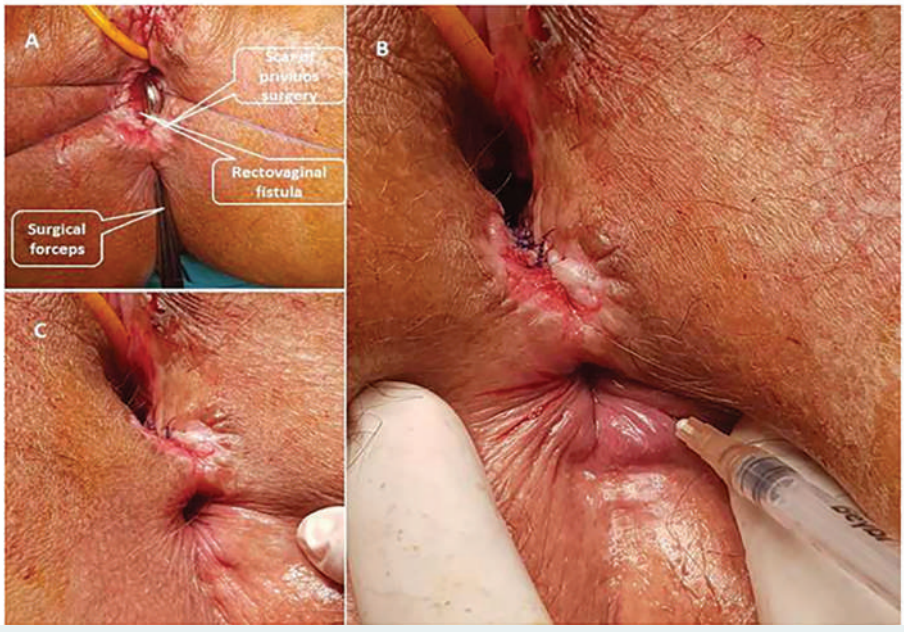


Figure 1. A) Rectovaginal fistula is seen, surgical forceps passing through the fistula. B) After transvaginal repair of the fistula, bilateral botulinum toxin injection in to the internal sphincter muscle is seen. C) After surgical repair and botulinum toxin injection finished.

[P-096]

Complication profile and associated clinical variables in oncoplastic breast surgery: A single-center retrospective study

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Objective: Oncoplastic breast surgery is a multidisciplinary approach aimed at improving aesthetic outcomes while preserving oncologic safety. This single-center retrospective study evaluated the profile of postoperative complications and the clinical variables potentially associated with these complications in patients who underwent oncoplastic breast surgery at our institution between 2019 and 2026.

Material and Methods: This retrospective, single-center study included 16 patients who underwent oncoplastic breast surgery between 2019 and 2026. All procedures were performed by a multidisciplinary team consisting of general and plastic surgeons. Demographic characteristics (age, body mass index), comorbidities (smoking status, diabetes mellitus), surgical features (axillary surgery, implant use), neoadjuvant and adjuvant treatment details, and postoperative complications were recorded. Complications were assessed during the early postoperative period (within 3 months) and graded according to the Clavien-Dindo classification.

Results: All 16 patients were female (100%), with a mean age of 44.5 years and a mean body mass index of 26.83 kg/m². A history of smoking was present in 25% of patients.Surgical management was carried out by a multidisciplinary team in all cases. Sentinel lymph node biopsy and/or axillary dissection were performed in selected patients according to tumor characteristics and clinical stage. Neoadjuvant and adjuvant treatments were planned based on pathological findings and molecular subtype. Early postoperative complications occurred in 18.75% of patients. Most were classified as Clavien-Dindo grade II-IIIb and were successfully managed with medical or surgical intervention. Reoperation within the first year was infrequent, and implant loss was rare. No mortality was observed (0%). During follow-up, the rate of early local recurrence was low, while a limited number of patients developed late distant metastases. The mean follow-up duration was 34.5 months. Oncoplastic surgery was performed more frequently in 2021, 2023, and 2026. Higher body mass index, smoking, and performance of axillary surgery appeared to be associated with morbidity. Although patients receiving neoadjuvant or adjuvant therapy showed a trend toward higher complication rates, advanced statistical analysis was not feasible due to the limited sample size.

Conclusion: This single-center experience demonstrates that oncoplastic breast surgery can be performed safely with acceptable morbidity and zero mortality when a multidisciplinary approach is applied. Complications were generally manageable. Patient-related and surgical factors may influence morbidity. Larger multicenter prospective studies are required to validate these findings and better define risk factors.

Keywords: Morbidity, multidisciplinary surgery, oncoplastic breast surgery, postoperative complications

Table 1. Demographic and clinical characteristics of the patients complication profile

Hasta sayısı	16
Cinsiyet (kadın), n (%)	16 (%100)
Ortalama yaş (yıl)	44.5
Ortalama vücut kitle indeksi (kg/m²)	26.83
Sigara içme durumu, n (%)	4 (%25)
Diyabet mellitus, n (%)	0 (%0)
Koltuk altı ameliyatı, n (%)	3 (%18,75)
Komplikasyonların varlığı, n (%)	5 (%31,25)
Ölümlülük	Hiçbiri

Table 2. Distribution of postoperative complications according to the Clavien-Dindo classification

Clavien-Türkiye sınıfı	Hasta sayısı (n)	%
1. sınıf	11	%68,75
II. sınıf	2	%12,5
Sınıf IIIb	3	%18,75
4-5. sınıf	0	%0

[P-097]

Early clinical and biochemical outcomes of patients undergoing parathyroidectomy for parathyroid hyperplasia: A single-center experience

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Objective: In cases of secondary and tertiary hyperparathyroidism due to parathyroid hyperplasia, surgical treatment becomes a consideration when adequate control cannot be achieved despite medical therapy. Although biochemical improvement is expected following parathyroidectomy, early postoperative hypocalcemia may represent a significant cause of morbidity. The aim of this study was to evaluate the early postoperative clinical and biochemical outcomes of patients operated on at our center and to investigate factors associated with the development of postoperative hypocalcemia.

Material and Methods: Twenty-five patients who underwent parathyroidectomy with a diagnosis of parathyroid hyperplasia were retrospectively reviewed. Demographic characteristics, type of hyperparathyroidism, history of hemodialysis, medical treatments received, preoperative laboratory parameters (calcium, phosphorus, PTH, and ALP), as well as postoperative biochemical course and complications were recorded. Risk factors associated with the development of postoperative hypocalcemia were analyzed.

Results: The mean age of the patients was 56 years, and the majority were operated on for tertiary hyperparathyroidism. The mean preoperative PTH and ALP levels were 1.740 pg/mL and 389 U/L, respectively. A marked decrease in parathormone and phosphorus levels was observed after surgery. The mean calcium level on postoperative day 1 was 8.4 mg/dL. Hypocalcemia developed in six patients (24%), requiring calcium replacement therapy. Patients who developed hypocalcemia had higher preoperative PTH and ALP levels. No major surgical complications were observed.

Conclusion: Parathyroidectomy is an effective and safe treatment option for hyperparathyroidism due to parathyroid hyperplasia. However, postoperative hypocalcemia is frequently observed in patients with a high preoperative disease burden. Close biochemical monitoring and early replacement therapy are essential in these patients.

Keywords: Parathyroidectomy, hyperparathyroidism, hypocalcemia

[P-098]

Global scientific attention to the Israel-Gaza conflict: A bibliometric and thematic analysis of health and humanitarian research

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Objective: Armed conflicts and humanitarian crises, particularly in the Middle East, have led to profound disruptions in civilian health and psychosocial well-being. In recent years, the Gaza region has become a focal point of such disruptions, prompting increasing academic attention. This study provides a comprehensive bibliometric analysis of the global scientific output related to war-affected civilian populations in the Middle East, with a special emphasis on Gaza and Palestine.

Material and Methods: We conducted a bibliometric analysis of 488 peer-reviewed articles published between 1961 and 2025, retrieved from PubMed database. Quantitative metrics such as annual scientific production, author productivity (Lotka's Law), institutional contributions, international collaborations, keyword co-occurrence, and thematic evolution were assessed using Bibliometrix (R package). Visualization techniques included co-authorship networks, thematic maps, treemaps, and trend analysis.

Results: Scientific interest in war-related civilian health surged significantly after 2023, reflecting the global academic response to escalating humanitarian crises in Gaza. A small group of highly productive authors and institutions (primarily based in Gaza, Israel, and Western academic centers) contributed disproportionately to the literature (Figure 1). Core themes include psychosocial trauma, gender disparities, child vulnerability, warfare-related epidemiology, and health service disruption. Keywords such as "humans," "female," "warfare," "child," "Middle East," and "mental health" emerged as dominant focal points (Figure 2). International collaboration rates reached 20.9%, with a noticeable rise in publications from high-impact journals.

Conclusion: The intersection of warfare, civilian suffering, and public health has generated a distinct, rapidly expanding body of research. This bibliometric study maps the scientific terrain of conflict-related health literature. These bibliometric patterns are consistent with humanitarian data from the United Nations and UNICEF, which indicate that women and children constitute a significant portion of civilian casualties in Gaza. Future studies must prioritize inclusive research agendas that center the voices of affected populations and address structural inequities in global health scholarship.

Keywords: Gaza, Middle East, war, mental health, bibliometric analysis, public health

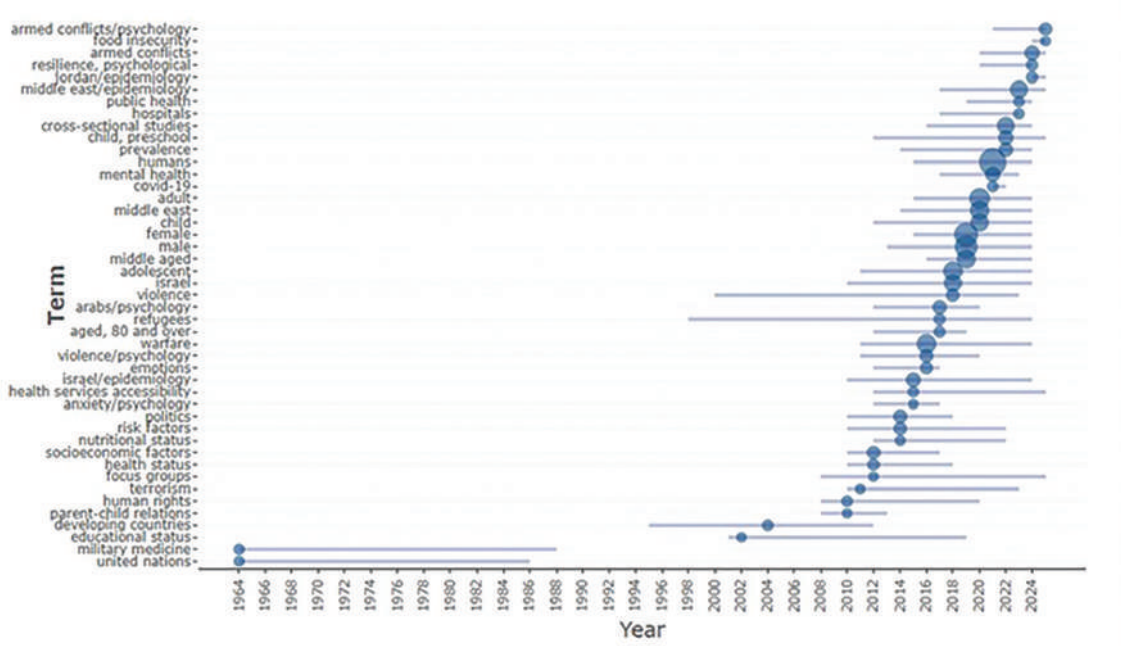


Figure 1.



Figure 2.

[P-099]

The ultimate killer in surgery: A sepsis-like syndrome or cytokine storm induced by surgery

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Objective: Surgical trauma triggers a cascade of immunological responses that can escalate into a cytokine storm—a life-threatening hyperinflammatory state characterized by massive elevations of pro- and anti-inflammatory mediators. This phenomenon shares pathophysiological features with sepsis-like syndrome and systemic inflammatory response syndrome (SIRS), contributing significantly to postoperative multiple organ dysfunction syndrome (MODS). Understanding the temporal dynamics of surgery-induced cytokine release and implementing damage control strategies are critical for improving patient outcomes, particularly in high-risk populations undergoing major abdominal or cardiac procedures. When we look backwards, the most common cause of mortality in our clinical surgical practice has often been sudden and unexpected intraoperative and early postoperative cytokine storms.

Material and Methods: This review synthesizes evidence from prospective observational studies, randomized controlled trials, and systematic reviews examining cytokine storm characteristics in surgical patients. Studies analyzed plasma cytokine levels (IL-1, IL-6, IL-8, IL-10, IL-16, TNF-α) at multiple time points using Luminex technology and ELISA. Patient cohorts included those undergoing cardiac surgery with cardiopulmonary bypass, abdominal surgery for intra-abdominal sepsis, and trauma patients requiring damage control surgery. Principal component analysis was employed to establish cytokine storm intensity curves. Therapeutic interventions including hemoadsorption (CytoSorb®), damage control surgery techniques, and targeted immunomodulation were evaluated.

Results: Cytokine storm response occurs within hours of surgical insult, with peak concentrations predating clinical deterioration markers. In severe cases, IL-6 levels reached 425.1 pg/mL (>1.200× normal), IL-10 reached 198.5 pg/mL (>1.800× normal), and IL-16 reached 623.0 pg/mL (>240× normal). Maximum cytokine storm intensity preceded peak Vasoactive-Inotropic Scores and Sequential Organ Failure Assessment scores, suggesting a critical intervention window. Damage control surgery—involving abbreviated initial operations followed by resuscitation and staged definitive repair—demonstrated reduced inflammatory burden compared to prolonged single-stage procedures. Hemoadsorption therapy showed promise in cytokine removal, though survival benefits remain inconclusive in randomized trials.

Conclusion: The early and predictable nature of surgery-induced cytokine storms presents opportunities for proactive intervention. Biomarkers such as IL-6, IL-10, and IL-16 may guide timing of immunomodulatory therapies within the critical 24-hour postoperative window. Damage control surgery philosophy aligns with this understanding by minimizing the "second hit" phenomenon—where prolonged operative stress compounds the initial inflammatory insult. Future therapeutic strategies should integrate cytokine storm biomarker monitoring with damage control principles, hemoadsorption technologies, and targeted anti-inflammatory interventions to mitigate progression from controlled inflammation to pathological sepsis-like states.

Keywords: Sepsis, sepsis-like syndrome, cytokine storm, damage control surgery

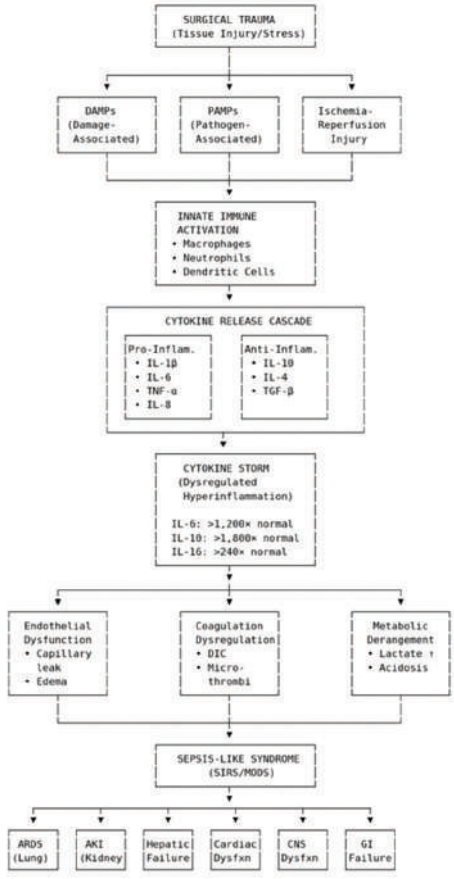


Figure 1. Etiopathogenesis of the cytokine storm.

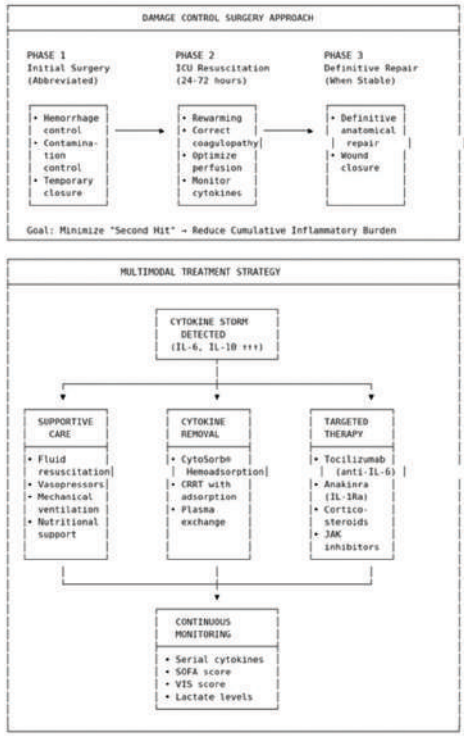


Figure 2. Treatment algorithms.

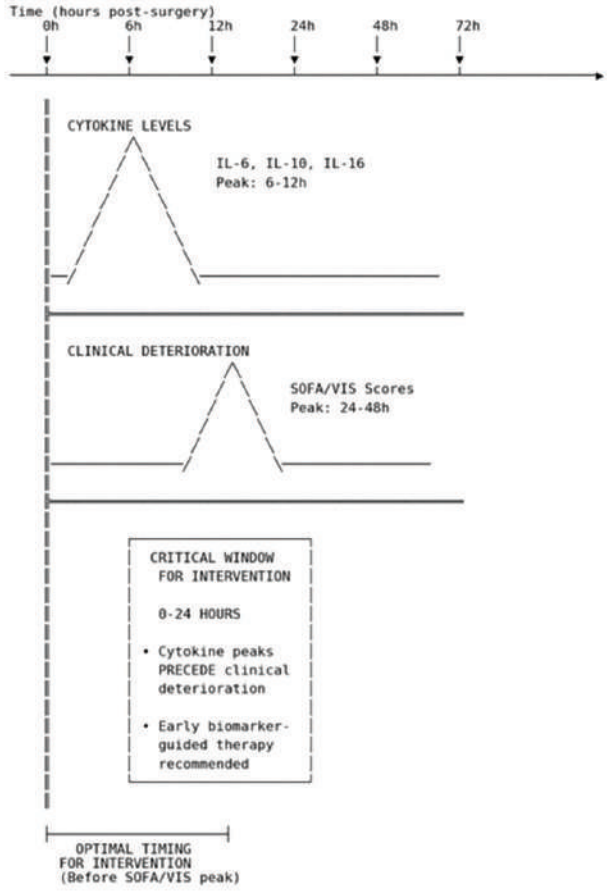


Figure 3. Cytokine dynamics.

[P-100]

Clinical management of rectal foreign bodies: A single-center experience

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Objective: Rectal foreign bodies are a rare clinical entity in general surgery but present distinctive diagnostic and therapeutic challenges. Cases associated with sexual preferences and social taboos often involve delayed presentation, difficulty obtaining a reliable medical history, and loss to follow-up, complicating clinical assessment and management. Additionally, variability in the type, size, and location of foreign bodies hinders the development of a standardized clinical approach. Although management algorithms prioritizing minimally invasive methods have been described, they do not fully address case heterogeneity, and clinical decision-making frequently relies on individual assessment. Therefore, the management of rectal foreign bodies remains a clinical problem with undefined standards. This study aims to contribute to the literature by sharing our clinical experience in managing rectal foreign bodies.

Material and Methods: Between January 2020 and January 2026, the demographic characteristics of patients treated for rectal foreign bodies, along with the diagnostic and therapeutic methods applied, were retrospectively reviewed using the hospital database.

Results: Between January 2020 and January 2026, 15 patients were treated in our clinic for rectal foreign bodies. The mean age was 41.2 years (22-66); 2 patients were female (13%) and 13 were male (87%). Upright plain abdominal radiography was performed in all patients, and abdominopelvic computed tomography was additionally obtained in 10 patients. Colon perforation with signs of peritonitis was detected in one patient, while no perforation was observed in the others. Foreign bodies were removed by digital rectal examination in 5 patients, anal examination under sedation in 1 patient, and rectosigmoidoscopy in 7 patients. In 2 patients, spontaneous passage occurred during intensive care follow-up due to concomitant drug-containing packages in the small intestine. Colon repair and colostomy were performed in the patient with perforation. Extracted foreign bodies were heterogeneous, including bottles, cucumbers, brushes, test tubes, and drug packages. Five patients were followed on an outpatient basis, nine were discharged the next day, and one on the seventh day. No mortality was observed.

Conclusion: Rectal foreign bodies, although rare, are associated with considerable uncertainty in clinical evaluation and management. In our study, most cases were safely managed with non-operative methods, while surgical intervention was required only in a limited number of complicated cases. However, delayed presentation, unreliable medical history, and case heterogeneity hinder the application of a standardized management strategy. Our single-center six-year experience supports prioritizing an individualized, stepwise, and minimally invasive approach in the management of rectal foreign bodies.

Keyword: Rectal foreign bodies

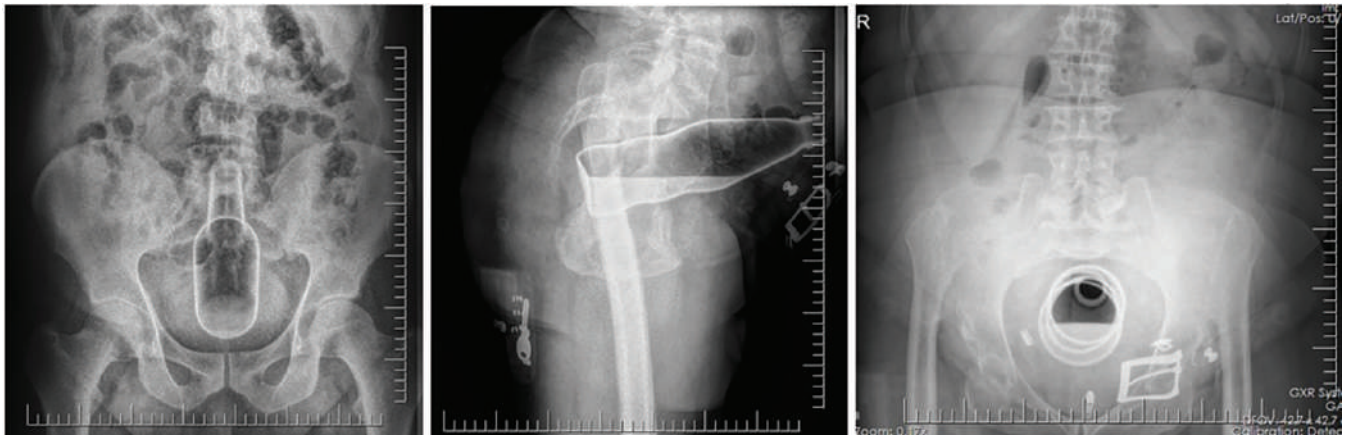


Figure 1. Foreign body on radiography.

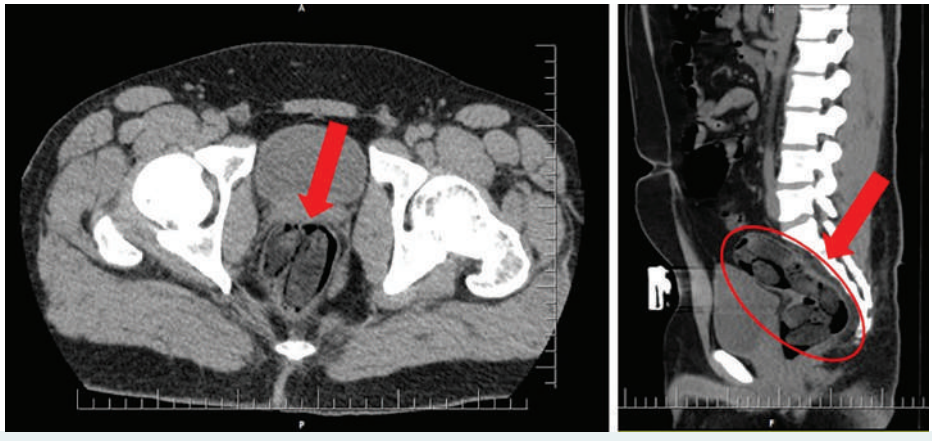


Figure 2. Abdominopelvic CT image showing drug packages in the gastrointestinal tract.

[P-101]

Evaluation of motorcycle accident cases admitted to our emergency clinic in 2025 in terms of ISS and NISS trauma scores

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Objective: Injury severity score (ISS) and new injury severity score (NISS), are anatomical scores calculated based on the abbreviated injury scale (AIS). The NISS scores multiple injuries in the same topographic region better than the ISS. The hypothesis of this study is that it does not show the same success in situations that can cause multiple orthopedic injuries, such as motorcycle accidents.

Material and Methods: In 2025, cases of motorcycle accidents brought to our hospital's emergency department were evaluated in terms of ISS and NISS scores, the clinic they were hospitalised, and need for intensive care. These scores were compared in cases admitted to the orthopedics and traumatology clinic (SPPS 27.0, Mann-Whitney U test).

Results: Of the 306 cases, 22 (7.2%) were admitted to the intensive care unit, 30 (9.8%) to the orthopedics and traumatology clinic, 13 (4.2%) to the thoracic surgery clinic, and 7 (2.3%) to other clinics. The mean ISS score was calculated as 6.57 (1-51) and the mean NISS score as 7.43 (1-51) in all cases. Both the ISS and NISS scores of the hospitalized cases were statistically significantly higher than those of the cases that did not require hospitalization (U=1776.5, p<0.001). The scores were also significantly higher in the cases admitted to the intensive care unit than in other cases (ISS U=180.5 p<0.001 and NISS U=171.5, p<0.001). However, no statistically significant difference was found between cases admitted to the orthopedics and traumatology clinic and cases admitted to other clinics (ISS U=226, p>0.05 and NISS U=230, p>0.05).

Conclusion: While ISS and NISS scores divide the body into 6 regions. ISS determines the highest score in each region and sums the squares of the top 3 regions. NISS, however, sums the squares of the top 3 pathologies regardless of topographical region. If there is multiple trauma in a single region, the ISS score may be lower than the NISS score overall. Therefore, we chose motorcycle accidents that can cause multiple fractures as our target group. Orthopedists make treatment decisions not only based on the severity of the pathology, but also considering age, the patient's general condition, the chosen treatment method, and even hospital conditions. For hospitals that want to measure themselves based on trauma scores, this situation can lead to misleading results. However, we did not obtain statistically significant results. Nevertheless, we believe that the anatomical scoring system NISS should not be used alone.better with one of the physiological trauma scores.

Keywords: Trauma scores, ISS, NISS

Table 1. Statistically results

Compared data	U	p
Hospitalisation	1776	<0.01
Need for intensive care unit	180	<0.01
Ortophedics and traumatology vs. other clinics	230	>0.05

[P-102]

The effect of nursing education on anxiety levels in patients with thoracic tube insertion

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Objective: Chest tube insertion is an invasive procedure that may increase fear, stress, and anxiety in patients. Nursing education provided before and after the procedure may improve patients' adaptation and psychological comfort. This study aimed to investigate the effect of nursing education on hospital anxiety levels in patients undergoing chest tube insertion.

Material and Methods: This study included 35 patients aged 18 years and older who were hospitalized in the Thoracic Surgery Department of Ondokuz Mayıs University Health Practice and Research Center and underwent chest tube insertion. Nursing education lasting 15-20 minutes was provided before and after the procedure. Pulse rate, respiratory rate, systolic and diastolic blood pressure, and body temperature were recorded, and the hospital anxiety assessment score (HAAS) was administered before and after the intervention. Data were analyzed using the SPSS statistical analysis program.

Results: The mean age of the patients was 57.6±16.6 years, and the mean length of hospital stay was 4.7±1.9 days. Of the patients, 40% were female and 60% were male. The mean body weight was 76.5±11.2 kg in female patients and 73.7±16.0 kg in male patients. All patients were mobilized, and 97.1% were fed with regimen 3. According to diagnoses, 65.7% of the patients had lung masses, 8.6% had pneumothorax, and 25.7% had other diagnoses (Table 1). No statistically significant differences were observed in vital signs before and after chest tube insertion ($p>0.05$). However, a statistically significant decrease in HAAS was found after nursing education ($p<0.05$) (Table 2).

Conclusion: Although chest tube insertion is an invasive procedure that increases anxiety, nursing education provided before and after the procedure significantly reduces anxiety levels without causing adverse changes in vital signs. Patient education should be considered a fundamental component of nursing care in surgical interventions.

Keywords: Thorax tube, anxiety, nursing education, nursing care

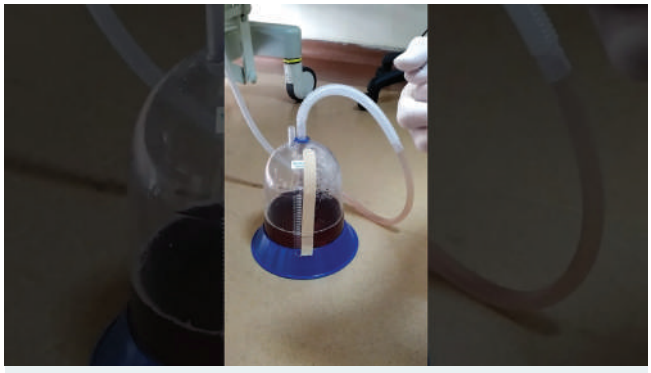


Figure 1. Thorax tube.

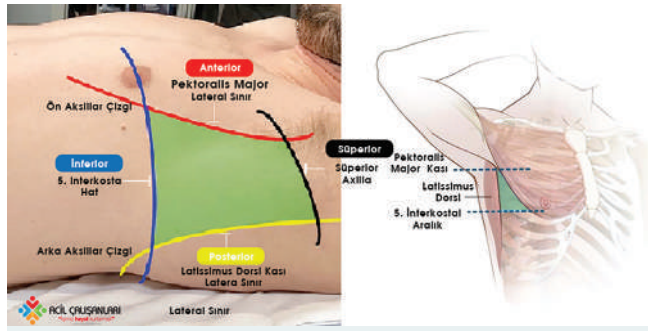


Figure 2. Insertion of a thoracic tube.

Table 1. Demographic characteristics of patients undergoing chest tube insertion

Characteristics	n=35
Age (years), mean ± SD	57.6±16.6
Gender (female/male), n (%)	14/21 (40%/60%)
Weight (kg), mean ± SD - female	76.5±11.2
Weight (kg), mean ± SD - male	73.7±16.0
Length of hospital stay (days), mean ± SD	4.7±1.9
Lung mass, n (%)	23 (65.7%)
Pneumothorax, n (%)	3 (8.6%)
Other diagnoses*, n (%)	9 (25.7%)
Mobilization, n (%)	35 (100%)
Nutrition regimen 1 (liquid), n (%)	1 (2.9%)
Nutrition regimen 3, n (%)	34 (97.1%)

*: Other diagnoses: pleural effusion, achalasia, etc., SD: Standard deviation.

Table 2. Comparison of vital signs and hospital anxiety assessment score (HAAS) before and after chest tube insertion

Parameters (n=35)	Before mean ± SD	After mean ± SD	p
Pulse rate	82.0±10.3	81.0±8.8	0.605
Systolic blood pressure	113.4±9.6	112.3±5.5	0.545
Diastolic blood pressure	69.4±5.9	70.4±4.6	0.422
Respiratory rate	22.3±0.71	22.1±0.7	0.317
Body temperature	36.3±0.28	36.2±0.3	0.188
HAAS	16.8±8.1	10.7±4.6	<0.05

SD: Standard deviation.

[P-117]

National surgical congress proceedings: Trends from 2012 to 2024. What's the next one?

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Objective: Rapid developments and changes in medicine have also led to fundamental changes in surgical disciplines. Turkish surgery is among the countries that have quickly adapted to these developments. In this study, we aimed to examine the thematic changes in the topics of papers and sessions presented at the National Surgical Congresses (UCK) between 2012 and 2024.

Material and Methods: The analysis was conducted using a qualitative comparison method based on accessible abstracts and session titles from the 18th (2012), 19th (2014), 21st (2018), 22nd (2022), and 23rd (2024) UCK, which are available on our association's website. Since the data examined represents only selected sessions and abstracts, not the entire conference content, the results should be considered a sample reflecting the general trends of the conferences. Abstract titles and main session themes were examined to determine the shift in scientific focus over the years within major surgical categories such as endocrine, gastrointestinal/colorectal, and advanced technology.

Results: Four main trends were observed: expansion of disciplinary scope: while there was a strong emphasis on endocrine surgery in 2012 and 2018, as of 2014, the congress content covered all subspecialties of general surgery, including gastrointestinal, colorectal, HPB, and bariatric surgery. Gastrointestinal/colorectal surgery, in particular, has consistently occupied a significant place on the congress agenda. The pace of technological advancement: the field of minimally invasive surgery has evolved from traditional methods in 2012 to advanced techniques such as scarless surgery (TOETVA) in 2018 and robotic surgery in 2022. In 2022, experimental approaches such as 3D bioprinting and molecular biomarkers also held an important place. New areas of expertise: the congress began to include specialized areas such as wound and burn care and adrenal surgery, and in 2024, it highlighted breast surgery, cytoreductive, and complex surgery as main topics. Focus on surgical quality and management: non-clinical but critical topics such as the philosophy of surgical safety, ethics, and the human factor, which became prominent at the 2024 congress, demonstrate the importance modern surgical practice places on holistic management and patient safety.

Conclusion: UCKs have evolved from a sub-discipline focus to a comprehensive scientific platform combining advanced technology and interdisciplinary approaches. We can anticipate that topics at the 2026 congress will include new management approaches such as long-term outcomes of robotic surgery applications and error analysis, or topics at the intersection of technology and basic sciences such as the use of artificial intelligence in gastrointestinal surgical oncology.

Keywords: National surgical congress, general surgery, surgical oncology, artificial intelligence, trend

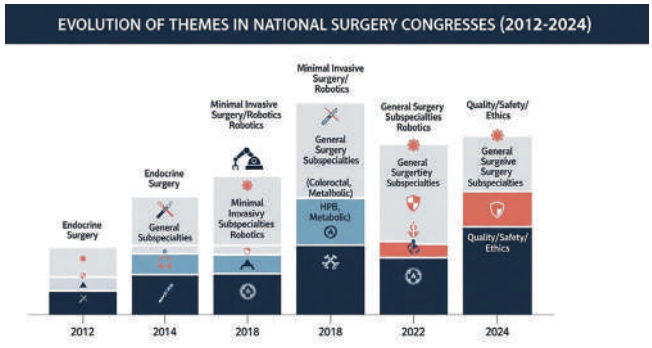


Figure 1. Congress abstract trends over the years.

Ana Konu / Tema	18. UCK 2012 (Görünür Odak)	19. UCK 2014	21. UCK 2018	22. UCK 2022	23. UCK 2024
Baskın Ana Disiplinler	Yoğun Endokrin Cerrahi (Tiroid/Paratiroid)	Çeşitlilik (Kolorektal, HPB, Fıtık, Obezite).	Yoğun Endokrin Cerrahi.	Geniş Çeşitlilik (Endokrin, HPB, Yara, Adrenal).	Kapsamlı (Tüm ana disiplinler, Meme Cerrahisi dahil).
Minimal Invaziv Cerrahi (MIC)	Video Yardımlı Tiroidektomi.	MIC Teknikleri (Rektum).	İzsiz Cerrahi (TOETVA).	Robotik Cerrahi (Adrenal).	Ana Konu (Gelişmiş teknikler ve IONM).
Obezite / Metabolik Cerrahi	Yok.	Var (DM etkileri, teknik karşılaştırmaları).	Yok.	Yok.	Ana Konu
Kolorektal Cerrahi	(Görünürde Yok)	Var (Onkolojik sınırlar, laparoskopi).	Yok.	Yok.	Ana Konu (Pelvik Cerrahi dahil).
İleri Teknoloji / Deneysel	Yok.	Deneysel (FDT).	Yok.	Yüksek Odak (3D Biyobaskılama, miRNA, Nanofiber).	Orta (Teknolojik yardımcılar, IONM).
Cerrahi Kalite / Yönetim	Yok.	Yok.	Yok.	Yok.	Ana Konu (Etik, Güvenli Cerrahi, İnsan Faktörü).
Onkoloji Desteği	Temel onkoloji (rastlantısal karsinom).	İmmünoloji (KIR) ve Onkolojik Sınırlar.	Hastalık ilişkileri (pHPT-PTC).	Moleküler biyoloji (mRNA).	Yüksek Odak (Meme Kanseri alt grupları, Sitoredüktif).

Figure 2. Congress topics.

[P-118]

One-year experience of gastric and colorectal ESD at a tertiary center: Indication diversity and early outcomes

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Objective: Endoscopic submucosal dissection (ESD) is a minimally invasive technique that enables high en-bloc and R0 resection rates for superficial gastrointestinal neoplasms. In Western series, R0 resection rates are reported at 80-91% for gastric lesions and approximately 92% for colorectal lesions. This study aimed to present the spectrum of indications, histopathology, and early clinical outcomes of gastric and colorectal ESD procedures performed over one year at a tertiary center.

Material and Methods: Patients undergoing ESD for gastric or colorectal lesions between 2025 and 2026 were retrospectively analyzed. Demographic data, lesion location, procedural details, histopathology, resection margin status, and complications were recorded. Mucosal defects were closed with endoclips or, if large, left to heal under endoscopic follow-up. Major procedural complications were noted.

Results: A total of 12 patients (7 males, 5 females; mean age 66.2 years) underwent 13 ESD procedures. Five lesions (38.5%) were gastric and eight (61.5%) colorectal. Gastric lesions were located in the antrum (n=3), antrum-corpus junction (n=1), and corpus (n=1); histopathology included GIST (low-risk, 3 cm), hyperplastic polyp with low-grade dysplasia, neuroendocrine tumor (pending), submucosal lesion (possible leiomyoma), and chronic gastritis. Colorectal lesions were located in the cecum (n=3), ascending colon (n=2), transverse colon (n=1), hepatic flexure (n=1), and rectum (n=1); histopathology included tubular adenoma, tubulovillous adenoma, intramucosal carcinoma arising in serrated adenoma, and serrated adenoma. All colorectal lesions had negative lateral and deep margins. No major complications occurred, except one cecal perforation during polyp removal, successfully managed with endoscopic clipping and conservative care. Post-procedure imaging revealed pneumoperitoneum without contrast leakage. One patient required intraperitoneal air aspiration via 16 Fr catheter due to persistent distension; the patient subsequently recovered and was discharged.

Conclusion: Our series demonstrates high R0 resection rates and low complication rates, consistent with Western literature. Notably, gastric subepithelial lesions such as GISTs were successfully enucleated via ESD. R0 resection was also achieved in technically challenging colorectal locations, including the cecum and hepatic flexure, highlighting our center's technical proficiency. These findings suggest that the ESD learning curve can be overcome early, and high success rates may be achieved with experienced endoscopists even with fewer than the previously suggested 50-100 cases. Overall, one-year experience indicates that gastric and colorectal ESD can be performed safely and effectively across a broad spectrum of indications.

Keywords: Endoscopic submucosal dissection (ESD), gastric and colorectal lesions, early outcomes

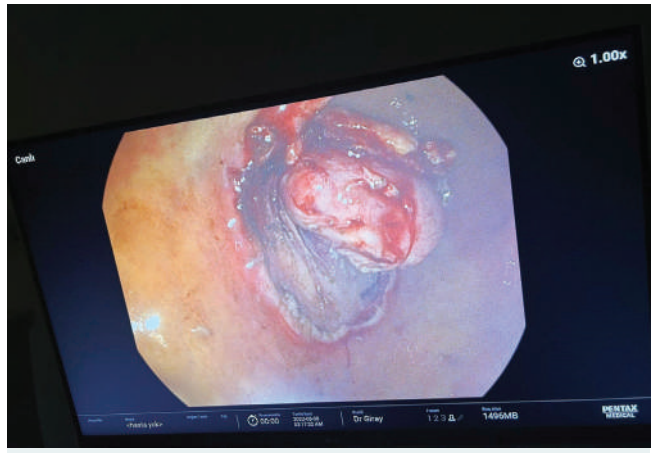


Figure 1. Enucleation was performed by endoscopic submucosal dissection at the level of the gastric incisura angularis.



Figure 2. ESD at the gastric antrum-corpus junction.

Demographic, clinical and histopathological characteristics of patients undergoing ESD

Parameter findings

Number of patients 12

Total ESD procedures 13

Gender7 Male (58.3%)/5 Female (41.7%)

Mean age 66.2 years

Lesion location stomach: 5 (38.5%)/colorectal: 8 (61.5%)

Gastric localizations antrum (n=3), antro-corporal junction (n=1), corpus (n=1)

Gastric histopathology GIST (low risk, 3 cm); hyperplastic polyp with low-grade dysplasia; neuroendocrine tumor?; submucosal lesion (leiomyoma?); chronic gastritis*

Colorectal localizations cecum (n=3), ascending colon (n=2), transverse colon (n=1), hepatic flexure (n=1), rectum (n=1)

Colorectal histopathology tubular adenoma; tubulovillous adenoma; traditional serrated adenoma with intramucosal carcinoma focus (high-grade dysplasia); serrated adenoma

Surgical margins (colorectal) negative (basal and lateral) in all lesions

Major complications none (no perforation or bleeding)

Mucosal defect management closure with endoclips or left for secondary healing in large defects.

[P-120]

Male breast cancer: A single-center retrospective descriptive study

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Objective: Male breast cancer (MBC) accounts for approximately 1% of all breast cancers. Due to its low incidence, data on the clinical, pathological, and biological characteristics of the disease are limited. Diagnosis is often made at an advanced age, and delayed presentation and lack of awareness can negatively affect the prognosis. Because of its rarity, MBC is often managed according to the treatment principles of female breast cancer. This study aimed to define the demographic, surgical, and pathological characteristics of MBC patients operated on at a single center.

Material and Methods: This retrospective and descriptive study was conducted by reviewing the files of male patients who underwent surgery for breast cancer between 2019 and 2025. Patient age, preoperative imaging findings, presence of distant metastasis, surgical method used, histopathological diagnosis, and immunohistochemical characteristics (ER, PR, HER2/CERB, Ki-67) were recorded. Data were anonymized for analysis. In statistical analysis, continuous variables were presented as mean ± standard deviation or median, and categorical variables as number and percentage (%). Since the study is descriptive, no further statistical comparisons were made.

Results: The study included 10 MBC patients. The mean age of the patients was 66.7±11 years. Preoperative evaluation revealed no distant metastases in any patient. The most frequently used surgical method was modified radical mastectomy, and sentinel lymph node biopsy was performed in selected cases. Histopathological diagnosis in all patients was invasive breast carcinoma, NST (ductal type). Immunohistochemical examination showed: ER positivity: 100%, PR positivity: 100%, HER2 (CERB) positivity: 50%, and median Ki-67 value: 15%. These findings indicate that the vast majority of patients have hormone receptor-positive biology.

Conclusion: Our study revealed that MBC is a disease diagnosed at an advanced age and has a high hormone receptor positivity rate. Our findings are consistent with EMC series reported in the literature. The detection of ER and PR positivity in all patients supports endocrine therapy as a fundamental approach in the treatment of EMC. The HER2 positivity rate of 50% suggests that targeted therapies may also play an important role in this patient group. The dominance of modified radical mastectomy in the surgical approach is related to the limited size of male breast tissue and the frequent retroareolar location of tumors. Although MBC is rare, it mostly exhibits hormone receptor-positive biological characteristics. Early diagnosis and appropriate surgery, along with a multidisciplinary approach, can improve the prognosis in these patients.

Keywords: Male breast cancer, hormone receptors, modified radical mastectomy, immunohistochemistry, retrospective study



Figure 1. Left breast malignity - preoperative.

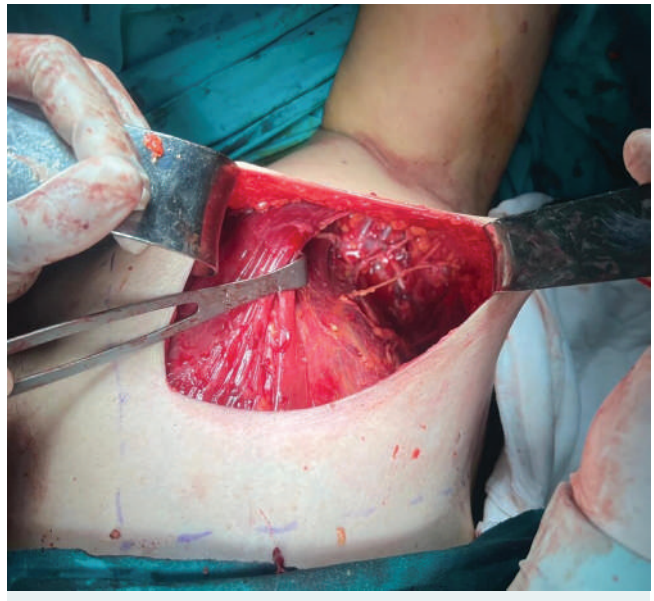


Figure 2. Left modified radical mastectomy - intraoperative.

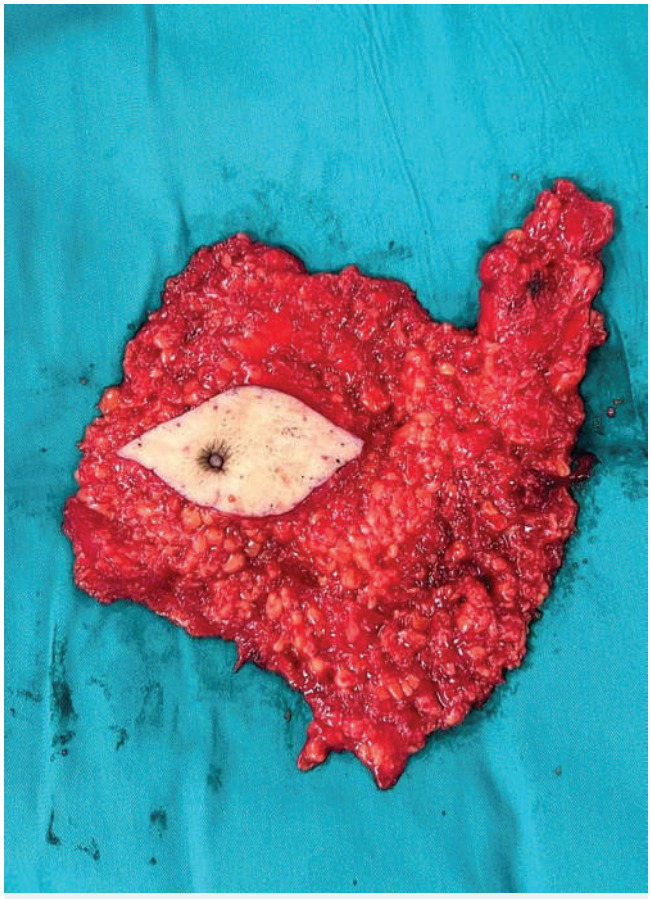


Figure 3. Left modified radical mastectomy - specimen.

Table 1. Demographic, clinical, and pathological characteristics of male breast cancer patients

Variable	Value
Number of patients	10
Sex	Male (10)
Mean age (years)	66.7 (range: 53-84 years)
Tumor location	
-Right breast	3
-Left breast	6
-Bilateral	1
Presence of distant metastasis	2
Surgical procedures	
Mastectomy	4
Modified radical mastectomy	6
Sentinel lymph node biopsy	4
Mean length of hospital stay (days)	4.1 (range: 2-7 days)
Neoadjuvant chemotherapy	1
Chemotherapy	9
Radiotherapy	3
Tumor type	
Invasive ductal carcinoma	10
Mean tumor diameter (cm)	3.2 (range: 2-6 cm)
Lymph node status	
Metastatic lymphadenopathy	5
Reactive lymphadenopathy	10
Perineural invasion	7
Estrogen receptor positivity	10
Progesterone receptor positivity	10
HER2 (c-erbB2) positivity	5
Mean Ki-67 index (%)	25.8 (range: 3-90)
ICU follow-up	0
Blood transfusion	0
Mortality	0
Mean follow-up duration (years)	3.9 (range: 2-7 years)

[P-122]

Bibliometric analysis: AI and colorectal cancer surgery (2020-2026)

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Objective: Artificial intelligence (AI) has rapidly emerged as a transformative technology in the field of colorectal cancer and surgery, offering new opportunities for early detection, diagnosis, treatment planning, and outcome prediction. As research in this interdisciplinary area accelerates, a comprehensive bibliometric analysis is essential to map the scientific landscape, identify influential authors, institutions, and journals, and highlight emerging trends and research hotspots. This study aims to systematically evaluate the global research output on AI applications in colorectal cancer and surgery, and impact of this dynamic and rapidly growing field.

Material and Methods: A bibliometric analysis was conducted using publication data exported from the Scopus database. The dataset comprised articles related to AI and colorectal cancer. Descriptive statistics were used to identify the most prolific authors, journals, and countries. Citation analysis was performed to determine the most influential articles. The top 10 authors, journals, and countries were identified based on publication counts. The most cited articles were ranked by total citation count.

Results: The most prolific authors in the field were Ichimasa, Katsuro and Kudo, Shinei, each contributing 13 publications, followed by Misawa, Masashi (10 publications), and Mori, Yuichi (8 publications). Several other authors, including Miyachi, Hideyuki and Kouyama, Yuta, also made significant contributions. The majority of articles were published in high-impact journals, with Frontiers in Oncology (12 articles) and European Journal of Surgical Oncology (10 articles) being the most frequent sources. "Artificial intelligence in colorectal cancer screening: A review" (2021), received 188 citations. Other highly cited works included "Transformer-based biomarker prediction from colonoscopy images" (2023, 170 citations) and "Artificial intelligence system to determine risk of colorectal cancer" (2021, 152 citations). China led in publication output with 171 articles, followed by the United States (157), United Kingdom (98), and Japan (90).

Conclusion: The bibliometric analysis reveals a rapidly expanding body of literature on AI in colorectal cancer and surgery, with a notable surge in publications over the past five years. This growth reflects the increasing recognition of AI's potential to enhance diagnostic accuracy, optimize surgical outcomes, and personalize patient care. Leading authors and institutions have contributed significantly to the field, and high-impact journals have provided platforms for disseminating key advancements. The shift in research focus from traditional image analysis to advanced deep learning and predictive modeling underscores the evolving landscape and the integration of AI into clinical workflows. However, challenges remain, including the need for standardized methodologies, validation in diverse populations, and addressing ethical and regulatory considerations.

Keywords: Artificial intelligence, colorectal cancer, colorectal surgery

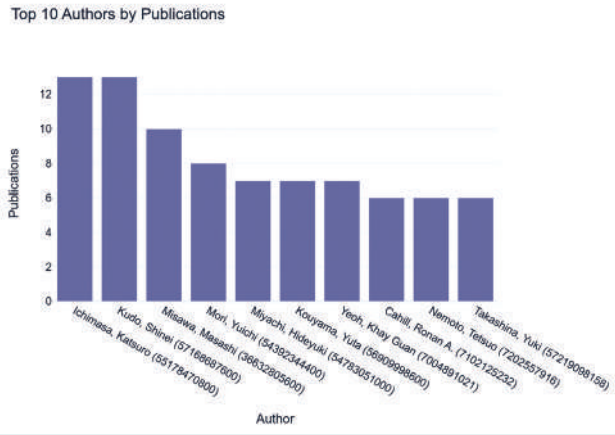


Figure 1. Top 10 authors by publication count.

Journal	Publications
Frontiers in Oncology	12
European Journal of Surgical Oncology	10
Cancers	9
Surgical Endoscopy	8
Gastrointestinal Endoscopy	7
The Lancet Gastroenterology and Hepatology	6
World Journal of Gastroenterology	6
Journal of Clinical Medicine	6
Digestive Endoscopy	6
Annals of Surgical Oncology	5

Figure 2. Top journals.

Title	Cited by	Year
Artificial intelligence in colorectal cancer screening, diagnosis and treatment. A new era	188	2021
Transformer-based biomarker prediction from colorectal cancer histology: A large-scale multicentric study	170	2023
Artificial Intelligence System to Determine Risk of T1 Colorectal Cancer Metastasis to Lymph Node	152	2021
Reducing adenoma miss rate of colonoscopy	102	2021

Figure 3. Most cited articles.

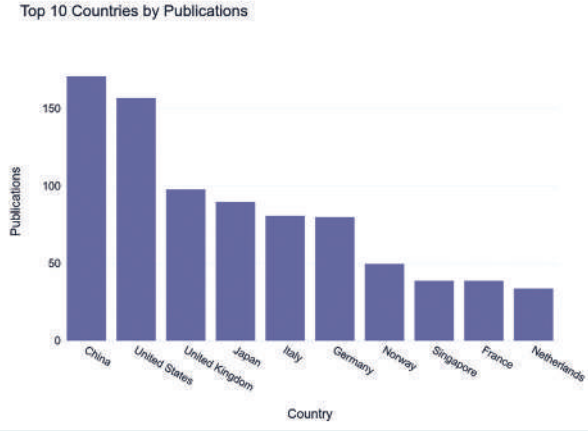


Figure 4. Top 10 countries.

[P-123]

Experience of laparoscopic colorectal surgery in a newly established general surgery clinic: Analysis of the first 26 cases

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Objective: Laparoscopic colorectal surgery (LCS) is becoming the gold standard today due to shorter hospital stays, fewer postoperative complications, faster return to daily life, and oncological results similar to conventional colorectal surgery. In this study, we aimed to present the clinical, perioperative, and short-term postoperative outcomes of LCS cases performed in our clinic, accompanied by demographic data and in light of the current literature.

Material and Methods: The data of 26 patients who underwent laparoscopic surgery for colorectal malignancy and benign diseases in our clinic were retrospectively analyzed. Patients' demographic characteristics, stages, surgical features, operation times, lengths of hospital stay, and complication rates were analyzed.

Results: The study included 15 females (57.6%) and 11 males (42.4%), with a mean age of 64.1 years. The mean body mass index of the patients was 27.11 kg/m^2. The procedures performed were laparoscopic anterior resection in 9 patients (34.6%), laparoscopic right hemicolectomy in 8 patients (30.7%), laparoscopic low anterior resection in 5 patients (19.2%), total mesorectal excision in 1 patient, conventional right hemicolectomy after laparoscopic exploration in 2 patients, and conventional abdominoperineal resection after laparoscopic exploration in 1 patient. The mean operation time was 269 minutes, and the mean hospital stay was 6.6 days. The total number of complications was 2 (7.7%), and no mortality was observed. One patient's intraoperative small bowel injury was repaired primarily, and one patient was reoperated due to a postoperative intraabdominal collection. According to the pathology data, of the 26 patients, 6 (23%) were Stage I, 6 (23%) were Stage II, 12 (46%) were Stage III, and 2 patients were evaluated as having low-grade dysplasia.

Conclusion: LCS applications performed in our clinic are safely carried out with low complication rates and short hospital stays. From the perspective of a training clinic, the contribution of these standardized techniques to resident observation and education is significant.

Keywords: Laparoscopic colorectal surgery, clinical outcomes, minimal invasive surgery

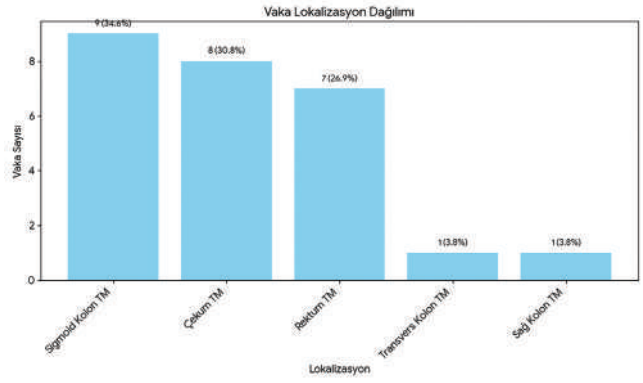


Figure 1. Distribution of case localizations.

[P-124]

Our clinical experience with wirsungojejunostomy types: A single-center experience

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Objective: Whipple procedure-related wirsungojejunostomy anastomosis leakage due to malignancy is a serious complication that prolongs hospital stay and can even significantly increase mortality. This study aimed to evaluate the development and severity of postoperative leakage according to the types of wirsungojejunostomies performed in our clinic between January 2024 and January 2026; a retrospective study was conducted

Material and Methods: Thirty patients who underwent Whipple procedure at our clinic between these dates were retrospectively reviewed. Age, gender, diagnosis, type of wirsungojejunostomy anastomosis, and postoperative amylase level, as well as drain amylase level, were recorded. The Callery fistula risk score, used to determine the risk of leakage, and the ISGPS 2016 scores, used to determine the severity of leakage, were calculated retrospectively from patient data. The development of postoperative leakage/pancreatic fistula in patients was also recorded.

Results: The mean age of the patients was 60.5 years, and 20 patients (66.6%) were male. Postoperative leakage/fistula was present in 5 patients (16.66%). Kakita, Blumgart, Blumgart+Coverage, and Peng methods were used as wirsungojejunostomy types. Leakage risk was calculated retrospectively in patients using the ISGPS 2016 score, and leakage severity was calculated using the Callery fistula score. A parallel relationship was observed between the ISGPS 2016 risk classification and Callery fistula severity; leakage development was more frequent in patients in the high-risk group. According to the Callery leakage score, it was significantly lower in the Blumgart + Coverage group.

Conclusion: Different wirsungojejunostomy techniques applied in our clinic were compared in terms of postoperative fistula risk and severity. The WJ leakage rate was 16.66%, consistent with the rates in the literature. When evaluated according to anastomosis methods, patients who underwent Blumgart+Coverage were predominantly found to have a low- and moderate-risk profile according to the ISGPS 2016 classification, and no clinically significant leakage was observed. This finding demonstrates the protective effect of supporting the anastomosis line and covering the pancreatic surface. In patients who underwent Kakita and Blumgart techniques, leakage development was mostly at Grade A-B level, and Grade C fistulas were not observed. This suggests that these techniques offer acceptable results with appropriate patient selection. However, the higher proportion of patients with a moderate-risk profile in the Blumgart technique group indicates that pancreatic tissue and duct diameter are decisive factors in this technique. In conclusion, this study emphasizes the importance of an individualized surgical strategy based on patient and pancreatic characteristics, rather than a standard approach in the selection of the WJ technique.

Keywords: Whipple, pancreaticojejunostomy, wirsungojejunostomy

Table 1. Preoperative and intraoperative findings for anastomosis types

Anastomoz Tipleri	Antrektomi	Çap (≤3)	Çap(3-6)	Çap(≥6)	Yumuşak Pankreas	Sert Pankreas	AC	Non-AC
Blumgart+Coverage (n:13)	11	4	1	8	6	7	12	1*
Kakita (n:7)	6	3	3	1	3	4	7	0
Blumgart (n:9)	9	3	2	4	3	6	7	2*
Peng (1)	1	1	0	0	1	0	0	1*

*: gastrointestinal stromal tümör, +: nöroendokrin tümör, AC: adeno CA, Non-AC: Non- Adeno CA

Table 2. Analysis of leakage risk and severity of anastomosis types according to ISGPS 2016 and Callery fistula scores

Anastamoz Çeşidi	ISGPS 2016			CALLERY		
	Düşük Risk	Orta Risk	Yüksek Risk	GRADE A	GRADE B	GRADE C
Blumgart+Coverage (n:13)	6	6	1	0	0	0
Kakita (n:7)	3	4	0	1	2	0
Blumgart (n:9)	4	5	0	2	3	0
Peng (n:1)	0	0	1	0	0	0

[P-127]

Laparoscopic repair of giant diaphragmatic hernias: Evaluating the efficacy of the spider-web-like suturing technique combined with composite mesh reinforcement

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Objective: Giant diaphragmatic hernias (GDH) are rare but clinically significant, often leading to severe respiratory and gastrointestinal complications. Surgical repair is challenging, with high recurrence rates, especially in large defects where tension-free closure is difficult. This study evaluates the effectiveness of the spider-web-like suturing technique with composite mesh reinforcement in laparoscopic GDH repair.

Material and Methods: A retrospective analysis of nine patients who underwent laparoscopic GDH repair using the spider-web-like suturing technique between May 2016 and February 2021 was conducted. Patient demographics, preoperative symptoms, intraoperative findings, surgical parameters, and postoperative outcomes were analyzed. The technique involved reducing defect size with spider-web suturing before mesh placement to enhance mechanical support and prevent recurrence (Figure 1).

Results: The mean age was 51.2 years, and the mean hernia defect size was 12.1 cm. The procedure was successfully completed laparoscopically in all cases, with a mean surgical time of 191.1 minutes and hospital stay of 4.4 days. No surgery-related mortality or major complications were observed. Minor complications included transient abdominal distension (all patients) and temporary nausea/indigestion (2 patients). The mean follow-up was 37.7 months, with 89.4% symptom resolution and 93.3% patient satisfaction. No recurrence or mesh-related complications occurred.

Conclusion: The laparoscopic spider-web-like suturing technique with composite mesh reinforcement provides an effective, durable, and minimally invasive approach for GDH repair. It offers low recurrence risk, enhanced mesh stability, and improved patient outcomes (Figure 2). While initial results are promising, further studies with larger cohorts and longer follow-up periods are needed to confirm long-term efficacy.

Keywords: Bochdalek hernia, minimally invasive surgery, mesh fixation

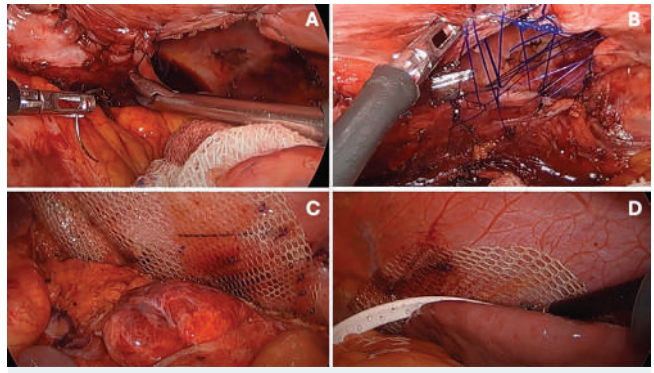


Figure 1. Stepwise repair of a giant diaphragmatic hernia using a spider-web suturing technique and composite mesh placement the giant diaphragmatic hernia was initially reduced by suturing its lateral edges to decrease the defect size. In the area where primary closure was not feasible, sutures were passed through opposing tissues in a spider-web-like fashion to create a structured closure. A composite mesh was then placed over the repaired area and secured for reinforcement. A) The defect is reduced by suturing from three different sides using V-Loc sutures. B) In the area where direct approximation is not possible, sutures are passed through opposing tissues, forming a spider-web-like structure to close the gap. C) A composite mesh is placed over the repaired area, ensuring it extends at least 2 cm beyond the defect, and is secured in place. D) The omentum and spleen are positioned over the repaired area and fixed to provide additional support and protection.



Figure 2. Comparison of preoperative abdominal computed tomography and postoperative chest X-ray images. A) In the preoperative CT scan, it is observed that the diaphragm hernia has allowed the colon, small intestine, stomach, omentum, spleen (white arrow), and kidney (black arrow) to pass into the thoracic cavity, occupying nearly the entire space. B) In the postoperative image, all abdominal organs are seen to be repositioned within the abdominal cavity, and the lung is fully expanded.

[P-128]

Topical etofenomate application in the treatment of anal fissures: Initial results

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Objective: In this study, we investigated the success rate in preventing painful defecation anxiety and improving the patient's overall comfort and relief by using an agent with analgesic, anti-edema, and anti-inflammatory effects in the treatment of anal fissures.

Material and Methods: Twenty consecutive patients were prospectively treated between September and December 2023. The indication was painful defecation and the presence of anal fissures on rectal examination. Topical etofenomat (72 mg/day, 4 times) and laxative suspension were used in cases with symptoms of chronic clinical constipation. Patients were seen 3 and 10 days after starting treatment. All were asked to answer a questionnaire from 0 to 5 (highest) indicating pain during defecation and rectal examination. The mean follow-up period was 3 months.

Results: Fourteen of the patients were women and six were men. The mean age was 34 (20-54). The pre-treatment pain score was 75% (5) in 15 patients and 25% (4) in 5 patients. Bleeding was present in 14 patients (70%), constipation in 12 patients (60%), and burning in 4 patients (20%) as accompanying symptoms. After 10 days of treatment, a significant reduction in pain score was observed in 16 patients. In 14 patients, the score was 0, meaning no pain, and in 2 patients, the score was 1, indicating regression of the pathology on physical examination. In two female patients, the pain score decreased from 4 to 3, while in the other two patients (both women), treatment was unsuccessful. In the vast majority of patients (80%), accompanying symptoms were also reduced (20%) or disappeared (60%). The only complication of treatment is perianal burning or itching (10%). One of these two patients had perianal maceration.

Conclusion: The data obtained from our study are preliminary and require further studies. On the other hand, local application of etofenomate accelerates fissure healing without any significant side effects and seems promising in the anamedical treatment of fissures.

Keywords: New supportive approaches in the medical treatment of anal fissures

[P-129]

Can bile leakage be prevented in complex and challenging biliary surgery?

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Objective: Laparoscopic cholecystectomy is one of the most commonly performed surgical procedures worldwide. However, bile leakage, stricture formation, intra-abdominal collections, cholangitis, and the need for reintervention may occur following cholecystectomy or other biliary tract surgeries. Due to its potent detergent effect on tissues, bile may cause severe inflammation, tissue destruction, and fibrosis, thereby complicating the treatment process. This issue becomes particularly critical in complex biliary cases requiring repeated interventions, where safe access to the biliary system poses a significant challenge. The concept of permanent access has traditionally been employed in situations necessitating long-term drainage and repeated interventions. This study aimed to evaluate the feasibility of a permanent access-like approach in the management of difficult biliary pathologies.

Material and Methods: One patient who developed a full-thickness common bile duct injury during cholecystectomy and two patients who developed anastomotic leakage following hepaticojejunostomy were included in the study. In all cases, the tissues were observed to be severely inflamed, edematous, and friable. Following Roux-en-Y hepaticojejunostomy, a catheter was placed across the anastomotic line and exteriorized through the abdominal wall by fixing it to the proximal (afferent) limb of the jejunal loop used for the anastomosis. In this manner, bile was diverted externally in the early postoperative period, thereby reducing pressure on the anastomotic site. During postoperative follow-up, biliary drainage was maintained via the permanent access-like route, and serial cholangiographic evaluations were performed. Technical success, complications, and clinical outcomes were retrospectively assessed.

Results: Active bile drainage through the catheter was observed in all three patients during the postoperative period, and no intra-abdominal bile leakage was detected. All patients were discharged on postoperative day 10. At three weeks, cholangiography performed via the catheter demonstrated no evidence of anastomotic leakage, and contrast passage to the distal intestine was confirmed in all cases. The catheter was subsequently clamped and removed in a controlled manner. Following catheter removal, normalization of stool color was observed in all patients. One patient developed a superficial wound infection, and one patient developed an incisional hernia. No episodes of cholangitis were observed.

Conclusion: In patients requiring long-term follow-up and repeated interventions after biliary tract surgery, permanent access is known to provide a safe and effective option that improves patient comfort. When applied in appropriately selected patients and in experienced centers, the combination of catheter placement and a permanent access approach may represent a valuable surgical option in the management of complex biliary diseases.

Keywords: Bile leakage, permanent access, hepaticojejunostomy



Figure 1. Intraoperative cholangiography.

Visualization of the bile ducts and the anastomosis line using intraoperative cholangiography.

[P-130]

Enteral and parenteral nutrition management in surgical intensive care patients: An integrative review

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Objective: Malnutrition in surgical intensive care units is a significant clinical problem that increases morbidity, mortality, and cost, as well as leading to delayed wound healing, increased risk of infection, loss of muscle strength, and prolonged hospital stay. Intensive care patients undergoing surgical procedures face significant physiological changes due to metabolic stress response. Conditions such as surgical stress, trauma, and sepsis cause rapid loss of body energy stores, negative nitrogen balance, and impaired immune function. The aim of this review is to synthesize, in light of current literature, the assessment of nutritional status in surgical and critically ill patients, the indications, contraindications, timing, and comparison of nutrition, and the importance of evidence-based nursing care in this process.

Material and Methods: This study used an integrative review method. Literature searching was conducted in the Google Scholar database using the keywords "enteral nutrition," "parenteral nutrition," "surgical patient," "intensive care," and "nursing care." Turkish studies published between 2010 and 2025, with full text available, were evaluated without any limitations regarding study type. Twelve studies were included in the review. The studies examined consisted of systematic reviews, meta-analyses, and clinical trials.

Results: The studies show that the malnutrition rate can reach up to 50% in intensive care patients undergoing surgical procedures. Therefore, nutritional support is an integral part of the treatment process. Any patient who stays in the intensive care unit for more than 48 hours should be considered at risk of malnutrition. Enteral nutrition should always be the first choice for patients with a functional gastrointestinal system; however, parenteral nutrition is life-saving when the gastrointestinal system is unusable or enteral nutrition is insufficient. Enteral nutrition preserves the mucosal integrity of the gastrointestinal system, is more physiological, reduces the risk of infection, and is less expensive than parenteral nutrition. In critically ill patients who are hemodynamically stable and have gastrointestinal function, it is recommended to start nutrition within the first 24-48 hours. Post-surgical accelerated recovery protocols also support avoiding prolonged fasting and initiating early nutrition.

Conclusion: In surgical and intensive care patients, nutritional support is a crucial part of treatment, not only to close the calorie deficit but also to manage the metabolic response and accelerate recovery. While the "use it if the gut is working" principle remains valid, parenteral support should be used when the targeted energy intake cannot be achieved. The success of nutritional management depends on early initiation, correct route selection, regular monitoring, and evidence-based nursing care.

Keywords: Enteral nutrition, parenteral nutrition, surgical patient, intensive care, nursing care

[P-131]

Temporary grafting as a barrier to protect brachial vein burn developed as a result of electrical arc burn

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Objective: In fourth-degree burns caused by high-voltage arc fires, subcutaneous tissues, muscles, and even internal organs have been observed to be affected. Vascular burns are rare complications and are difficult to detect and treat.

Material and Methods: A 46-year-old male patient was electrocuted and fell from a height after contact with a high-voltage power line. He was referred to our emergency clinic from a secondary healthcare center three hours after the trauma. The characteristics of his burns, the treatment applied, and the results were retrospectively evaluated.

Results: The patient had grade 3 and 4 burns covering most of the right upper extremity, grade 3 burns in the right axilla, and grade 3 burns covering almost the entire lateral aspect of the right thorax and abdomen. Compartment syndrome was detected in the right hand and forearm. Emergency decompression surgery was performed. Exploration was carried out to the axilla using a Lazy-S incision. Widespread necrosis was detected in all muscles of the volar surface of the forearm and debrided. An adventitial burn was observed in a 1 cm area 10 cm from the axilla in the proximal brachial vein. To prevent traumatization and injury to this area during dressing changes, the entire brachial vein was closed with a temporary split-thickness graft. In the subsequent period, after escharectomies, all burn areas were closed with partial-thickness grafts in 2 sessions starting from the 15th day. Advanced electromyographic examination of the patient showed near-complete loss of radial, ulnar, and median nerve conduction in the right arm. At six months, there were no remaining skin defects or open wounds, and although right upper extremity function had partially improved, it remained severely plegic. Venous Doppler examination of the right upper extremity revealed no pseudoaneurysm, and venous flow was normal.

Conclusion: Decompression surgery performed within the first 6 hours and by a burn center team yields the best results. In this case, we wanted to report that multiple compartments were affected, numerous muscles, tendons, and vascular structures were involved, therefore the incision (Lazy-S is preferred in our center) was kept wide, and the exposed venous structure was protected with a temporary partial-thickness skin graft. Synthetic barriers can also be used as an alternative. However, we found the skin graft suitable to allow visualization of the area where frequent debridement may be necessary. Temporary partial-thickness skin grafts can be used to protect exposed vascular structures for evaluation of necrosis and underlying tissues.

Keywords: Burn, vascular injury, graft



Figure 1. Burn areas, right upper extremity.

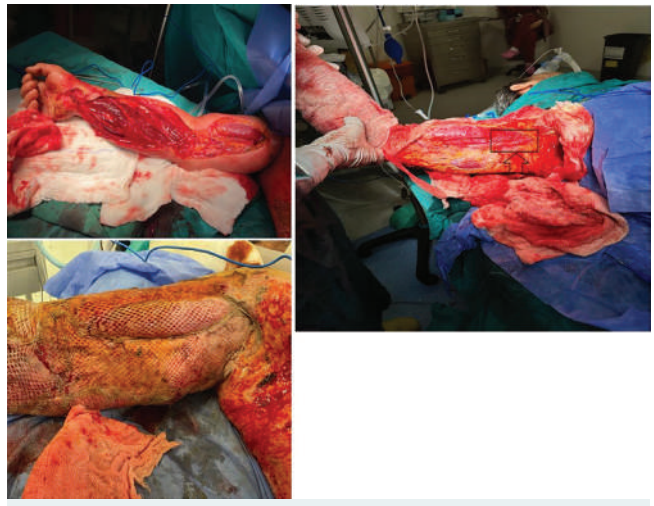


Figure 2. Before fasiatomy.

Brachial venous burn and temporary grafting.

[P-132]

Experience with 120 TAPP cases in a secondary care center

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Objective: Laparoscopic transabdominal preperitoneal (TAPP) repair is a widely accepted approach for inguinal hernia treatment. This study presents early outcomes from 120 TAPP procedures performed in a secondary care hospital.

Material and Methods: Between October 2024 and July 2025, a total of 120 TAPP cases performed by a consistent surgical team at Zonguldak Karadeniz Ereğli State Hospital were retrospectively analyzed. All patients underwent standardized procedures using polypropylene mesh, absorbable tackers for fixation, and continuous closure of the peritoneum with 3/0 V-Loc suture. Hernia defects were left open.

Results: Patients ranged from 20 to 75 years of age, with 108 males. The mean BMI was 32. Comorbidities included hypertension (40%), diabetes mellitus (26%), COPD (8%), and coronary artery disease (32%). Among the cases, 104 were primary and 16 were recurrent hernias. The average operation time was 40 minutes. One case experienced epigastric artery injury requiring drainage. Postoperatively, 2 patients developed atelectasis and 6 developed seromas, 2 of which required interventional drainage. No wound infection, mesh infection, ileus, or chronic pain was observed. VAS scores were 6 on day 1 and 2 on day 10.

Conclusion: Our experience shows that TAPP repair can be safely and effectively performed even in a secondary care hospital. Low complication rates and high patient satisfaction were achieved through consistent surgical technique and team standardization. Peritoneal closure and leaving hernia defects open were found to be safe strategies.

Keywords: Inguinal hernia, laparoscopic hernia repair, postoperative complications, secondary care center, transabdominal preperitoneal (TAPP)

Table 1. Demographic and perioperative characteristics of the patients (n=120)

Parameter	Value
Number of patients	120
Age (range)	20-75
Sex	108 male/12 female
BMI (mean)	32
HTN/DM/COPD/CAD	48/32/10/38
Primary/recurrent	104/16
Unilateral/bilateral	106/14
Mean operative time	40 dk
Periop. complication	1 epigastric artery injury
Length of hospital stay (discharge time)	100 patients: 24 h; 15 patients: 48 h; 2 patients: 72 h
Postoperative complications	2 atelectasis, 6 seroma
VAS score (POD 1/POD 10)	6/2

[P-133]

Effects of preoperative parameters and compliance with the weight loss process on post sleeve gastrectomy weight loss

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Objective: Obesity is a chronic disease that is increasingly prevalent and poses a significant risk of morbidity and mortality. Individuals with a body mass index (BMI) of 30 kg/m² or higher are classified as obese, and obesity is associated with health issues such as diabetes, cardiovascular diseases, and hypertension. Bariatric surgery is considered one of the most effective methods for achieving sustained weight loss. Sleeve gastrectomy is a commonly performed procedure that reduces stomach volume, thereby limiting food intake and providing metabolic benefits. However, surgical success is not solely dependent on the procedure itself but also on patients preoperative parameters and adherence to preoperative education. The aim of this study is to evaluate the effects of preoperative patient parameters and compliance with preoperative education on postoperative weight loss in patients undergoing sleeve gastrectomy.

Material and Methods: This retrospective study includes 113 patients who underwent sleeve gastrectomy at Ankara Bilkent City Hospital Obesity Center between December 2019 and December 2023. Inclusion criteria included patients aged 18 years and older who underwent sleeve gastrectomy and completed the follow-up process. Patients who underwent other bariatric surgical procedures or revision surgery were excluded from the study. The evaluation parameters included age, gender, preoperative and postoperative weight, BMI, waist to hip ratio, blood pressure, HbA1c, and lipid profile.

Results: The mean age of the patients was 42.22±11.55 years, with 83.2% being female and 16.8% male. Comorbid conditions such as diabetes (29.2%) and hypertension (18.6%) were identified. The average weight loss at postoperative 3 months was -28.37±12.48 kg for male patients and -22.45±8.85 kg for female patients (p=0.035). The total weight loss at postoperative 12 months was -42.32±15.81 kg for males and -35.30±12.69 kg for females (p=0.020). A moderate, positive, and statistically significant relationship was found between total and excess weight loss in the preoperative 3 months and excess weight loss at postoperative 3 and 12 months (p<0.005). The results indicate that as preoperative 3 month weight loss increases, postoperative 3 month and 12 month weight loss also increases.

Conclusion: This study demonstrates that preoperative patient parameters and compliance with preoperative education have a significant impact on postoperative weight loss in patients undergoing sleeve gastrectomy. Male patients experienced greater weight loss than females. Furthermore, adherence to preoperative education and preparation was found to support postoperative weight loss. These findings provide guidance for patient selection criteria and preoperative education processes in bariatric surgery applications.

Keywords: Obesity, sleeve gastrectomy, weight loss

Table 1. Pairwise comparison results of the time effect of total weight loss (TWL) and excess weight loss (EWL) values

	Ort±SS	Medyan (Min-Maks)	p(Zaman)	
***Toplam Kilo Kaybı (TWL)**				
Preop 3 ay	-6.48±6.54	-6.0 (-32.0- +12.0)		
Postop 3.ay	-23.44±9.75	-23.0 (-64.0 -3.0)	χ2=221.535	p<0.001
Postop 12.ay	-36.48±13.45	-35.0 (-88.0 -11.0)		
Fazla Kilo Kaybı (EWL) (%)				
Preop 3 ay	9.73±7.44	8.0 (0-32)		
Postop 3.ay	35.45±12.55	35.0 (2-68)	χ2=221.601	p<0.001
Postop 12.ay	55.12±16.10	55.0 (18-90)		

*χ^2: Friedman Testi. *Preop 3 ayda Kilo alan bireyler olduğu kilo kaybı eksi olarak gösterilmiştir.*

Table 2. The relationship between excess weight loss (EWL) preoperatively at 3 months and Excess weight loss (EWL) postoperatively at 3 and 12 months

	Fazla Kilo Kaybı (EWL) Preop 3 ay	
	r	p
Fazla Kilo Kaybı (EWL) Postop 3.ay	0.436	**<0.001**
Fazla Kilo Kaybı (EWL) Postop 12.ay	0.271	**0.004**

r:Spearman İlişki Katsayısı

[P-134]

Endoscopic submucosal dissection for gastrointestinal polypoid lesions: A single-center experience

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Objective: Endoscopic submucosal dissection (ESD) is a curative and organ-preserving treatment modality that can be applied as an alternative to surgery in superficial gastrointestinal neoplastic lesions. This study aimed to evaluate the clinical and pathological outcomes of ESD procedures performed at our center and to assess procedure-related complications.

Material and Methods: Patients who underwent ESD at the Surgical Endoscopy Unit of Marmara University Pendik Training and Research Hospital between September 2024 and January 2026 were retrospectively analyzed. A total of 20 patients were included. Lesion localization, size, en-bloc and R0 resection rates, complications, and histopathological results were evaluated. One patient whose pathology report was not yet available was excluded from the study.

Results: The mean age of the patients was 65 years. Seventeen lesions (85%) were colorectal and three (15%) were gastric in origin. Lesion size was ≤20 mm in seven patients (35%) and >20 mm in thirteen patients (65%). En-bloc resection was achieved in 16 patients (80%), and R0 resection in 18 patients (90%). Bleeding occurred in four patients (20%); three were early and one was delayed. All bleeding episodes were successfully managed with endoscopic clip application. Perforation was observed in three patients (15%). In two patients, perforation was recognized intraoperatively and closed with endoscopic clips. One of these cases involved a 3 cm sessile lesion in the sigmoid colon, in which a wall defect developed during deep dissection. In one patient, no obvious perforation was detected during the procedure; however, minimal free air was identified on postoperative CT. This patient was managed conservatively following clip application, and no emergency surgery was required. Histopathological examination revealed tubular adenoma in seven patients, tubulovillous adenoma in six, sessile serrated lesion in four, and T1 adenocarcinoma in three patients. Among the gastric lesions, one patient had a well-differentiated neuroendocrine tumor (Grade 1) located in the corpus, with lymphovascular and perineural invasion and positive deep and lateral margins. One of the two patients with non-R0 resection had invasive adenocarcinoma in the sigmoid colon (pT1, Grade 3, lymphovascular invasion positive, lateral margin positive) and underwent laparoscopic anterior resection; no residual tumor was detected in the surgical specimen. The other patient is under multidisciplinary evaluation. No recurrence was observed during early follow-up.

Conclusion: ESD performed at our center achieved high R0 resection rates, and procedure-related complications such as bleeding and perforation were largely managed endoscopically. In cases of non-curative resection, ESD played an important role in guiding further treatment decisions.

Keywords: ESD, polypoid lesions, en-bloc resection

[P-135]

Clinical value of RDW in predicting the presence of lymphoma: A retrospective study

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Objective: Lymphoma is a malignancy characterized by frequently non-specific clinical and laboratory manifestations, necessitating histopathological assessment for a definitive diagnosis. In clinical practice, there is a critical need for readily accessible parameters to predict which patients require prioritization for invasive diagnostic interventions. The objective of this study is to evaluate the clinical utility of specific hematological and biochemical parameters, derived from routine laboratory investigations, in predicting the presence of lymphoma among patients undergoing evaluation for suspected malignancy.

Material and Methods: Patients who underwent axillary lymph node sampling after being referred from the hematology clinic with suspected lymphoma between February 2024 and February 2026 were included in the study. Based on histopathological diagnosis, patients were divided into two groups: Those diagnosed with lymphoma and those who were not. Age and gender data, along with lymphocyte count, neutrophil-to-lymphocyte ratio (NLR), red cell distribution width (RDW), lactate dehydrogenase (LDH), albumin, and systemic immune-inflammation index (SII) values, were retrospectively analyzed. Data were analyzed using SPSS version 23.0. In descriptive statistics, categorical variables were presented as numbers and percentages, while continuous variables were expressed as mean ± standard deviation or median (interquartile range). Differences in categorical variables between groups were analyzed using appropriate chi-square tests, and differences in continuous variables were assessed using the Mann-Whitney U test. Statistical significance was set at $p<0.05$.

Results: A total of 27 patients were included in the study. The mean age of the patients was 54.5±18.1 years, and 51.9% were male. It was determined that 40.7% (11 patients) were diagnosed with lymphoma. No statistically significant differences were observed between the groups with and without a lymphoma diagnosis in terms of age ($p=0.394$), gender ($p=0.532$), lymphocyte count ($p=0.294$), NLR ($p=0.080$), LDH ($p=0.162$), albumin ($p=0.080$), and SII ($p=0.121$). The median RDW value was 16.20 (15.50-18.60) in the lymphoma group and 14.45 (12.70-15.93) in the non-lymphoma group. RDW values were found to be statistically significantly higher in the lymphoma group compared to the non-lymphoma group ($p=0.039$).

Conclusion: These findings suggest that routine blood parameters may guide clinicians in evaluating suspected lymphoma. Specifically, the association between RDW and lymphoma presence indicates its potential as a simple, cost-effective supportive marker in clinical decision-making. However, these results should not be used independently for diagnosis and warrant validation through larger, prospective studies.

Keywords: Lymphoma, RDW

[P-136]

Retrospective analysis of colorectal cancer surgery before, during, and after the COVID-19 pandemic (2018-2025)

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Objective: This study aimed to evaluate the impact of the COVID-19 pandemic on colorectal cancer diagnosis and surgical treatment processes by comparing emergency/elective surgery rates and disease stage at presentation across the pre-COVID, COVID, and post-COVID periods.

Material and Methods: In this retrospective single-center study, the periods were defined as follows: Pre-COVID (March 2018-February 2020), COVID (March 2020-April 2022), and post-COVID (May 2022-December 2025). Patients aged ≥18 years with histopathologically confirmed colon cancer who underwent elective or emergency surgery and whose data were accessible were included. Patients with rectal cancer were excluded. Emergency versus elective surgery rates, disease stage [early stage (Stage I-II) vs advanced stage (Stage III-IV)], and presence of metastatic disease were compared across the three periods.

Results: A total of 446 colorectal cancer cases were analyzed (pre-COVID: n=130, COVID: n=101, post-COVID: n=215). Emergency surgery rates during the pre-COVID, COVID, and post-COVID periods were 17.69% (n=23), 11.88% (n=12), and 13.49% (n=29), respectively, with no statistically significant difference between periods (p=0.38). The proportion of patients presenting with advanced-stage disease was 59.2% (n=77) in the pre-COVID period, 58.4% (n=59) during COVID, and 48.8% (n=105) in the post-COVID period, with no statistically significant difference (p=0.10). Similarly, metastatic disease rates were 11.5% (n=15), 12.9% (n=13), and 8.8% (n=19) across the respective periods, and the difference was not statistically significant (p=0.50).

Conclusion: No statistically significant differences were observed among the three periods regarding advanced-stage diagnosis, metastatic disease rates, or emergency surgical presentation in colorectal cancer patients at our center. However, compared with the pre-COVID and COVID periods, a decreasing trend in advanced-stage presentation and metastatic disease rates was observed in the post-COVID period. Multicenter studies are needed to better clarify the impact of the pandemic on colorectal cancer diagnosis and treatment processes.

Keywords: Colorectal cancer, COVID-19

[P-137]

Time-dependent effects of botulinum toxin and glyceryl trinitrate on postoperative pain after excisional hemorrhoidectomy: A systematic review and meta-analysis

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Objective: Postoperative pain following excisional hemorrhoidectomy remains a significant clinical problem, adversely affecting patient comfort, recovery, and return to daily activities. Internal anal sphincter spasm is considered a major contributing factor, along with other multifactorial mechanisms. Chemical sphincter relaxation strategies, including botulinum toxin and topical glyceryl trinitrate (GTN), have been proposed to reduce postoperative pain. However, their time-dependent efficacy has not been clearly established. This study aimed to evaluate and compare the effectiveness of botulinum toxin and GTN in postoperative pain control using a systematic review and meta-analysis.

Material and Methods: This systematic review and meta-analysis was conducted in accordance with PRISMA 2020 guidelines. PubMed was systematically searched for randomized controlled trials evaluating botulinum toxin or topical GTN for pain control after excisional hemorrhoidectomy. Studies involving stapled hemorrhoidopexy or Doppler-guided techniques were excluded. Pain outcomes were standardized to a 0-10 visual analog scale. Mean differences (MD) with 95% confidence intervals (CI) were calculated using a random-effects model for postoperative days 1, 3, and 7.

Results: Nine randomized controlled trials were included in the systematic review, and eight studies comprising 452 patients were eligible for meta-analysis. On postoperative day 1, GTN significantly reduced pain compared to controls (MD -0.72, 95% CI -1.18 to -0.26; p=0.002; I^2=48%), whereas botulinum toxin showed no significant effect (MD -0.21, 95% CI -0.58 to 0.16; p=0.26). On postoperative day 3, both GTN (MD -0.64, 95% CI -1.09 to -0.19; p=0.005; I^2=52%) and botulinum toxin (MD -0.68, 95% CI -1.12 to -0.24; p=0.003; I^2=46%) significantly reduced pain scores. On postoperative day 7, botulinum toxin demonstrated a greater and more consistent analgesic effect (MD -1.12, 95% CI -1.63 to -0.61; p<0.001; I^2=34%), while GTN was not statistically significant (MD -0.38, 95% CI -0.82 to 0.06; p=0.09). Headache was the most common adverse event with GTN, occasionally leading to discontinuation. Botulinum toxin was not associated with increased serious adverse events.

Conclusion: Chemical sphincter relaxation demonstrates time-dependent effects on postoperative pain following excisional hemorrhoidectomy. GTN provides superior pain relief in the early postoperative period, whereas botulinum toxin offers more sustained analgesia in later stages. Considering its single-dose administration and favorable safety profile, botulinum toxin may represent a more durable analgesic option. Further high-quality randomized controlled trials are required to determine optimal treatment strategies.

Keywords: Botulinum toxin, excisional hemorrhoidectomy, postoperative pain

[P-138]

Placement of markers and the impact on surgical outcomes in node-positive breast cancer patients prior to neoadjuvant therapy

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Objective: Accurate surgical management of the axilla after neoadjuvant chemotherapy (NACT) is crucial to prevent unnecessary axillary lymph node dissections (ALND). This study aimed to evaluate the impact of marker (clip) placement in biopsy-proven metastatic axillary lymph nodes prior to NACT on surgical and oncological outcomes.

Material and Methods: A total of 192 patients who underwent surgery after NACT at our tertiary breast surgery center between 2019 and 2024 were retrospectively analyzed. Patients were divided into two groups based on whether a marker was placed in the axillary lymph node. Surgical approach [sentinel lymph node biopsy (SLNB)/ALND], number of excised lymph nodes, pathological response, and surgery-related complications were compared between groups. Statistical analyses were performed using SPSS version 21.0, and p values <0.05 were considered statistically significant.

Results: Among the 192 patients, marker placement in the axillary lymph node was performed in 124 patients. In the marker group, the sensitivity (33.7%) and negative predictive value (14.7%) of SLNB were higher. In contrast, specificity was higher in the non-marker group (58.3%). No significant difference was observed between patients undergoing SLNB and ALND in terms of surgical complications such as reoperation and lymphedema. Univariate analysis identified advanced nodal stage (N2) (p=0.011) and older age (p=0.016) as factors significantly associated with the need for ALND.

Conclusion: Removal of the marker-placed lymph node during axillary evaluation after NACT improves the accuracy of axillary staging and enhances the reliability of SLNB. Marker placement is an effective method that may reduce the need for ALND in appropriately selected patients. However, the decision to avoid axillary dissection in patients with high nodal burden should be made with caution.

Keywords: Axilla, breast cancer, marker, neoadjuvant chemotherapy, sentinel lymph node

[P-139]

Immediate breast reconstruction concurrent with mastectomy: Our clinical experience

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Objective: Approximately one in eight women worldwide will be diagnosed with breast cancer during their lifetime. Preserving psychosocial well-being is particularly important for patients with a history of mastectomy due to breast cancer or an increased risk of developing breast cancer. Reconstructive options include autologous reconstruction and implant-based techniques. Although autologous reconstruction was more commonly preferred before the 2000s, implant-based reconstruction has become markedly more popular in recent years. This study aimed to report the clinical outcomes of patients who underwent immediate breast reconstruction at the time of mastectomy.

Material and Methods: Thirty-two patients who underwent immediate implant-based breast reconstruction in the subpectoral plane concurrently with mastectomy between January 2024 and January 2026 were retrospectively reviewed.

Results: The mean age of female patients was 42.8 years (range, 29-55). The mean body mass index was 19.60 kg/m^2 (range, 14.56-25.62). The mean length of hospital stay was 6.84 days. Subcutaneous mastectomy and reconstruction were performed in 32 breasts: unilateral in 29 patients (90.6%) and bilateral in 3 patients (9.4%). The mean breast specimen weight was 511.4 g. The mean implant volume was 399.1 cc (range, 250-600). No complications occurred in 22 of 32 patients. Complications were observed in 10 patients, including one patient who underwent bilateral subcutaneous mastectomy and reconstruction. Among the 10 breasts with complications, partial skin necrosis occurred in 3, bleeding in 1, wound dehiscence in 5, and pneumothorax in 1 patient. Patients with wound complications were treated with debridement and primary closure. Among molecular subtypes, the most common were luminal A (n=11) and luminal B (n=9).

Conclusion: Our single-center experience suggests that immediate subpectoral implant-based reconstruction at the time of mastectomy is a feasible option and that complications are largely manageable. Appropriate patient selection, careful assessment of mastectomy flap quality, and multidisciplinary follow-up are critical to reducing complications. Immediate reconstruction is often preferred, particularly by patients with greater cosmetic concerns. Some studies have identified immediate mastectomy plus reconstruction as a factor associated with reduced psychiatric comorbidity. Given the multitude of parameters involved—together with the cancer treatment process and patient adherence—it is evident that optimal treatment selection requires a multidimensional evaluation.

Keywords: Breast cancer, immediate, breast reconstruction



Figure 1. Postoperative 1st month.

Table 1. Patient characteristics and surgical parameters

Number of patients	**32**
Age (years)	42.8±6.4 (min-max: 29-55)
BMI (kg/m^2)	19.60±2.50 (min-max: 14.56-25.62)
Hospital stay (days)	6.84±1.71 (median 7; min-max 4-11)
Implant volume (cc)	399.1±90.4 (median 405; min-max 250-600)
Breast weight (g)	511.4±260.7 (n=18; min-max 140-1120)

[P-140]

A rare and aggressive malignancy: Clinical, surgical, and pathological analysis of our adrenocortical carcinoma cases

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Objective: Adrenocortical carcinoma (ACC) is a rare but highly aggressive endocrine malignancy characterized by a distinct biological behavior and poor prognosis. This study aimed to evaluate the demographic, clinical, surgical, and pathological characteristics, along with adjuvant therapy, recurrence, and follow-up outcomes of patients who underwent adrenalectomy and were histopathologically diagnosed with ACC in our clinic.

Material and Methods: Eleven patients who underwent adrenalectomy and were diagnosed with ACC based on pathological reports were retrospectively analyzed. Demographics, clinical presentation, hormonal functional status, radiological and surgical findings, and pathological parameters (Weiss score, Ki-67, mitosis, invasion status, and ENSAT staging) were recorded. Additionally, adjuvant mitotane therapy, recurrence, follow-up duration, and mortality data were collected. Continuous data were mean ± standard deviation or median (min-max), while categorical variables were expressed as frequencies and percentages.

Results: The study included 11 patients (mean age: 50.3 ± 13.7 years; 54.5% male). Mean BMI was 30.2 ± 8.2 kg/m^2 and ASA III rate was 54.5%. Incidentalomas were found in 63.6%. Functional tumors comprised 63.6%, with cortisol excess (Cushing's) as the primary presentation (36.4%); no virilization or feminization occurred. Hyperaldosteronism, hypokalemia, and hypertension rates were 9.1%, 9.1%, and 27.3% (Table 1A). Median operative time was 180 (95-300) minutes. Complication rate was 18.2%; none were Clavien-Dindo $\ge$III. Median hospital stay was 6 (3-12) days (Table 2B). Pathology showed capsular invasion in 54.5% and vascular invasion in 45.5%. R0 resection rate was 72.7% (Table 3B). Median tumor diameter was 90 (45-180) mm. Median Ki-67 was 25% (10-55) and mitotic activity was 16/50 HPF (5-40) (Table 3A). Per ENSAT staging, 45.5% were Stage III and 18.1% Stage IV (Table 3C). Adjuvant mitotane was given to 45.5%. Over a median 21 (3-27) month follow-up, recurrence and mortality rates were 18.2% and 9.1%.

Keywords: Adrenalectomy, adrenocortical carcinoma, ENSAT staging, mitotane, Weiss score

Table 1. Clinical presentation and hormonal characteristics of the patients (n=11)

TABLO 1A. Başvuru ve Fonksiyonel Durum

Değişken	Değer
Baskın başvuru şekli	İnsidentaloma: 7 (%63,6)
	Hormon ilişkili semptom: 3 (%27,3)
	Karın ağrısı/kitle: 1 (%9,1)
Fonksiyonel tümör	Var: 7 (%63,6)
	Yok: 4 (%36,4)
Cushing sendromu	Var: 4 (%36,4)
	Yok: 7 (%63,6)
Virilizasyon / feminizasyon	Yok: 11 (%100)
Hiperaldosteronizm	Var: 1 (%9,1)
	Yok: 10 (%90,9)
Hipertansiyon	Var: 3 (%27,3)
	Yok: 8 (%72,7)
Hipokalemi	Var: 1 (%9,1)
	Yok: 10 (%90,9)

TABLO 1B. Hormonal Laboratuvar Bulguları

Parametre	Değer
Serum kortizol (µg/dL)	16,6 ± 6,8
	Medyan: 15,4 (9,4–28,2)
ACTH (pg/mL)	17,0 ± 12,7
	Medyan: 13,6 (1,9–38,9)
DHEA-S (µg/dL)	357,4 ± 341,5
	Medyan: 224,0 (16,4–1000,0)
Aldosteron (ng/dL)	55,7 ± 35,0
	Medyan: 52,0 (13,3–112,0)

Table 2. Radiological findings and surgical characteristics (n=11)

TABLO 2A. Radyolojik Özellikler

Değişken	Değer
Patolojik tümör çapı (mm)	96,4 ± 38,7
	Medyan: 90 (45–180)

TABLO 2B. Cerrahi Özellikler ve Perioperatif Seyir

Değişken	Değer
Ameliyat süresi (dk)	182,7 ± 61,4
	Medyan: 180 (95–300)
Postoperatif komplikasyon	Var: 2 (%18,2)
	Yok: 9 (%81,8)
Clavien–Dindo sınıflaması	Grade 0: 9 (%81,8)
	Grade I–II: 2 (%18,2)
Hastanede yatış süresi (gün)	6,1 ± 2,7
	Medyan: 6 (3–12)

Table 3. Adrenokortikal carcinoma (ACC)-comparison of our series with selected literature series

ÇALIŞMA	TASARIM / MERKEZ	n	EVRE (ENSAT)	TÜMÖR BOYUTU	HORMONAL AKTİVİTE	R0 REZEKSİYON	ADJUVAN MİTOTAN	NÜKS	MORTALİTE / SAĞKALIM
Bizim serimiz (Etlik Şehir Hastanesi)	Retrospektif, tek merkez	**11**	**I–II ağırlıklı** *(serimizde erken evre baskın)*	**Medyan 90 mm**	**%63,6 fonksiyonel**	**%72,7**	**%45,5**	**%18,2**	**%9,1** *(izlem medyanı ~21 ay)*
Şişman ve ark., 2017 (Turk J Urol)	Retrospektif, tek merkez	**15**	I %20, II %6,7, III %73,3, IV %0	—	%26,7	**R0 %46,7** (R1 %26,7; R2 %13,3; Rx %13,3)	"Mitotan" %20 *(kombinasyonlarla birlikte daha yüksek)*	**Nüks %46,7**; metastaz %40	Ortalama izlem **21 ay**; ölüm **%60**
Bokal ve ark., 2025 (Slovenya, iki merkez)	Retrospektif, iki merkez	**48**	I %6, II %42, III %25, IV %27	Medyan **12 cm** (4–30)	"GC" %35; diğer %17 (toplam ~%52)	**R0 %76** *(evre I–III küratif cerrahi grubunda)*	Uygun hastalarda **%52,9** mitotan başlandı	Küratif cerrahi sonrası **relaps: 20 olgu** *(I–III relaps alt grubu)*	5 yıllık OS: **Evre I %100, II %50, III %50, IV %0**
Sakin ve ark., 2020 (Eur Arch Med Res)	Retrospektif, tek merkez	**10**	**Evre III %60, IV %40**	Ortalama **10,6±4,3 cm**	%60	Cerrahi uygulananlarda **R2 %37,5** *(3/8); R0/R1 oranı ayrıntısız sınırlı)*	**%20**	Cerrahi olanlarda **nüks %100** *(6/6)*	İzlemde ölüm **%70**
Procopio ve ark., 2025 (Updates in Surgery)	Tersiyer merkez serisi (1997–2024), evre I–III	**48**	I %12,5; II %75; III %12,5 *(IV dışlandı)*	Medyan **~92–110 mm**	—	**Tüm olgular da R0**	Adjuvan tedaviler (mitotan dâhil) grupları arası benzer	Lokoreg. nüks: **%19 (I/II)** vs **%33,3 (III)**; uzak nüks: **%28,6 (I/II)** vs **%66,7 (III)**	5 yıllık OS yaklaşık **%69** (gruplar benzer)

[P-141]

Surgical management, treatment, and clinical outcomes in adrenal myelolipomas: A single-center experience

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Objective: Adrenal myelolipomas are rare, benign adrenal tumors that are mostly detected incidentally. Clinical uncertainty regarding the surgical approach can occur because they can reach large sizes, their imaging findings can overlap with malignant adrenal tumors, and they rarely lead to complications such as intratumoral hemorrhage. In this study, we aimed to evaluate the detailed clinical, radiological, hormonal, and surgical outcomes of patients in our clinic whose diagnosis of adrenal myelolipoma was histopathologically confirmed following adrenalectomy.

Material and Methods: Seven patients undergoing adrenalectomy with histopathologically confirmed adrenal myelolipoma were retrospectively reviewed. Clinical analysis included demographics, comorbidities, detection mode, tumor laterality/size, CT density, intratumoral hemorrhage, and hormonal status. Surgical indications, operative approach, operative time, postoperative complications, and follow-up outcomes were recorded. Data were analyzed using descriptive statistics.

Results: Mean patient age was 56.4±11.9 years, with a male predominance (71.4%). Most myelolipomas were detected incidentally (85.7%) (Table 1). Laterality was equally distributed between right and left sides (42.9% each), with one bilateral case (14.3%). Mean tumor diameter was 67.9±18.6 mm; 71.4% were giant myelolipomas (>6 cm). Mean CT density was -32.1±11.4 HU, consistent with adipose content. Intratumoral hemorrhage occurred in one patient (14.3%), necessitating surgery due to symptoms (Table 2). Hormonal evaluation revealed only one functional tumor (14.3%). Primary surgical indications were size (57.1%), symptoms (14.3%), hemorrhage (14.3%), and suspicious imaging (14.3%). Surgical approaches included laparoscopic (57.1%), open (28.6%), and robotic (14.3%) adrenalectomy. Mean operative time was 112±26 minutes. No major complications (Clavien-Dindo ≥3) occurred. Over a median follow-up of 21 months (3-39), no recurrence or mortality was recorded (Table 4).

Conclusion: Literature indicates that adrenal myelolipomas are typically non-functional, incidental benign lesions, with surgery recommended for tumors >6 cm, symptomatic cases, intratumoral hemorrhage, or malignancy suspicion. Notably, our series achieved adrenalectomy without major morbidity, recurrence, or mortality, despite a predominance of giant myelolipomas. The successful use of minimally invasive techniques confirms that laparoscopic and robotic approaches are safe and effective for large lesions in experienced centers. This study demonstrates that while tumor size is the primary determinant for surgery, symptoms, hemorrhage, and suspicious imaging findings are critical complementary indications, providing real-world guidance for clinical management (Table 5).

Keywords: Adrenal myelolipoma, adrenalectomy, giant myelolipoma, incidentaloma, minimally invasive surgery

Table 1. Demographic and clinical characteristics (n=7)

Parametre	Değer
Yaş (yıl)	56,4 ± 11,9
	Medyan: 58 (min–maks: 39–72)
Cinsiyet	Erkek: 5 (%71,4)
	Kadın: 2 (%28,6)
ASA skoru	ASA II: 4 (%57,1)
	ASA III: 3 (%42,9)
Saptanma şekli	İnsidentaloma: 6 (%85,7)
	Semptomatik: 1 (%14,3)
Fonksiyonel tümör	Var: 1 (%14,3)
Hipertansiyon	Var: 4 (%57,1)
Diyabet	Var: 1 (%14,3)
Obezite (BMI ≥30)	Var: 1 (%14,3)

Table 2. Tumor characteristics

Parametre	Değer
Tümör tarafı	Sağ: 3 (%42,9)
	Sol: 3 (%42,9)
	Bilateral: 1 (%14,3)
Tümör çapı (mm)	67,9 ± 18,6
	Medyan: 65 (min–maks: 45–102)
Dev miyelolipom (>6 cm)	Var: 5 (%71,4)
BT dansitesi (HU)	-32,1 ± 11,4
Tümör içi kanama	Var: 1 (%14,3)

Table 3. Hormonal evaluation

Parametre	Ortalama ± SS
Serum kortizol (µg/dL)	19,1 ± 4,8
ACTH (pg/mL)	64,2 ± 18,3
Aldosteron (ng/dL)	150,5 ± 42,7
DHEA-S (µg/dL)	113,6 ± 36,9
Fonksiyonel tümör	1 (%14,3)

Table 4. Surgical and postoperative outcomes

Parametre	Değer
Cerrahi yaklaşım	Açık: 2 (%28,6)
	Laparoskopik: 4 (%57,1)
	Robotik: 1 (%14,3)
Cerrahi endikasyon	Boyut: 4 (%57,1)
	Semptom: 1 (%14,3)
	Kanama: 1 (%14,3)
	Şüpheli görüntüleme: 1 (%14,3)
Ameliyat süresi (dk)	112 ± 26
Postop komplikasyon	0
Clavien–Dindo ≥3	0
Hastanede yatış (gün)	Medyan: 3 (2–6)
Nüks	0
Takip süresi (ay)	Medyan: 21 (3–39)
Takipte mortalite	0

Table 5. Surgical management of adrenal myelolipomas: comparison with recent literature

Çalışma	Tasarım / Merkez	n	Yaş (ortalama)	İnsidental saptanma	Boyut / "Giant-Dev"	Cerrahi yaklaşım	Endikasyon (özet)	Majör komplikasyon / Nüks / Mortalite
Bizim çalışmamız (Tek merkez)	Retrospektif, tek merkez	7	56,4 ± 11,9	%85,7	Ortalama 67,9 ± 18,6 mm; Dev >6 cm: %71,4; Kanama: %14,3	Lap %57,1; Robotik %14,3; Açık %28,6	Boyut %57,1; Semptom %14,3; Kanama %14,3; şüpheli görüntüleme %14,3	Majör: 0; Nüks: 0; Mortalite: 0
Paul ve ark., 2024	Tersiyer merkez kohortu (2014–2022)	15 (ameliyat: 5)	(aralık 27–70)	—	Boyut aralığı 2–15 cm; Cerrahi grup ort. 7,4 cm	—	İndetermine lezyon (n=3), ağrı+>4 cm (n=1), komşu organ bası (n=1); "boyut tek başına" değil	Tüm rezeksiyonlarda histoloji AML
Katsoulis ve ark., 2023 (JSCR)	Vaka sunumu + literatür derleme	1	—	—	"Giant/large" olgu	—	Cerrahi: semptomatik veya >5 cm ya da malignite şüphesi	Vaka bazlı
Hogea ve ark., 2024	"Giant AML" literatür derlemesi (1981–2023)	15 (>~10 cm)	Ortalama ~53 (26–72)	—	"Giant" >10 cm olgular	Değişken	Olgu bazlı	Olgu bazlı
Cochetti ve ark., 2019	Vaka sunumu (robotik)	1	—	—	Giant AML	Robotik parsiyel adrenalektomi	Cerrahi önerisi: semptomatik / hızlı büyüme / >6 cm; giant >10 cm nadir	Vaka bazlı
Bapir ve ark., 2024	Vaka sunumu (laparoskopik)	1	63	—	12×10×8 cm	Laparoskopik rezeksiyon	Dev olgu – lap uygulanabilirliği vurgusu	Vaka bazlı

[P-142]

Clinicopathological evaluation of Hürthle cell thyroid lesions: A case series

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Objective: Hürthle cell thyroid neoplasms lead to uncertainties in clinical management due to the difficulty of distinguishing adenoma from carcinoma using preoperative cytological and radiological methods. In this study, we aimed to evaluate the clinical, radiological, and pathological features of patients with Hürthle cell lesions who underwent surgical treatment in our clinic and to identify distinctive findings suggestive of carcinoma.

Material and Methods: Four patients who underwent total thyroidectomy in our clinic and whose final pathology was reported as Hürthle cell neoplasm were retrospectively reviewed. Demographic data, preoperative ultrasonography findings (TI-RADS classification), fine-needle aspiration biopsy results (Bethesda classification), surgical and pathological features, adjuvant treatment approaches, and follow-up outcomes were evaluated. Pathological examination particularly analyzed the presence of capsular invasion, vascular invasion, and extrathyroidal extension. Additional parameters such as thyroid function tests, ultrasonographic morphological features, and lymph node status were described based on clinical records.

Results: All patients included in the study were female, with a median age of 54 years (range: 47-69). Preoperative ultrasonography revealed TI-RADS category 4 nodules in all cases, with nodule sizes ranging from 8 to 56 mm. Fine-needle aspiration biopsy results ranged from Bethesda categories 2 to 6, with cytological findings overlapping between benign and malignant groups. Final pathological evaluation identified Hürthle cell carcinoma in 2 patients and Hürthle cell adenoma in 2 patients. Vascular invasion was observed in all patients with Hürthle cell carcinoma, whereas no vascular invasion, capsular invasion, or extrathyroidal extension was detected in adenoma cases. Capsular invasion and extrathyroidal extension were observed exclusively in the carcinoma group. Preoperative thyroid function tests, when available, indicated a euthyroid state in all patients. Ultrasonographic assessment showed that all nodules were solid, and no distinct morphological differences were identified between benign and malignant cases. No lymph node involvement was detected based on clinical and imaging findings. All patients in the carcinoma group received adjuvant radioactive iodine therapy. Follow-up duration ranged from 3 to 96 months, during which recurrence was observed in one carcinoma case. No mortality was observed during the study period.

Conclusion: In conclusion, this case series highlights the limited ability of preoperative ultrasonographic and cytological methods to reliably distinguish adenoma from carcinoma in Hürthle cell thyroid lesions. Our findings emphasize that postoperative pathological features, particularly vascular invasion and other invasive criteria, represent the most consistent and reliable indicators of malignancy. Despite the limited number of patients, these results support a pathology-based approach in clinical decision-making and follow-up strategies and underscore the need for careful long-term surveillance, especially in patients with Hürthle cell carcinoma.

Keywords: Case series, Hürthle cell adenoma, Hürthle cell carcinoma, Hürthle cell neoplasm, thyroid nodule

Table 1. Pathological findings

Parametre	Hürthle Karsinom (n=2)	Hürthle Adenom (n=2)
Vasküler invazyon	2/2	0/2
Kapsül invazyonu	1/2	0/2
Ekstratiroidal yayılım	1/2	0/2
Radyoaktif iyot tedavisi	2/2	0/2
Nüks	1/2	0/2
Mortalite	0	0

Table 2. Demographic and clinical characteristics

Parametre	Bulgular
Toplam hasta sayısı	4
Yaş, ortanca (aralık)	54 (47–69)
Cinsiyet	Kadın (4/4)
En büyük nodül çapı (mm)	8–56
TI-RADS	4 (4/4)
Bethesda sınıflaması	2–6
Cerrahi yöntem	Total tiroidektomi (4/4)

Table 3. Clinical, radiological, and pathological features

Olgu	Yaş	USG max çap (mm)	TI-RADS	Bethesda	Nihai patoloji	Kapsül inv.	Vasküler inv.	ETE	RAI	Takip (ay)	Nüks
Olgu 1	51	56	4	4	Hürthle karsinom	Evet	Evet	Evet	Evet	96	Evet
Olgu 2	57	56	4	6	Hürthle karsinom	Hayır	Evet	Hayır	Evet	3	Hayır
Olgu 3	47	8	4	4	Hürthle adenom	Hayır	Hayır	Hayır	Hayır	3	Hayır
Olgu 4	69	8	4	2	Hürthle adenom	Hayır	Hayır	Hayır	Hayır	36	Hayır

Table 4. Additional clinical findings during the preoperative and follow-up periods

Parametre	Bulgular
Tiroid fonksiyon durumu	Ötiroid
USG morfolojisi	Solid nodül (4/4)
Lenf nodu tutulumu	Klinik ve görüntüleme ile saptanmadı
Takip süresi (ay)	3–96
Takip yöntemi	Klinik ± görüntüleme ± Lab

Table 5. Comparison with the literature

Çalışma	Yıl	Çalışma Tipi	Hasta Sayısı	Ayırt Edici Bulgular	Preoperatif Ayırım	Klinik Mesaj
Bizim çalışmamız	2025	Olgu serisi	4	**Karsinomlarda vasküler invazyonun tutarlı varlığı**, adenomlarda invazyon yokluğu	Sınırlı	Patolojik invazyon, karsinom lehine en belirgin ayırt edici bulgudur
Haugen ve ark. (ATA)	2015 (güncel rehber)	Klinik rehber	—	Patolojik invazyon risk sınıflamasında temel belirleyici	Sınırlı	Tedavi ve takip kararları patoloji temelli olmalıdır
NCCN Tiroid Kanseri Rehberi	2023–2024	Klinik rehber	—	Vasküler ve kapsüler invazyon yüksek risk kriteridir	Sınırlı	Hürthle karsinom agresif biyoloji gösterebilir
Zhang ve ark.	2020	Retrospektif seri	>100	Vasküler invazyon ve ETE kötü prognostik faktörler	Yetersiz	Sitoloji malignite ayrımında sınırlıdır
Trimboli ve ark.	2021	Sistematik derleme	—	Sitoloji ve USG malignityi güvenilir ayıramaz	Yetersiz	Cerrahi sonrası patoloji esastır
Pitoia ve ark.	2022	Klinik derleme	—	Hürthle karsinomda geç nüks riski	—	Uzun dönem takip gereklidir

[P-143]

Parathyroid surgery: A single-center, single-surgeon experience (53 cases)

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Objective: Parathyroid surgery is the definitive treatment for primary hyperparathyroidism and is increasingly performed in general surgical practice. Primary hyperparathyroidism is one of the most common causes of hypercalcemia, particularly affecting elderly patients and women. With appropriate patient selection and a standardized surgical approach, high success rates with low complication risk can be achieved. This study aimed to present the demographic characteristics, preoperative imaging findings, pathological diagnoses, and early postoperative clinical and biochemical outcomes of patients who underwent parathyroid excision at our center.

Material and Methods: A retrospective analysis was conducted of 53 patients who underwent parathyroid surgery at a single center by a single surgeon. Demographic data, comorbidities, preoperative biochemical parameters [serum calcium and parathyroid hormone (PTH) levels], preoperative imaging results (ultrasonography and/or scintigraphy), pathological diagnoses, early postoperative laboratory findings, complications, reoperation rates, and length of hospital stay were evaluated. Intraoperative intact PTH monitoring could not be performed due to technical limitations, and frozen section examination was not routinely used. The study was designed as a descriptive analysis.

Results: Of the patients, 77.4% (n=41) were female and 22.6% (n=12) were male. Most patients were elderly, and a considerable proportion had at least one comorbidity. The mean preoperative serum calcium and PTH levels were 11.1 mg/dL and 273.6 pg/mL, respectively. Preoperative imaging successfully localized the parathyroid lesion in 90.6% of patients (n=48). Pathological examination revealed parathyroid adenoma in 92.5% (n=49) and parathyroid carcinoma in 7.5% (n=4). Single-gland excision was performed in 81.1% of cases (n=43), while multigland excision was required in 18.9% (n=10). Despite the absence of intraoperative PTH monitoring and routine frozen section analysis, significant biochemical improvement was observed. On postoperative day one, mean serum calcium and PTH levels decreased to 8.9 mg/dL and 38.0 pg/mL, corresponding to reductions of approximately 20% and 85%, respectively. Most patients experienced no postoperative complications, and hospital stay was generally limited to one day.

Conclusion: Parathyroid surgery at our center achieved high rates of successful preoperative localization, marked early postoperative biochemical improvement, and low complication rates. Even without intraoperative intact PTH monitoring and routine frozen section examination, effective and predictable outcomes were obtained with careful surgical exploration and appropriate patient selection.

Keywords: Parathyroid surgery, parathyroid hormone, serum calcium

[P-144]

Outcomes of percutaneous cholecystostomy in high-risk patients with acute cholecystitis: A single-center experience

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Objective: Emergency surgery in high-risk patients with acute cholecystitis is associated with substantial morbidity and mortality. In this patient population, percutaneous cholecystostomy (PC) has been proposed as an alternative or bridge-to-surgery treatment option. This study aimed to evaluate the clinical outcomes of PC in high-risk patients with acute cholecystitis.

Material and Methods: In this retrospective study, 53 patients with acute cholecystitis who underwent PC at our institution were analyzed. Demographic characteristics, diagnoses, Tokyo severity grades, ASA scores, Charlson comorbidity index (CCI), indications for cholecystostomy, need for intensive care, length of hospital stay, 30-day mortality, recurrent cholecystitis episodes, and rates of elective cholecystectomy were recorded.

Results: The mean age of the 53 patients was 75.2±11.8 years, and 64.2% were male. Regarding diagnosis, 83.0% had acute cholecystitis and 17.0% had perforated cholecystitis. According to the Tokyo classification, 77.4% of patients were classified as grade III. In terms of surgical risk, 71.7% were ASA III and 28.3% were ASA IV. The mean CCI was 5.9±2.1. The most common indication for PC was high surgical risk (67.9%), followed by sepsis (20.8%) and need for intensive care (11.3%). Overall, 41.5% of patients required intensive care unit follow-up. The median length of hospital stay was 12 days (IQR: 7-18). The 30-day mortality rate was 7.5%. During follow-up, 83.0% of patients did not experience recurrent cholecystitis. Only 18.9% of patients subsequently underwent elective cholecystectomy.

Conclusion: PC is an effective and safe treatment option in high-risk patients with acute cholecystitis, with relatively low 30-day mortality rates. Particularly in elderly patients with significant comorbidities, this approach may serve as an alternative to emergency surgery and often remains the definitive treatment in a substantial proportion of patients.

Keywords: Acute cholecystitis, percutaneous cholecystostomy, mortality

[P-145]

Pancreatic osteoclast-like giant cell undifferentiated carcinoma: A rare case treated with surgical resection

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Objective: Undifferentiated pancreatic carcinoma with osteoclast-like giant cells (UC-OGC) is an extremely rare histological subtype among pancreatic malignancies, accounting for less than 1% of all pancreatic tumors. This study aimed to present a case of UC-OGC treated surgically.

Material and Methods: Patient data were retrospectively obtained from the database of Gaziantep University Hospital.

Results: A 72-year-old male patient presented to the emergency department with abdominal pain. Ultrasound revealed a suspicious lesion in the pancreas, and the patient underwent further investigation. A mass was detected in the pancreatic corpus during the evaluation for pancreatic cancer. Dynamic contrast-enhanced upper abdomen CT scan revealed a heterogeneous hypodense mass measuring approximately 48×45×40 mm in the pancreatic corpus, extending superoposteriorly and containing cystic-necrotic areas. There was approximately 5 mm dilation in the tail section of the pancreatic duct. The lesion was in close proximity to the celiac trunk and its branches, as well as the portal and splenic veins, and its borders with the right diaphragmatic crus could not be clearly distinguished. A PET-CT scan performed for staging purposes revealed a hypermetabolic lesion measuring 4.72×3.60 cm in the pancreatic corpus with an SUV_{max} of 14.75 and a centrally hypometabolic (consistent with necrosis). Additionally, a suspicious soft tissue lesion measuring 1.3 cm with low FDG uptake was observed. Tru-cut biopsy results revealed findings consistent with an UC-OGC; carcinosarcoma could not be definitively ruled out. The patient underwent neoadjuvant chemotherapy. A PET-CT scan performed after treatment showed a slight increase in the size of the lesion and metabolic stability (5.37×4.29 cm, SUV_{max} 15.2). Surgical treatment was then planned, and the patient underwent distal pancreatectomy and splenectomy. No complications developed in the postoperative period, and the patient was discharged without any problems.

Conclusion: UC-OGC is a rare pancreatic malignancy and differs from classic pancreatic ductal adenocarcinoma in terms of clinical and histopathological features. Radiologically, it is usually seen as large masses with a necrotic and heterogeneous structure. The effectiveness of chemotherapy is limited, and a better prognosis is reported in cases where surgical resection is feasible. UC-OGC is rare but should be considered in the differential diagnosis. Preoperative biopsy may be helpful in the diagnostic process, and surgical resection is the primary treatment option in suitable patients.

Keywords: Osteoclast-like giant cells, distal pancreatectomy, splenectomy

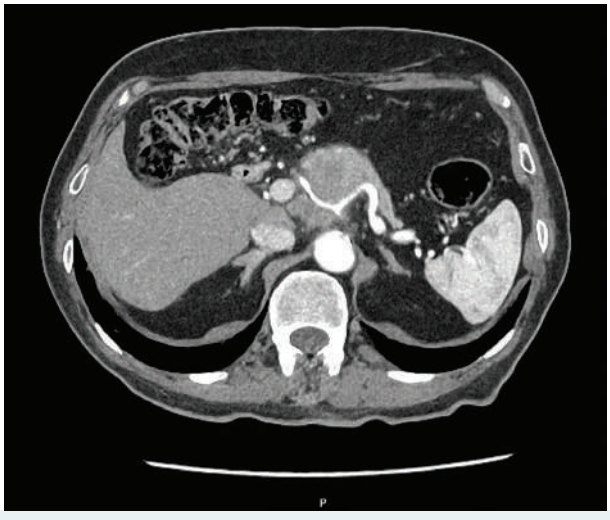


Figure 1. CT scan image of the tumor in the pancreas.

[P-146]

Evaluation of clinical features, diagnosis, treatment, and surgical outcomes in cases of hydatid cysts with atypical localization: A retrospective study

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Objective: This study aimed to evaluate the clinical features, diagnostic challenges, and surgical outcomes of hydatid cysts with atypical localization based on a single-center retrospective case series.

Material and Methods: This was a retrospective study of patients who underwent surgery for pathologically confirmed hydatid cysts in locations outside the liver, spleen, and pancreas between 2014 and 2024. Postoperative recurrence, intraoperative and postoperative complications, and the need for reoperation were evaluated. All patients were assessed with ultrasonography and/or computed tomography according to standard diagnostic protocols for hydatid disease, and albendazole was used as adjuvant therapy regardless of cyst localization.

Results: Ten patients (mean age 44.5±17.7 years; 8 females, 2 males) were included. Cysts were localized in musculoskeletal tissues (n=5, 50%), retroperitoneum (n=3, 30%), adrenal gland (n=1, 10%), and adnexal region (n=1, 10%). Total cyst excision was performed in eight patients (80%), while cystotomy and drainage were required in two patients (20%). Postoperative recurrence was observed in two patients (20%), one following excision of a gluteal cyst and one after retroperitoneal cyst drainage; both patients underwent reoperation. No intraoperative or postoperative complications and no mortality were observed during the follow-up period.

Conclusion: This case series demonstrates that hydatid cysts with atypical localization present with diverse anatomical involvement and may be associated with a risk of postoperative recurrence, particularly in non-radical surgical procedures. Careful preoperative evaluation and complete surgical excision, when feasible, may reduce the need for reoperation in these patients.

Keywords: Hydatid cyst, atypical localization, diagnosis and surgery

[P-147]

Classic inflammatory findings may be absent in perforated appendicitis: A diagnostic pitfall

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Objective: Perforated appendicitis is a common surgical cause of acute abdominal pain, and its diagnosis often requires the combined evaluation of clinical findings, laboratory tests, and imaging results. Although inflammatory markers such as leukocytosis and C-reactive protein (CRP) are frequently used as supportive tools, they are not always reliable predictors. Ultrasonography, particularly in the early stages, may fail to detect perforation and yield false-negative results. Recent studies suggest that perforated appendicitis without accompanying classical inflammatory findings may complicate the diagnostic process and increase the risk of delayed treatment. This study aims to evaluate the diagnostic pitfalls of perforated appendicitis cases in which classical inflammatory findings are absent.

Material and Methods: This retrospective study reviewed patients who underwent surgery for acute appendicitis at Medicana Ataşehir Hospital between May 2021 and August 2025. The diagnosis of perforated appendicitis was confirmed based on intraoperative findings and pathological reports. Among patients with perforation, those without fever and leukocytosis were identified. Demographic characteristics, symptom duration, laboratory parameters (CRP, white blood cell count, and neutrophil-to-lymphocyte ratio), and ultrasonography findings were evaluated. Perforated appendicitis cases with and without classical inflammatory findings were compared.

Results: A total of 286 patients operated on for acute appendicitis were evaluated. Among them, 32 patients were confirmed to have perforated appendicitis based on surgical and pathological findings. In 8 patients (25%), neither fever nor leukocytosis was present. In this subgroup, the median CRP level was 4.9 mg/dL, and the median symptom duration was 72 hours. Ultrasonography failed to detect perforation in 5 patients (62.5%). A summary of the findings and the diagnostic process is presented in Figure 1.

Conclusion: Perforated appendicitis without accompanying classical inflammatory findings such as fever and leukocytosis represents a significant diagnostic pitfall in clinical practice. Our findings demonstrate that normal body temperature and white blood cell counts do not reliably exclude perforated appendicitis. In patients with prolonged symptom duration and subtle inflammatory markers, clinical suspicion should be maintained even when imaging findings are unremarkable, and a comprehensive diagnostic approach is essential. Among 286 patients operated on for acute appendicitis, 32 cases were confirmed as perforated appendicitis based on intraoperative and pathological findings. In 8 patients (25%), neither fever nor leukocytosis was present. In this subgroup lacking classical inflammatory findings, ultrasonography failed to detect perforation in 62.5% (5/8) of cases. The median CRP level was 4.9 mg/dL, and the median symptom duration was 72 hours. This schematic highlights that normal body temperature and white blood cell counts do not reliably exclude perforated appendicitis.

Keywords: Perforated appendicitis, diagnostic pitfall, normal inflammatory markers, ultrasonography, C-reactive protein

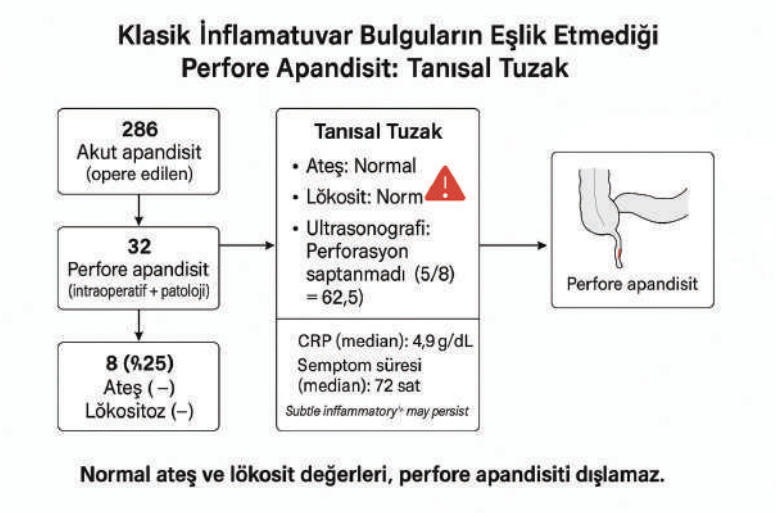


Figure 1. Schematic illustration of the diagnostic pathway in perforated appendicitis cases without classical inflammatory findings.

[P-148]

Gastrointestinal introduction of drug-filled plastic capsules: A single-center experience and clinical management in light of literature recommendations

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Objective: Gastrointestinal introduction of drug-filled plastic capsules is a high-risk clinical scenario due to potential complications such as obstruction, perforation, and rupture-related toxicity. Current recommendations generally support close observation and conservative elimination in patients without toxicity or complications, while advocating surgical management when symptoms or suspected complications are present. In the setting of gastric retention, the optimal timing of intervention remains patient-specific and debated. Here, we present the diagnostic workup and treatment outcomes of patients managed at a single center.

Material and Methods: Seven consecutive patients brought to the hospital under law-enforcement supervision with multiple drug-filled capsules identified within the gastrointestinal tract were retrospectively reviewed. Recorded variables included demographics, diagnostic modality, the method used to confirm complete capsule clearance from the gastrointestinal tract, number of capsules, signs of toxicity, laxative use, time to passage, duration of in-hospital observation, management strategy, and complications.

Results: The median age of the seven patients was 39 years (27-48), and six were male. The number of capsules ranged from 7 to 93. Diagnosis was established by computed tomography (CT) in all patients. Clearance was confirmed by CT in four patients and by colonoscopy in two patients. No patient developed clinical signs of toxicity. Six patients were managed conservatively, and all patients in the conservative group received laxatives. In this group, capsule passage occurred within 1-2 days. One patient underwent surgical treatment due to marked gastric retention on presentation accompanied by abdominal pain; 52 capsules were removed via gastrotomy. The median duration of in-hospital observation was 2 days (range 1-5). No complications were observed in any patient. In the patient operated on due to abdominal pain with marked gastric retention on CT, a total of 52 capsules were extracted via gastrotomy.

Conclusion: When this series is interpreted alongside the literature, management appears to be best guided by risk stratification. Close observation and conservative treatment should be prioritized in patients without toxicity or acute abdominal findings. Surgical treatment should be considered in the presence of toxicity, marked gastric retention, obstruction, or perforation.

Keywords: Body packing, conservative management, emergency surgery



Figure 1. Appearance of capsules within the gastrointestinal tract on CT.



Figure 2. Capsules removed via gastrotomy.

[P-149]

Clinical, laboratory, and imaging characteristics of negative and uncomplicated cases in acute appendicitis: Single-center real-life data

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Objective: Acute appendicitis is one of the most common causes of acute abdomen requiring emergency surgical intervention. Variability in clinical presentation and the limitations of imaging modalities may complicate the differentiation of negative and uncomplicated appendicitis in daily practice, potentially leading to increased rates of negative appendectomy and unnecessary surgical interventions. A better understanding of the clinical, laboratory, and imaging characteristics of negative and uncomplicated appendicitis may improve diagnostic accuracy and help reduce unnecessary surgeries. This study aimed to compare the clinical, laboratory, and imaging findings of patients with negative and uncomplicated appendicitis.

Material and Methods: This single-center retrospective study included patients who underwent surgery with a diagnosis of acute appendicitis. Patients with pathological findings consistent with negative appendicitis (normal appendix or reactive/lymphoid hyperplasia) and uncomplicated appendicitis were included. Patients with complicated appendicitis and those with incomplete data were excluded from the analysis. Demographic characteristics, preoperative laboratory parameters (white blood cell count, C-reactive protein, albumin levels, and neutrophil-to-lymphocyte ratio), and imaging findings obtained by ultrasonography and computed tomography were evaluated. Group comparisons were performed using appropriate statistical tests, and a p-value of <0.05 was considered statistically significant.

Results: A total of 82 patients were included in the study, of whom 13 had negative appendicitis and 69 had uncomplicated appendicitis. The proportion of normal or equivocal findings on computed tomography was significantly higher in the negative appendicitis group compared with the uncomplicated group (33.3% vs. 7.5%; $p=0.034$). Although white blood cell count, C-reactive protein levels, and neutrophil-to-lymphocyte ratio tended to be lower in patients with negative appendicitis, these differences did not reach statistical significance ($p>0.05$ for all). No significant difference was observed in albumin levels between the groups.

Conclusion: Computed tomography findings are more frequently reported as normal or equivocal in patients with negative appendicitis, indicating persistent diagnostic uncertainty in this subgroup. While clinical and laboratory parameters alone may not be sufficiently discriminative, careful interpretation of imaging findings may help reduce negative appendectomy rates. These results support the importance of a multidisciplinary diagnostic approach in patients with suspected acute appendicitis.

Keywords: Acute appendicitis, negative appendectomy, imaging modalities

[P-150]

Traumatic diaphragmatic injuries: Diagnosis, surgical approach, and retrospective analysis of clinical outcomes

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Objective: Traumatic diaphragmatic injuries (TDI), although uncommon, are clinically significant due to diagnostic challenges and the high rate of associated thoracoabdominal injuries. This study aimed to retrospectively evaluate the demographic characteristics, mechanisms of trauma, diagnostic processes, associated injuries, surgical management, and clinical outcomes of patients operated for TDI at the General Surgery Department of University of Health Sciences Türkiye, Ankara Etlik City Hospital between November 2022 and December 2025.

Material and Methods: This single-center retrospective case series included patients operated for TDI during the study period. Data were obtained from electronic medical records. Demographics, trauma mechanism and type, time to admission, time to diagnosis and delayed diagnosis (>24 hours), imaging modalities and CT findings, associated injuries, side of injury and defect size, surgical timing, approach and repair technique, and clinical outcomes were recorded. Continuous variables were presented as median (IQR), and categorical variables as number and percentage.

Results: Twenty-one patients were analyzed. The median age was 29 years (IQR: 23-42), and 95.2% were male. Penetrating trauma accounted for 76.2% of cases, most commonly stab wounds (52.4%), while 23.8% resulted from blunt trauma. Injuries involved the left hemidiaphragm in 81.0% and the right in 19.0%. Most patients (95.2%) presented in the acute phase; the median time from trauma to diagnosis was 3 hours (IQR: 2-6), with delayed diagnosis in 14.3%. CT identified diaphragmatic injury in 42.9% of patients, whereas 19.0% were missed on initial imaging. Associated injuries were present in 90.5%, predominantly thoracic (81.0%) and abdominal (76.2%). Solid organ injury occurred in 42.9%, hollow viscus injury in 28.6%, and abdominal organ herniation in 28.6%. All patients underwent emergency surgery. Laparotomy was the most common approach (81.0%), and primary suture repair was performed in all cases. The median defect size was 4 cm (IQR: 2-7), and median operative time was 90 minutes (IQR: 90-120). All patients required ICU admission; median ICU stay was 7 days (IQR: 2-8), and median hospital stay was 14 days (IQR: 7-18). No reoperations or mortality were observed. Median follow-up was 4 months (IQR: 1-11).

Conclusion: TDI represents a critical trauma entity characterized by diagnostic difficulty and a high incidence of associated injuries. Despite widespread CT use, a subset of injuries was missed on initial imaging, underscoring the importance of clinical suspicion. Systematic evaluation for diaphragmatic injury is essential, particularly in penetrating thoracoabdominal trauma.

Keywords: Traumatic diaphragm injury, penetrating trauma, emergency surgical repair

Table 1. Demographic, trauma, application characteristics, and imaging

Parameter	Value
Age, y	29 (23-42)
Male sex	20 (95.2)
Female sex	1 (4.8)
Mechanism-penetrating	16 (76.2)
Mechanism-blunt	5 (23.8)
Injury type-stab wound	11 (52.4)
Injury type-traffic accident	5 (23.8)
Injury type-firearm injury	5 (23.8)
Side-left	17 (81.0)
Side-right	4 (19.0)
Presentation-acute	20 (95.2)
Presentation-delayed	1 (4.8)
Time from trauma to diagnosis, h	3 (2-6)
Glasgow coma scale score	15 (14-15)
Systolic blood pressure, mmHg*	105 (90-119)
Shock index (HR/SBP)*	1.00 (0.90-1.22)
Intubation requirement	3 (14.3)
Comorbidity	3 (14.3)
Delayed diagnosis (>24 h)-yes	3 (14.3)
Delayed diagnosis (>24 h)-no	18 (85.7)
Imaging modality-CT + US (FAST)	20 (95.2)
Imaging modality-US (FAST) only	1 (4.8)
Diagnosed by CT	9 (42.9)
Not diagnosed by CT	12 (57.1)
CT finding-collar sign	2 (9.5)
CT finding-herniation	1 (4.8)
CT finding-unspecified (code 0)	18 (85.7)
Missed on initial CT	4 (19.0)
Associated injury-yes	19 (90.5)
Thoracic injury-yes	17 (81.0)
Abdominal injury-yes	16 (76.2)
Solid organ injury-yes	9 (42.9)
Hollow viscus injury-yes	6 (28.6)
Abdominal organ herniation-yes	6 (28.6)

Table 2. Surgical characteristics and clinical outcomes

Parameter	Value
Surgical timing-emergency	21 (100)
Surgical approach-laparotomy	17 (81.0)
Surgical approach-laparoscopy	1 (4.8)
Surgical approach-thoracotomy	1 (4.8)
Repair method-primary suture	21 (100)
Diaphragmatic defect size, cm (maximum)	4 (2-7)
Defect area, cm^{2*}	16 (4-24)
Operative time, min	90 (90-120)
ICU admission	21 (100)
ICU length of stay, days	7 (2-8)
Hospital length of stay, days	14 (7-18)
Reoperation	0
30-day mortality	0
Overall mortality	0
Follow-up duration, months	4 (1-11)



Figure 1. Posttraumatic diaphragma hernia.

Diaphragmatic laceration and hiatal hernia following a vehicle traffic accident.

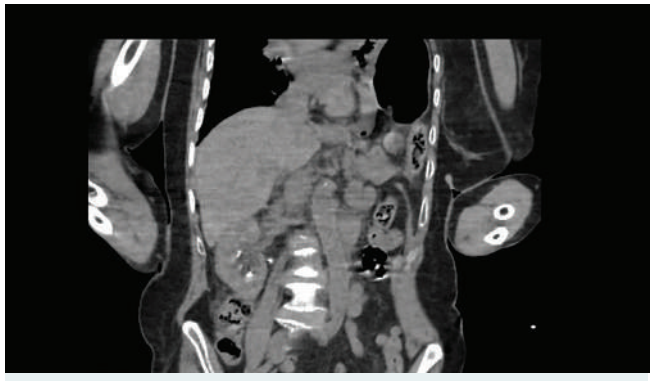


Figure 2. Posttraumatic diaphragma hernia.

Diaphragmatic laceration and hiatal hernia following a vehicle traffic accident.

[P-151]

Pneumatosis intestinalis: A mysterious radiological finding or an early harbinger of surgical necessity? Our experience with 28 cases

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Objective: Pneumatosis intestinalis (PI) is a radiological finding defined by the presence of gas within the bowel wall. It may appear in a linear or cystic pattern within the submucosal or subserosal layers of the intestine. PI is not pathognomonic for a single disease entity and may be encountered in a wide clinical spectrum ranging from benign, self-limiting conditions to life-threatening acute mesenteric ischemia requiring emergency surgical intervention.The aim of this study was to retrospectively evaluate the role of this clinical-radiological marker, whose pathogenesis is not yet fully understood, in predicting the need for surgical intervention.

Material and Methods: Patients in whom PI was detected on radiological imaging at Necmettin Erbakan University Faculty of Medicine Hospital over the last five years were retrospectively reviewed. Patients younger than 18 years of age and those who were not evaluated by a general surgery specialist were excluded from the analysis. Demographic data, presenting symptoms, laboratory parameters (lactate, CRP, WBC), computed tomography findings, and surgical outcomes were analyzed.

Results: A total of 28 patients diagnosed with PI were included in the study. The mean age was 60.8±18.4 years (range, 23-92), with a median age of 58.5 years. Regarding sex distribution, PI was observed in both genders without a marked predominance, demonstrating a heterogeneous distribution. Among the 28 patients, 13 (46.4%) were managed conservatively with medical treatment, whereas 13 patients (46.4%) underwent surgical intervention. However, two additional patients for whom surgical intervention was indicated could not undergo surgery: one patient died before the operation due to hemodynamic instability, and another patient refused surgical treatment. Therefore, while surgical indication was established in 15 patients, 13 were ultimately operated on indications for surgery. The main reasons for surgical decision-making were: • Mesenteric ischemia • Bowel necrosis • Perforation • Internal herniation • Progresive mechanical ileus. Surgical decisions were primarily based on clinical findings consistent with an acute abdomen and radiological suspicion of bowel ischemia. Patients with surgical indication demonstrated significantly higher leukocyte levels. CRP levels also tended to be higher in this group, whereas lactate levels showed a similar distribution between groups.

Conclusion: PI alone is not an absolute indication for surgery; however, in our series, it was associated with a substantial rate of significant surgical pathology. When evaluated together with clinical and laboratory parameters, PI may serve as an early warning sign of serious conditions such as bowel ischemia and perforation. Therefore, careful clinical assessment and timely surgical decision-making are of critical importance in patients diagnosed with PI.

Keyword: Pneumatosis intestinalis

Table 1. Comparison of surgical indications and laboratory parameters between surgically treated and primarily medically managed patients

Parameter	Surgical indication (n=15)	Primary medical management (n=13)
WBC (×10³/μL)	17.3	11.3
CRP (mg/L)	197.8	149.6
Lactate (mmol/L)	4.62	4.43

[P-152]

Rare complication of pleural drainage catheter: Iatrogenic splenic vein cannulation and management

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Objective: While subdiaphragmatic organ injuries during pleural effusion drainage have been described in the literature, direct cannulation of a vascular structure by a pleural catheter (pleurocan) is extremely rare. This report discusses the surgical management of a case in which a catheter, placed for pleural effusion, traversed the splenic parenchyma and was malpositioned directly into the splenic vein.

Material and Methods: A 69-year-old female patient, hospitalized in the oncology department for chemotherapy due to metastatic ovarian cancer, was consulted following pleurocan catheterization for pleural effusion. The consultation was prompted by the drainage of approximately 1000 cc of hemorrhagic fluid, accompanied by acute hypotension (90/50 mmHg) and tachycardia (130 bpm). Laboratory findings revealed a hemoglobin level of 8.2 g/dL. A non-contrast chest CT, performed to check the catheter position, demonstrated that the drainage catheter had advanced into the abdomen through the left 9th-10th intercostal space, traversed the entire splenic parenchyma, and extended to the level of the splenic hilum. Due to hemodynamic instability and potential vascular injury, the patient was taken for emergency surgery.

Results: During exploration, no hemorrhagic fluid was detected within the abdominal cavity. It was observed that the catheter had passed through the diaphragm, entered the spleen via the lateral-posterior aspect, emerged from the splenic hilum medially, and advanced into the splenic vein. The spleen was mobilized by sharp dissection from its surrounding ligaments. The splenic artery and vein were skeletonized. The artery was ligated and divided. The catheter was palpated within the vein; it was then removed in a controlled manner, followed by the ligation and division of the vein. Subsequently, the spleen was removed from the abdomen. The diaphragm was repaired primarily, and a new pleural drainage catheter was inserted. The patient, who experienced no postoperative complications, was transferred back to the oncology department on the 5th day.

Conclusion: This case highlights that pleural interventions, though rare, can lead to life-threatening complications such as major vascular cannulation following parenchymal passage. Rapid imaging and timely surgical intervention are essential to reducing mortality and morbidity.

Keywords: Iatrogenic complication, pleural drainage catheter, splenectomy



Figure 1. Macroscopic view of the splenectomy specimen and catheter malposition.



Figure 2. Perioperative view of splenic vein cannulation.

[P-153]

Nursing care for the use of abdominal binder after major abdominal surgery and abdominal hernia surgery

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Objective: Approximately 400 abdominal hernia surgeries are performed annually in the General Surgery-3 unit of University of Health Sciences Türkiye, Başakşehir Çam and Sakura City Hospital, where we are employed. Nursing care provided to these patients during the preoperative and postoperative periods primarily encompasses the use of surgical abdominal binders, respiratory exercises, early mobilization, nutritional management, wound care, and discharge education. Within the scope of binder use, nurses conduct comprehensive physical and psychosocial assessments, provide patient education and practical support, and take an active role in ensuring appropriate application while preventing potential complications. The aim of this study is to present our clinical experience regarding nursing care in patients using abdominal binders following surgery.

Material and Methods: Abdominal binders are initiated within the first 24 hours postoperatively, in conjunction with the mobilization process. The duration of use generally ranges between 2-6 weeks, depending on the type of surgery performed. In this context, the patient's height, weight, waist circumference, and, if present, the presence and location of a stoma should be carefully assessed. By comprehensively evaluating these characteristics, nurses facilitate the selection of the appropriate binder. During the first postoperative mobilization, the binder is applied while the patient is in a supine position or slightly turned to the right or left lateral position, ensuring full support of the abdominal region. While fastening the binder straps, nurses pay particular attention to maintaining adequate respiratory function, avoiding excessive compression of the body, preventing impairment of regional blood circulation, and ensuring that existing drains are not compromised.

Results: Patients are instructed to wear the surgical binder during each mobilization period for 2-6 weeks, depending on the type of surgery, and to loosen or remove the straps when resting in the supine position after mobilization. Furthermore, in accordance with the physician's recommendations, patients are advised not to wear the binder while bathing and during wound care following discharge.

Conclusion: Incorrect use of abdominal binders may lead to skin irritation, pressure injuries, and impairments in circulation and respiratory function. In conclusion, in surgeries requiring abdominal incisions, the use of an abdominal binder in accordance with physician recommendations necessitates comprehensive nursing roles, including patient assessment, implementation support, complication prevention, and management. The effective execution of these roles based on scientific principles and collaboration with patients and their families throughout the process contributes significantly to the improvement of postoperative care quality.

Keywords: Abdominal surgery, binder, nursing care

[P-154]

Successful management of congenital transmezocolic internal hernia in adult patients with second-look surgery

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Objective: Rectovaginal fistula (RVF) is a clinical condition resulting from the formation of an abnormal tract between the rectum and the vagina, leading to serious hygiene problems, infections, and a significant loss of quality of life. RVFs secondary to pelvic radiotherapy constitute the most difficult subgroup to treat due to poor vascularization and fibrosis. The success rate of primary surgical repair in these cases is low. Fecal diversion is often preferred as the first-line approach. However, spontaneous closure after diversion is rare. This report presents a case of radiation-related RVF that completely closed after fecal diversion and mucosal support therapy.

Material and Methods: The clinical findings, imaging methods, surgical approach, and follow-up results of a 59-year-old female patient with a history of neoadjuvant chemoradiotherapy were retrospectively evaluated.

Results: The patient presented approximately one year after radiotherapy with complaints of fecal leakage from the vagina and foul-smelling discharge. Imaging revealed a RVF extending from the anterior rectal wall to the vagina. Colonoscopy confirmed a large fistula 15 cm proximal to the anal verge. Primary repair was considered high-risk due to the previously irradiated area, fistula width, and suspicion of widespread disease, so fecal diversion was planned. During laparotomy, colon mobilization was not possible due to a "frozen pelvis" appearance, so a loop ileostomy was performed. The vaginal leakage completely resolved in the postoperative period. Omental biopsies were reported as benign. Long-term mesalazine and sucralfate enema therapy was administered to support the radiation-damaged mucosa. The sixth-month follow-up colonoscopy showed complete closure of the fistula and epithelialization. The ileostomy was closed at eight months. No fistula recurrence or additional complications were detected during the 24-month follow-up.

Conclusion: In the treatment of radiation-induced RVF, fecal diversion, when used in conjunction with mucosal support therapy in appropriate patients, may allow for permanent fistula closure. This case demonstrates that conservative approaches may be an alternative to surgical reconstruction in selected cases.

Keywords: Rectovaginal fistula, radiation damage, fecal diversion, ileostomy, mucosal support therapy

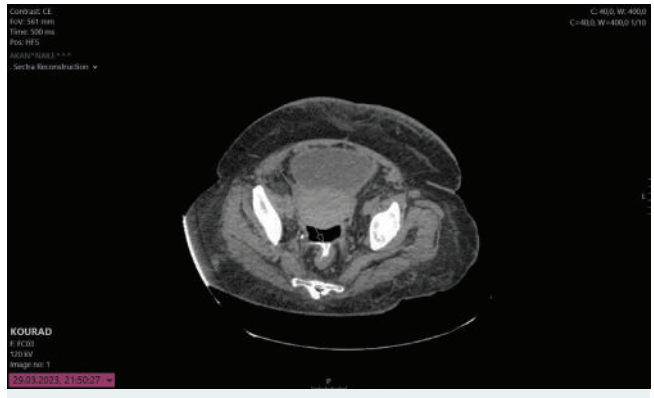


Figure 1a. Contrast-enhanced abdominal CT scan showing a rectovaginal fistula.

In rectal contrast-enhanced CT, a tract extending from the anterior rectal wall towards the cervix/vaginal apex, through which contrast material passes into the vagina.

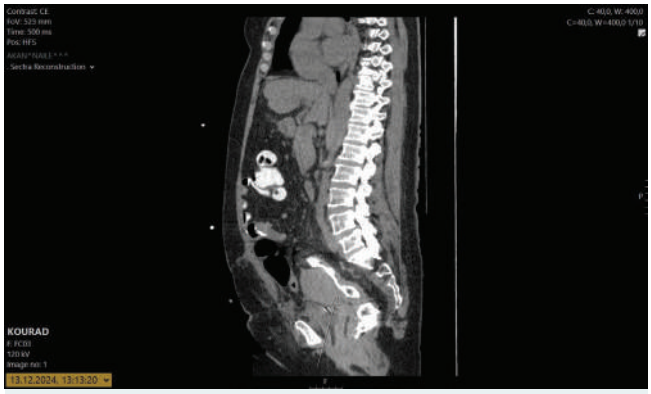


Figure 2a. Contrast-enhanced abdominal CT scan showing a rectovaginal fistula.

In rectal contrast-enhanced CT, a tract extending from the anterior rectal wall towards the cervix/vaginal apex, through which contrast material passes into the vagina.

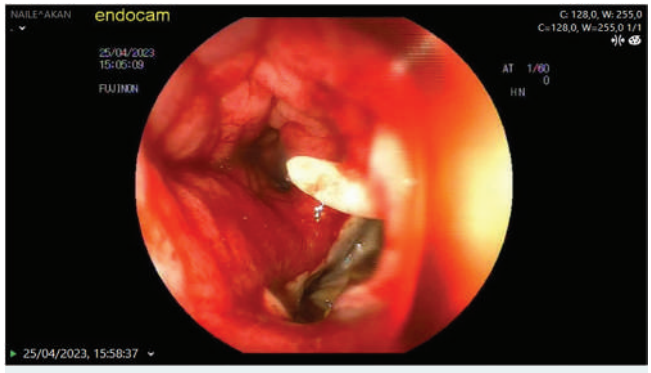


Figure 3a. Colonoscopy image of rectovaginal fistula.

Colonoscopy revealed a rectovaginal fistula located approximately 15 cm proximal to the anal verge and approximately 5 cm in width.

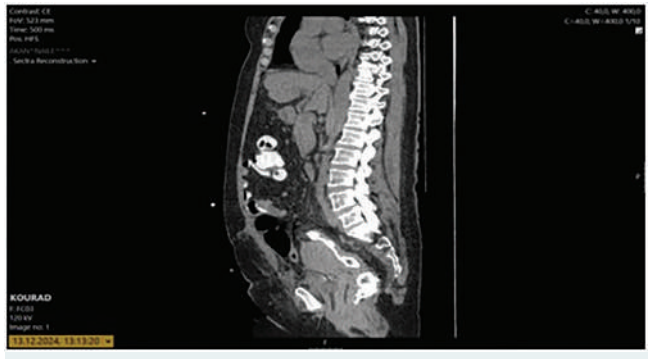


Figure 4a. Image of a healed rectovaginal fistula with contrast-enhanced abdominal CT scan.

Image showing absence of contrast passage into the vagina via contrast-enhanced lower abdominal CT scan.



Figure 5a. Colonoscopy image of healed rectovaginal.

The colonoscopy image shows that the rectovaginal fistula is completely epithelialized and closed.

[P-187]

Colonoscopy findings in diverticular disease: Are polyps and colorectal malignancy actually increasing?

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Objective: Diverticular disease is a common clinical condition in the colonoscopy patient population. The relationship between diverticular disease and colonic polyps and colorectal malignancy remains unclear. In particular, data on the relationship between the location of the diverticulum in the colon, the clinical stage of the disease, and the prevalence of polyps and malignancy are limited. This study aimed to evaluate the age and gender distribution, colonic location, polyp prevalence, Hinchey classification, and colorectal malignancy frequency in patients diagnosed with diverticular disease.

Material and Methods: This retrospective study included 79 patients of whom 48 underwent by colonoscopy. Patients' age and gender information, diverticulum location (right colon, left colon, total colon), Hinchey classification, presence of polyps detected by colonoscopy, and malignancy status were recorded. The presence of polyps was assessed as a binary variable (present/absent). Missing data were coded as NA and excluded from the relevant subgroup analyses. The Hinchey classification was evaluated only in patients diagnosed with acute diverticulitis. Patients with colorectal malignancy were excluded from the polyp prevalence analysis. Continuous variables were presented as median (minimum-maximum), and categorical variables were presented as number and percentage. The chi-square test was used to compare categorical variables.

Results: Of the patients included in the study, 49 (62.0%) were female and 30 (38.0%) were male. The median age was 58 years (range 32-92). In terms of colonic location, left-sided colon involvement was observed in the vast majority of cases. Colonic polyps were detected in 9 (18.8%) of the 48 patients with available polyp data. No statistically significant relationship was found between the presence of polyps and gender or colonic location ($p>0.05$). The majority of patients were in the Hinchey 1A-1B group, while Hinchey ≥2 cases were rare. No significant relationship was found between complicated diverticulitis and the presence of polyps. Colorectal malignancy was rarely detected in patients who underwent colonoscopy.

Conclusion: The prevalence of colonic polyps in patients with diverticular disease is similar to that in the general population, and cases are predominantly localized in the left colon. The presence of complicated diverticulitis does not pose an additional risk for polyp development. Colorectal malignancy was observed at a low rate in patients with diverticulitis who underwent colonoscopy. These findings suggest that diverticular disease and the development of colonic polyps and colorectal malignancy may be largely independent processes.

Keywords: Diverticulitis, polyps, malignancy

[P-188]

Frequency of neoplastic lesions in appendectomy specimens: A single-center experience with 749 cases

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Objective: Acute appendicitis is one of the most common indications for emergency surgical intervention, with a reported lifetime incidence of approximately 7-8%. In patients presenting with typical clinical symptoms, the diagnosis is generally established using imaging modalities, followed by appendectomy. However, histopathological examination of appendectomy specimens is of great importance not only for identifying inflammatory conditions but also for detecting rare yet clinically significant neoplastic lesions.

Material and Methods: In this study, pathology reports of 749 patients who underwent surgery for acute appendicitis at the Department of General Surgery, Ondokuz Mayıs University Faculty of Medicine, between January 2017 and January 2026 were retrospectively reviewed. Histopathological findings were categorized, and the frequency of neoplastic lesions was evaluated.

Results: Among the 749 cases, the most common histopathological diagnosis was acute appendicitis, observed in 477 patients (63.68%). This was followed by necrotizing appendicitis in 174 cases (23.63%), lymphoid hyperplasia in 32 cases (4.27%), and perforated appendicitis in 16 cases (2.13%).Neoplastic lesions were identified in 12 cases (1.6%). The distribution of these lesions was as follows: low-grade mucinous neoplasm (6 cases), high-grade mucinous neoplasm (1 case), adenocarcinoma (2 cases), tubulovillous adenoma (1 case), and grade 2 neuroendocrine tumor (2 cases). Non-neoplastic pathologies accounted for 98.4% of all cases.The most frequently detected pathology in appendectomy specimens was acute appendicitis, which is consistent with the rates of 60-70% reported in the literature. Complicated forms such as necrotizing and perforated appendicitis together constituted approximately 25-30% of cases. Although appendiceal neoplasms are rare, they are clinically significant. Mucinous neoplasms and neuroendocrine tumors often mimic the clinical presentation of acute appendicitis in the preoperative period. The neoplasm rate of 1.6% observed in our study is consistent with the range of 0.5-2% reported in the literature.

Conclusion: Although acute appendicitis remains the most common diagnosis in appendectomy specimens, neoplastic lesions are detected at a non-negligible rate. These findings support the clinical necessity of routine histopathological examination of all appendectomy specimens, as early diagnosis contributes to appropriate treatment and follow-up planning.

Keywords: Appendectomy, appendicitis, neoplasia

[P-189]

What has changed in the surgical management of T1a papillary thyroid carcinoma over the last 10 years?

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Objective: Papillary thyroid carcinoma (PTC) is the most common differentiated thyroid cancer. Its incidence has steadily increased over the past 50 years, and approximately half of surgically treated cases are tumors ≤1 cm (T1a, micro-PTC). Although lymph node metastasis is present at diagnosis in 9-42% of these tumors, prognosis is generally excellent. Management options for T1a tumors range from active surveillance to total thyroidectomy and therapeutic neck dissection. We aimed to evaluate whether there has been a change in the surgical management of T1a tumors in our clinic over the past decade.

Material and Methods: We retrospectively reviewed patients who underwent surgery for PTC with T1a (<1 cm) tumors between January 2016 and December 2025. Patients with lymph node metastasis underwent therapeutic central and/or lateral neck dissection. Patients were divided into two groups: 2016-2020 (group 1) and 2021-2025 (group 2). Surgical extent was compared between the two periods.

Results: A total of 178 patients (147 females, 31 males) were included: 52 in group 1 and 126 in group 2. Initial surgery in group 1 vs. group 2 was lobectomy in 21 (40.4%) vs. 76 (60.3%), total thyroidectomy in 25 (48.1%) vs. 46 (36.5%), and total thyroidectomy with central ± lateral neck dissection in 6 (11.5%) vs. 4 (3.2%), respectively (p=0.0142). Completion thyroidectomy after lobectomy was performed in 6 (11.1%) and 5 (4.1%) patients in groups 1 and 2, respectively (p=0.0803). After completion procedures, final surgical distribution was lobectomy in 17 (32.7%) vs. 72 (57.1%), total thyroidectomy in 28 (53.8%) vs. 50 (39.7%), and total thyroidectomy with central ± lateral neck dissection in 6 (11.5%) vs. 4 (3.2%) (p=0.0046).

Conclusion: A significant shift in the surgical management of T1aN0M0 tumors has occurred over the last decade. During the first 5-year period, total thyroidectomy (± neck dissection) was the most common procedure, accounting for nearly 60% of cases. In the second period, approximately 60% of patients underwent lobectomy, making it the preferred initial surgical approach. The rate of neck dissection for lymph node metastasis decreased from 10% to 3%, likely reflecting a move away from prophylactic dissection and an increase in incidentally detected small tumors.

Keywords: Papillary thyroid carcinoma, T1a tumor, lobectomy

[P-191]

Invasive lobular breast cancer progressing to aggressive metaplastic carcinoma

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Objective: Breast cancer is a malignancy exhibiting heterogeneous biological characteristics, with treatment response and prognosis varying significantly according to histopathological subtypes. Metaplastic breast carcinoma (MBC) is a rare subtype, accounting for less than 1% of all breast cancers, which is usually aggressive, triple-negative, and resistant to chemotherapy. The sequential development of different histopathological breast cancer types in the same patient is quite rare and complicates clinical management. This case presents aggressive MBC developing after a history of invasive lobular breast cancer.

Material and Methods: The clinical course, imaging findings, surgical interventions, and histopathological results of a 44-year-old female patient who developed different breast cancer subtypes at different times were retrospectively evaluated.

Results: The patient was initially operated on due to a mass developing in the left breast. Pathological evaluation revealed HER2-positive invasive breast carcinoma, and adjuvant chemotherapy, trastuzumab, and radiotherapy were administered. During follow-up, a rapidly growing mass in the right breast was surgically removed, and invasive lobular carcinoma was diagnosed. Adjuvant chemotherapy was initiated. However, eight months after right mastectomy, while adjuvant treatment was ongoing, a rapidly progressing mass invading the pectoral muscle developed at the mastectomy site. No distant metastases were detected on imaging. Following a multidisciplinary team decision, the lesion was en bloc excised along with the pectoral muscle segment. Pathological examination revealed findings consistent with MBC with a triple-negative phenotype, containing widespread squamous differentiation, and the surgical margins were negative.

Conclusion: Although MBC is rare, it exhibits aggressive biological behavior and chemoresistant properties. This case highlights the possibility of biological transformation in breast cancer and the necessity for re-biopsy and multidisciplinary evaluation in cases of recurrence or progression. An aggressive surgical approach in the absence of distant metastasis may offer an important treatment option for local control.

Keywords: Metaplastic breast carcinoma, invasive lobular carcinoma, breast cancer, triple-negative phenotype, local recurrence

[P-194]

Reasons for conversion from breast-conserving surgery decision to primary mastectomy in multidisciplinary tumor boards: Pandemic impact and temporal trends

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Objective: Reasons for conversion from breast-conserving surgery decision to primary mastectomy in multidisciplinary tumor boards: pandemic impact and temporal trends.

Material and Methods: In this single-center retrospective analysis, cases initially recommended for BCS by the MTB but who subsequently underwent primary mastectomy were evaluated annually. The "pandemic impact" period was defined as 2021-2022, and the "post-pandemic" period as 2023-2025. Reasons for conversion were categorized as physician-based (extra-board re-evaluation: concerns regarding negative surgical margins, cosmetic considerations) and patient-based [preference for mastectomy following counseling: perceived higher efficacy of mastectomy, difficulty accessing radiotherapy (RT), fear of RT/hospital contact, and the desire to minimize hospital visits by opting for a single-session procedure]. Ethical committee exemption was obtained for the study.

Results: Between 2021 and 2025, a total of 369 BCS decisions were made, and primary mastectomy was performed in 77 cases (20.9%). While the annual number of BCS decisions increased from 62 to 84 (a 35.5% increase), the conversion rate from BCS to mastectomy was 37.1% (23/62) in 2021, 25.0% (17/68) in 2022, 22.7% (17/75) in 2023, 12.5% (10/80) in 2024, and 11.9% (10/84) in 2025. The conversion rate was significantly higher during the pandemic impact period (30.8%, 40/130) compared to the post-pandemic period (15.5%, 37/239) ($p<0.001$). Throughout the entire study period, 33.8% (26/77) of conversions were physician-based, while 66.2% (51/77) were patient-based. The most common physician-based reason was concern regarding negative surgical margins (19/26), followed by cosmetic reasons (7/26). In the pandemic impact period, fear of RT/hospital contact and RT access difficulties were the predominant patient-based factors; in the post-pandemic period, although the overall conversion rate decreased, patient-related factors remained the primary driver.

Conclusion: The conversion rate from a BCS recommendation to primary mastectomy was found to be significantly higher during the pandemic impact period. In the post-pandemic era, while BCS decisions increased, the conversion rate markedly decreased. We conclude that the standardization of patient counseling and implementation of measures to facilitate access to radiotherapy may further reduce the conversion rates from BCS to mastectomy in the future.

Keywords: Breast cancer, BCS, mastectomy

[P-195]

Multidisciplinary team (MDT)-tumor board practices and the need for digital solutions in Türkiye

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Objective: The annual number of newly diagnosed cancer cases in Türkiye is reported to be approximately 240.000 (Turkish Statistical Institute), and these cases,together with other complex clinical conditions,are evaluated within multidisciplinary team meeting (MDT/tumor boards); however, MDT/tumor board practices vary across institutions, and the need for digitalization in terms of recording,data management, and sustainability is increasing. Systematic evaluation of MDT practices in Türkiye remains limited.

Material and Methods: This cross-sectional survey study included 167 physicians representing 26 medical specialties and 23 different tumor board types from 30 cities across Türkiye. Participants were digitally administered a 42-item online questionnaire (Google Forms) covering MDT experience, tumor board workflow, recording-consent-data security practices, and attitudes toward digital MDT solutions.

Results: Of the 167 participating physicians, 63.47% were male and 36.53% female, with 68.26% aged 31-50 years. Overall, 69.46% had ≥5 years of post-specialty experience, and 83.24% worked in tertiary care institutions. Regarding MDT experience, 66.02% reported ≥4 years and 33.53% ≥10 years. According to participant reports, 82.63% of MDT meetings are still conducted face to face, and 46.10% of decisions are recorded on paper forms. Presentation materials and patient files are commonly stored on personal computers (31.70%), messaging platforms (24.00%), and email attachments (21.60%), with 63.47% reporting file loss or version confusion. The proportion reporting that no specific patient consent is obtained for MDT discussions was 73.65%, while 71.26% indicated the absence of a written procedure for communicating decisions to patients. Only 22.75% considered MDT processes to be fully compliant with "KVKK/GDPR". Additionally, 44.31% reported frequent impact on personal time, and 32.93% on working hours. Despite this, MDT participation was not institutionally documented in 47.31% of cases; 94.01% reported no financial benefit, and 80.24% rated academic prestige/publication contribution as none or rare. Artificial intelligence was not used in MDT processes by 89.20% of participants. The main barriers to digitalization were lack of technical infrastructure (67.10%), insufficient digital tool usage habits (61.10%), and institutional integration challenges (52.70%). The most prioritized features of a digital MDT system were single-panel access to all patient data (77.80%), automated and standardized decision recording (73.70%), PACS integration (71.30%), and "HBYS/e-Nabız" integration (59.90%). A total of 84.40% agreed that digital MDTs would improve standardization, accessibility, and institutional sustainability, and 78.40% believed they would contribute to the national healthcare system. Digital solutions for MDT preparation and implementation (Table 1) and the anticipated innovations and benefits of a digital MDT software (Table 2) were rated as highly important and beneficial. Finally, 92.80% stated they would use a digital MDT system (definitely 53.30%, if needed 39.50%), and 74.85% were willing to participate voluntarily in pilot, testing,or design phases.

Conclusion: This study demonstrates that MDT practices in Türkiye are widespread but require further development in terms of standardization, data security, and recording systems; however, there is strong acceptance and high willingness to participate in digital, integrated, and artificial intelligence-supported MDT solutions. The findings indicate that digital MDT solutions hold significant transformative potential.

Keywords: Multidisciplinary tumor boards, multidisciplinary team meeting, digital health, artificial intelligence, data security

Table 1. Perceived importance of MDT session, preparation, and patient communication processes

Durum	1=hiç önemli değil	2=az önemli	3=orta düzeyde önemli	4=önemli	5=çok önemli
Uzaktan erişim ile konsültan katılımı	9 (5.39%)	22 (13.17%)	43 (25.75%)	49 (29.34%)	44 (26.35%)
Konsey kararlarının dijital ortamda kayıt imkanı	1 (0.60%)	3 (1.80%)	30 (17.96%)	44 (26.35%)	89 (53.29%)
Kurumsal standart sunum formatı bulunması	2 (1.20%)	2 (1.20%)	36 (21.56%)	46 (27.54%)	81 (48.50%)
Sunum dosyalarına toplantı öncesi online erişim	1 (0.60%)	6 (3.59%)	24 (14.37%)	50 (29.94%)	86 (51.50%)
Hastalardan özel yazılı/dijital onam alınması	22 (13.17%)	28 (16.77%)	48 (28.74%)	37 (22.16%)	32 (19.16%)
Konsey kararlarının hastaya yazılı/dijital iletilmesi	7 (4.19%)	11 (6.59%)	34 (20.36%)	54 (32.34%)	61 (36.53%)
KVKK/GDPR'ye tam uyumlu veri işleme ve paylaşım	6 (3.59%)	8 (4.79%)	34 (20.36%)	54 (32.34%)	65 (38.92%)
Durum	**1=hiç önemli değil**	**2=az önemli**	**3=orta düzeyde önemli**	**4=önemli**	**5=çok önemli**
Ortalama kazanım yüzdeleri	**4.11%**	**6.84%**	**21.30%**	**28.57%**	**39.18%**

Table 2. Evaluation of innovations and benefits of the digital MDT software

Yenilik/kazanım	1=kesinlikle faydasız	2=faydasız	3=kararsız/ kısmen faydalı	4=faydalı	5=çok faydalı
Sabit dijital mimari ve geliştirilebilir format	5 (2.99%)	10 (5.99%)	46 (27.54%)	62 (37.13%)	44 (26.35%)
Konsey süresi verimliliği ve zaman tasarrufu	3 (1.80%)	13 (7.78%)	39 (23.35%)	60 (35.93%)	52 (31.14%)
Konsey hazırlık süreçlerini hızlandırması ve hataları azaltması	2 (1.20%)	11 (6.59%)	27 (16.17%)	78 (46.71%)	49 (29.34%)
Hasta verilerinin güvenli dijital saklanması ve arşiv kayıplarının önlenmesi	3 (1.80%)	12 (7.19%)	25 (14.97%)	63 (37.72%)	64 (38.32%)
Konsey katılım bilgilerinin kişisel ve akademik olarak belgelenebilmesi	1 (0.60%)	9 (5.39%)	28 (16.77%)	60 (35.93%)	69 (41.32%)
Etik onam, dijital belge/sonuç iletimi ve siber güvenlik	5 (2.99%)	17 (10.18%)	36 (21.56%)	57 (34.13%)	52 (31.14%)
Klinik araştırma için veri entegrasyonu ve etik onamlı katılım	6 (3.59%)	14 (8.38%)	33 (19.76%)	60 (35.93%)	54 (32.34%)
Dijital davet ve planlama ile toplantı organizasyonu	5 (2.99%)	14 (8.38%)	30 (17.96%)	62 (37.13%)	56 (33.53%)
Yapay zeka destekli klinik önerilerin artması	4 (2.40%)	20 (11.98%)	42 (25.15%)	54 (32.34%)	47 (28.14%)
Konsey geçmişinin arşivlenebilir, indekslenebilir ve erişilebilir olması	3 (1.80%)	8 (4.79%)	26 (15.57%)	59 (35.33%)	71 (42.51%)
Katılımın kurumsal ve akademik olarak belgelendirilmesi	4 (2.40%)	10 (5.99%)	29 (17.37%)	53 (31.74%)	71 (42.51%)
MDT katılımı olmayan kurumlara ve hastalara erişim imkanı	8 (4.79%)	13 (7.78%)	35 (20.96%)	55 (32.93%)	56 (33.53%)
Tanı-tedavi-maliyet etkinlik analiz imkânı	6 (3.59%)	10 (5.99%)	44 (26.35%)	54 (32.34%)	53 (31.74%)
Yenilik/kazanım	**1=kesinlikle faydasız**	**2=faydasız**	**3=kararsız/ kısmen faydalı**	**4=faydalı**	**5=çok faydalı**
Ortalama kazanım yüzdeleri	**2.53%**	**7.41%**	**20.27%**	**35.77%**	**33.99%**

[P-196]

Evolution of educational resources: A comparative analysis of laparoscopic cholecystectomy videos over two decades

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Objective: Laparoscopic cholecystectomy (LAP chole) is one of the most commonly performed surgeries worldwide. With the rise of online platforms like YouTube and WebSurg, surgical videos have become popular educational tools. However, the quality of these videos varies, raising concerns about their reliability. This study evaluates the changes in the quality of laparoscopic cholecystectomy videos over two decades and compares the educational value of YouTube and WebSurg videos.

Material and Methods: Twenty-four videos were analyzed and divided into four groups: older YouTube, older WebSurg, newer YouTube, and newer WebSurg. Six videos from each group were selected based on relevance and popularity. Three independent surgeons assessed them using standardized scoring systems, including the JAMA benchmark score, global quality score (GQS), LAP-VEGaS, and a new LAP chole-specific score (SS). Video characteristics such as duration, uploader type, and viewer engagement were also considered. Statistical comparisons were made between the groups.

Results: The analysis showed that although newer videos were longer, the difference was not statistically significant (p=0.74). Newer videos had significantly better image quality (p<0.001). WebSurg videos consistently outperformed YouTube videos across all evaluation criteria (Table 1). WebSurg scored higher in the JAMA benchmark (2.62 vs. 1.66), GQS (3.58 vs. 2.63), LAP-VEGaS (13.7 vs. 6.58), and LAP chole-SS (4.08 vs. 2.33) (Table 2).

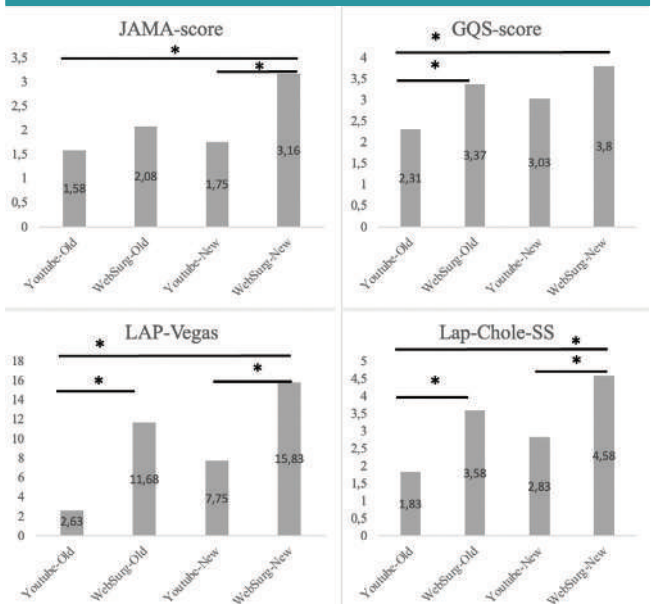
Conclusion: In conclusion, WebSurg provides higher-quality, peer-reviewed content, making it more reliable for surgical education, while YouTube offers accessibility but often lacks educational rigor.

Keywords: Cholecystectomy, education, laparoscopic surgery, youtube, video

Table 1.

		YouTube videos (n=12)	WebSurg videos (n=12)	sig.
Duration		485	546	.877
		(107-978)	(282-1130)	
Views		52k	6.8k	.050
		(1.1k-550k)	(0.6k-23k)	
Source				<.001
Physician Commercial		9 3	12 0	
Country				<.001
India USA France		8 4 0	0 0 12	
Image quality				<.001
Poor Moderate Good		5 1 6	0 0 12	
Background sound				<.001
Music Narration Silent		6 5 1	0 11 1	
JAMA benchmark		1.66	2.62	.965
GQS		2.63	3.58	.005
LAP-VEGaS		6.58	13.7	.493
LAP chole-SS		2.33	4.08	.047

Table 2.



[P-197]

Upper and lower gastrointestinal endoscopy: Indications and findings according to age groups in a tertiary center

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Objective: Upper and lower gastrointestinal endoscopy are essential diagnostic tools for evaluating gastrointestinal symptoms. Endoscopic indications and findings may vary according to age, influencing diagnostic yield and clinical decision-making. This study aimed to evaluate age-related differences in indications and findings of both upper and lower gastrointestinal endoscopy and to explore whether clinically relevant findings increase before the current colorectal cancer screening age.

Material and Methods: A retrospective analysis was conducted on patients who underwent upper and/or lower gastrointestinal endoscopy between 2025 and 2026 in a tertiary care center. Patients were stratified into age groups (<40, 40-49, 50-59, and ≥60 years). Demographic characteristics, indications for endoscopy, and endoscopic findings were recorded. Upper and lower gastrointestinal endoscopy results were analyzed separately and comparatively according to age groups using descriptive and comparative statistical methods.

Results: A total of 325 endoscopic procedures were included, comprising 167 upper and 156 lower gastrointestinal endoscopies. Dyspeptic symptoms were the most common indications for upper gastrointestinal endoscopy across all age groups. Antral gastritis was the most frequent upper endoscopic finding. Lower gastrointestinal endoscopy was most commonly performed for rectal bleeding, altered bowel habits, anemia, and abdominal pain. Normal or near-normal findings were more frequent in younger patients, whereas pathological findings increased with age, particularly in patients aged 50 years and older. Although colorectal cancer screening is generally recommended from the age of 50, analysis of patients aged 40-49 years did not reveal a statistically significant increase in pathological endoscopic findings compared with other age groups (p=0.66), indicating no clear evidence to support lowering the screening age to 40 in this cohort.

Conclusion: Endoscopic findings demonstrate a progressive age-related increase rather than a sharp rise in the 40-49 age group. While pathological findings become more prevalent after the age of 50, the current data do not support lowering the colorectal cancer screening age to 40. An age-based and indication-driven approach to gastrointestinal endoscopy remains essential for optimizing diagnostic yield.

Keywords: Gastrointestinal endoscopy, age groups, colorectal cancer screening, screening age

[P-198]

The role of nurses in preventing post-liver transplantation complications

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Objective: Liver transplantation is a life-saving treatment for end-stage liver disease. However, early postoperative complications such as infection, acute rejection, bleeding, vascular thrombosis, and biliary complications remain major causes of morbidity and mortality. Nurses play a pivotal role in the early detection, monitoring, and prevention of these complications.

Material and Methods: This study was designed as an evidence-based literature review. Recent national and international studies were analyzed to identify common postoperative complications and related nursing interventions. Key nursing responsibilities, including hemodynamic monitoring, infection control practices, immunosuppressive therapy management, fluid and electrolyte balance assessment, early mobilization, and patient education, were systematically evaluated.

Results: Findings indicate that structured and protocol-driven nursing care significantly reduces preventable postoperative complications. Continuous monitoring of vital signs and laboratory parameters enables early detection of acute rejection and graft dysfunction. Strict adherence to aseptic techniques lowers infection rates, while comprehensive patient education enhances medication adherence and long-term graft survival.

Conclusion: Nurses play a critical role in preventing early complications after liver transplantation. The integration of standardized nursing protocols into postoperative care pathways improves patient safety, reduces complication rates, and enhances overall transplant outcomes.

Keywords: Liver transplantation, nursing care, postoperative complications

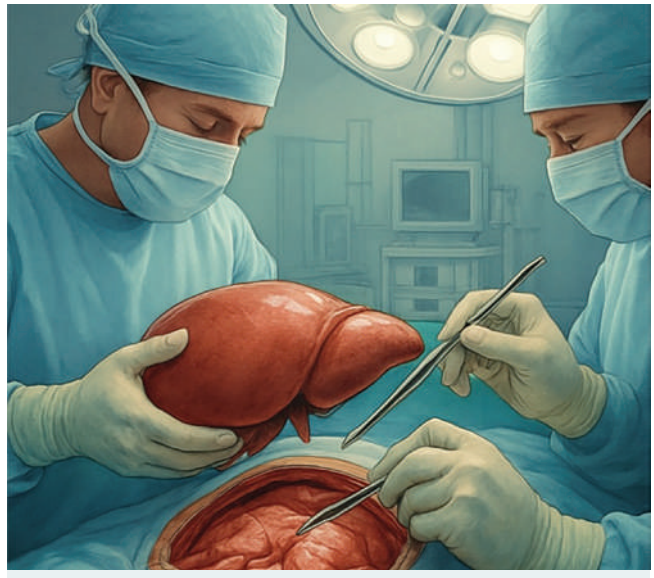


Figure 1. Liver transplantation.

A glimpse of surgeons performing liver transplantation.

[P-201]

The role of four-dimensional computed tomography in preoperative localization in primary hyperparathyroidism

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Objective: Accurate preoperative localization is of critical importance in the surgical management of primary hyperparathyroidism (PHPT). Ultrasonography (USG) and sestamibi scintigraphy are first-line imaging modalities. However, in cases where first-line imaging is negative or discordant, four-dimensional computed tomography (4D-CT) has gained increasing importance. In this study, the concordance between imaging modalities and surgical findings was analyzed in PHPT patients who underwent 4D-CT and subsequent surgery.

Material and Methods: Demographic and clinical characteristics of 23 patients diagnosed with PHPT were retrospectively recorded. Patients included in the study had a diagnosis of PHPT, had not undergone prior surgery, had non-localizing findings on first-line imaging or discordance between imaging modalities, and underwent 4D-CT imaging preoperatively. Surgical findings were accepted as the gold standard, and the localization success and complete concordance rates of the imaging methods were evaluated accordingly. Intraoperative rapid parathyroid hormone (PTH) measurement and nerve monitoring were utilized in all cases. Focused parathyroidectomy or four-gland exploration was performed depending on the case.

Results: Of the patients (19 females, 4 males), the mean age was 46.8±14.5 years. The mean preoperative serum calcium level was 10.81±0.83 mg/dL, and the mean PTH level was 279.4±437.1 pg/mL. All patients underwent preoperative USG, scintigraphy, and 4D-CT imaging. According to surgical findings, the most common adenoma location was the right inferior gland (39.1%). The localization success rate of USG was 87% (20/23), with a complete localization accuracy of 78.3% (18/23). 4D-CT achieved localization in 65.2% (15/23) of cases, with a complete surgical concordance rate of 39.1% (9/23). Scintigraphy achieved localization in 30.4% (7/23) of cases, with a complete concordance rate of 17.4% (4/23). In cases with marked discordance between USG and scintigraphy, 4D-CT provided additional anatomical information in some patients and contributed to surgical planning, particularly in ectopically located glands. However, 4D-CT did not demonstrate sufficient concordance with surgical findings in all discordant cases. Among the imaging modalities, USG showed the highest concordance with surgical findings.

Conclusion: Although the overall success rate of 4D-CT was low in our study, it appears to serve a complementary role, particularly in selected patients with negative or discordant conventional imaging findings. According to the literature, we attribute our relatively low imaging success rate with 4D-CT to the learning curve associated with this technique. Despite inadequate imaging results, pathological foci were identified and successfully excised in 21 patients. These findings support the importance of a stepwise imaging approach in the management of PHPT.

Keywords: Hyperparathyroidism, 4D-CT, ultrasonography, scintigraphy

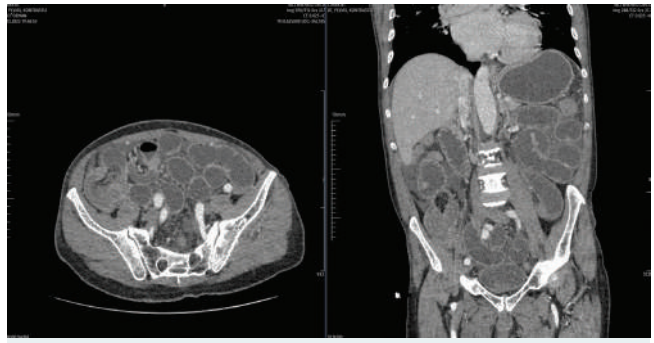


Figure 1. İleoçekal invajinasyon.

Sağ alt kadranda ileoçkal invajinasyon ve dilate ince barsak anslarının aksiyel ve coronal BT görüntüsü.

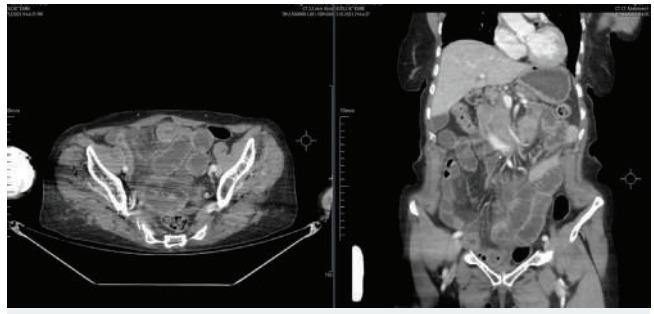


Figure 2. Sağ alt kadranda ileo-ileal invajinasyona ait hedef tahtası bulgusu.

[P-205]

"Diagnosis, surgical approach, and clinical outcomes in adult intussusception: A single-center experience"

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Objective: Adult intussusception is a challenging clinical entity in terms of diagnosis and management due to its rarity, high rate of malignancy in the etiology, and variable clinical course. In this study, the demographic characteristics, clinical and radiological findings, surgical approaches, and clinical outcomes of adult patients with intussusception presenting to the emergency department were evaluated.

Material and Methods: Thirty-eight adult patients diagnosed with intussusception after presenting to the Emergency Department at the General Surgery Department, University of Health Sciences Türkiye, Ankara Etlik City Hospital were retrospectively reviewed. Demographic data, duration of symptoms, clinical and radiological findings, surgical decision-making processes, pathological diagnoses, and postoperative outcomes were analyzed.

Results: Median age was 50 years (IQR: 31.5-57.8), and 55.3% were male. The most common presenting symptom was abdominal pain (94.7%), followed by nausea-vomiting (71.1%) and obstipation (50.0%). Fever (15.8%) and hypotension (10.5%) were noted, while a palpable abdominal mass on physical examination was recorded in 5.3% of patients. Computed tomography (CT) was used for diagnostic evaluation in all patients, and a preoperative diagnosis of intussusception was achieved in 97.4% of cases. The most frequently identified type of intussusception was enteroenteric (83.8%). CT findings included the target/donut sign in 97.4%, an invaginated segment longer than 3 cm in 81.6%, obstruction in 51.4%, and free fluid in 39.5% of patients. Diagnostic delay (>48 hours) was present in 52.6% of cases. The median time from symptom onset to diagnosis was 59 hours (IQR: 12-81). Of the 38 patients, 27 (71.1%) underwent surgical intervention, the vast majority under emergency conditions (96.3%). The most common surgical indications were bowel obstruction (37.0%), acute abdomen/peritonitis (25.9%), signs of ischemia (18.5%), and suspicion of malignancy (18.5%). Bowel resection was performed in 55.6% (15/27) of surgically treated patients. Among those who underwent resection, 93.3% received segmental small bowel resection and 6.7% underwent right hemicolectomy. The stoma formation rate was 3.7%. Pathological examination of resected specimens revealed malignancy in 33.3% (5/15) of cases. In the postoperative period, at least one complication occurred in 18.5% of patients. The most common complications were surgical site infection (7.4%) and sepsis (7.4%). No anastomotic leakage was observed. A total of 40.7% of patients required intensive care unit follow-up, with a median ICU stay of 0 days (IQR: 0-1). The 30-day mortality rate was 2.6%, and overall mortality was 7.4%. The median follow-up duration was 12 months (IQR: 7.5-20.5).

Conclusion: The literature indicates that adult intussusception is often detected electively or incidentally. In our study, the fact that all cases presented through the emergency department reflects a distinct patient population with a more severe clinical course. The malignancy rate of 33.3% in surgically treated and resected cases is consistent with the literature and underscores that the possibility of malignancy must be carefully considered in clinical decision-making for emergent adult intussusception. The central role of CT in diagnosis was confirmed, as CT was used in all patients with a preoperative diagnostic rate of 97.4%. Radiological parameters such as the target/donut sign, invaginated segment length, and findings of obstruction or ischemia significantly guided surgical decision-making. In conclusion, adult intussusception presenting to the emergency department is associated with a high need for surgery and a substantial malignancy risk, requiring integrated clinical, radiological, and pathological evaluation for timely surgical management.

Keywords: Adult intussusception, bowel resection, computed tomography (CT), emergency surgery, malignancy

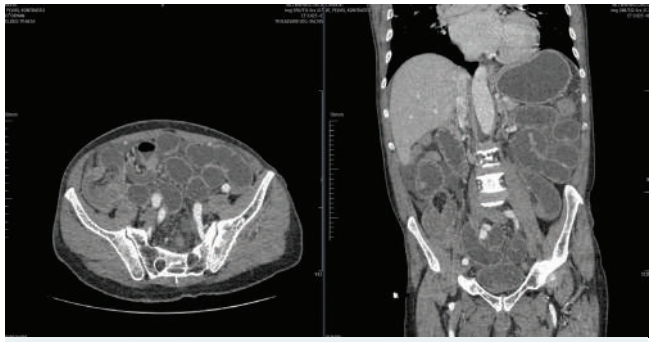


Figure 1. Ileocecal intussusception.

Axial and coronal CT images demonstrating ileocecal intussusception in the right lower quadrant with dilated small bowel loops.

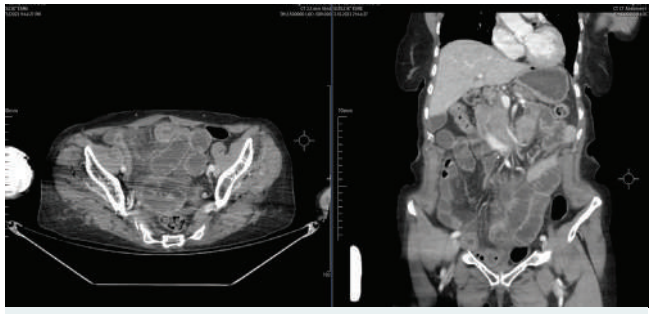


Figure 2. Ileoileal intussusception.

Target sign of ileoileal intussusception in the right lower quadrant.

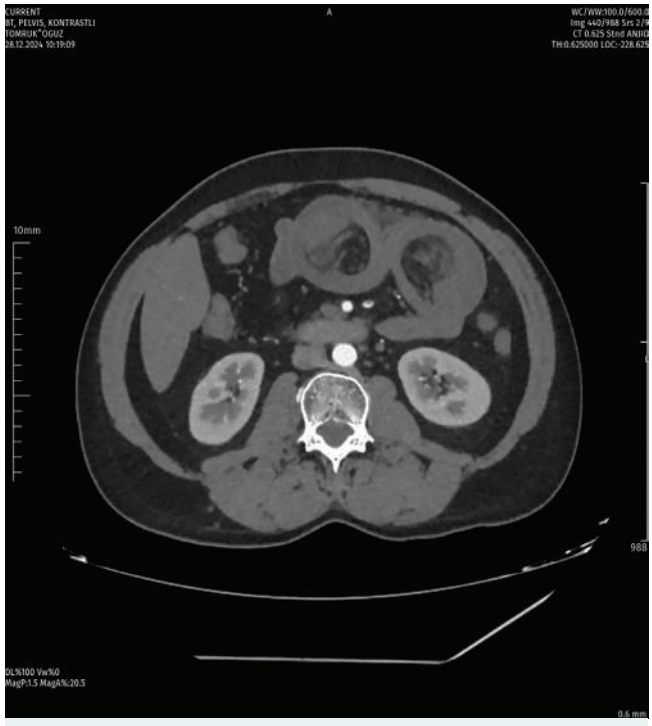


Figure 3. Jejunojejunnal intussusception.

Axial CT image demonstrating small bowel intussusception involving the mesentery.



Figure 4. Intraoperative findings.
Reduction of intussusception using laparoscopic and open surgical techniques.

Table 1. Demographic characteristics and presenting findings (n=38)

Variable	Value
Age (years), median (IQR)	50 (31.5-57.8)
Age (years), mean ± SD	46.9±18.6
Sex	
Male	21 (55.3%)
Female	17 (44.7%)
Body mass index (kg/m^2), median (IQR	22.8 (19.8-27.9)
ASA score	
ASA I	9 (23.7%)
ASA II	16 (42.1%)
ASA III	8 (21.1%)
ASA IV	5 (13.1%)
Presence of comorbidity	
Absent	18 (47.4%)
Present	20 (52.6%)
Mode of presentation	
Emergency	38 (100%)
Symptom duration (days), median (IQR)	3.0 (2.0-7.0)

Table 2. Clinical symptoms and laboratory findings

Variable	Value
Abdominal pain	36 (94.7%)
Nausea/vomiting	27 (71.1%)
Absence of flatus-stool passage	19 (50.0%)
Lower gastrointestinal bleeding	7 (18.4%)
Palpable mass	2 (5.3%)
Fever (>38 °C)	6 (15.8%)
Hypotension (SBP <90 mmHg)	4 (10.5%)
WBC (10^3/µL), median (IQR)	11.6 (9.1-16.8)
Hemoglobin (g/dL), median (IQR)	12.6 (10.9-14.4)
CRP (mg/L), median (IQR)	42.0 (15.0-132.0)
Lactate (mmol/L), median (IQR)	2.1 (1.4-3.6)

Table 3. Imaging findings and diagnostic characteristics

Variable	Value
Imaging modality used	
CT	19 (50.0%)
Ultrasonography	0 (0.0%)
CT+ultrasonography	19 (50.0%)
Diagnosis of intussusception by CT	37 (97.4%)
Type of intussusception	
Enteroenteric	31 (83.8%)
Ileocecal	6 (16.2%)
Ileocolic	0 (0.0%)
Colocolic	0 (0.0%)
Suspicion of malignancy on CT	7 (19.4%)
Bowel obstruction	19 (51.4%)
Signs of bowel ischemia	6 (16.2%)
Free fluid	15 (39.5%)
Clear visualization of lead point on CT	4 (10.5%)
Target/donut sign	37 (97.4%)
Segment length >3 cm	31 (81.6%)
Preoperative diagnosis established	37 (97.4%)
Time from symptom onset to diagnosis (hours), median (IQR	59 (12-81)
Diagnostic delay (>48 hours)	20 (52.6%)

Table 4. Surgical and pathological findings	
Variable	**Value**
Patients who underwent surgery	27 (71.1%)
Timing of surgery	
Emergency	26 (96.3%)
Semi-elective	1 (3.7%)
Indication for surgery	
Bowel obstruction	10 (37.0%)
Acute abdomen/peritonitis	7 (25.9%)
Signs of ischemia	5 (18.5%)
Suspicion of malignancy	5 (18.5%)
Patients in whom reduction was attempted	4 (14.8%)
Successful reduction	4/4 (100%) (among attempted)
Bowel resection	15 (55.6%)
Type of resection (patients with resection, n=15)	
Segmental small bowel resection	14 (93.3%)
Right hemicolectomy	1 (6.7%)
Anastomosis performed	15 (55.6%)
Stoma creation	1 (3.7%)
Operative time (min), median (IQR)	60 (45-85)
Pathological findings (patients with resection, n=15)	
Benign	10 (66.7%)
Malignant	5 (33.3%)

Table 5. Postoperative complications and outcomes (patients who underwent surgery, n=27)	
Postoperative complication (at least one)	**5 (18.5%)**
Anastomotic leakage	0 (0.0%)
Postoperative ileus	1 (3.7%)
Surgical site infection	2 (7.4%)
Sepsis	2 (7.4%)
Clavien-Dindo grade ≥3	2 (7.4%)
Intensive care unit admission	11 (40.7%)
ICU stay (days), median (IQR)	0 (0-1)
Length of hospital stay (days), median (IQR	6 (3-8.5)
30-day mortality	0 (0.0%)
Overall mortality	2 (7.4%)
Recurrence	0 (0.0%)
Follow-up duration (months), median (IQR)	12 (7.5-20.5)

Erişkin invajinasyonunda güncel literatür ile çalışmamızın karşılaştırılması

Çalışma	Tasarım / Dönem	N	Hasta profili	Yaş	BT/CT kullanımı	Preop tanı	Cerrahi oranı	Malignite oranı	Öne çıkan mesaj
Bizim çalışmamız (Etlik Şehir Hastanesi, acil başvurulu erişkin invajinasyon)	Retrospektif, tek merkez	38	Tümü acil başvuru	Medyan 50 (IQR 31,5–57,8)	**%100 (BT tek başına veya BT+USG)**	**BT ile preoperatif tanı %97,4 (acil popülasyon)**	**%71,1 (27/38)**	**Rezeksiyon yapılanlarda %33,3 (5/15)**	Acil popülasyonda yüksek cerrahi yükü; BT tanıda çok güçlü; malignite riski klinik kararın merkezinde
Chand ve ark., 2024	Sistematik derleme (59 makale)	1902 / 1920 invajinasyon	Karma (erişkin)	Ort. 52,1±15,0	BT primer yöntem %88,5	Preop tanı %98,3	Çoğunluk cerrahi	NR	Redüksiyon çok nadir; cerrahide onkolojik prensip vurgusu
Heersche ve ark., 2025	Sistematik derleme	2402 invajinasyon	Karma (erişkin)	NR	NR	NR	Operatif %65	Lokalizasyona göre %9–68	Lokalizasyona göre malignite riski keskin biçimde değişiyor
Su ve ark., 2020	Retrospektif, tek merkez	150	Karma (erişkin)	Ort. 54,5	BT %92	NR	%92,7	%36,7 (cerrahi hastalarda)	Büyük seri; cerrahi ve tümör ilişkisi yüksek
Revista Gastroenterología de México, 2022	Retrospektif, tek merkez	28	Karma (erişkin)	Medyan 46	NR	NR	25/28	%32,1	Morbidite ve mortalite vurgusu

Figure 5. Comparison of our study with the current literature on adult intussusception.

[P-206]

Global research trends in robotic versus laparoscopic low anterior resection for rectal cancer: A bibliometric analysis

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Objective: Low anterior resection (LAR) is a cornerstone procedure in rectal cancer surgery, with minimally invasive techniques increasingly replacing open approaches. While laparoscopic LAR has demonstrated favorable perioperative and oncological outcomes, technical limitations in challenging pelvic anatomy have encouraged the adoption of robotic platforms. With the maturation and wider availability of robotic technology, comparative studies between robotic and laparoscopic LAR have increased. However, beyond clinical outcome comparisons, the global research structure and collaborative patterns of this literature have not been systematically evaluated. This study aimed to perform a bibliometric analysis of publications comparing robotic and laparoscopic low anterior resection, focusing on temporal trends, core journals, and leading contributors.

Material and Methods: This bibliometric analysis evaluated PubMed-indexed literature comparing robotic and laparoscopic low anterior resection for rectal cancer. A systematic search of titles and abstracts was conducted using the terms "low anterior resection" OR "LAR" AND "robotic" AND "laparoscopic," without restrictions on publication year, article type, or language. Publications published between 2006 and 2026 were included and exported in MEDLINE format. Analyses were performed using the Bibliometrix package and Biblioshiny interface. Evaluated indicators included annual scientific production, life cycle analysis, core journals identified by Bradford's law, corresponding author countries, and collaboration patterns based on co-authorship and geographic networks.

Results: A total of 198 publications across 77 journals were included, authored by 1,248 unique researchers. All publications were multi-authored, with a mean of 7.7 authors per document, indicating a highly collaborative research environment. Scientific production remained limited until 2012, followed by steady growth after 2013 and a marked increase from 2020 onward. Life cycle analysis demonstrated that the field has entered a maturity phase, reaching approximately 75% of its projected saturation level. Journal analysis revealed a concentrated dissemination pattern, with a small group of core journals accounting for a disproportionate share of publications. Japan was identified as the leading contributing country, followed by South Korea, China, and the United States, with predominantly regional research networks. Thematic assessment indicated a shift from feasibility-oriented laparoscopic studies toward robotic-focused and outcome-driven research. Annual number of publications comparing robotic and laparoscopic low anterior resection for rectal cancer between 2006 and 2026. Scientific output remained limited until 2012, followed by a steady increase after 2013 and a marked surge from 2020 onward. Life cycle analysis of publications comparing robotic and laparoscopic low anterior resection. The model demonstrates that the research field has reached approximately 75% of its projected saturation level, indicating a maturity phase of scientific production. Leading journals publishing studies on robotic versus laparoscopic low anterior resection, demonstrating a concentrated dissemination pattern in a limited number of core surgical journals.

Conclusion: This bibliometric analysis demonstrates that research comparing robotic and laparoscopic low anterior resection has evolved into a mature and expanding field. Although bibliometric data cannot establish clinical superiority, observed research trends suggest that robotic platforms are increasingly perceived as potential solutions to the limitations of conventional laparoscopy in complex pelvic surgery. These findings support the need for future multicenter and cost-effectiveness-focused studies to define the role of robotic technology in routine rectal cancer practice.

Keywords: Bibliometric analysis, laparoscopic surgery, low anterior resection, rectal cancer, robotic surgery

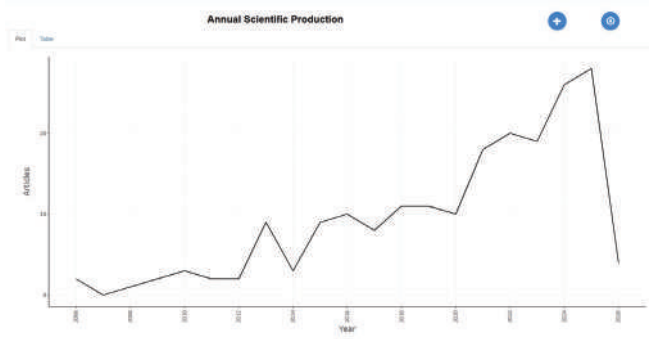


Figure 1. Annual scientific production.



Figure 2. Life cycle of scientific production.

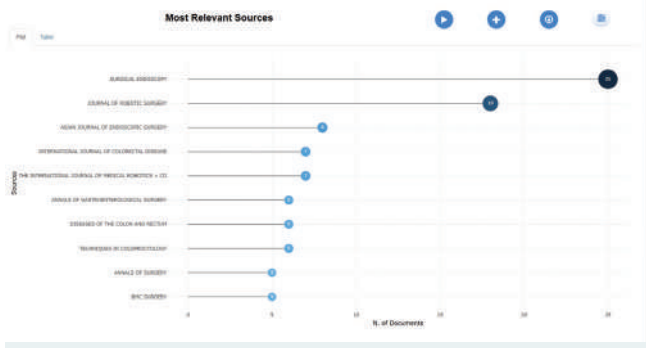


Figure 3. Most relevant sources.

[P-207]

Can axillary positivity be predicted by hemogram parameters in breast cancer patients with axillary positivity at the time of diagnosis?

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Objective: This study aimed to evaluate the predictive value of hemogram parameters for axillary metastasis in patients diagnosed with breast cancer who had synchronous axillary lymph node metastasis at the time of diagnosis.

Material and Methods: This retrospective study was conducted among patients diagnosed with breast cancer who presented to the breast/endocrine surgery outpatient clinic of University of Health Sciences Türkiye, Prof. Dr. Cemil Taşcıoğlu City Hospital between June 2023 and May 2025. Patients were divided into two groups according to axillary lymph node (ALN) status at diagnosis as ALN-negative and ALN-positive. Hemogram parameters at initial presentation were evaluated, and lymphocyte, neutrophil, and platelet counts were recorded. Based on these values, the neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR), and lymphocyte-to-monocyte ratio (LMR) were calculated.

Results: Of the 203 patients included in the study, 101 were ALN-positive and 102 were ALN-negative. Lymphocyte counts were significantly higher in ALN-positive patients ($p<0.001$), whereas no significant differences were observed in monocyte, platelet, or neutrophil counts. Similarly, NLR, PLR, and LMR values were found to be statistically significant ($p<0.001$). Ultrasonography, mammography, and magnetic resonance imaging (MRI) showed a strong positive association with ALN positivity ($p<0.05$), while no association was found between tumor type and axillary positivity ($p=0.805$). ALN biopsy results were also found to be significantly higher in identifying ALN positivity ($p<0.001$).

Conclusion: We concluded that hemogram parameters may be effective in predicting axillary lymph node positivity in breast cancer patients, particularly in situations where radiological methods and biopsy procedures are not accessible.

Keywords: Lymphocyte-to-monocyte ratio (LMR), breast cancer, metastatic axillary lymph node, neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR)

[P-209]

Quality and safety of AI-generated patient education in general surgery: A pilot study

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Objective: Artificial intelligence (AI)-generated patient education materials are increasingly used to support perioperative counseling in general surgery. However, concerns remain regarding the accuracy, safety, readability, and clinical appropriateness of AI-generated information. This pilot study aimed to evaluate the quality, safety, and readability of AI-generated patient education content for common general surgical conditions.

Material and Methods: In this cross-sectional pilot study, patient education texts were generated using a large language model for 10 common general surgery topics, including appendicitis, cholelithiasis, hernia, colorectal cancer, and postoperative care. Three general surgery specialists independently evaluated the materials using validated assessment tools, including DISCERN, global quality score (GQS), and a safety checklist focusing on misinformation and missing critical warnings. Readability was assessed using flesch reading ease and grade-level metrics. Inter-rater reliability was analyzed using intraclass correlation coefficients (ICC).

Results: A total of 50 AI-generated education texts were evaluated. The mean DISCERN score was 61.4 ± 8.2, indicating moderate-to-high quality, while the mean GQS was 3.8 ± 0.7. Safety assessment identified minor omissions in 18% of materials, primarily related to complication warnings and red-flag symptoms, whereas critical misinformation was rare (4%). Readability analysis showed that most texts were written at a grade level above recommended patient education standards (mean grade level: 10.6 ± 1.3). Inter-rater agreement was good to excellent ($ICC=0.82$).

Conclusion: AI-generated patient education materials in general surgery demonstrate acceptable overall quality and safety but frequently exceed recommended readability levels and may omit key safety information. Human supervision remains essential before clinical implementation. Larger studies are needed to establish standardized frameworks for AI-assisted patient education

Keywords: Artificial intelligence, patient education, DISCERN

[P-210]

Our clinical experience with laparoscopic splenectomy

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Objective: Laparoscopic splenectomy is considered the gold standard for elective splenectomy in benign hematological diseases, as it provides less postoperative pain, shorter hospital stay, and faster recovery compared with open surgery. This study aimed to evaluate the outcomes of laparoscopic splenectomy performed at our clinic.

Material and Methods: Forty-four patients who underwent laparoscopic splenectomy for benign hematological diseases between 2015 and 2022 were retrospectively analyzed. Demographic characteristics, indications for splenectomy, length of hospital stay, conversion to open surgery, transfusion requirements, and postoperative complications were evaluated.

Results: The patients' ages ranged from 19 to 87 years; 26 were female and 18 were male. Immune thrombocytopenic purpura was the most common indication (79.5%). Conversion to open surgery occurred in one patient. The median length of hospital stay was 4 days. No significant associations were found between age, sex, spleen size, preoperative platelet count, or hematological diagnosis and complication rate, mortality, length of hospital stay, or conversion rate. However, complication rates were significantly higher in patients requiring perioperative transfusion ($p<0.05$). Low preoperative hemoglobin levels and high preoperative leukocyte counts were also significantly associated with increased complication rates ($p<0.05$).

Conclusion: Laparoscopic splenectomy is a safe and effective procedure for benign hematological diseases. Careful assessment of preoperative hematological parameters is essential to reduce postoperative complications.

Keywords: Immune thrombocytopenic purpura, laparoscopic splenectomy

[P-211]

The organ-preserving role of endoluminal surgical techniques in large colorectal polyps: Initial experience of our center

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Objective: With the implementation of advanced endoluminal techniques such as endoscopic mucosal resection (EMR) and hybrid EMR/endoscopic submucosal dissection (ESD), large colorectal polyps and superficially spreading lesions that were previously considered unresectable can now be removed without the need for organ resection. This approach reduces the rate of colorectal resections performed for benign lesions and prevents the morbidity and mortality associated with major colorectal surgery. In this study, we aimed to present our initial experience with EMR and hybrid EMR/ESD procedures performed at our center.

Material and Methods: Patients who underwent endoluminal surgical techniques at our center between 2024 and 2025 were included in the study. Demographic, clinical, endoscopic, pathological, and follow-up data were retrospectively evaluated.

Results: A total of nine patients were included. The median age was 63 years (range: 51-77), and six patients (66.7%) were male. The median lesion size was 26 mm (range: 17-37), with five lesions located in the rectum. According to the Paris classification, seven lesions were type 0-IIa, one was type 1sp, and one was type 1p. Based on the Kudo pit pattern classification, five lesions were type 3 and four were type 4. En bloc resection was achieved in five patients, while piecemeal resection was performed in four patients. Post-polypectomy bleeding occurred in only one patient and was successfully managed with endoscopic clipping. No perforation was observed. Histopathological examination revealed tubulovillous adenoma in seven patients and villous adenoma in two patients. High-grade dysplasia was identified in three patients (33.3%); all three lesions were resected en bloc with negative surgical margins. During a median follow-up of 17 months (range: 13-21), no recurrence was detected.

Conclusion: Endoluminal surgical techniques enhance organ-preserving management in colorectal polyps and superficially spreading lesions. Their wider adoption, given the low complication rates, may reduce the need for colorectal resections performed for benign disease.

Keywords: Endoscopic mucosal resection, endoscopic submucosal dissection

[P-212]

1331 iatrogenic perforation in consecutive colonoscopies: A single-center experience of five cases

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Objective: Colonoscopy is a widely used and generally considered safe procedure for the diagnosis and treatment of colorectal diseases. However, perforation is one of the rare but potentially serious complications. This study aimed to evaluate the incidence of iatrogenic perforations and the results of surgical management in 1331 consecutive colonoscopy procedures performed at our center.

Material and Methods: 1331 colonoscopies performed during the specified period were retrospectively reviewed. Five patients who developed perforation after the procedure were included in the study. Patients were evaluated in terms of demographic characteristics, accompanying comorbidities, perforation localization, time of diagnosis (during the procedure or in the postoperative period), surgical approach applied, need for intensive care, length of hospital stay, and 30-day mortality.

Results: Perforation occurred in five patients out of a total of 1331 colonoscopy procedures, and the perforation rate was calculated as 0.37%. The average age of the patients was approximately 68 years, and the majority of cases were in the elderly age group. Most perforations were found in the distal colon, particularly in the rectosigmoid region; one case involved a perforation at the level of the splenic flexure. The diagnosis was made during the procedure in some patients, while in others it was diagnosed based on acute abdominal symptoms that developed after the procedure. All patients were treated surgically. Primary repair was preferred in hemodynamically stable cases with limited intra-abdominal contamination. Laparoscopic approach was safely applied in appropriate cases. A temporary stoma was required in one patient with a more clinically complicated course. No mortality was observed during the 30-day follow-up period.

Conclusion: Although rare, colonoscopic perforation is a potentially serious complication. The perforation rate in our series was consistent with the literature. Successful clinical outcomes were achieved with early diagnosis and timely surgical intervention. When appropriate patient selection is made, primary repair stands out as a safe and effective treatment option, especially for perforations located in the distal colon.

Keywords: Colonoscopy, iatrogenic perforation

Hasta No / Patient No	Yaş / Age	Cinsiyet / Gender	Lokalizasyon / Localisation	Perforasyon Boyutu / Perforation size	Fekal Kontaminasyon / Fecal contamination	Peritonit / Peritonitis
1	60	E / M	SİGMOİD KOLON / SIGMOID COLON	2 CM	1	1
2	67	K / F	REKTUM / RECTUM	3 CM	0	1
3	71	E / M	SPLENİK FLEKSURA / SPLENİC FLEXURE	1,5 CM	1	1
4	72	E / M	SİGMOİD KOLON / SIGMOID COLON	2 CM	0	0
5	63	K / F	SİGMOİD KOLON / SIGMOID COLON	2 CM	0	0

Hasta No / Patient No	Cerrahi Tip / Surgery Type	Postoperatif Komplikasyon ClavienDindo / Postoperative Complication ClavienDindo	Reoperasyon / Reoperation	Yoğun Bakım Yatışı / ICU Admission	Hastanede Kalış gün / Days spent in the hospital	30 Gün İçerisinde Mortalite / Mortality in 30 Days
1	1	1	0	1	7	0
2	2	2	1	1	13	0
3	2	1	0	1	9	0
4	2	1	0	0	7	0
5	2	1	0	1	7	0

Figure 1. Findings of iatrogenic perforation on colonoscopy.

Fecal contamination: 1 = Present, 0 = Absent; Peritonitis: 1 = Present, 0 = Absent; Surgical approach: 1 = Laparoscopic, 0 = Open; Reoperation: 1 = Yes, 0 = No; ICU admission: 1 = Yes, 0 = No; 30-day mortality: 1 = Yes, 0 = No.

[P-213]

Laparoscopic repair of iatrogenic colon perforations occurring during colonoscopy

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Objective: Colonoscopy is a diagnostic procedure commonly performed for suspected colonic pathologies. The incidence of iatrogenic perforation during colonoscopy ranges between 0.03% and 0.8%. In this study, we aimed to present the management of patients who developed perforation during colonoscopy.

Material and Methods: Iatrogenic perforation occurred in three patients during colonoscopy procedures. The mean age of the patients was 57.6 years; two were male and one was female. None of the patients had a history of previous abdominal surgery. Colonoscopy was performed in one patient due to abdominal pain and constipation, while in the other two patients it was performed for diagnostic purposes following a positive fecal occult blood test. The perforations were detected intraoperatively by direct visualization of intraperitoneal perforation, and the patients were taken for emergency surgery. Laparoscopic exploration revealed no intra-abdominal contamination. Perforation sites were located in the sigmoid colon in two patients and at the rectosigmoid junction in one patient. The perforation size ranged between 2 and 3 cm. Primary repair was performed laparoscopically using 3/0 Vicryl sutures. A pelvic drain was placed, and the procedure was concluded. During follow-up, no anastomotic leakage was observed. A liquid diet was initiated on postoperative day 3, and all patients were discharged uneventfully on postoperative day 5.

Results: Iatrogenic colon perforations occurring during colonoscopy may present as an acute abdomen requiring emergency surgery if not recognized promptly. However, early detection during the procedure allows timely intervention. Depending on the size of the perforation, surgical repair, resection, or ostomy creation may be preferred based on the patient's comorbidities and the degree of contamination.

Conclusion: In our case series, early-detected perforations were successfully managed with laparoscopic intervention. In similarly presenting cases, laparoscopic management should be considered as the first-line approach.

Keywords: Colonoscopy, laparoscopic repair, perforation

[P-214]

Is surgery always necessary in adult intussusception?

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Objective: Adult intussusception is a rare clinical entity that differs from pediatric cases due to the higher likelihood of underlying pathological causes. Although surgery has traditionally been recommended in adult patients, the widespread use of advanced imaging techniques has led to increased detection of transient and self-limiting small bowel intussusceptions. This has raised questions regarding the necessity of routine surgical intervention. The aim of this study was to evaluate the need for surgery in adult intussusception based on localization and to assess the risk of malignancy, particularly in colonic cases.

Material and Methods: Adult patients who were hospitalized after being diagnosed with intussusception on imaging studies following emergency department or outpatient clinic admission over the past 10 years were retrospectively reviewed. In patients with multiple admissions, the admission requiring surgery was included; if none required surgery, the admission with the most complete data was selected. Patients were compared according to operative and non-operative management. Intussusceptions were classified as small bowel or colonic. Histopathological findings were evaluated in surgically treated patients.

Results: A total of 90 patients were included in the study. Surgical treatment was performed in 38 patients (42%), while 52 patients (58%) were managed non-operatively. The rate of surgical intervention was significantly higher in colonic intussusceptions compared to small bowel intussusceptions (64% vs. 32%, p=0.028). Colonic intussusceptions were associated with a 3.7-fold increased risk of requiring surgery (OR: 3.7, 95% CI: 1.1-12.4). Malignant pathology was identified in 1 patient (2.6%) who underwent surgery, and malignancy was observed exclusively in the colonic intussusception group.

Conclusion: Surgical management of adult intussusception should not be routine for all patients but rather individualized according to the location of the intussusception. While a substantial proportion of small bowel intussusceptions can be safely managed conservatively, the potential presence of underlying malignancy in colonic intussusceptions should always be considered, favoring a surgical approach.

Keywords: Adult intussusception, colonic intussusception, surgical management, malignancy

[P-215]

Bibliometric analysis of the sacral neuromodulation literature in pelvic floor disorders

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[2]*Etimesgut State Hospital, Ankara*

Objective: This study aimed to bibliometrically evaluate the scientific output, historical evolution, thematic trends, and global research dynamics of sacral nerve stimulation (SNS) and sacral neuromodulation in the context of pelvic floor disorders and pelvic floor dysfunction.

Material and Methods: This bibliometric study included publications indexed in PubMed between 2001 and 2026. The search strategy combined "sacral nerve stimulation" or "sacral neuromodulation" with "pelvic floor disorders" or "pelvic floor dysfunction." Retrieved records were analyzed for annual scientific output, author and institutional contributions, country-level productivity, journal distribution, keyword frequencies, trending topics, and patterns according to Lotka's and Bradford's laws. Analyses were performed using the bibliometrix package.

Results: A total of 56 publications were identified across 42 journals, with contributions from 257 authors. The literature was predominantly multi-authored, with a mean of 4.95 authors per document; the international collaboration rate was 10.71% (single-author publications: n=4). Annual output was low and irregular between 2001 and 2010, followed by a marked increase after 2015, with a clear concentration during 2018-2025. Country-level productivity was mainly driven by the United States, Chile, China, Norway, Portugal and France, reflecting a progressive global dissemination of the field. At the institutional level, pelvic floor innovation centers and university hospitals predominated, with core production concentrated in a limited number of centers. Journal distribution conformed to Bradford's law, clustering in journals focused on colorectal surgery, urogynecology, gastroenterology, and neuromodulation. Keyword and trend analyses identified humans, female, electric stimulation therapy/methods, and treatment outcome as dominant terms, with a temporal shift from technique-oriented themes toward clinical outcomes and quality-of-life-focused research; author productivity followed Lotka's law.

Conclusion: This bibliometric analysis indicates that sacral nerve stimulation and sacral neuromodulation have become an increasingly studied and maturing research area in pelvic floor disorders. The literature remains concentrated in specific countries and high-volume centers, yet recent years show broader global expansion with growing contributions from diverse regions. The predominantly multi-author and interdisciplinary structure suggests a clinically driven, collaboration-based research ecosystem. The original contribution of this study is its holistic characterization of scientific production in this field—not only quantitatively, but also through thematic trajectories, journal dynamics, and temporal shifts in research focus. The observed transition from technique- and pathophysiology-oriented approaches toward treatment outcomes and quality-of-life–centered evaluations clearly reflects ongoing clinical integration. By clarifying the structure and developmental pathways of the literature, this work provides a practical framework for researchers, clinicians, and policymakers and serves as a strategic reference for planning future multicenter, prospective, and standardized studies.

Keywords: Pelvic floor disorders, publication dynamics, sacral neuromodulation

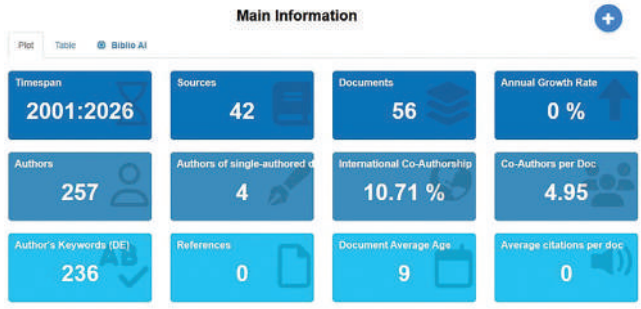


Figure 1. Main bibliometric characteristics of the sacral nerve stimulation and sacral neuromodulation literature (2001-2026).



Figure 2. Word cloud analysis of author keywords in the sacral nerve stimulation and sacral neuromodulation literature.

[P-216]

Rectal cancer patients: The effect of distal resection margin on local recurrence and survival

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Objective: To evaluate the impact of distal circumferential surgical margin (distal resection margin; DRM) length on local recurrence and survival in patients undergoing curative resection for rectal cancer, and to provide clinical data to inform ongoing debates on the optimal distal margin.

Material and Methods: This retrospective cohort study included 186 patients who underwent surgery with curative intent for rectal cancer at Mersin University Faculty of Medicine, Department of General Surgery, between 2010 and January 2025. Patients were stratified into three groups according to the distal margin length reported in the pathology report: ≤1 cm (n=43), 1-2 cm (n=51), and >2 cm (n=92). Clinical, intraoperative, pathological, and postoperative variables were recorded. Survival analyses were performed using the Kaplan-Meier method, and groups were compared with the log-rank test. Factors associated with mortality and recurrence were assessed using univariable and multivariable Cox regression analyses.

Results: The mean age was 63.72±9.63 years and 57.0% of patients were male. The overall local recurrence rate was 6.5% (n=12). There were no statistically significant differences among DRM groups in 60-month overall survival (OS) or disease-free survival (DFS) (all p>0.05); 60-month DFS rates were 81.3% in the ≤1 cm group, 80.4% in the 1-2 cm group, and 81.5% in the >2 cm group. Anal verge distance and stoma formation rates differed significantly between groups, whereas no meaningful differences were observed in other demographic, clinical, or pathological variables. In mortality analyses, postoperative complications and lymphovascular invasion increased the risk of mortality; perineural invasion was associated with mortality in univariable analysis.

Conclusion: In this cohort, distal resection margin length (≤1 cm, 1-2 cm, >2 cm) did not significantly affect local recurrence or 60-month survival outcomes. These findings suggest that, particularly when oncologic resection quality is ensured (R0/CRM-negative resection and appropriate surgical technique), individualized decision-making based on tumor biology and clinical context may be more rational than a single rigid distal margin threshold.

Keywords: Rectal cancer, distal resection margin, local recurrence, survival

[P-217]

Truths and falsehoods in transanal excision decisions

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Objective: The widespread adoption of screening programs has led to a significant increase in the early diagnosis of rectal cancer. In addition, staging tools and treatment modalities for rectal cancer have greatly advanced. Consequently, there is growing interest in multimodal organ-preserving strategies, including the use of local excision and chemoradiotherapy in patients with early rectal cancer. In our study, we aimed to evaluate the correct and incorrect decisions regarding local excision in patients who underwent transanal resection (TAR).

Material and Methods: Patients who underwent transanal resection for a mass in the distal rectum between November 2023 and August 2024 were included in the study. The patients' demographic data, such as age, gender, height, and weight, comorbidities, preoperative radiological and endoscopic images, and pathology results were recorded. Patient positions, duration, complications, pathology results, and follow-up data during surgery were recorded.

Results: Three patients were included in the study. Two patients were male and one was female. The mean age was 61.3 years. Two patients were ASA 3 and one was ASA 2. The patients' BMIs were 29.1, 27.9, and 25.2, respectively. The follow-up periods of the patients were 21, 35, and 30 months. The distances of the lesions from the dentate line were 1 cm, 2 cm, and 3 cm. The sizes were 5x6 cm for the small lesion and 4x3 cm for the other lesion. The CEA values of the patients were 1.7, 20.1, and 8. The biopsy results of 2 patients were reported as tubulovillous adenoma, and the biopsy of 1 patient was reported as intramucosal carcinoma. Preoperative endosonography did not reveal muscularis propria invasion in 2 patients, and there was suspicion of muscularis propria invasion in 1 patient. CT and MR imaging were performed for this patient. LAP was not detected on CT imaging. The patients' surgery durations were 70, 50, and 120 minutes. Postoperative pathology results: Adenocarcinoma (biopsy result: Tubulovillous adenoma) was detected in 1 patient, and adenocarcinoma invading the muscularis propria (biopsy result: Intramucosal carcinoma) was detected in 1 patient. Low anterior resection was performed on this patient. No malignancy was detected in the surgical pathology specimen. The other two patients underwent colonoscopic follow-up.

Conclusion: When deciding on local excision for rectal masses, radiological and endoscopic examinations and pathology specimens should be evaluated by experienced multidisciplinary teams. Correct decisions based on preoperative data can protect patients from unnecessary surgery, while incorrect assessments negatively affect patients' definitive surgical processes after local excision.

Keywords: Transanal excision, early rectal cancer

Table 1.			
Patient no	**1**	**2**	**3**
Age	58	65	61
Gender	M	F	M
Asa	2	3	3
BMI	29.1	27.9	25.2
Additional disease	DM	DM, HT	Tuberculosis history
Previous surgery	Subtotal gastrectomy (due to perforation), appendectomy	Thyroidectomy, appendectomy	None
Pre-operative colonoscopy	Above the dentate line by 2 cm (5*6 cm)	Above the dentate line by 3 cm (4*3 cm)	Dentate line'in 1cm by (5*6 cm)
Pre-operative biopsy	Tubulovillous adenoma with mild dysplasia	Tubulovillous adenoma with foci of intramucosal adenocarcinoma	Tubulovillous adenoma
Pre-operative cea	1.7	20	1.18
EUS	None	Polypoid mass in the rectum (suspected invasion of the musculatura propria?)	Muscle-invasive mass, perirectal, 3 cm or smaller, 3 pieces, lap
CT	Polypoid mass measuring 26*22 mm in the distal rectum in the sol lateral position	Suspected asymmetric wall thickening in the rectum	No pathology in the report
MR	Increased wall thickness in a 4 cm segment at the distal rectum level	No pathology in the report	An asymmetric, mass-like lesion reaching 10 mm at its thickest point in the distal third of the rectum, protruding into the lumen in places
PET	None	Post op: In a case followed up with a diagnosis of rectal cancer, an increase in diffuse FDG uptake was observed in a 3 cm segment of the proximal rectum (residual ?).	10*8 cm FDG uptake in the rectum
Position	Jackknife	Right decubitus	Jackknife
Suture	4/0 PDS	3/0 V-Loc	3/0 V-Loc
Duration	90 minutes	120 minutes	100 minutes
Surgical pathology	Tubulovillous adenoma with focal intramucosal adenocarcinoma focus. surgical margin at the base is clear, high-grade dysplasia at the surgical margin on the left side	Well-differentiated adenocarcinoma developed on a tubulovillous adenoma base. The tumor has invaded the muscularis propria	Tubulovillous adenoma (right lateral surgical margin with low-grade dysplasia)
Hospitalization period	6 days	6 Days	6 days
2. Surgery	None	Lap. Low anterior resection + loop ileostomy No malignancy detected in the pathology.	None
Follow-up period	21 months	35 months	30 months

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Magnetic compression therapy for a patient with colorectal anastomotic stricture

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Objective: We aimed to present the outcomes of a patient who developed colorectal anastomotic stricture following colorectal surgery and was treated using magnetic compression therapy.

Material and Methods: A 70-year-old male patient presented with difficulty in gas and stool passage and abdominal distension. He had a history of Hartmann's procedure performed approximately two years earlier for rectosigmoid adenocarcinoma causing intestinal obstruction. Synchronous liver metastases had also been detected, and the patient was under medical oncology treatment. His colostomy had been closed approximately nine months prior, and three months after closure, an anastomotic stricture was identified. Despite one endoscopic stent placement and five balloon dilatation procedures, the stricture could not be resolved. Rectoscopic examination revealed a tight stricture approximately 10 cm from the anal verge, preventing passage of the colonoscope. The patient underwent surgery, during which a loop ileostomy was created. Under colonoscopic guidance, magnets were placed across the anastomotic stricture. At three-week follow-up rectoscopy, restoration of luminal patency was observed, and the magnets were removed. The patient was discharged with a plan for subsequent ileostomy closure.

Results: The patient underwent surgery, during which a loop ileostomy was created. Under colonoscopic guidance, magnets were placed across the anastomotic stricture. At three-week follow-up rectoscopy, restoration of luminal patency was observed, and the magnets were removed. The patient was discharged with a plan for subsequent ileostomy closure.

Conclusion: Magnetic compression therapy may be successfully applied in selected cases of colorectal anastomotic stricture.

Keywords: Anastomotic stricture, colorectal cancer, magnetic treatment

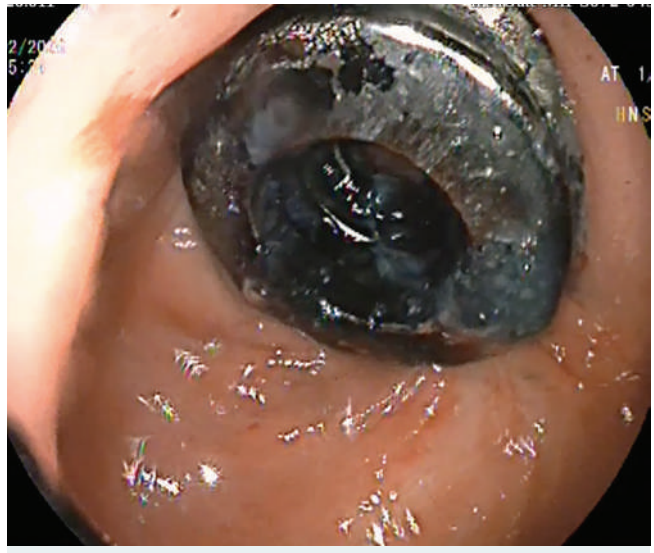


Figure 1. View of magnets placed in the anastomotic stricture from the rectum.

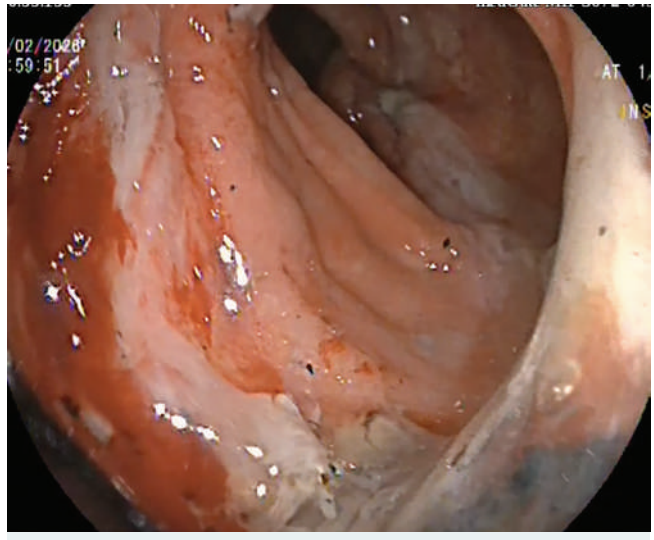


Figure 2. Appearance of the anastomosis after magnetic therapy.

[P-219]

The relationship between tumor regression and clinicopathological parameters in breast cancers treated with neoadjuvant systemic therapy

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Objective: Neoadjuvant systemic therapy is accepted as the standard approach in locally advanced breast cancers and in tumors that are sensitive to targeted therapies according to their biological subtype. However, the response to treatment varies depending on the biological characteristics of the tumor. In this study, we aimed to evaluate the relationship between tumor regression and clinicopathological parameters in breast cancer patients who received neoadjuvant systemic therapy.

Material and Methods: A total of 35 breast cancer patients who underwent surgery following neoadjuvant systemic therapy at our institution were retrospectively evaluated. Tumor regression after neoadjuvant therapy was analyzed according to the Miller-Payne classification. Patients were divided into two groups based on treatment response: Miller-Payne grades 1-3 were defined as poor response, and grades 4-5 as good response. Histopathological type, tumor grade, ER, PR, HER2 status, Ki-67 proliferation index, luminal subtype, clinical T stage, lymph node status, perineural invasion, and lymphovascular invasion parameters obtained from biopsy and resection specimens were evaluated. Categorical variables were analyzed using the chi-square test, and continuous variables were analyzed using the Mann-Whitney U test. ROC analysis was performed for Ki-67 to determine the optimal cut-off value.

Results: A significant association was found between tumor grade, luminal subtype, histopathological type, and response to neoadjuvant systemic therapy ($p=0.047$, $p<0.001$, and $p<0.001$, respectively). ER positivity was observed in 71% of patients, PR positivity in 45%, and HER2 positivity in 37%, and all were significantly associated with a good response to neoadjuvant systemic therapy ($p=0.006$, $p<0.001$, and $p=0.002$, respectively). The Ki-67 value (cut-off 35%) demonstrated an AUC of 0.70 in ROC analysis for predicting response to neoadjuvant therapy, and the optimal cut-off value was determined as 35%. At this threshold, sensitivity was 58.8% and specificity was 88.9%. No significant association was found between tumor regression and clinical T stage, MRI tumor size, age, or lymphovascular invasion.

Results: Tumor response to neoadjuvant systemic therapy is closely associated with the biological characteristics of the tumor. In particular, hormone receptor status, HER2 expression, proliferation index, and luminal subtype are key determinants in predicting tumor regression. The impact of anatomical staging parameters on treatment response appears to be limited. These findings support the importance of biology-driven approaches in the planning of neoadjuvant therapy.

Keywords: Neoadjuvant systemic therapy, breast cancer, tumor regression

[P-220]

Clinicopathological characteristics and recurrence analysis in male breast cancer: A single-center experience

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Objective: Male breast cancer is a rare malignancy accounting for approximately 1% of all breast cancers; therefore, available data remain limited. Although it shares biological similarities with female breast cancer, diagnosis is often established at a more advanced stage, and prognostic factors are not clearly defined. Tumor size, lymph node involvement, histological grade, and immunohistochemical markers are considered important determinants of prognosis. However, data regarding predictors of recurrence in male breast cancer are insufficient. This study aimed to evaluate our institutional experience and investigate the association between clinicopathological characteristics and recurrence.

Material and Methods: This retrospective study included patients who underwent surgery for histopathologically confirmed male breast cancer between 2023 and 2025 at Ankara Bilkent City Hospital. Demographic data, comorbidities, preoperative tumor markers, surgical procedure, tumor size, lymph node status, lymphovascular and perineural invasion, and immunohistochemical parameters (ER, PR, HER2, Ki-67) were recorded. Tumors were staged according to the AJCC 8th edition. The Nottingham prognostic index (NPI) was calculated. Patients were followed for disease-free survival (DFS) and categorized as disease-free or recurrence/metastasis/death. Statistical analyses were performed using appropriate parametric or non-parametric tests and the chi-square test, with $p<0.05$ considered significant.

Results: A total of 20 male breast cancer patients were evaluated. The mean age was 60.7 ± 15 years, and the mean tumor size was 2.6 ± 1.1 cm. Sixty percent were T2 stage, and nodal positivity was observed in 60%. The mean number of lymph nodes removed was 13.7 ± 4.8, while the median number of metastatic nodes was 1 (0-17). All tumors were invasive ductal carcinoma, and 60% were grade 2. Lymphovascular invasion was present in 85% and perineural invasion in 50%. Modified radical mastectomy was performed in 75%. Estrogen receptor positivity was frequent, whereas HER2 positivity was 25%. The mean Ki-67 index was approximately 30%. Most patients were classified as intermediate risk according to the Nottingham Prognostic Index. Mean disease-free survival was 14 months (6-36), and recurrence/metastasis/death occurred in 20%. Although tumor size and metastatic lymph node number were higher in recurrent cases, differences were not statistically significant ($p>0.05$).

Conclusion: Male breast cancer predominantly presents as hormone receptor-positive disease with an intermediate prognostic profile. None of the evaluated clinicopathological parameters significantly predicted recurrence. However, increased tumor size and nodal burden may be associated with recurrence. Larger multicenter studies are needed to clarify prognostic factors.

Keywords: Male breast cancer, recurrence, prognostic factors

Table 1. Demographic, clinicopathological characteristics and follow-up outcomes of male breast cancer patients	
Age (years)	60.75±15.08
Sex	
Male	20 (100%)
BMI (kg/m²)	26.9 (23.5-37.8)
Family history of breast cancer	
Present	4 (20%)
Absent	16 (80%)
Smoking	
Present	12 (60%)
Absent	8 (40%)
Alcohol use	
Present	2 (10%)
Absent	18 (90%)
Charlson comorbidity index (CCI)	2 (0-8)
Length of hospital stay (days)	7.15±2.34
Tumor location	
Left retroareolar	12 (60%)
Right retroareolar	6 (30%)
Right upper inner quadrant	2 (10%)
Neoadjuvant chemotherapy	
Present	4 (20%)
Absent	16 (80%)
Preoperative CEA (ng/mL)	1.2 (0.5-3.1)
Preoperative CA 15.3 (U/mL)	12.7 (2.5-28.9)
Surgical procedure	
Modified radical mastectomy	15 (75%)
Mastectomy + SLNB	5 (25%)
Histopathologic diagnosis	
Invasive ductal carcinoma	20 (100%)
Presence of DCIS component	
Present	13 (65%)
Absent	7 (35%)
Estrogen receptor (ER)	
>90%	11 (55%)
80-90%	8 (40%)
50-60%	1 (5%)
Progesterone receptor (PR)	
>90%	5 (25%)
80-90%	3 (15%)
70-80%	3 (15%)
60-70%	3 (15%)
20-30%	5 (25%)
1%	1 (5%)
CerB2	
Score 0	6 (30%)
Score 1	4 (20%)
Score 2	8 (40%)
Score 3	2 (10%)
HER2	
Positive (+)	5 (25%)
Negative (-)	15 (75%)

Table 1. Continued	
Ki-67 proliferation	
40-50%	5 (25%)
30-40%	3 (15%)
20-30%	7 (35%)
10-20%	3 (15%)
3-5%	2 (10%)
TNM**	
T1	6 (30%)
T2	12 (60%)
T3	2 (10%)
N0	8 (40%)
N1	4 (20%)
N2	4 (20%)
N3	4 (20%)
M0	19 (95%)
M1	1 (5%)
Perineural invasion	
Present	10 (50%)
Absent	10 (50%)
Lymphovascular invasion	
Present	17 (85%)
Absent	3 (15%)
Modified bloom-richardson grade	
Grade 1	4 (20%)
Grade 2	12 (60%)
Grade 3	4 (20%)
Total number of lymph nodes removed	13.75±4.89
Number of metastatic lymph nodes	1 (0-17)
Maximum tumor diameter (cm)	2.61±1.17
Nottingham prognostic index (NPI)	
Grup 1	1 (5%)
Grup 2	2 (10%)
Grup 3	13 (65%)
Grup 4	4 (20%)
Adjuvant radiotherapy (RT)	
Present	18 (90%)
Absent	2 (10%)
Adjuvant chemotherapy (CT)	
Present	14 (70%)
Absent	6 (30%)
Adjuvant targeted therapy	
Present	13 (65%)
Absent	7 (35%)
Adjuvant hormone therapy	
Present	18 (90%)
Absent	2 (10%)
Disease-free survival (months)	14 (6-36)
Follow-up status	
Disease-free	16 (80%)
Recurrence/metastasis/death	4 (20%)

** AJCC 8th edition, BMI: Body mass index, CEA: Carcinoembryonic antigen, SLNB: Sentinel lymph node Biopsy, DCIS: Ductal carcinoma *in situ*, HER2: Human epidermal growth factor receptor 2.

Table 2. Parameters associated with recurrence/metastasis/death				
Variable		**Disease-free**	**Recurrence/metastasis/death**	**p-value**
Age (years)		62.06±15.26	55.5±15.15	*0.522
BMI (kg/m²)		27.350 (23.5-37.2)	26.55 (24.5-37.8)	**0.813
Total number of lymph nodes removed		13.5±4.96	14.75±5.18	*0.866
Number of metastatic lymph nodes		1 (0-12)	7 (0-17)	**0.557
Preoperative CEA (ng/mL)		1.3 (0.6-3.1)	1.2 (0.5-1.4)	**0.448
Preoperative CA 15.3 (U/mL)		14.1 (2.5-27.2)	9.1 (7.5-28.9)	**0.345
Tumor size (cm)		2.34±0.85	3.67±1.79	**0.155
Family history of breast cancer	Present	3 (75%)	1 (25%)	***0.624
	Absent	13 (81.3%)	3 (18.7%)	
Smoking	Present	8 (66.7%)	4 (33.3%)	***0.117
	Absent	8 (100%)	0 (0%)	
Alcohol use	Present	2 (100%)	0 (0%)	***0.632
	Absent	14 (77.8%)	4 (22.2%)	
Presence of DCIS component	Present	10 (76.9%)	3 (23.1%)	***0.561
	Absent	6 (85.7%)	1 (14.3%)	
Perineural invasion	Present	8 (80%)	2 (20%)	***0.709
	Absent	8 (80%)	2 (20%)	
Lymphovascular invasion	Present	14 (82.4%)	3 (17.6%)	***0.509
	Absent	2 (66.7%)	1 (33.3%)	
HER2 status	Positive	5 (100%)	0 (0%)	***0.282
	Negative	11 (73.3%)	4 (26.7%)	
Estrogen receptor (ER)	≥90%	9 (81.8%)	2 (18.2%)	***0.625
	<90%	7 (77.8%)	2 (22.2%)	
Progesterone receptor (PR)	≥80%	6 (75%)	2 (25%)	***0.535
	<80%	10 (83.3%)	2 (16.7%)	
Ki-67	≥30%	6 (75%)	2 (25%)	***0.535
	<30%	10 (83.3%)	2 (16.7%)	
Modified bloom-richardson grade	Grade 1, 2	13 (81.3%)	3 (18.7%)	***0.624
	Grade 3	3 (75%)	1 (25%)	
Nottingham prognostic index (NPI)	Group 1, 2	2 (66.7%)	1 (33.3%)	***0.509
	Group 3, 4	14 (82.4%)	3 (17.6%)	

*t-test, **Mann-Whitney U test, ***Chi-square test, DCIS: Ductal carcinoma *in situ*.

[P-221]

Insulinoma: Clinicopathological characteristics and surgical management -a case series-

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Objective: This study aims to evaluate the clinical and pathological characteristics of patients treated for insulinoma and discuss the surgical outcomes in light of the current literature.

Material and Methods: We retrospectively reviewed six insulinoma patients operated on between 2023 and 2025. Demographic, clinical, surgical, and histopathological data were extracted from institutional databases. Long-term outcomes and symptom resolution were assessed via telephone follow-up.

Results: The mean age of the patients was 52,17±15,63 years, with an equal gender distribution (3 females, 3 males). The mean body mass index (BMI) was 26.38±1.46 kg/m². All patients presented with syncope as the primary reason for emergency admission, and whipple's triad (WT) was observed in all cases. The mean blood glucose level at admission was 31.83±10.42, and all six patients exhibited elevated C-peptide levels. The Prolonged Fasting test was positive in four patients. Preoperative localization was achieved in all cases via imaging. Surgical intervention consisted of laparotomy in five patients and a laparoscopic approach in one. In all laparotomy cases, intraoperative ultrasound (IOUS) was utilized for definitive lesion localization. The primary factor influencing operative time was the duration of intraoperative localization. While the lesion was identified through direct surgical exploration in three patients, IOUS was required for localization in the remaining three. The mean tumor size was 17.5±7.37 mm. Surgical procedures included distal pancreatectomy for distal lesions (n=1), Whipple procedure (pancreaticoduodenectomy) for a lesion in the pancreatic head adjacent to the wirsung duct (n=1), and enucleation for the remaining four cases. The patient who underwent the Whipple procedure required a 131-day hospitalization due to postoperative complications, whereas the mean hospital stay for other patients was 5 days. Histopathological analysis revealed WHO NET grade 1 in three patients, grade 2 in two, and grade 3 in one. The Ki-67 proliferation index was below 5% in five patients, while it was 20% in the patient who underwent distal pancreatectomy. During the follow-up period (23.17±11.57 months), all patients achieved complete symptomatic relief with no evidence of recurrence.

Conclusion: Surgical resection is definitive, though intraoperative localization remains challenging. We emphasize the necessity of intraoperative ultrasonography (IOUS). Despite high morbidity reported in the literature—such as citing a 53% fistula and 7% hemorrhage rate for proximal lesions—our series remained recurrence-free. One patient required re-intervention for a post- Whipple fistula. Persistent hypoglycemia post-resection should prompt investigation for multiple adenomas or MEN syndromes. High Ki-67 indices and poor differentiation necessitate rigorous long-term surveillance.

Keywords: Insulinoma, surgical treatment

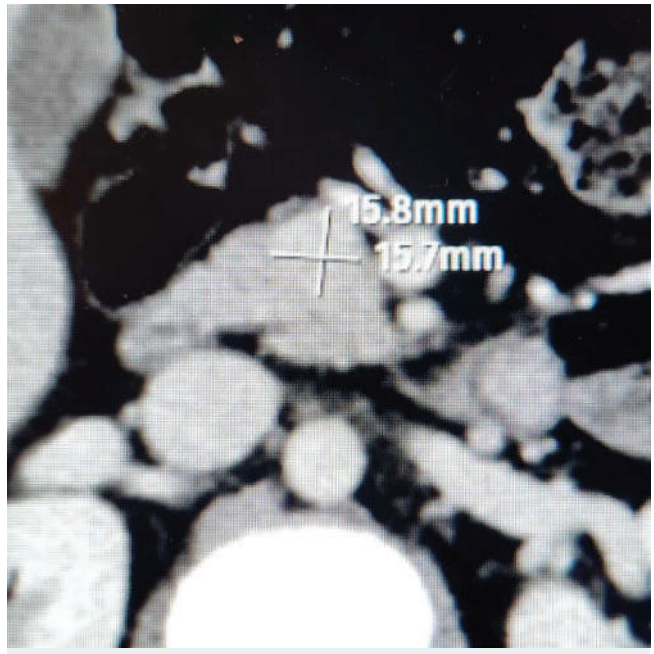


Figure 1. Preoperative radiological (CT) evaluation of the case.



Figure 2. Macroscopic evaluation of the lesion excised following enucleation.

Table 1. Demographic and laboratory characteristics (n=6)

	Hasta 1	Hasta 2	Hasta 3	Hasta 4	Hasta 5	Hasta 6
Yaş (yıl)	33	67	55	41	73	44
Cinsiyet	Kadın	Erkek	Erkek	Kadın	Kadın	Erkek
VKİ (kg/m²)	26.00	27.10	28.40	26.30	24.00	26.50
ASA	2	3	2	3	3	2
Glukoz (mg/dL)	22	23	32	25	45	44
İnsülin (µIU/mL)	120.00	7.81	28.30	34.30	20.70	6.74
C-peptid (ng/mL)	4.36	2.10	4.30	6.39	3.30	1.56

Table 2. Surgical and pathological findings (n=6)

	Hasta 1	Hasta 2	Hasta 3	Hasta 4	Hasta 5	Hasta 6
Adenom boyutu (mm)	30	12	11	20	20	12
Adenom yerleşim yeri	Kuyruk	Korpus	Baş	Korpus	Baş	Korpus
Cerrahi yaklaşımı ve tipi	Laparoskopi, Distal pankreatektomi	Laparotomi, Enükleasyon	Laparotomi, Whipple	Laparotomi, Enükleasyon	Laparotomi, Enükleasyon	Laparotomi, Enükleasyon
WHO NET Grade	G3	G1	G2	G1	G1	G2
Ki-67 (%)	20.00	2.00	3.20	2.00	2.00	5.00

Table 3. Comparative literature review and current series results

Çalışma	n	Cerrahi yaklaşım / dağılım	Adenom yerleşimi / boyutu	Komplikasyonlar (özet)	Sonuç (kür / nüks)
Li ve ark. 2025	76	LAP/LaP(*) ? Enükleasyon 50 Whipple 7 Subtotal pankreatektomi 19	Baş 37 Korpus/Kuyruk 39 Adenom boyutu 1.6±0.6 cm	Pankreatik fistül 41 Pankreatit ? Kanama 6 Nüks 0 Mortalite 1	Takip süresi 68 ay Nüks 0
Iglesias ve ark. 2015	29	LAP/LaP 2/25 Enükleasyon 18 Whipple 0 Subtotal pankreatektomi 9	Baş 11 Korpus 13 Kuyruk 4 Ektopik yerleşim 1 Adenom boyutu 1.7±0.7 cm	Pankreatik fistül 4 Pankreatit ? Kanama ? Nüks 0 Mortalite 0	Takip süresi 53 ay Nüks 0 Cerrahi ile kür %88.9
Ülkü ve ark. 2018	13	LAP/LaP 0/13 Enükleasyon 11 Whipple 0 Subtotal pankreatektomi 2	Baş 5 Korpus 6 Kuyruk 2 Adenom boyutu 1.85 cm	Pankreatik fistül 3 Pankreatit 1 Kanama 1 Nüks 0 Mortalite 0	Takip süresi 63.6 ay Nüks 0
Ritter ve ark. 2025	8	LAP/LaP 6/2 Enükleasyon 2 Whipple 0 Subtotal pankreatektomi 6	Baş 2 Korpus/Kuyruk 6 Adenom boyutu 1.7±1.3 cm	Pankreatik fistül 0 Pankreatit ? Kanama ? Nüks 0 Mortalite 1	Takip süresi 15.5 ay Nüks 0
Sayın ve ark. 2025 (Sunulan seri)	6	LAP/LaP 1/5 Enükleasyon 4 Whipple 1 Subtotal pankreatektomi 1	Baş Korpus Kuyruk Adenom boyutu 1.7±0.7 mm	Pankreatik fistül 1 Pankreatit 0 Kanama 0 Nüks 0 Mortalite 0	Takip süresi 23.1 ay Nüks 0

(*)LAP/LaP: Laparoskopi/Laparotomi

Table 4.

	Mean	Min.	Max.
Age	52.6	20	80
BMI	21.6	14	31

[P-222]

Surgical approach to chronic pancreatitis cases: Analysis of a single-center study

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Objective: Chronic pancreatitis is a clinical condition characterized by severe pain, with its etiology primarily categorized into biliary and non-biliary causes. This study aims to evaluate patients diagnosed with chronic pancreatitis who underwent surgical intervention at our center, comparing surgical approaches in relation to postoperative hospital stay, complication rates, and postoperative pathological findings.

Material and Material: Patients operated on between June 2020 and December 2025 were retrospectively analyzed. Surgical methods were classified into the frey procedure, laparoscopic frey procedure, laparoscopic beger procedure, classic Whipple procedure, pylorus-preserving Whipple (PPPD), and robotic puestow procedure. Data regarding etiology, body mass index (BMI), ASA score, age, gender, length of hospital stay, postoperative complications, and surgical indications were recorded to evaluate the clinical impact of surgical treatment.

Results: Eighteen patients were included in the study. Six patients had a confirmed preoperative diagnosis of chronic pancreatitis, with biliary and non-biliary etiologies equally represented. The remaining 12 patients underwent a Whipple procedure due to an inability to exclude malignancy in the presence of distal common bile duct stricture (n=3), pancreatic head cysts (n=2), and pancreatic head masses (n=7). Patient histories revealed recurrent attacks of abdominal pain. Regarding etiology, 6 of the patients who underwent the Whipple procedure presented with biliary pathology. Surgical techniques included classic Whipple in 9 (50%) patients, PPPD in 3 (16.6%), laparoscopic beger in 1 (5.5%), laparoscopic frey in 2 (11.1%), frey in 2 (11.1%), and robotic puestow in 1 (5.5%). The mean age was 52, mean BMI was 21.6, mean hospital stay was 16 days, median ASA score was 2, and the mean preoperative attack frequency was 5. The postoperative complication rate was 33.3% (n=6), with pancreatic fistula being the most common cause. The median number of attacks was 2 in the complication group and 5 in the non-complication group. Notably, the final pathology for all 12 patients who underwent radical resection due to suspected malignancy was consistent with chronic pancreatitis. Pain recurrence was observed in one patient operated on for non-biliary chronic pancreatitis.

Conclusion: While drainage methods suffice, Whipple remains necessary if malignancy is suspected. Preoperative attack frequency predicts complications, requiring meticulous patient and technique selection to optimize clinical outcomes

Keywords: Chronic pancreatitis, surgery

Table 1. Values

	Mean value	Min	Max
Age	52.6	20	82
BMI	21.6	14	31
Length of stay	16.1 days	6	42
ASA score	2.4	2	3
Number of attacks	4.8	2	15

[P-223]

Surgical treatment outcomes and prognostic factors in non-colorectal non-endocrine liver metastases: A single-center experience

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Objective: Liver metastases resulting from malignancies other than colorectal and endocrine tumors (non-colorectal non-endocrine liver metastases; NCNELM) are characterized by heterogeneous biological behavior and generally poor prognosis. However, in cases with appropriate patient selection, surgical resection remains one of the most important curative treatment options capable of providing long-term survival. This retrospective study aimed to analyze the demographic, clinicopathological, and operative characteristics of patients with NCNELM who underwent surgery, and to evaluate perioperative outcomes and survival data in conjunction with the existing literature.

Material and Methods: Patients who underwent liver resection in a separate session from the primary tumor surgery between June 1, 2020, and October 31, 2025, at our clinic due to NCNELM were retrospectively analyzed. The demographic data, comorbidities, operative findings, primary tumor and metastasis characteristics, postoperative clinical course, and histopathological results of the patients were evaluated.

Results: The median age of the 18 patients was 53.5 years (range 31-74), and 13 (72.2%) were female. Ten patients (55.6%) had at least one comorbidity. The distribution of primary tumors was as follows: Breast (n=7, 38.9%), lung (n=3, 16.7%), sarcoma (n=2, 11.1%), stomach (n=2, 11.1%), pancreas (n=1, 5.6%), small intestine (n=1, 5.6%), ovary (n=1, 5.6%), and ocular origin (n=1, 5.6%). Surgical procedures performed included segmentectomy in 12 patients (66.7%) and bisegmentectomy in 6 patients (33.3%). The R0 resection rate was 83.3% (n=15). Postoperatively, one patient (5.6%) developed an intra-abdominal abscess, and two patients (11.1%) developed wound infections. No mortality was observed within 90 days postoperatively.

Conclusion: Surgical resection stands out as a safe and feasible treatment option in patients with non-colorectal non-endocrine liver metastases who are appropriately selected. The high rate of R0 resection achieved in our series, together with low morbidity rates and the absence of 90-day mortality, supports the perioperative safety and reliability of the surgical approach. Despite the heterogeneous tumor biology, these results suggest that surgery may provide a potential survival benefit in selected patients. Therefore, an aggressive surgical approach should be considered for appropriate candidates with NCNELM following multidisciplinary evaluation.

Keywords: Liver resection, non-colorectal liver metastases, non-endocrine liver metastases

[P-224]

Epidemiological distribution and clinical correlations of pathological findings in cholecystectomy specimens: A single-center experience with 509 patients

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Objective: Cholecystectomy is one of the most frequently performed operations in general surgery. The aim of this study is to determine the distribution of gallbladder pathology results in patients who underwent cholecystectomy and to evaluate its relationship with clinical parameters.

Material and Methods: A retrospective analysis was conducted on 509 consecutive cholecystectomy patients who underwent surgery at the general surgery clinic of University of Health Sciences Türkiye, İstanbul Haseki Training and Research Hospital, between 2020 and 2025. Demographic data, type of surgery (laparoscopic/open), operation time, length of hospital stay, and postoperative complications were recorded. Histopathological results were classified as chronic cholecystitis, acute cholecystitis, cholesterolosis, adenomyomatosis, polyp, dysplasia, and incidental malignancy. Categorical variables were analyzed using the chi-square test, and continuous variables were analyzed using the Mann-Whitney U or Kruskal-Wallis test.

Results: The study included 509 patients who underwent cholecystectomy. Of these patients, 327 (64.2%) were women and 182 (35.8%) were men, with a median age of 50 years (IQR: 40-60). The most frequently detected pathology was chronic cholecystitis (87.8%) in 447 patients, followed by acute cholecystitis (3.7%), adenomyomatosis (2.8%), and cholesterol polyp (2.4%). Dysplasia was observed in 14 patients (2.8%) in the study group. The incidence of incidental gallbladder malignancy was 0.8%. Among non-malignant causes, the longest operation time was 112 minutes (IQR: 61-149) in the acute cholecystitis group, and the length of hospital stay was statistically longer than in the other groups, similar to the acute pancreatitis group ($p<0.05$). No association was found between the presence of malignancy and dysplasia and continuous variables ($p<0.05$). Patients with malignancy were older, but no statistically significant difference was found ($p=0.606$).

Conclusion: The vast majority of cholecystectomy specimens consist of benign inflammatory pathologies. However, the occurrence of incidental malignancy, albeit at a low rate, highlights the importance of routine histopathological evaluation of all specimens.

Keywords: Cholecystectomy, gallbladder neoplasms, incidental findings

[P-225]

Complementary surgery in incidental gallbladder cancers: A single-center experience from 2018-2025

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Objective: Gallbladder cancer (GBC), although rare, is clinically significant due to its aggressive course and frequent late diagnosis. Most cases are incidentally detected after cholecystectomy performed with a preliminary diagnosis of benign disease. Complementary surgery is recommended in stages T1b and above due to the risk of residual disease and regional lymph node metastasis. This study evaluated incidental GBC cases detected in cholecystectomy specimens after 2018 and the pathological results of the complementary surgeries performed.

Material and Methods: Cholecystectomies performed in our center between 2018 and 2025 were retrospectively reviewed. A total of 8.886 cholecystectomies were performed during this period [8.162 laparoscopic (91.9%)], 724 open [(8.1%)]. Cases with malignancy were identified by reviewing pathology records. Tumors were staged according to the AJCC 8th edition TNM classification. The primary surgical type, T stage, complementary surgical content (liver bed/segment IVb-V resection and regional lymph node dissection), and complementary pathology findings were analyzed.

Results: Between 2018 and 2025, gallbladder malignancy was detected in 9 patients (incidence ≈0.10%). 5 of the patients were female (55.6%), and 4 were male (44.4%). The mean age was 68.7±8.0, and the median age was 70 (57-80). The majority of cases were T2 or higher stage (T1b: 1; T2/T2a: 7; T3: 1). All 8 patients with information on complementary surgery underwent liver bed/segment resection along with regional lymph node dissection. Metastatic lymph nodes were detected in 3 of the patients who underwent lymph node dissection (37.5%); One patient had N2 disease (≥4 metastatic nodes). Complementary pathology samples revealed residual tumor or microscopic malignant involvement in 3 patients (37.5%).

Conclusion: Incidental gallbladder cancer (GBC) is rare but clinically significant. The rates of lymph node metastasis and residual disease detected during complementary surgery in T2 and higher cases strongly support the critical oncological importance of liver bed resection and regional lymph node dissection.

Keywords: Cholecystectomy, complementary surgery, gallbladder cancer, incidental carcinoma

Table 1. Demographic and clinical characteristics (2018-2025, n=9)

Feature	Value
Number of patients	9
Age (mean ± SD)	68.7±8.0
Median age (min-max)	70 (57-80)
Female, n (%)	5 (55.6%)
Male, n (%)	4 (44.4%)

Table 2. Pathological and complementary surgical findings

Feature	Value
T1b	1
T2/T2a	7
T3	1
Complementary surgery performed	8
Liver bed/segment resection	8
Lymph node dissection performed	8
Lymph node metastasis	3 (37.5%)
N2 disease	1
Residual tumor detection	3 (37.5%)

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Clinical characteristics, diagnostic process, and treatment outcomes of bezoar ileus cases: A single-center retrospective analysis

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Objective: Although rare, bezoar ileus represents an important cause of acute abdomen and mechanical intestinal obstruction. This study aimed to retrospectively evaluate the demographic characteristics, clinical findings, diagnostic methods, treatment approaches, and clinical outcomes of patients diagnosed with bezoar ileus and managed at the Department of General Surgery, University of Health Sciences Türkiye, Ankara Etlik City Hospital.

Material and Methods: Patients who presented to the emergency department between October 2022 and November 2025 and were followed, treated, or surgically managed with a diagnosis of bezoar ileus were retrospectively analyzed. Demographic data, comorbidities, clinical symptoms, laboratory findings, imaging modalities, bezoar characteristics, applied treatment modalities, and postoperative outcomes were recorded. Continuous variables were presented as median (IQR) and mean ± standard deviation, whereas categorical variables were expressed as number and percentage.

Results: A total of 22 patients were included in the study. The median age was 60 years (48.2-68.5), and 59.1% were female. All patients were admitted. The most common presenting symptoms were abdominal pain (90.9%), nausea/vomiting (90.9%), and abdominal distension (81.8%). The median symptom duration was 3.5 days (2.0-5.0). Computed tomography was the most frequently used imaging modality, and a preoperative diagnosis of bezoar was established in 68.2% of patients, while 27.3% were initially diagnosed with non-bezoar-related causes. The majority of bezoars were phytobezoars (86.4%), and the common location was the ileum (72.7%). Conservative treatment was attempted in 45.5% of patients; however, 81.8% ultimately required emergency surgery. Open surgery was performed in all surgically treated patients, with enterotomy and bezoar extraction being the most commonly applied procedure (77.8%). Bowel resection was required in 18.2% of patients. The postoperative complication rate was 27.3%, with postoperative ileus being the most frequent complication. No mortality was observed, and the recurrence rate during follow-up was 9.1%.

Conclusion: Our series demonstrates that bezoar ileus represents an important cause of mechanical intestinal obstruction, particularly in elderly patients with a high comorbidity burden. Despite widespread use of computed tomography, preoperative diagnosis was achieved in only two-thirds of patients, and misdiagnosis persisted, consistent with the existing literature. Although conservative and endoscopic approaches showed limited effectiveness, the majority of patients required emergency surgery. Enterotomy with bezoar extraction was the most commonly performed and effective surgical method, whereas the need for bowel resection remained limited. The absence of mortality and acceptable complication rates support the safety of early and timely surgical intervention. Therefore, appropriate clinical suspicion, effective imaging, and prompt surgical decision-making are critical to reducing morbidity and preventing recurrence.

Keywords: Bezoar ileus, emergency surgery, enterotomy, mechanical intestinal obstruction, phytobezoar

Table 1. Demographic characteristics, clinical findings

TABLO 1. Demografik Özellikler ve Komorbiditeler (n=22)

PARAMETRE	AÇIKLAMA / DEĞER
Yaş (yıl)	60.0 (48.2–68.5) | 57.1 ± 16.0
Cinsiyet	Kadın: 13 (%59.1) – Erkek: 9 (%40.9)
Vücut kitle indeksi (kg/m²)	30.0 (27.2–34.0) | 30.6 ± 5.0
ASA skoru	3.0 (2.0–3.0) | 2.5 ± 0.9
Charlson komorbidite indeksi	2.0 (0.2–3.8) | 2.5 ± 2.3
Ek hastalık varlığı	Var: 10 (%45.5) – Yok: 12 (%54.5)
Önceki GİS cerrahisi öyküsü	Var: 11 (%50.0) – Yok: 11 (%50.0)
Gastrektomi öyküsü	Var: 4 (%18.2) – Yok: 18 (%81.8)
Bariatrik cerrahi öyküsü	Var: 2 (%9.1) – Yok: 20 (%90.9)
Diyabet	Var: 7 (%31.8) – Yok: 15 (%68.2)
Hipotiroidi	Var: 2 (%9.1) – Yok: 20 (%90.9)
Psikiyatrik hastalık öyküsü	Var: 3 (%13.6) – Yok: 19 (%86.4)
Trikotillomani öyküsü	Var: 1 (%4.5) – Yok: 21 (%95.5)
Liften zengin diyet öyküsü	Var: 13 (%59.1) – Yok: 9 (%40.9)

TABLE 1. Demographic Characteristics and Comorbidities (n=22)

PARAMETER	DESCRIPTION / VALUE
Age (years)	60.0 (48.2–68.5) | 57.1 ± 16.0
Sex	Female: 13 (59.1%) – Male: 9 (40.9%)
Body mass index (kg/m²)	30.0 (27.2–34.0) | 30.6 ± 5.0
ASA score	3.0 (2.0–3.0) | 2.5 ± 0.9
Charlson comorbidity index	2.0 (0.2–3.8) | 2.5 ± 2.3
Presence of comorbidity	Yes: 10 (45.5%) – No: 12 (54.5%)
History of previous GI surgery	Yes: 11 (50.0%) – No: 11 (50.0%)
History of gastrectomy	Yes: 4 (18.2%) – No: 18 (81.8%)
History of bariatric surgery	Yes: 2 (9.1%) – No: 20 (90.9%)
Diabetes mellitus	Yes: 7 (31.8%) – No: 15 (68.2%)
Hypothyroidism	Yes: 2 (9.1%) – No: 20 (90.9%)
History of psychiatric disease	Yes: 3 (13.6%) – No: 19 (86.4%)
History of trichotillomania	Yes: 1 (4.5%) – No: 21 (95.5%)
High fiber diet history	Yes: 13 (59.1%) – No: 9 (40.9%)

TABLO 2. Klinik Bulgular, Laboratuvar ve Bezoar Özellikleri

PARAMETRE	AÇIKLAMA / DEĞER
Başvuru şekli	Acil: 22 (%100)
Semptom süresi (gün)	3.5 (2.0–5.0) | 4.6 ± 4.6
Karın ağrısı	Var: 20 (%90.9)
Bulantı / kusma	Var: 20 (%90.9)
Karın distansiyonu	Var: 18 (%81.8)
Gaz–gaita çıkışı yok	Var: 17 (%77.3)
Ateş (>38 °C)	Var: 3 (%13.6)
WBC (10³/μL)	11.0 (7.2–15.8) | 12.2 ± 5.7
CRP (mg/L)	19.5 (4.2–44.8) | 69.9 ± 112.6
Laktat (mmol/L)	1.5 (1.0–2.0) | 1.7 ± 0.8
Serum albümin (g/dL)	3.5 (3.1–4.0) | 3.6 ± 0.7
Malnütrisyon (Alb <3.5 g/dL)	Var: 9 (%40.9)
Görüntüleme yöntemi	BT: 21 (%95.5) – BT+USG: 1 (%4.5)
BT'de bezoar tanısı	Var: 15 (%68.2)
Bezoar tipi	Fitobezoar: 19 (%86.4) – Trikobezoar: 3 (%13.6)
Bezoar lokalizasyonu	İleum: 16 (%72.7) – Jejunum: 4 (%18.2) – Mide/Duodenum: 2 (%9.1)
Bezoar çapı (mm)	40 (30–40) | 39.5 ± 10.2
Multipl bezoar	Var: 5 (%22.7)
Eşlik eden gastrik bezoar	Var: 1 (%4.5)
Preoperatif bezoar tanısı	Var: 15 (%68.2)
Yanlış ön tanı ile izlem	Var: 6 (%27.3)

TABLE 2. Clinical Findings, Laboratory Results, and Bezoar Characteristics

PARAMETER	DESCRIPTION / VALUE
Admission type	Emergency: 22 (100%)
Symptom duration (days)	3.5 (2.0–5.0) | 4.6 ± 4.6
Abdominal pain	Present: 20 (90.9%)
Nausea / vomiting	Present: 20 (90.9%)
Abdominal distension	Present: 18 (81.8%)
Absence of flatus/stool	Present: 17 (77.3%)
Fever (>38 °C)	Present: 3 (13.6%)
WBC (10³/μL)	11.0 (7.2–15.8) | 12.2 ± 5.7
CRP (mg/L)	19.5 (4.2–44.8) | 69.9 ± 112.6
Lactate (mmol/L)	1.5 (1.0–2.0) | 1.7 ± 0.8
Serum albumin (g/dL)	3.5 (3.1–4.0) | 3.6 ± 0.7
Malnutrition (Alb <3.5 g/dL)	Present: 9 (40.9%)
Imaging modality	CT: 21 (95.5%) – CT+US: 1 (4.5%)
Bezoar diagnosis on CT	Present: 15 (68.2%)
Bezoar type	Phytobezoar: 19 (86.4%) – Trichobezoar: 3 (13.6%)
Bezoar location	Ileum: 16 (72.7%) – Jejunum: 4 (18.2%) – Stomach/Duodenum: 2 (9.1%)
Bezoar diameter (mm)	40 (30–40) | 39.5 ± 10.2
Multiple bezoars	Present: 5 (22.7%)
Concomitant gastric bezoar	Present: 1 (4.5%)
Preoperative bezoar diagnosis	Present: 15 (68.2%)
Follow-up with misdiagnosis	Present: 6 (27.3%)

Table 2. Treatment methods and literature comparison

TABLO 3. Tedavi Yöntemleri ve Klinik Sonuçlar

PARAMETRE	AÇIKLAMA / DEĞER
Konservatif tedavi denendi	Var: 10 (%45.5)
Enzimatik tedavi	Var: 4 (%18.2)
Endoskopik tedavi denendi	Var: 2 (%9.1)
Endoskopik tedavi başarılı	0
Acil cerrahi gereksinimi	Var: 18 (%81.8)
Cerrahi uygulandı	Var: 18 (%81.8)
Cerrahi endikasyon	İleus: %100
Cerrahi yaklaşım	Açık: 18 (%100)
Cerrahi prosedür	Enterotomi + bezoar çıkarılması: 14 (%77.8) – Rezeksiyon: 4 (%22.2)
Ameliyat süresi (dk)	65 (60–97.5) | 81.1 ± 37.0
Barsak rezeksiyonu	Var: 4 (%18.2)
Postop komplikasyon	Var: 6 (%27.3)
Postop ileus	Var: 4 (%18.2)
Cerrahi alan enfeksiyonu	Var: 2 (%9.1)
Sepsis	Var: 1 (%4.5)
Clavien–Dindo ≥ III	Var: 1 (%4.5)
Yoğun bakım yatışı	Var: 15 (%68.2)
Yoğun bakım süresi (gün)	3 (1–4) | 3.7 ± 4.0
Hastanede yatış süresi (gün)	7 (5.2–10.5) | 9.4 ± 7.4
Mortalite	Yok
Nüks (takipte)	Var: 2 (%9.1)
Takip süresi (ay)	10 (4–12) | 11.5 ± 12.5

TABLO 4. Literatür Karşılaştırma Tablosu

Parametre	Bizim Çalışma (Etlik Şehir Hast., 2022–2025)	Gök 2019	Tang 2019	Tihan 2016	Yakan 2010	Erzurumlu 2005
Örneklem (n)	22	25	36 (operatif vaka)	17	14	34
Yaş	Medyan 60	Medyan 60	—	Ortalama 56.8±17.0	—	—
Kadın (%)	59.1	52	—	35.3	—	—
BT yapılma (%)	95.5	—	—	88.2	(rutin değil)	—
BT de bezoar tanısı (%)	68.2	—	75	80 (BT çekilenlerde)	Preop tanı çok düşük: %7 (13/14 intraop)	—
Preop tanı güçlüğü / intraop tanı	Yanlış ön tanı 27.3	—	"Non-diagnostic CT" risk faktörü	İntraop kesin tanı 29.5	İntraop tanı %93	—
Cerrahi gereksinimi (%)	81.8	80	%100 (çalışma tasarımı: operatif)	(çoğu cerrahi) enterotomi baskın	Neredeyse tümü acil cerrahi	—
Cerrahi yöntemi (özet)	Enterotomi 77.8 (cerrahlar içinde), rezeksiyon 22.2	Cerrahi %80, komplikasyonlar raporlu	Milking fragmentasyon 55.6, enterotomi rezeksiyon 44.4	Enterotomi 64.7, nadiren laparoskopi+milking	Terminal ileum %64, jejunum %36 yerleşim	—
Postop komplikasyon (%)	27.3	3 olgu komplikasyon	Enterotomi rezeksiyonda morbidite 43.8 (milking %7)	Yüzeyel CAE %5.9 (1 olgu)	—	29.4
Mortalite (%)	0	4	—	—	—	11.5
Yatış süresi	Medyan 7 gün	Medyan 7 gün	—	Medyan 4 gün	—	—

TABLE 3. Treatment Modalities and Clinical Outcomes

PARAMETER	DESCRIPTION / VALUE
Conservative treatment attempted	Yes: 10 (45.5%)
Enzymatic therapy	Yes: 4 (18.2%)
Endoscopic treatment attempted	Yes: 2 (9.1%)
Successful endoscopic treatment	0
Emergency surgery requirement	Yes: 18 (81.8%)
Surgical intervention performed	Yes: 18 (81.8%)
Surgical indication	Ileus: 100%
Surgical approach	Open: 18 (100%)
Surgical procedure	Enterotomy + bezoar removal: 14 (77.8%) – Resection: 4 (22.2%)
Operation time (min)	65 (60–97.5) | 81.1 ± 37.0
Bowel resection	Yes: 4 (18.2%)
Postoperative complication	Yes: 6 (27.3%)
Postoperative ileus	Yes: 4 (18.2%)
Surgical site infection	Yes: 2 (9.1%)
Sepsis	Yes: 1 (4.5%)
Clavien–Dindo ≥ III	Yes: 1 (4.5%)
ICU admission	Yes: 15 (68.2%)
ICU stay (days)	3 (1–4) | 3.7 ± 4.0
Length of hospital stay (days)	7 (5.2–10.5) | 9.4 ± 7.4
Mortality	None
Recurrence (during follow-up)	Yes: 2 (9.1%)
Follow-up duration (months)	10 (4–12) | 11.5 ± 12.5

TABLE 4. Literature Comparison Table

Parameter	Our Study (Etlik City Hosp., 2022–2025)	Gök 2019	Tang 2019	Tihan 2016	Yakan 2010	Erzurumlu 2005
Sample size (n)	22	25	36 (operative cases)	17	14	34
Age	Median 60	Median 60	—	Mean 56.8±17.0	—	—
Female (%)	59.1	52	—	35.3	—	—
CT performed (%)	95.5	—	—	88.2 (not routine)	—	—
Bezoar diagnosis by CT (%)	68.2	—	75	80 (among CT cases)	Preop diagnosis very low: 7%	—
Preop diagnostic difficulty / intraop diagnosis	Misdiagnosis 27.3%	—	"Non-diagnostic CT" risk factor	Intraop definitive diagnosis 29.5%	Intraop diagnosis 93%	—
Surgical requirement (%)	81.8	80	100	Mostly surgical	Almost all emergency surgery	—

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Clinical outcomes of a case series of heller myotomy and Dor fundoplycation for achalasia

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Objective: Achalasia is a rare primary esophageal motility disorder affecting 1.6 people per 100,000 annually, characterized by progressive dysphagia, regurgitation, and nocturnal aspiration. If left untreated, patients eventually become unable to maintain oral feeding, leading to significant nutritional deficiencies and weight loss. The physical discomfort and social eating restrictions caused by chronic symptoms significantly reduce the patients' health-related quality of life.

Material and Methods: This case series includes five patients admitted and treated at a tertiary teaching hospital between 2018 and 2025. All patients underwent diagnostic evaluation with preoperative contrast esophageal radiography, esophagogastroscopy, and esophageal manometry. Three patients had previously undergone unsuccessful endoscopic balloon dilation at other centers. All patients underwent laparoscopic Heller myotomy and partial anterior (Dor) fundoplication to prevent reflux. The patients' clinical outcomes were evaluated preoperatively and postoperatively using the Eckardt score (range 0-12).

Results: The study included five patients with an average age of 46 (29-56). All procedures were successfully completed laparoscopically. During myotomy, an undesirable disruption of mucosal integrity (mucosal opening) was detected in two patients, but these were immediately noticed and corrected with primary repair during surgery. In the postoperative period, all patients showed uneventful recovery, with no signs of leakage or infection. Patients were discharged on the 3rd or 4th day postoperatively without any delay caused by intraoperative repairs. The mean follow-up period was 77 months (33-95 months), and in the last clinical evaluation in January 2026, it was determined that all five patients had completely resolved their dysphagia and reflux symptoms and achieved clinical improvement (Eckardt score <1).

Conclusion: Laparoscopic myotomy and Dor fundoplication provide safe, permanent, and effective long-term relief for achalasia despite failed endoscopic treatments.

Keywords: Achalasia, heller myotomy, Dor fundoplication, Eckardt score

Table 1. Patient characteristics and clinical outcomes

Case	Age, gender	Type	Pre ECK score	Post ECK, score	LOS	Follow-up (mo)
1	56	I	7	0	4	95
2	45	II	8	1	3	80
3	29	II	9	1	3	77
4	53	II	6	0	3	49
5	34	II	8	1	3	33

[P-228]

Clinicopathological features of patients diagnosed with gastrointestinal stromal tumor (GIST): A single-center experience

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Objective: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the gastrointestinal tract and exhibit heterogeneous clinical and histopathological characteristics. This study aimed to evaluate the demographic, clinical, and pathological features of patients diagnosed with GIST between 2015 and 2025 at our center, and to analyze recurrence rates and synchronous/metachronous tumor associations.

Material and Methods: A total of 83 patients diagnosed histopathologically with GIST between 2015 and 2025 were retrospectively analyzed. Demographic data, tumor localization, histological and immunohistochemical features, surgical approaches, and adjuvant treatment information were obtained from medical records.

Results: The mean age was 60.7 years; 48 patients (57.8%) were male and 35 (42.2%) were female. The most common presenting symptoms were abdominal pain (n=26) and gastrointestinal bleeding (n=16). Tumors were most frequently located in the stomach (47%), followed by the small intestine (26.5%) and other sites (14.5%). Recurrence developed in 10 patients (12%), with 50% of recurrences involving the liver. Open resection was performed in 65 patients, while 18 underwent laparoscopic surgery. The recurrence rate was 5.6% in the laparoscopic group and 13.8% in the open surgery group. Absence of mitosis was observed in 42.9% of recurrent cases and in 28.6% of non-recurrent cases. Metachronous tumors were detected in 12 patients (14.5%). Synchronous malignancies were identified in 11 cases (13.3%). In these patients, the Ki-67 proliferation index was lower compared to the primary pathology, and 7 cases were reported as micro-GIST.

Conclusion: GISTs are most commonly located in the stomach, and our findings are consistent with the literature regarding demographic and clinical distribution. The considerable rate of liver recurrence and concomitant malignancies highlights the importance of long-term multidisciplinary follow-up in these patients.

Keywords: Gastrointestinal stromal tumor (GIST), recurrence, synchronous malignancy

[P-229]

Current approach to post-resuscitation care after cardiac arrest in the surgical critical care unit: Fever control instead of therapeutic hypothermia

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Objective: Targeted temperature management has long been considered one of the main components of post-resuscitation care in order to reduce hypoxic-ischemic brain injury after cardiac arrest. Previous international guidelines recommended therapeutic hypothermia (32-34 °C) as a standard approach in comatose patients who achieved return of spontaneous circulation (ROSC). However, large randomized controlled trials published in recent years and updated guidelines have questioned the clinical benefit of routine hypothermic cooling and have brought active prevention of fever to the forefront. The aim of this report is to evaluate, in light of the 2025 European Resuscitation Council (ERC) and European Society of Intensive Care Medicine (ESICM) guidelines, why fever control has become a higher priority than therapeutic hypothermia in post-resuscitation care after cardiac arrest.

Material and Methods: This study was conducted based on randomized controlled trials, systematic reviews, and meta-analyses published after 2021, with particular emphasis on the 2025 ERC-ESICM Post-Resuscitation Care Guidelines. Therapeutic hypothermia, controlled normothermia, and active fever prevention strategies were comparatively analyzed in terms of mortality, neurological outcomes, and treatment-related complications.

Results: Current evidence indicates that deep therapeutic hypothermia (32-34 °C) does not provide a significant advantage over normothermia with active fever control in terms of survival or favorable neurological outcome. In contrast, aggressive cooling strategies have been reported to increase the incidence of complications such as arrhythmias, electrolyte disturbances, infections, and coagulopathy. In accordance with these findings, the 2025 ERC guidelines no longer recommend therapeutic hypothermia as a routine and mandatory intervention in comatose patients after ROSC; instead, continuous temperature monitoring and active prevention of fever are defined as the primary goals. The target temperature for fever control is generally specified as ≤37.5-37.7 °C, and this strategy is recommended to be maintained for 36-72 hours. Selection of lower target temperatures is left to individual clinical assessment in specific patient subgroups.

Conclusion: The current approach to post-resuscitation care after cardiac arrest has shifted away from routine therapeutic hypothermia toward effective and continuous control of fever. This approach reflects an important change that enhances patient safety, reduces the risk of complications, and supports evidence-based individualized critical care management. In surgical critical care units, in cases of cardiac arrest occurring in the postoperative period or due to surgical conditions such as trauma, sepsis, and massive hemorrhage, post-resuscitation temperature management should be regarded as a critical component of care that directly affects clinical outcomes.

Keywords: Cardiac arrest, fever, post-resuscitation care, surgical critical care, therapeutic hypothermia

[P-230]

Laparoscopy in emergency general surgery: Balancing benefit and risk from hernia to trauma and emergency colorectal surgery (a synthesis of six systematic reviews)

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Objective: Although minimally invasive, laparoscopy in emergency general surgery remains debated due to sepsis, hostile anatomy, hemodynamic instability, and the need for conversion. We synthesized short-term outcomes of laparoscopy versus open surgery across major emergency indications using existing systematic reviews/meta-analyses.

Material and Methods: Systematic reviews/meta-analyses comparing laparoscopic and open approaches in adult emergency general surgery were collated across six domains: Emergency inguinal hernia repair, emergency femoral hernia management (minimally invasive strategies), laparoscopic peritoneal lavage (LPL) versus resection for complicated perforated diverticulitis, laparoscopic versus open surgery after stenting for obstructive colorectal cancer, laparoscopy versus laparotomy in abdominal trauma, and laparoscopy versus open surgery in emergency colorectal procedures. Primary outcomes were mortality, morbidity, and length of stay (LOS). Secondary outcomes included surgical site infection (SSI)/wound complications, pulmonary complications, ileus, reintervention, and conversion. Findings were narratively synthesized by direction of effect and reported p-values.

Results: In emergency inguinal hernia repair (13 studies; 38,659 patients), laparoscopy reduced LOS (MD -2.96 days; p=0.0074) and lowered wound infection (p<0.0001), with a 2.78% conversion rate. Evidence for emergency femoral hernia was limited and largely non-comparative; nevertheless, minimally invasive approaches—particularly TAPP—were highlighted for evaluating hernia content and potentially avoiding non-therapeutic laparotomy. For complicated perforated diverticulitis, LPL decreased mortality and permanent stoma rates (p<0.001) but increased sepsis (p=0.03), intra-abdominal abscess (p<0.001), and recurrence (p<0.001). After stenting for obstructive colorectal cancer (12 cohorts; 933 patients), laparoscopy reduced overall complications (p<0.0001), LOS (p=0.001), and SSI (p=0.04), at the expense of longer operative time (p=0.03), while 30-day mortality was similar (p=0.95). In abdominal trauma, missed injury and mortality were comparable (p=0.90 and p=0.09), whereas wound infection was lower with laparoscopy (p=0.002). In emergency colorectal surgery (29 studies; 63,727 patients), laparoscopy was associated with lower mortality and morbidity (both p<0.001), and reduced ileus (p=0.009) and pulmonary complications (p<0.001).

Conclusion: Across meta-analytic evidence, laparoscopy appears to be a safe alternative in selected emergency patients managed by experienced teams, with particularly favorable short-term outcomes in emergency colorectal and hernia surgery. In contrast, in complicated peritonitis (as exemplified by LPL), the increased risk of abscess/recurrence underscores the importance of careful selection, robust source control, and a low threshold for conversion.

Keywords: Emergency surgery, laparoscopy, trauma

[P-231]

Surgical and clinical outcomes of kidney transplantation according to renal artery number

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Objective: Kidney transplantation is the most effective treatment for end-stage renal disease. The presence of multiple renal arteries in donor kidneys has traditionally been considered a controversial issue due to the increased complexity of vascular anastomosis. This study aimed to evaluate the surgical and early-to-midterm clinical outcomes of kidney transplants performed at our center according to the number of renal arteries.

Material and Methods: Patients who underwent kidney transplantation at our center between 2021 and 2025 were retrospectively analyzed. Recipients were divided into two groups based on graft renal artery number: Single-artery and multiple-artery (≥2 arteries) grafts. Demographic data, donor type, perioperative findings, vascular and urological complications, and follow-up serum creatinine levels were analyzed. Data were evaluated using descriptive statistical methods.

Results: A total of 200 kidney transplants were evaluated. Single renal artery was present in 142 patients (71.0%), while 58 patients (29.0%) had multiple renal arteries. Among the multiple-artery grafts, 49 had two arteries, 8 had three arteries, and 1 had four arteries. The incidence of vascular complications in multiple-artery grafts did not show a significant increase compared with single-artery grafts. During follow-up, serum creatinine levels remained within acceptable ranges in both groups.

Conclusion: This study demonstrates that the presence of multiple renal arteries in kidney transplantation does not constitute a disadvantage in terms of surgical or early-to-midterm clinical outcomes. With appropriate vascular reconstruction techniques in experienced centers, kidneys with multiple arteries—including selected cases with four arteries—can be safely transplanted, achieving functional outcomes comparable to those of single-artery grafts.

Keywords: Kidney transplants, multiple renal arteries

[P-232]

Exposure to electrocautery smoke in operating rooms and nurse awareness: An observational poster study

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Objective: Surgical smoke generated during the use of electrocautery constitutes a significant occupational risk for healthcare professionals working in operating rooms. Inhalation of surgical smoke has been associated with respiratory tract irritation, headaches, and potential long-term health problems.

Material and Methods: This study was designed as an observational study based on clinical practices in operating rooms. In surgeries where electrocautery was used, the occurrence of surgical smoke, the use of smoke evacuation systems, and the types of masks preferred were evaluated. In addition, operating room nurses' awareness of the possible health effects of electrocautery smoke was assessed through clinical observations.

Results: Observations revealed that surgical smoke occurred in the majority of procedures involving electrocautery. It was noted that smoke evacuation systems were not actively used in every case and that standard surgical masks were predominantly preferred. Nurses' awareness regarding the long-term health effects of electrocautery smoke was found to be insufficient.

Conclusion: Electrocautery smoke represents an important source of occupational exposure for operating room nurses. Therefore, effective use of smoke evacuation systems and the planning of awareness-enhancing educational programs for nurses are necessary.

Keywords: Operating room nursing, surgical smoke, occupational safety, nurse health, electrocautery smoke



Figure 1. Exposure to electrocautery smoke in operating rooms and nurse awareness: An observational poster study.

• Observation of surgical smoke generated during electrocautery use • Operating room nurse exposed to electrocautery smoke • Dispersion of surgical smoke within the operating room environment • Use of a smoke evacuation system to reduce exposure to surgical smoke • Use of standard surgical masks during procedures involving electrocautery.

[P-233]

Information continuity in the operating room: The impact of communication channels on workflow

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Objective: Operating rooms are high-risk environments where multidisciplinary teams work simultaneously, and the continuity of information flow directly impacts patient safety and workflow. The objective of this study is to evaluate the impact of communication channels used in the operating room on information continuity and their relationship with the workflow.

Material and Methods: This study is a descriptive and observational evaluation conducted in the operating room of a large-scale hospital. Communication methods used among nurses, surgeons, and anesthesia teams during surgical processes were examined; specifically, information transfer processes during shift handovers, emergency cases, and peak working hours were observed. No patient data were used in the study, and it did not require ethics committee approval.

Results: The evaluation revealed that communication breakdowns increased in cases where information transfer was person-dependent and relied solely on verbal communication. The absence of a standardized information transfer process, particularly during shift handovers, led to workflow disruptions, prolonged surgical preparation times, and increased stress levels within the team. Conversely, it was observed that structured and documented communication channels supported information continuity.

Conclusion: Ensuring information continuity in the operating room is of critical importance for the sustainability of safe surgical practices. Standardizing communication channels and developing specific information transfer models for shift processes can positively influence workflow and enhance team performance. This study highlights areas for communication-based improvements in perioperative nursing.

Keywords: Perioperative nursing, communication, information continuity, shift, workflow

[P-258]

A retrospective evaluation of surgical site infection in patients undergoing colostomy closure

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Objective: Colostomy closure is a commonly performed procedure in gastrointestinal surgery; however, surgical site infections remain one of the most frequent postoperative complications. These infections may lead to prolonged hospital stay, additional treatment requirements, and increased postoperative morbidity. The aim of this study was to retrospectively evaluate surgical site infections following colostomy closure and to identify associated risk factors.

Material and Methods: This retrospective study reviewed medical records of patients who underwent colostomy closure at the University of Health Sciences Türkiye, Ankara Etlik City Hospital, Department of General Surgery between 2023 and 2025. Patients aged ≥18 years, with at least 30 days of postoperative follow-up and documented surgical site infection status were included. Patients with incomplete records, additional surgeries, or immunosuppression were excluded. Demographic data, comorbidities, surgical details, and postoperative outcomes were collected. Patients with and without surgical site infections were compared. Continuous variables were analyzed using Independent t-test or Mann-Whitney U test, and categorical variables using chi-square or Fisher's exact test. Statistical significance was set at $p<0.05$.

Results: In this study of 80 patients, the overall incidence of surgical site infection (SSI) was 23.7%. Univariate analyses identified smoking history ($p=0.004$), emergency surgery ($p=0.002$), and longer operative time ($p=0.005$) as significant factors associated with increased SSI risk. Additionally, a strong association was observed between skin closure method and infection development ($p<0.001$). Multivariate analysis demonstrated that operative time (OR: 1.066; $p=0.012$) and skin closure method (OR: 19.911; $p=0.002$) were independent risk factors for the development of SSI.

Conclusion: Surgical site infection after colostomy closure remains a common complication. Primary skin closure and prolonged operative time are key independent risk factors. Awareness of these factors may guide surgical planning and perioperative management to reduce SSI incidence and improve postoperative outcomes.

Keywords: Colostomy closure, surgical site infection, risk factors, surgical complications

Table 1. Demographic and clinical findings			
	There is a wound infection (n=19)	**No wound infection (n=61)**	**p**
Age	64.7±13.6	62.9±15.7	0.651
Gender			
Male	12 (63.2%)	34 (55.7%)	0.568
Female	7 (36.58%)	27 (44.3%)	
Smoking	17 (89.5%)	32 (52.5%)	0.004
Additional medical history	12 (63.2%)	35 (57.4%)	0.655
Diabetes	10 (52.6%)	22 (36.1%)	0.198
Hypertension	4 (21.1%)	10 (6.4%)	0.641
History of immunosuppression	0 (0.0%)	5 (8.2%)	0.332
Chronic renal failure	0 (0.0%)	2 (3.3%)	0.579
Indications for colostomy Malignancy Diverticulitis Gunshot injury Stab wound Fournier	 6 (31.6%) 7 (36.8%) 3 (15.8%) 0 (0.0%) 3 (11.8%)	 14 (23.0%) 15 (24.6%) 11 (18.0%) 8 (13.1%) 8 (21.3%)	0.448
Complication of colostomy care	4 (21.1%)	11 (18.0%)	0.501
Colostomy closure time (months)	8.6±3.9	8.4±4.6	0.852
Emergency	14 (73.7%)	60 (98.4%)	0.002
Operation time (minutes)	67.1±16.1	57.6±11.1	0.005
Hospital stay duration (days)	5.3±1.8	4.5±2.3	0.153
Multi-organ injury	3 (15.8%)	19 (31.1%)	0.190
Postoperative ICU requirement	3 (15.8%)	7 (11.5%)	0.620
Type of surgery Laparoscopic Open Surgery	 5 (26.3%) 14 (73.7%)	 25 (41.0%) 36 (59.0%)	0.249
Intraabdominal contamination	11 (57.9%)	31 (50.8%)	0.590
Type of colostomy Hartman Loop colostomy	 8 (42.1%) 11 (57.9%)	 22 (36.1%) 39 (63.9%)	0.635
Skin closure method Primary closure Secondary healing	 16 (84.2%) 3 (15.8%)	 20 (32.8%) 41 (67.2%)	<0.001
Type of anastomosis Stapled Hand-sewn	 12 (63.2%) 7 (36.8%)	 42 (68.9%) 19 (31.1%)	0.644

[P-259]

Surgical management and pathological reclassification of non-parasitic cystic lesions of the liver: A single-center experience (2019-2025)

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Objective: Non-parasitic cystic lesions of the liver are pathologies that require careful surveillance and appropriate management due to their potential risk of malignancy. In this context, the data of patients who were operated on with a preliminary diagnosis of biliary cystadenoma at our institution were retrospectively analyzed.

Material and Methods: The surgical approaches performed between 2019 and 2025 and postoperative complications were evaluated. In addition, the pathological specimens of cases diagnosed with biliary cystadenoma were re-examined to confirm and clarify the diagnoses of mucinous cystic neoplasm (MCN) and biliary intraductal papillary neoplasm (IPNB)

Results: A total of 12 patients were operated on between 2019 and 2025. Nine patients (75%) were female and three (25%) were male, with a mean age of 53.5 years (range, 36-78 years). Regarding lesion localization, four patients had right lobe involvement and eight had left lobe involvement. Ten patients were primary cases, whereas two underwent surgery for recurrence. In terms of surgical approach, robotic surgery was performed in one patient, laparoscopic surgery in six patients, and open surgery in five patients. Final pathological evaluation revealed mucinous cystic neoplasm (MCN) in eight patients, intraductal papillary neoplasm of the bile duct (IPNB) in two patients, and simple cyst in two patients. One patient developed a postoperative intra-abdominal collection, which was successfully managed with percutaneous intervention. The mean follow-up duration was 57 months.

Conclusion: Non-parasitic cystic lesions of the liver should be carefully evaluated due to their potential for malignancy. A multidisciplinary approach is essential in the diagnostic and therapeutic process. With appropriate patient selection, minimally invasive surgical techniques can be applied safely and effectively.

Keywords: MKN, IPNB, non-parasitic

[P-262]

The need for formal recognition of endocrine surgery as a subspecialty of general surgery in Türkiye

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Objective: General surgery has evolved over time into a discipline composed of focused areas of expertise. While structured fellowship programs and "focused practice" designations have been developed in the United States (USA), only surgical oncology, intensive care, and gastrointestinal surgery are currently recognized as formal subspecialties in Türkiye. Endocrine surgery, despite its high technical complexity and steadily increasing case volume, is not included among the general surgery subspecialty programs in Türkiye.

Material and Methods: The subspecialty system in Türkiye was compared with the training model defined by the American Medical Association FREIDA database (2024) and the American Board of Surgery. The number of accredited programs, training structure, and officially recognized fellowship areas were reviewed, with particular focus on endocrine surgery.

Results: In the USA, general surgery training is conducted as a five-year residency in 368 accredited programs, followed by structured fellowship programs in multiple focused fields. These include complex general surgical oncology, hepatopancreatobiliary surgery, colorectal surgery, minimally invasive surgery, pediatric surgery, vascular surgery, transplant surgery, surgical critical care, breast surgery, burn surgery, and hand surgery. Endocrine surgery is practiced as an independent field in high-volume centers, encompassing thyroid, parathyroid, adrenal, and neuroendocrine diseases. Surgeons who have received subspecialty training in this field have been shown to have lower complication rates and better functional outcomes. Endocrine surgery is an advanced field requiring detailed anatomical knowledge, nerve preservation, hormonal physiology, and the integration of oncologic principles. A strong association between high case volume and improved surgical outcomes has been demonstrated, supporting the value of focused training. However, there is currently no standardized subspecialty training program in endocrine surgery in Türkiye.

Conclusion: Formal recognition of endocrine surgery as a subspecialty of general surgery in Türkiye would provide standardization in training and enhance patient safety.

Keywords: Endocrine surgery, focused practice, general surgery, subspecialty training

Table 1. Comparison of general surgery subspecialty/fellowship structures in Türkiye and the USA

Yapılanmasının Karşılaştırılması

Özellik	Türkiye	ABD
Genel cerrahi eğitim süresi	5 yıl	5 yıl
Resmî yan dal sayısı	3	>10
Tanınan alanlar	Cerrahi Onkoloji, Cerrahi Yoğun Bakım, Gastrointestinal Cerrahi	Surgical Oncology, HPB, Colorectal, MIS, Transplant, Vascular, Breast, Endocrine, vb.
Endokrin cerrahisi	Tanınmıyor	Bağımsız fellowship
Eğitim modeli	Merkezden merkeze değişken	Standart, akredite
Vaka hacmi şartı	Yok	Var
Komplikasyon oranları	Heterojen	Daha düşük (yüksek hacimli merkezler)
Hasta güvenliği	Standart dışı	Yüksek

[P-264]

Integration of robotic colorectal surgery into clinical practice: First year experience and early clinical outcomes

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Objective: Robotic surgery (da Vinci Surgical System) offers advanced visualization and instrumentation advantages in colorectal resections. However, data regarding the early phase of integration of a robotic platform into an established surgical practice remain limited in the literature. This study aimed to evaluate the safety and early clinical outcomes of a robotic colorectal surgery program initiated at our center between December 2024 and December 2025.

Material and Methods: A total of 48 patients who underwent robotic colorectal surgery between December 2024 and December 2025 were retrospectively analyzed. Demographic characteristics, ASA score, type of operation, operative time, estimated blood loss, conversion rate (to open surgery), postoperative complications, and length of hospital stay were recorded. Major complications were defined as Clavien-Dindo grade ≥III. Continuous variables were analyzed using appropriate parametric or non-parametric tests, and categorical variables were compared using the chi-square test. A p-value <0.05 was considered statistically significant. All procedures were performed by the same experienced surgical team following standardized surgical principles.

Results: Among the 48 patients included in the study, 56.3% were male, and the median age was 61.5 years (range, 38-81). ASA ≥3 was present in 20.8% of patients. The most frequently performed procedures were anterior resection (n=20, 41.7%) and right hemicolectomy (n=16, 33.3%). The mean operative time was 213 minutes, and the median estimated blood loss was 120 mL. Conversion to open surgery occurred in 5 patients (10.4%). The overall complication rate was 18.8%, and the major complication rate was 6.2%. The anastomotic leak rate was 4.2%, and no mortality was observed. The median length of hospital stay was 7 days (range, 4-14). All oncologic resections achieved negative surgical margins (R0). Comparison between the early (first 24 cases) and late (last 24 cases) periods demonstrated a statistically significant reduction in operative time, blood loss, overall complication rate, and length of hospital stay (p<0.05).

Conclusion: The integration of robotic colorectal surgery into a tertiary referral center appears to be safe, with low mortality, acceptable complication rates, and conversion rates consistent with the literature during the first year of implementation. The observed improvements in clinical parameters suggest a structured learning curve. Although the retrospective design and limited sample size restrict generalizability, these findings support that robotic colorectal surgery can be effectively and sustainably integrated into clinical practice in the presence of an experienced surgical team and appropriate institutional organization.

Table 1. Learning curve analysis according to clinical parameters

Parameter	All cases	First 24 cases	Last 24 cases	p
Operative time, min (mean)	213.2	232.6	193.8	**<0.001**[a]
Blood loss, mL (median)	120.5	155.5	100.5	**<0.001**[b]
Length of hospital stay, days (median)	7.0	9.5	5.0	**<0.001**[b]
Conversion, n (%)	10.4	12.5	8.3	1.000[c]
Complications, n (%)	18.8	33.3	4.2	**0.023**[c]
Anastomotic leakage, n (%)	4.2	8.3	0.0	0.489[c]

[a]Student's t test, [b]Mann-Whitney U, [c]Fisher's exact test.

[P-272]

Patients after cardiopulmonary resuscitation should be evaluated for organ donation: CPR is not a contraindication to organ transplantation!

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Objective: A substantial proportion of patients who achieve return of spontaneous circulation after cardiac arrest die due to irreversible hypoxic brain injury or progressive multiple organ failure. It was a widespread belief that patients who had undergone cardiopulmonary resuscitation (CPR) would not be suitable for organ donation. However, the 2025 Post-Resuscitation Care Guidelines of the European Resuscitation Council and the European Society of Intensive Care Medicine have stated that this belief is incorrect and recommend that patients after cardiac arrest should be evaluated for their potential as organ donors.

Material and Methods: In this study, recommendations regarding organ donation after cardiac arrest were reviewed on the basis of the 2025 Post-Resuscitation Care Guidelines of the European Resuscitation Council and the European Society of Intensive Care Medicine.

Results: The guideline clearly states that all patients who achieve return of spontaneous circulation after cardiopulmonary resuscitation should be assessed for organ donation. Numerous observational studies have shown that there is no significant difference in graft function or recipient survival between organs obtained from resuscitated donors and those obtained from non-resuscitated donors. This finding applies to all major solid organs, including the heart, lungs, liver, kidneys, pancreas, and small intestine.

Conclusion: The main barrier to organ donation after cardiac arrest is not a lack of medical evidence, but the insufficiently systematic evaluation of potential donors. The guideline defines organ donation as an integral component of post-cardiac arrest care. The fact that cardiopulmonary resuscitation has been performed is not, by itself, a determinant of donor suitability. Surgeons and intensivists working in surgical critical care units play an important role in the early identification of potential donors and timely notification of transplantation teams. Organ donation after cardiac arrest is an evidence-based practice that remains underutilized. The 2025 European Resuscitation Council and European Society of Intensive Care Medicine Post-Resuscitation Care Guidelines recommend that every patient who dies after successful cardiopulmonary resuscitation should be evaluated for organ donation. Evaluation of patients after CPR in surgical critical care units will increase the number of potential donors.

Keywords: Brain death, cardiac arrest, cardiopulmonary resuscitation, organ donation, surgical critical care unit

[P-273]

Multimodal risk assessment of thyroid malignancy in nodules with indeterminate cytology: Six years of research analysis

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Objective: Thyroid nodules are a common clinical finding, with prevalence rates ranging from 19% to 68% in the general population, largely due to the widespread use of high-resolution ultrasonography (US). While the vast majority of these nodules are benign, a significant proportion necessitate further evaluation to rule out malignancy. To evaluate the clinical, ultrasonographic, and elastographic parameters for risk stratification of malignancy in thyroid nodules with indeterminate cytology according to The Bethesda System for Reporting Thyroid Cytology (TBSRTC).

Material and Methods: This retrospective, single-center study analyzed 838 thyroid nodules from 716 consecutive patients for six years. The diagnostic performance of nodule size, Doppler US features, American Thyroid Association (ATA) risk of malignancy (ROM) guidelines, and Tsukuba elasticity scores (TES) via strain elastography (SE) was assessed. A multinomial logistic regression analysis was employed to compare indeterminate cytology (categories III, IV, and V) with benign cytology (category II) to identify independent predictors of malignancy.

Results: Nodules with ambiguous cytology exhibited larger mean diameters compared to benign nodules (20.83±9.89 mm vs. 18.65±9.08 mm; $p<0.05$), and significant associations were found between categories III, IV, and V and increased peripheral/central vascularization, high-risk ATA ROM classifications, and high TES (4 and 5). Histopathological malignancy rates were higher in the ambiguous groups ($p<0.05$); however, patient age and nodule localization did not show significant predictive value.

Conclusion: The integrated assessment of nodule size, Doppler vascularity, ATA risk stratification, and SE significantly enhances the predictive accuracy for malignancy in nodules with indeterminate cytology. Eventually, these multiparametric indices may provide essential guidance for optimizing surgical indications and clinical management in cases of diagnostic uncertainty.

Keywords: Thyroid gland, cytology, risk

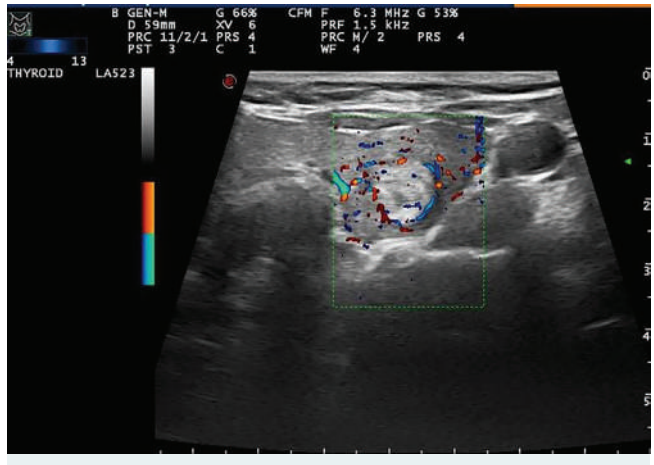


Figure 1. A Doppler US of an isoechoic nodule in the inferoposterior region of the left lobe of the thyroid gland with peripheric vascularization, possessing category II, TBSRTC, cytology.

TBSRTC: The Bethesda System for Reporting Thyroid Cytology, TES: Tsukuba elasticity score, OR: Odds ratio, CI: Confidence interval.

[P-275]

Results and patient satisfaction of inguinal hernia repair in a teaching hospital

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Objective: Inguinal hernia is one of the most common diseases in general surgery practice, affecting 2-4% of the population and with a lifetime risk of approximately 30% in men. Due to its high prevalence and the applicability of different surgical techniques (open and laparoscopic), not only recurrence and chronic pain but also long-term quality of life and patient satisfaction are important in evaluating the success of these elective procedures.

Material and Methods: Adult mesh inguinal hernia repairs (Lichtenstein, TEP, TAPP) performed at our tertiary training hospital between January 2020 and December 2023 were retrospectively analyzed. Patients were divided into four groups according to surgical technique (open/laparoscopic) and side (unilateral/bilateral). Postoperative outcomes (recurrence, chronic pain, quality of life) were compared. Statistical analyses were performed using R software.

Results: A total of 153 patients (mean age 55±14) were divided into four groups: Laparoscopic bilateral (LB, n=58), Open bilateral (AB, n=42), open unilateral (AU, n=33), and laparoscopic unilateral (LU, n=20). Follow-up was achieved in 139 patients (91%), while 9% were not followed up. The overall recurrence rate in the entire cohort was 10% (n=14), and the rate of chronic pain was 6% (n=8). Recurrence rates were 0% in the AB group, 15% in the AU group, 12% in the LB group, and 15% in the LU group. There was no statistically significant difference in recurrence rates between the surgical techniques (p=0.117). Similarly, there was no significant difference in the incidence of chronic pain (p=0.38). There were also no significant differences between the groups in terms of patient satisfaction and quality of life (p=0.12).

Conclusion: Inguinal hernia repairs performed at a tertiary teaching hospital resulted in good postoperative quality of life and similar recurrence and morbidity rates among the techniques. High patient satisfaction was noteworthy in open bilateral repair. The relatively high recurrence rates observed in the laparoscopic group require evaluation in larger series.

Keywords: Inguinal hernia, teaching hospital, recurrence

Table 1. Clinical outcomes and patient satisfaction by surgical technique

Group	N.	Reached	Recurrence	Chronic pain	Satisfaction	Quality of life
Open bilateral	37	37 (100%)	0 (0%)	1 (3%)	35 (95%)	9.3
Open unilateral	33	33 (100%)	5 (15%)	2 (6%)	26 (79%)	9.0
Laparoscopic bilateral	63	49 (78%)	6 (12%)	2 (4%)	44 (90%)	8.7
Laparoscopic unilateral	20	20 (100%)	3 (15%)	3 (15%)	18 (90%)	9.4
Total cohort	153	139 (91%)	14 (10%)	8 (6%)	123 (89%)	9
p-value*	-	-	0.12	0.4	0.21	-

[P-276]

Early mortality rate in laparoscopic sleeve gastrectomies: A single center review, this time we'll point the finger at ourselves

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Objective: The increasing rate of worldwide obesity is considered one of the most challenging contemporary threats to public health. Over 50% of bariatric surgeries performed are laparoscopic sleeve gastrectomy (LSG) at worldwide. The remaining 30% are gastric bypass and metabolic surgeries. Laparoscopic sleeve gastrectomy remaining most chosen technique in bariatric surgical treatment because of cost effectivity rate, technical simplicity and remaining digestive system. According to IFSO data, the mortality rate after LGS varies between 0.18% and 0.27% depending on age, gender, and comorbidities.

Material and Methods: In our study, we examined the total number of laparoscopic sleeve gastrectomies performed at the Clinic of General Surgery, İzmir Bozyaka Training and Research Hospital, University of Health Sciences Türkiye.

Results: Our study revealed that a total of 680 patients performed laparoscopic sleeve gastrectomy. %88 of the patients were female and %12 were male. The age distribution of the cases ranged from 18 to 71. The average hospital recovery period for patients after surgery was 4 days. The postoperative mortality rate of our patients was 0.7% (5 patients). The cause of death in these patients was gastrointestinal perforation in 3 patients and sudden cardiac death in 2 patients.

Conclusion: The number of sleeve gastrectomy operations is directly proportional to the obesity rate in the population. While the postoperative mortality rate is 0.7% in our clinic, this rate may vary in more experienced centers. Patients existing comorbidities and age distribution affect postoperative mortality and morbidity rates. There is a need for multicenter studies on this subject in our country.

Keywords: Gastrointestinal perforation, Health Sciences University, laparoscopic sleeve gastrectomy, mortalty rate

[P-280]

A portal vein branch identified in the gallbladder bed during laparoscopic cholecystectomy: A rare and high-risk case report

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Objective: Portal vein anatomy and its variations are of clinical importance in hepatobiliary surgery. Although these variations are most commonly considered during hepatic resections and major liver surgeries, they may rarely pose a risk of serious vascular injury during laparoscopic cholecystectomy as well. In particular, portal vein branches coursing within the gallbladder bed may lead to difficult-to-control and potentially life-threatening hemorrhage if unrecognized. In this report, we present a case of a portal vein branch that was identified intraoperatively during laparoscopic cholecystectomy and required a modification of the surgical approach.

Results: A 52-year-old male patient presented to our outpatient clinic with complaints of biliary colic. Preoperative ultrasonography and computed tomography revealed a 9-mm gallstone. No variations related to portal vein anatomy were reported on preoperative imaging. An elective laparoscopic cholecystectomy was planned for the patient. Following standard trocar placement, adhesions between the gallbladder and the omentum were separated using sharp and blunt dissection. The cystic duct and cystic artery were carefully dissected, clipped, and divided. During dissection of the gallbladder from the liver bed, a vascular structure consistent with a portal vein branch, approximately 1 cm in diameter and 2 cm in length, was identified within the gallbladder bed, following an atypical anatomical course. Given the location and diameter of the identified vascular structure, it was considered that standard electrocautery dissection could result in severe and difficult-to-control hemorrhage. At this stage, the surgical strategy was revised intraoperatively; dissection was continued carefully and in a controlled manner without the use of energy devices, with preservation of the vascular structure. The portal vein branch was successfully preserved without injury, and the gallbladder was completely separated from the liver bed (Figure 1). No intraoperative bleeding was observed, and no additional surgical intervention was required. The gallbladder was removed in an endobag and sent for pathological examination. No postoperative complications such as bleeding or bile leakage were observed. The patient was discharged on postoperative day 1. No complications were noted during a six-month follow-up period.

Conclusion: This case demonstrates that portal vein variations may pose a risk of serious vascular injury not only during major hepatic surgeries but also during commonly performed procedures such as laparoscopic cholecystectomy. When unexpected vascular structures are encountered in the gallbladder bed, intraoperative awareness and appropriate modification of the dissection strategy are crucial for preventing major hemorrhage and ensuring safe surgery.

Keywords: Portal vein variation, laparoscopic cholecystectomy, gallbladder bed, vascular injury

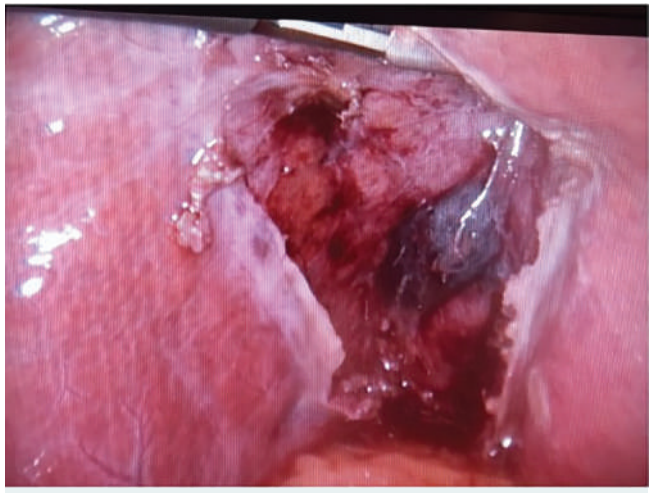


Figure 1. Intraoperative view of a portal vein branch approximately 1 cm in diameter coursing within the gallbladder bed.

[P-281]

Laparoscopic surgical approach in acute cholecystitis: A single-center retrospective study

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Objective: Acute cholecystitis is an acute inflammatory disease of the gallbladder, most commonly caused by gallstones. It occupies an important place among the causes of acute abdomen, and if not treated surgically in time, morbidity may increase. Nowadays, laparoscopic cholecystectomy has become the standard treatment approach for patients diagnosed early due to its feasibility in the early period, shorter hospital stay, and lower complication rates. This study aimed to evaluate demographic data, comorbidities, intraoperative findings, and postoperative outcomes in patients who underwent laparoscopic cholecystectomy for acute cholecystitis.

Material and Methods: Between February 2024 and January 2026, a total of 47 patients who underwent laparoscopic cholecystectomy with a diagnosis of acute cholecystitis in the Department of General Surgery, Bakırçay University Çiğli Training and Research Hospital, were retrospectively analyzed. The following data were recorded: age, sex, body mass index (BMI), comorbidities, previous surgical history, Parkland score, time from symptom onset to surgery, Tokyo classification of acute cholecystitis, intensive care unit (ICU) stay, development of complications, and postoperative length of hospital stay.

Results: Of the patients, 26 (55.3%) were female and 21 (44.7%) were male. The mean age was 60.8±15.4 years, and the mean BMI was 28.7±4.8 kg/m². The most common comorbidities were hypertension (40.4%), diabetes mellitus (23.4%), and cardiac disease (19.1%). Previous abdominal surgery was present in 46.8% of patients. Based on the Tokyo Classification, 18 patients were Grade 1 and 29 were Grade 2. The Parkland score was 2 in 3 patients, 3 in 19 patients, 4 in 10 patients, and 5 in 15 patients. The mean time from the onset of symptoms to surgery was 3.3 days. Postoperative respiratory complications occurred in only one patient (2.1%), and no surgical complications were observed. The mean postoperative hospital stay was 3.0±1.5 days.

Conclusion: Laparoscopic cholecystectomy in acute cholecystitis is a safe surgical method when appropriate patient selection is made, offering a low complication rate and shorter hospital stay. Although advanced age, high BMI, and comorbidities may increase surgical difficulty, they do not significantly raise complication rates.

Keywords: Acute cholecystitis, laparoscopic cholecystectomy, Parkland classification

[P-282]

Postoperative recurrence in intra-abdominal and retroperitoneal sarcomatosis: A ten-year retrospective analysis of 82 cases

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Objective: Intra-abdominal and retroperitoneal soft tissue sarcomas are rare tumors characterized by aggressive biological behavior and high rates of local recurrence, necessitating close postoperative surveillance. The development of sarcomatosis represents an advanced stage of disease; however, data addressing long-term recurrence patterns and the impact of prior surgical interventions in this patient population remain limited. The aim of this study was to comprehensively evaluate histopathological subtype distribution, postoperative recurrence timing, and the effect of previous surgical history in patients undergoing surgery for intra-abdominal and retroperitoneal sarcomatosis.

Material and Methods: A total of 82 patients who underwent surgery for intra-abdominal and retroperitoneal sarcomatosis over a 10-year period were retrospectively analyzed. Histopathological diagnoses, history of previous sarcoma-related surgery at other institutions, postoperative recurrence, and time to recurrence were evaluated. Patients presenting with sarcomatosis as recurrence or disease progression following prior surgery were analyzed as a distinct subgroup.

Results: The histopathological distribution of the 82 patients was heterogeneous and consistent with the existing literature. The most common diagnosis was liposarcoma, observed in 41 patients (50.0%), followed by leiomyosarcoma in 18 patients (22.0%) and undifferentiated pleomorphic sarcoma in 11 patients (13.4%). Less frequent subtypes included solitary fibrous tumor in 5 patients (6.1%), malignant peripheral nerve sheath tumor in 4 patients (4.9%), and other high-grade sarcoma subtypes in 3 patients (3.6%). Postoperative recurrences occurred predominantly during the early and intermediate follow-up periods. The median time to recurrence was 16 months (IQR: 9-32 months). Overall, 62% of recurrences developed within the first 24 months, and 85% occurred within the first 60 months. Patients with a history of prior surgery at other institutions had a shorter median time to recurrence (12 months) compared with those whose primary surgery was performed at our center (22 months), indicating a significant impact of previous surgical interventions on recurrence patterns.

Conclusion: This study represents one of the largest single-center series detailing postoperative recurrence timing and histopathological distribution in patients with intra-abdominal and retroperitoneal sarcomatosis. The demonstrated association between prior surgical history and earlier recurrence constitutes a key original contribution of this analysis. Our findings underscore the importance of initial sarcoma surgery being planned and performed in experienced, high-volume centers using a multidisciplinary approach, as well as the need for intensive, long-term follow-up strategies focused on the early postoperative period in this high-risk patient population.

Keywords: Intra-abdominal sarcoma, retroperitoneal sarcoma, postoperative recurrence

[P-283]

The experience of four young general surgeons (experience <5 years) in colorectal malignancy surgery at the newly opened University of Health Sciences Türkiye, Antalya City Hospital: Is comprehensive and high-quality colorectal surgery possible with standard core training?

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Objective: Colorectal cancer surgery is most often performed in high-volume tertiary centers by subspecialist surgeons. In addition to technical success, adherence to oncological surgical principles is of paramount importance. The aim of this study was to evaluate the experience of four young general surgeons, all graduates of the same training center and trained under the same core curriculum, who are currently working at the newly established University of Health Sciences Türkiye, Antalya City Hospital, and to assess the impact of standardized training on clinical practice in terms of surgical approach diversity and pathological quality criteria.

Material and Methods: This retrospective descriptive study included patients who underwent surgery for colorectal malignancy between March 2024 and December 2025 at the newly established tertiary-care University of Health Sciences Türkiye, Antalya City Hospital, University of Health Sciences Türkiye. Demographic data, emergency versus elective surgical status, surgical approach, and pathological outcomes were analyzed. All procedures were performed by four general surgeons who shared the same education.

Results: A total of 101 patients were included in the study. The mean age was 66.3±15.25 years (range: 31-91 years). Of the patients, 60.4% were male and 39.6% were female. Fifty-nine surgeries (57.8%) were performed electively, 42 (41.2%) were performed under emergency conditions. Tumor localization was as follows: right colon in 24 patients (23.7%), left colon in 8 (8%), transverse colon in 2 (2%), sigmoid colon in 17 (16.8%), and rectum in 50 patients (49.5%). Regarding surgical approach, 54 patients (52.9%) underwent open surgery, 22 (21.6%) laparoscopic surgery, and 26 (25.5%) robotic surgery. The overall rate of minimally invasive surgery was 47.1%. No positive surgical margins were detected pathologically. In 14 patients (13.8%), the number of harvested lymph nodes was fewer than 12, whereas adequate lymph node dissection with complete mesocolic excision was achieved in 86.2% of patients. These findings were consistent with the existing literature. Postoperatively, 8 patients (7.9%) died in the intensive care unit due to non-surgical causes; all patients had undergone emergency surgery. Three patients (3%) died due to postoperative surgical complications. These mortality rates were consistent with those reported in the literature.

Conclusion: Young general surgeons trained through a standardized and robust core curriculum are capable of performing colorectal cancer surgery in city hospital settings not only with technical proficiency but also in accordance with oncological principles and pathological quality standards. However, as not all residency training centers provide education at the same standard, the continuation of post-graduate training and the active involvement of the Turkish Surgical Association and the Turkish Society of Colorectal Surgery remain crucial.

Keywords: Colorectal cancer, core curriculum training, oncological surgical quality

[P-284]

Evaluation of colonoscopic polypectomy outcomes: University of Health Sciences Türkiye, Bağcılar Training and Research Hospital experience

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Objective: Polyps are defined as abnormal mucosal growths protruding into the lumen of the colon and rectum. Colonoscopy is considered the gold standard for both diagnosis and treatment of colorectal polyps. In addition, colonoscopic polypectomy is a fundamental method for preventing the development of colorectal cancer. We aimed to evaluate the endoscopic and histopathological characteristics of patients who underwent colonoscopic polypectomy.

Material and Methods: Between 2018 and 2024, a total of 10,927 lower gastrointestinal endoscopic examinations were performed in the endoscopy unit of the general surgery department. Among these, 2,364 patients (21.6%) who underwent colonoscopic polypectomy and 3,291 polyps were retrospectively analyzed. Demographic characteristics, polyp localization, number, size, histopathological type, degree of dysplasia, and malignancy rates were recorded.

Results: The male-to-female ratio was 1,488/876 and the median age was 58 years (range: 16-92). Polyps were detected in 3.291 locations during 2.364 procedures (cecum 177, ascending colon 370, transverse colon 385, descending colon 482, sigmoid colon 1.052, rectum 735). The sigmoid colon was the most frequent location. Polyps were found in a single location in 774 cases and in multiple locations in 1,590 cases. The median polyp size was 5 mm (range: 1-45). Histopathological evaluation revealed benign lesions in 1.370 polyps (41.7%), premalignant lesions in 1.745 polyps (53%), and malignant lesions in 176 polyps (5.3%). Dysplasia was low-grade in 316 polyps (9.5%) and high-grade in 340 polyps (10.3%). Malignant lesions were detected in 111 of 2.183 polyps (5.1%) in 1.488 male patients and in 65 of 1.108 polyps (5.9%) in 876 female patients.

Conclusion: Colonoscopic polypectomy, when performed in experienced centers, is a safe and effective method with a low complication risk for both the diagnosis and treatment of colorectal cancer. Given the high frequency of premalignant lesions, particularly in the sigmoid colon and rectum, rectosigmoidoscopic examination may be appropriate in screening programs. Larger studies are needed to better define the prevalence and prognosis of premalignant lesions.

Keywords: Polypectomy, colonoscopy, colorectal cancer

[P-285]

Impact of emergency and elective surgery on short-term clinical outcomes in right colon cancer: A single-center experience (2023-2026)

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Objective: In this study, we aimed to evaluate the impact of emergency surgery on short-term clinical outcomes in patients undergoing surgical resection for right colon cancer and to compare these outcomes with those of elective surgery.

Material and Methods: In this retrospective single-center study, 102 patients who underwent surgery for right colon cancer between 2023- 2026, were included. Patients were divided into two groups according to emergency (n=32) and elective surgery (n=70). The primary endpoint was defined as major morbidity (Clavien-Dindo ≥3). Secondary endpoints included 30-day mortality, anastomotic leakage, intensive care unit (ICU) requirement, and length of hospital stay. Continuous variables were expressed as median and analyzed using the Mann-Whitney U test, while categorical variables were analyzed using Fisher's exact test or the chi-square test.

Results: The groups were similar in terms of age (p=0.759).The rate of ASA ≥III was significantly higher in the emergency group (65.4% vs. 41.4%, p=0.042). No significant difference was detected between the groups regarding the Charlson comorbidity index (p=0.691). In the emergency group, preoperative CRP levels were significantly higher (44.05 vs. 6.15 mg/L, p<0.001), while albumin levels were significantly lower (3.46 vs. 4.18 g/dL, p=0.001). Regarding the surgical approach, 84.4% of patients in the emergency group underwent open surgery, whereas minimally invasive techniques were preferred in 77.1% of the elective group. The conversion rate was 60% in the emergency group and 11.1% in the elective group. Operative time was significantly longer in the elective group (197.5 vs. 150 minutes, p<0.001). Pathological staging showed a significant difference in T stage distribution between the groups (p<0.001); the T4 rate was 50% in the emergency group compared with 12.9% in the elective group. Although the N2 rate was higher in the emergency group (34.4% vs. 17.1%, p=0.074). There was no significant difference in the total number of retrieved lymph nodes between the groups [22 (16.8-34.2) in the emergency group vs. 20 (17.0-25.0) in the elective group, p=0.178]. The rate of major morbidity was significantly higher in the emergency group (21.9% vs. 1.4% ,p=0.001). Thirty-day mortality was also higher in the emergency group (18.8% vs. 2.9%,p=0.011). Anastomotic leakage was observed only in the emergency group (12.5% vs. 0%, p=0.008). Length of stay was significantly longer in the emergency group (8 vs. 6 days, p=0.041).

Conclusion: Emergency surgery in right colon cancer is associated with advanced T stage, higher rates of open surgery and conversion, and significantly increased major morbidity and mortality. Although the oncological quality of surgery is comparable, emergency presentation significantly worsens short-term clinical outcomes due to loss of physiological reserve and greater disease burden.

clinical outcomes.

Keywords: Elective surgery, emergency surgery, right colon cancer

Table 1. Demographic characteristics, operative features, and pathological findings

Variable	Emergency (n=32)	Elective (n=70)	p
Age, median (IQR)	68 (60-77)	68.5 (62-77)	0.759
ASA ≥III	17 (65.4%)	29 (41.4%)	0.042
CCI, median (IQR)	5 (4-7.25)	5 (4-6)	0.691
Open surgery	27 (84.4%)	16 (22.9%)	<0.001
Minimally invasive surgery	5 (15.6%)	54 (77.1%)	<0.001
Conversion*	3/5 (60.0%)	6/54 (11.1%)	-
Operative time (min), median (IQR)	150 (132.5-176.2)	197.5 (166.2-248.8)	<0.001
T stage distribution (overall)	-	-	<0.001
T4	16 (50.0%)	9 (12.9%)	<0.001
N2	11 (34.4%)	12 (17.1%)	0.074
Total lymph nodes, median (IQR)	22 (16.8-34.2)	20 (17.0-25.0)	0.178
≥12 lymph nodes retrieved	29 (90.6%)	64 (91.4%)	1.000

Table 2. Clinical outcomes

Variables			
30-day mortality	6 (18.8%)	2 (2.9%)	0.011
Anastomotic leakage	4 (12.5%)	0	0.008
ICU requirement	10 (31.2%)	21 (30.0%)	1.000
Length of hospital stay (days), median (IQR)	8 (6-12.75)	6 (6-7)	0.041

[P-286]

Reduction of biopsy requirement with magnetic resonance imaging in breast cancer: A five-year clinical experience in high-risk women

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Objective: In women with familial risk of breast cancer, mammography and ultrasound (US) can yield indeterminate findings that prompt biopsy. Breast magnetic resonance imaging (MRI) may better characterize lesions, reduce avoidable procedures, and reveal malignancies occult on conventional imaging. To compare biopsy recommendations generated by mammography/US with those after breast MRI and to summarize a five-year single-center experience.

Material and Methods: We retrospectively reviewed 99 women with a positive family history who underwent breast MRI between January 2020 and January 2025 at a tertiary center. Familial risk was defined as breast cancer in a first-degree relative (mother and/or sister) and/or a second-degree maternal relative (maternal aunt). Imaging assessments from mammography and/or US were compared with subsequent MRI interpretations. A biopsy recommendation was considered indicated when the index lesion was categorized as BI-RADS 4-5 on the reporting modality (mammography, US, or MRI). The primary outcome was the change in biopsy recommendation after MRI (withdrawal or new indication). Secondary outcomes were pathology results and short-term safety of deferring biopsy.

Results: Overall, biopsy was recommended in 26/99 patients (26.3%). Sixteen patients had BI-RADS 4 findings on mammography and/or US prompting biopsy. After MRI, 10/16 (62.5%) were downgraded to BI-RADS 2-3 and biopsy was withdrawn; no malignancy was observed during a minimum 12-month follow-up using clinical assessment plus interval imaging (US and/or mammography). The remaining 6/16 (37.5%) continued to meet BI-RADS 4-5 criteria and underwent biopsy; all pathology results were benign. Among patients without a biopsy indication on mammography/US, MRI alone prompted biopsy in 10/99 (10.1%). Seven underwent biopsy: 5 benign and 2 malignant. Biopsy was not performed in 3 patients and follow-up data were unavailable; these cases were treated as missing and excluded from outcome assessment.

Conclusion: In women with familial risk, adding breast MRI to mammography and US reduced biopsy recommendations by downgrading many BI-RADS 4 findings with reassuring follow-up, while also detecting malignancy in a subset not identified by conventional imaging. MRI appears to be a useful problem-solving adjunct within guideline-based screening pathways for this population.

Keywords: Magnetic resonance imaging (MRI), mammography, breast ultrasound (US), familial risk, BI-RADS

[P-287]

Is non-surgical treatment of breast cancer possible

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Objective: Breast cancer, once considered untreatable, has evolved into an era where the necessity of surgery is being questioned. Thanks to molecular advancements, cancer subtypes can be defined on a receptor basis, allowing for the development of disease-specific, targeted treatment strategies. With increased experience and advancements in imaging technologies, early diagnosis rates are rising. In light of these developments, the opportunity has arisen to answer the question: Is non-surgical breast cancer treatment possible?

Material and Methods: Studies published in the PubMed database between 2017-2025, which reported the accuracy of pathologic response via minimal invasive biopsy prior to surgery after neoadjuvant therapy, were screened. Keywords used included "Neoadjuvant therapy", "pathologic complete response", "vacuum-assisted biopsy", "core needle biopsy", and "surgery omission". Prospective, retrospective comparative, feasibility, and accuracy studies were included, while case reports and studies with insufficient methodology were excluded. Literature findings were synthesized to evaluate the efficacy of biopsy-based surgery omission strategies.

Results: Breast cancer is classified into four subtypes: Luminal A, Luminal B, HER2+, and Triple Negative, which show significant differences in treatment response and prognosis. Current neoadjuvant chemotherapy and radiotherapy applications have increased clinical complete remission rates, reaching up to 60% specifically in HER2+ and triple-negative patients. However, reliably ruling out residual tumor after neoadjuvant therapy remains challenging; while the sensitivity and specificity of imaging methods vary (Table 1), some studies have shown that results can be improved with artificial intelligence. Regarding axillary management, the AMAROS trial (2001-2010, n=4806) compared 1425 cN+ patients and found 5-year axillary recurrence rates of 0.43% in the axillary lymph node dissection (ALND) group and 1.19% in the radiotherapy (RT) group. Disease-free survival was 86.9% and 82.7%, respectively, while overall survival was 81.4% and 84.6%. In detecting breast pathologic complete response (pCR), the false-negative rate of invasive biopsies ranges from 0% to 49% depending on factors such as needle size and technique (VAB, CNB). A review of studies over the years indicates that pCR rates are progressing positively (Table 2).

Conclusion: Avoidance of surgery cannot yet enter routine practice; prospective studies should be awaited. The crucial point is to prove the accuracy of pathologic complete response via non-surgical methods. Current methods lack sufficient sensitivity and specificity to select patients with pathologic complete response. While moving away from breast cancer surgeries is an inevitable trend, higher quality clinical studies are required. Treatment algorithms will be reshaped in the future with the results of AI and multi-center studies.

Keywords: Non-operative management of breast cancer

Table 1. Sensitivity and specificity of imaging methods

	Sensitivity (%)	Specificity (%)
Mammography (3)	81	48
Diffusion-weighted MRI (4)	93	82
USG (5)	90	80
PET-CT (6)	84	71

Table 2. Pathologic complete response (pCR) rates by subtype

	Multi-center	TR (7)
Luminal A	10-15%	8.7%
Luminal B	15-30%	10.8%
Luminal B HER2 +	30-55%	42.4%
HER2+ HR-	50%+	54.5%
Triple negative	30-60%	46.7%

[P-288]

Bilateral breast cancer: A single-center experience

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Objective: Bilateral breast cancer is a rare disease entity that presents diagnostic and therapeutic challenges due to its clinical and pathological heterogeneity. Tumors may develop in both breasts either synchronously or at different time points, necessitating individualized surgical approaches and adjuvant treatment planning. The aim of this study was to evaluate the clinicopathological characteristics and treatment approaches of patients diagnosed with bilateral breast cancer.

Material and Methods: In this retrospective study, patients diagnosed with metachronous bilateral breast cancer at our center between 2021 and 2026 were analyzed. Demographic characteristics, tumor localization, histological and molecular subtypes, surgical procedures, and adjuvant treatments were evaluated using patient medical records and electronic databases.

Results: A total of 21 patients were included in the study. The median age of the patients was 47 years (range: 39-78). The mean follow-up period was 29.4 months (range: 2.1-61.2). Histopathological evaluation revealed mixed invasive lobular and invasive ductal carcinoma in 2 patients (9.5%), while invasive ductal carcinoma was present in 19 patients (90.5%). Bilateral luminal-type tumors were observed in 16 patients (76.2%), whereas 5 patients (23.8%) had luminal-type breast cancer in one breast and hormone receptor-positive, HER2-positive breast cancer in the contralateral breast. Breast-conserving surgery was performed in 10 patients (47.6%), while mastectomy was performed in 11 patients (52.4%). Pathological staging revealed advanced-stage disease in both tumors in 1 patient (4.8%), whereas all remaining patients were diagnosed at an early stage. In 3 patients (14.3%), the second tumor was identified as carcinoma *in situ*. During the follow-up period, no local recurrence or distant metastasis was observed.

Conclusion: In this single-center experience, the prognosis of patients with metachronous bilateral breast cancer was found to be comparable to that of patients with unilateral breast cancer. Although the literature reports a higher incidence of invasive lobular carcinoma in bilateral breast cancer, invasive lobular carcinoma was observed only in patients with mixed histopathological subtype in our series. Despite the relatively short follow-up period, favorable clinical outcomes were observed, likely attributable to the fact that the majority of patients were diagnosed at an early stage. Accordingly, breast-conserving surgery was feasible in nearly half of the patients. These findings suggest that appropriate patient selection and individualized treatment strategies may play a decisive role in the prognosis of metachronous bilateral breast cancer.

Keywords: Bilateral breast cancer, metachronous breast cancer, breast-conserving surgery

[P-289]

Imaging-guided localization of non-palpable early-stage breast cancer and its surgical and oncological outcomes: A single-center registry study

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Objective: With the widespread use of screening programs and neoadjuvant therapies, non-palpable breast cancers are encountered more frequently in clinical practice. In these patients, preoperative localization is of great importance in terms of achieving complete tumor excision, reducing the need for re-surgery, and preserving cosmetic results.

Material and Methods: This retrospective registry analysis included 67 patients with non-palpable breast cancer at Tis-T1N0M0 stage who underwent breast-conserving surgery with image-guided localization between 2015 and 2024. Complete data on surgical outcomes were available for 50 patients. Demographic characteristics, tumor characteristics, and oncological outcomes were evaluated using descriptive statistical methods.

Results: The mean age of the patients was 55.2±10.1 years. The mean diameter of the largest tumor was 13.9±4.5 mm, consistent with early-stage disease. Three patients (6%) required re-excision after the first surgery. A second re-excision was performed in two patients (4%). During follow-up, local recurrence was observed in one patient (2%), regional recurrence in one patient (2%), and systemic recurrence in two patients (4%). Disease-related mortality occurred in one patient (2%).

Conclusion: In non-palpable early-stage breast cancer, imaging-guided localization appears to be a safe and effective approach with low re-excision rates and favorable oncological outcomes. Larger multicenter studies are needed to evaluate the impact of different localization techniques on long-term outcomes.

Keywords: Non-palpabl, wire guided

[P-290]

Is the stage at diagnosis advanced in patients under 40 years of age with breast cancer?: A single-center experience

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Objective: Breast cancer occurring at a young age represents a distinct clinical subgroup due to its more aggressive biological characteristics and exclusion from routine screening programs. This study aimed to evaluate the clinical stage distribution at diagnosis in patients under 40 years of age with breast cancer and to compare the proportion of advanced-stage disease (Stage III-IV) with population-based literature data.

Material and Methods: In this single-center retrospective study, 62 patients under the age of 40 diagnosed with invasive breast cancer and evaluated at the multidisciplinary breast tumor board in 2025 were analyzed. Clinical stages were reclassified according to the AJCC 8th edition, and Stage III-IV disease was defined as "advanced stage." The observed proportion of advanced-stage disease was compared with rates reported in national and international population-based studies using a one-sample proportion test.

Results: Among the 62 patients, 11 (17.7%; 95% CI: 10.2-29.0%) were diagnosed with advanced-stage disease. The rate of metastatic disease at presentation was 4.8%. The observed advanced-stage proportion did not differ significantly from the approximately 15-20% rates reported in the Turkish National Breast Cancer Registry Program and SEER data (p=0.64).

Conclusion: In this single-center young-age cohort, the proportion of advanced-stage disease was comparable to population-based data. Despite the well-documented increased biological aggressiveness of breast cancer in younger patients, the stage distribution did not demonstrate a marked deviation from that of the general population. Larger, multicenter studies are warranted.

Keywords: Breast cancer, early-onset, staging

[P-291]

Clinical characteristics and surgical outcomes of hypercalcemic patients aged 65 years and older with primary hyperparathyroidism

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Objective: Primary hyperparathyroidism represents the leading cause of hypercalcemia. Although hypercalcemia is frequently asymptomatic across age groups, elders tend to present with atypical and non-specific manifestations, which may contribute to delayed diagnosis. This study aimed to characterize the clinical presentation and therapeutic outcomes of patients aged ≥65 years with hypercalcemia and to evaluate the necessity and effectiveness of surgical management in this population.

Material and Methods: Patients diagnosed with hyperparathyroidism, either referred from internal medicine/endocrinology clinic or consult to general surgery clinic between September 2022-2025 were retrospectively evaluated. Demographics, laboratory data, imaging modalities, and treatments were systematically reviewed. All patients underwent neck ultrasonography and parathyroid scintigraphy; 4D computed tomography (4D-CT) was employed when initial imaging failed to localize a parathyroid lesion.

Results: Among 165 patients diagnosed with hyperparathyroidism and hypercalcemia, 22 (13.3%) were ≥65 years of age. The cohort consisted of 15 women (68.1%) and 7 men (31.8%), with a mean age of 70.5 years; while female patients demonstrated a slightly higher mean age (71.5 years). Hypercalcemia was incidentally detected in laboratory tests in 7 patients (31.8%). Musculoskeletal complaints were reported by 8 patients (36.3%), whereas hypertension and cognitive dysfunction each constituted the presenting symptom in 3 patients (13.6%). One patient (4.5%) was diagnosed with nephrolithiasis. All patients with confirmed biochemical hyperparathyroidism underwent minimally invasive parathyroidectomy. In 8 cases, the addition of 4D-CT facilitated precise localization and optimized the surgical approach. A double adenoma was identified in one patient via 4D-CT. A 53-year-old male patient with primary hyperparathyroidism in whom a parathyroid adenoma could not be identified by ultrasonography or scintigraphic imaging; however, the lesion was successfully diagnosed and localized using four-dimensional computed tomography (4D CT).

Conclusion: Primary hyperparathyroidism in elderly patients most commonly arises from parathyroid adenoma, lesser hyperplasia, or, least frequently, parathyroid carcinoma. Given the potential multisystem involvement of hypercalcemia in this age group, timely intervention is imperative. Surgical treatment should be prioritized in patients who do not respond adequately to medical therapy. Considering the higher prevalence of comorbid conditions in the elderly, accurate preoperative localization is crucial to minimize operative time and reduce perioperative morbidity. Focused minimally invasive parathyroidectomy represents an optimal first-line strategy, offering shorter operative duration and lower complication rates.

Keywords: Hypercalcemia, primary hyperparathyroidism, diagnosis, imaging, treatment

Table 1.

	Female	Male
Sex	15 (68.1%)	7 (31.8%)
Mean age at the time of diagnosis	71.5	70.5

Table 2.

Symptoms	
Incidentally detected	7
Musculuskeletal complaints	8
Hypertension	3
Cognitive dysfunction	3
Nephrolithiasis	1



Figure 1. 4D CT at primary hyperparathyroidism.

[P-292]

Evaluation of clinical, pathological, and genetic findings in medullary thyroid carcinoma: A single-center experience

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Objective: Medullary thyroid carcinoma (MTC) holds a distinctive position among thyroid malignancies due to its aggressive biological behavior, potential for early lymph node metastasis, monitorability via biochemical markers, and strong association with familial/genetic syndromes. The extent of surgical treatment, neck dissection strategies, and the genetic evaluation process are fundamental factors directly impacting prognosis. This study aims to provide a detailed evaluation of the demographic, clinical, genetic, surgical, and pathological characteristics of MTC patients surgically treated at University of Health Sciences Türkiye, Ankara Etlik City Hospital, Department of General Surgery; to present short-term follow-up outcomes, and to emphasize the role of institutional experience in MTC management.

Material and Methods: In this retrospective observational study, seven patients operated on with a diagnosis of MTC were analyzed. Parameters including age, sex, ASA score, familial MTC/MEN history, presence of MEN syndrome, RET mutation status, preoperative calcitonin and CEA levels, surgical procedures performed, pathological findings, and follow-up data were recorded. Continuous variables were presented as mean ± standard deviation or median (minimum–maximum), and categorical variables were expressed as frequencies and percentages.

Results: All patients were female, with a mean age of 40.4±6.9 years. Most patients were ASA II (71.4%). A family history of MTC/MEN was present in 28.6%, and RET mutation was positive in 28.6%. One patient (14.3%) had MEN 2A syndrome (Table 1). Preoperative biochemical assessment revealed a median calcitonin level of 585 pg/mL (120-2000 pg/mL) and a median CEA level of 18 ng/mL (4-65 ng/mL). All patients underwent total thyroidectomy and central neck dissection; 42.9% required lateral neck dissection (Table 2). Mean tumor diameter was 2.1±0.7 cm. Multicentricity and extrathyroidal extension rates were both 28.6%. Lymph node metastasis was identified in 42.9% of cases. Over a median follow-up of 17 months (4-41 months), no recurrence or mortality was observed (Table 3).

Conclusion: Despite its low incidence, MTC is a malignancy that requires high clinical vigilance during surgical planning and follow-up. Given the high rates of lymph node metastasis and recurrence risk reported in the literature, the complete implementation of standard surgical approaches and multidisciplinary evaluation in our series resulted in zero short-term recurrence and mortality. Our findings support that early diagnosis, genetic screening, and appropriate neck dissection strategies are decisive factors for prognosis, underscoring the importance of institutional experience and structured surgical approaches in this rare tumor group (Table 4).

Keywords: Medullary thyroid carcinoma, MEN syndromes, neck dissection, RET mutation, total thyroidectomy

Table 1. Demographic, clinical, and genetic characteristics (n=7)

Parametre	Değer
Yaş (ortalama ± SS), yıl	40,4 ± 6,9
Yaş (medyan, min–maks), yıl	40 (30–49)
Cinsiyet – Kadın, n (%)	7 (100)
ASA I, n (%)	1 (14,3)
ASA II, n (%)	5 (71,4)
ASA III, n (%)	1 (14,3)
Ailede MTC/MEN öyküsü – Var, n (%)	2 (28,6)
MEN sendromu – MEN2A, n (%)	1 (14,3)
MEN sendromu – MEN2B, n (%)	0 (0)
MEN sendromu – Yok, n (%)	6 (85,7)
RET mutasyonu – Var, n (%)	2 (28,6)

Table 2. Preoperative biochemical and surgical characteristics

Parametre	Değer
Preoperatif kalsitonin (pg/mL), medyan (min–maks)*	967 (87,4–16825)
Preoperatif CEA (ng/mL), medyan (min–maks)	19,6 (4,9–126)
Cerrahi tipi – TT + Santral LN, n (%)	3 (42,9)
Cerrahi tipi – TT + Santral + Lateral LN, n (%)	4 (57,1)
Lateral boyun diseksiyonu – Evet, n (%)	4 (57,1)

Table 3. Pathological findings and follow-up outcomes

Parametre	Değer
Primer tümör çapı (cm), ortalama ± SS	2,61 ± 1,95
Multifokalite – Var, n (%)	3 (42,9)
Ekstratiroidal yayılım – Var, n (%)	1 (14,3)
Lenf nodu metastazı – Var, n (%)	3 (42,9)
Takip süresi (ay), medyan (min–maks)	15 (4–41)
Nüks, n (%)	0 (0)
Takipte mortalite, n (%)	0 (0)

Table 4. Comparison of clinical and pathological findings in MTC with literature

Parametre	Bizim Çalışmamız (Etlik Şehir Hastanesi)	Machens & Dralle(World J Surg)	Wells ve ark.(ATA Guidelines)	Elisei ve ark.(J Clin Endocrinol Metab)
Hasta sayısı (n)	7	>1000	Çok merkezli	638
Ortalama yaş (yıl)	40,4	45–50	40–55	47
Kadın oranı (%)	100	~55–60	~50	56
Ailesel MTK / MEN (%)	28,6	20–25	20–30	24
RET mutasyonu (%)	28,6	25–30	25–35	27
MEN 2A (%)	14,3	10–15	10–20	12
Preop kalsitonin (pg/mL)	967 (medyan)	Değişken	Prognostik belirteç	Yüksek düzey LN ile ilişkili
Lateral LN diseksiyonu (%)	57,1	40–60	Risk bazlı önerilir	~50
Lenf nodu metastazı (%)	42,9	40–70	Sık	45–60
Ekstratiroidal yayılım (%)	14,3	10–30	Prognozu etkiler	20
Nüks (%)	0	10–20	Uzun dönemde artar	15–25
Takipte mortalite (%)	0	5–10	Evreye bağlı	8–12

[P-293]

Our results of parathyroid surgery: A single-center experience (2020-2025)

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Objective: Hyperparathyroidism is characterized by elevated parathyroid hormone (PTH) levels and impaired calcium metabolism. The most common etiological factor is parathyroid adenoma, while parathyroid hyperplasia and, rarely, parathyroid carcinoma may also be responsible. Surgical treatment provides definitive management in appropriate patients. Preoperative imaging plays a critical role in localizing pathological glands and improving surgical success.

Material and Methods: A total of 265 patients who underwent surgery for hyperparathyroidism, hypercalcemia, or parathyroid adenoma at University of Health Sciences Türkiye, Kartal Dr. Lütfi Kırdar City Hospital between January 2020 and June 2025 were retrospectively analyzed. Demographic characteristics, imaging modalities, surgical techniques, preoperative and postoperative PTH and calcium levels, and pathological findings were evaluated. Ultrasonography and scintigraphy were used for preoperative localization in all patients.

Results: Of the patients, 75 (28.3%) were male and 190 (71.7%) were female, with a mean age of 46 years. Chronic kidney disease was present in 71 patients, and 14 patients had a history of renal transplantation. The mean preoperative PTH level decreased from 623 pg/mL to 68.7 pg/mL postoperatively. Mean serum calcium levels decreased from 10.88 mg/dL preoperatively to 8.78 mg/dL postoperatively. The most common localization was the left inferior parathyroid gland, and the mean lesion size was 1.93 cm. Subtotal (3.5-gland) parathyroidectomy with autotransplantation was performed in 38 patients. Pathological examination revealed parathyroid adenoma in 190 patients, parathyroid hyperplasia in 58 patients, and normal parathyroid tissue/thymus in 17 patients. Parathyroid carcinoma was detected in three patients, and parathyromatosis in one patient.

Conclusion: Parathyroid surgery is a safe and effective treatment for hyperparathyroidism. The combined use of ultrasonography and scintigraphy provides accurate preoperative localization. In our series, parathyroid adenoma was the most common pathology, and significant reductions in PTH and calcium levels were observed after surgery. Our findings support the effectiveness of surgical management in hyperparathyroidism.

Keywords: Hyperparathyroidism, parathyroid adenoma, parathyroidectomy

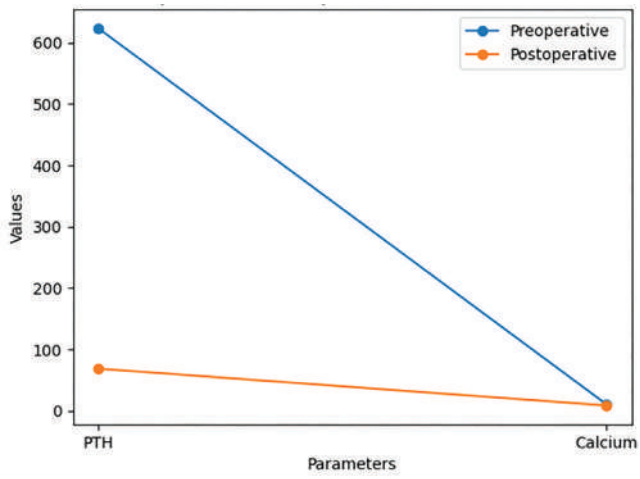


Figure 1. Preoperative vs. postoperative biochemical values.

Table 1. Surgical and pathological findings

Variable	Value
Most common gland localization	Left inferior
Mean lesion size (cm)	1.93
Subtotal parathyroidectomy + autotransplantation, n	38
Parathyroid adenoma, n	190
Parathyroid hiperplasia, n	58
Normal parathyroid tissue/thymus, n	17
Parathyroid carcinoma, n	3
Parathyromatosis, n	1

[P-294]

Clinical significance of prognostic nutritional and inflammatory indices in patients undergoing the Whipple procedure: Analysis of PNI, AGR, and CAR

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Objective: The aim of this study was to evaluate the relationship between inflammation- and nutrition-based indices, including the prognostic nutritional index (PNI), albumin-globulin ratio (AGR), and C-reactive protein-albumin ratio (CAR), and the clinical and pathological characteristics of patients undergoing pancreaticoduodenectomy (Whipple procedure).

Material and Methods: This retrospective study included 89 patients who underwent the Whipple procedure at the Department of General Surgery, Mersin University Faculty of Medicine, within the last five years. Demographic data, pathological diagnoses, tumor stages, and preoperative laboratory parameters were recorded. PNI was calculated using the formula 10× albumin (g/dL) + 0.005× total lymphocyte count; AGR as albumin/(total protein-albumin); and CAR as CRP/albumin. Patients with available pathological stage information were considered to have adenocarcinoma. The associations between these indices and age groups, pathological diagnosis, and tumor stage were analyzed.

Results: The mean age of the patients was 62.9±11.9 years. Seventy patients (78.7%) were diagnosed with adenocarcinoma. Patients with adenocarcinoma had lower PNI values and higher CAR values compared to patients with other pathologies. In patients aged ≥70 years, PNI and AGR values were markedly lower, while CAR values were significantly higher.As pathological stage advanced, PNI values decreased and CAR values increased. Although AGR values were similar between adenocarcinoma and non-adenocarcinoma groups, a decreasing trend was observed in the elderly population. Low PNI and high CAR values were more pronounced in patients with advanced-stage disease, suggesting that increasing inflammatory burden adversely affects nutritional and immune status.

Conclusion: PNI, AGR, and CAR values were found to be associated with clinical and pathological characteristics in patients undergoing the Whipple procedure. Low PNI and high CAR, in particular, appear to be important indicators reflecting advanced disease burden and increased systemic inflammation. AGR may serve as a supportive parameter reflecting the patient's overall inflammatory and nutritional status rather than tumor biology. Incorporation of these indices into preoperative assessment may contribute to improved risk stratification and surgical management.

Keywords: Whipple procedure, PNI, CAR, AGR, pancreatic cancer, prognostic indices

Table 1. PNI, CAR, and AGR values according to pathological stage

Pathological stage	Number of patients (n)	PNI (mean ± SD)	CAR (mean ± SD)	AGR (mean ± SD)
Stage 1a	11	31.9±4.8	33.3±28.1	1.25±0.36
Stage 1b	13	33.0±5.1	24.7±23.0	1.29±0.47
Stage 2a	3	25.0±2.8	35.5±24.3	0.97±0.32
Stage 2b	26	33.4±5.5	23.3±19.7	1.36±0.38
Stage 3	13	35.8±7.5	24.2±22.0	1.22±0.42

PNI: Prognostic nutritional index, CAR: C-reactive protein-albumin ratio, AGR: Albumin-globulin ratio, SD: Standard deviation.

[P-295]

Clinicopathological features and surgical outcomes of incidental and non-incidental gallbladder adenocarcinoma: A retrospective study

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Objective: Gallbladder adenocarcinoma (GBC) is a rare malignancy with aggressive biological behavior and poor prognosis. Due to the absence of disease-specific clinical symptoms and the limited diagnostic sensitivity of radiological imaging, a substantial proportion of cases are diagnosed incidentally during histopathological examination of cholecystectomy specimens. Early diagnosis remains challenging, and surgical resection is the only potentially curative treatment option. This study aimed to evaluate the clinicopathological characteristics, diagnostic findings, and surgical management of patients with GBC, with particular emphasis on differences between incidental and non-incidental cases.

Material and Methods: This retrospective study included 48 patients diagnosed with GBC between 2015 and 2025 in Ankara Bilkent City Hospital. Patients were classified according to the mode of diagnosis as incidental GBC (n=28) and non-incidental GBC (n=20). Demographic data, clinical presentation, radiological findings, operative procedures, tumor localization, and pathological staging were recorded. Tumor staging was assessed according to the AJCC 8th edition. Comparative analyses were performed to identify differences in disease presentation and tumor stage between the two groups.

Results: The study cohort consisted of 32 women (66.7%) and 16 men (33.3%), with a mean age of 65.9 years. More than half of the patients were older than 65 years at diagnosis. Most patients presented with non-specific symptoms, and gallstones were present in 40 cases. Cholecystectomy alone was oncologically sufficient in 12 patients (25%), whereas additional hepatic resection was required in 25 patients (52.1%). Tumors were most frequently located in the fundus (27.1%), while multifocal or diffuse involvement was observed in 22.9% of patients. In the incidental GBC group, 81.4% of patients had early-stage tumors (T1-T2). In contrast, 85% of patients in the non-incidental GBC group, including inoperable cases, had advanced-stage disease (T3-T4).

Conclusion: GBC is frequently diagnosed incidentally due to the lack of specific clinical and radiological findings. Non-incidental cases are more commonly associated with advanced tumor stage and multifocal involvement. Careful preoperative evaluation is therefore essential for optimal surgical planning. Adequate surgical resection remains the only potentially curative treatment for GBC.

[P-296]

Comparison of the peritoneal cancer index, the morphological stage of the tumor, and cytology results detected by staging laparoscopy in gastric cancer, with the results after neoadjuvant chemotherapy and postoperative pathology results: A single-center experience with 89 patients

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Objective: Staging laparoscopy performed before neoadjuvant chemotherapy (CT) in gastric cancer;plays an important role in assessing peritoneal spread of the tumor, determining whether the tumor is T4, whether it has invaded the serosa, and enabling cytology work, thereby facilitating the detection of free tumor cells. This helps guide initial treatment and provides insight into the course of the disease. So, how much and how do these data change in patients after CT? Our study aimed to compare the PCI score determined before neoadjuvant CT, the morphological status of the tumor, and cytological data with the findings and pathologies after surgery following CT.

Material and Methods: Patients diagnosed with gastric adenocarcinoma at our center who require neoadjuvant CT are routinely evaluated with staging laparoscopy. In our study, patients scheduled for neoadjuvant CT and undergoing staging laparoscopy between January 1, 2022, and January 1, 2026, were retrospectively evaluated. During pre-CT laparoscopy, the PCI score was calculated, serosal invasion of the tumor was assessed, and peritoneal lavage cytology was obtained. Following neoadjuvant CT, patients were re-evaluated during surgery or repeat laparoscopy, and findings before and after CT were analyzed comparatively.

Results: In the pre-CT assessment, cytology positivity was detected in a certain proportion of patients, along with serosalinvasion and varying levels of PCI scores. In the evaluation performed after neoadjuvant CT, cytology negativity, regression of serosalinvasion, and changes in PCI scores were observed in a group of patients. However, it was noted that peritoneal disease persisted in another groupof patients. Overall, variable responses in peritoneal tumor burden were observed after CT. In conclusion, neoadjuvant CT may improve the response rate to subsequent treatment in patients with peritoneal metastasis.

Conclusion: Laparoscopic staging is becoming increasingly important in the management of patients diagnosed with gastric cancer. Peritoneal cytology after neoadjuvant CT may reveal changes in tumor serosal invasion and PCI scores. Our study specifically seeks to answer the question of what should be expected from neoadjuvant therapy at which point and in which patient group. The question of what these changes in PCI, cytology, and serosal invasion following neoadjuvant therapy correspond to in the final surgical pathology of patients remains relevant and requires further detailed evaluation.

Keywords: Stomach cancer, neoadjuvant chemotherapy, staging laparoscopy

[P-297]

Early feeding management after surgery and the role of the nurse: An integrative review

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Objective: Surgical interventions lead to a distinct metabolic stress response characterized by hypermetabolism and increased protein breakdown in the organism. Malnutrition that may develop during this physiological process is associated with clinically important outcomes such as delayed wound healing, increased risk of infection, and prolonged length of hospital stay in surgical patients. Enhanced recovery after surgery (ERAS) protocols developed in recent years recommend the initiation of early feeding within the first 24 hours after surgery in order to reduce the aforementioned adverse effects.

Material and Methods: In this review, it is aimed to present current evidence regarding post-operative early feeding practices, ESPEN (European Society for Clinical Nutrition and Metabolism) guidelines, and nursing interventions. Accordingly, the study was planned and conducted using the integrative review method. The literature search was performed in PubMed, ScienceDirect, and Google Scholar databases using the keywords “early feeding”, “nursing care”, “malnutrition”, “ERAS”, and “surgical”. No restriction was made in terms of study type; a total of 26 studies published between 2015-2025, with full text access, in English and Turkish were included in the review. The examined publications consist of systematic reviews, multicenter randomized controlled trials, observational data analyses, and meta-analyses.

Results: In the vast majority of the studies examined, it has been reported that post-operative early oral or enteral feeding is safe and does not increase the risk of anastomotic leakage. Furthermore, it is stated that early feeding ensures the onset of bowel motility (gas and stool passage) in an earlier period. Studies show that early feeding practices significantly reduce the length of hospital stay and health care costs; moreover, they provide positive effects on immune functions. Nurses have basic responsibilities within the multidisciplinary health team such as assessing nutritional risk with screening tools like NRS-2002, monitoring gastrointestinal tolerance (nausea, vomiting), maintaining enteral feeding tube care, and implementing interventions to prevent aspiration. However, in some studies, it is emphasized that nurses still maintain traditional long-term fasting approaches and that the need for education regarding current evidence-based protocols continues.

Conclusion: Early feeding in the post-operative period is an effective care approach supported by strong scientific evidence that reduces morbidity and improves patient outcomes. Increasing nurses’ knowledge and awareness levels regarding early feeding will play an important role in enhancing the quality of care by contributing to the effective transfer of evidence-based protocols into clinical practice.

Keywords: Early feeding, ERAS, nursing care

[P-298]

The effect of early enteral nutrition on clinical outcomes in surgical intensive care patients: An integrative review

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Objective: In surgical intensive care units (SICUs), inadequate nutritional support is associated with increased morbidity, prolonged hospitalization, infectious complications, and impaired wound healing. Early enteral nutrition (EEN), initiated within the first 24-48 hours of intensive care admission, has been recommended to preserve gut integrity, modulate immune response, and improve clinical outcomes. Despite growing evidence supporting early enteral feeding in critically ill patients, the effects of EEN specifically in surgical intensive care populations remain inconsistent across studies. This integrative review aimed to evaluate the effects of EEN on clinical outcomes in surgical intensive care patients.

Material and Methods: An integrative review methodology was used. A comprehensive literature search was conducted in PubMed, ScienceDirect, CINAHL, and Google Scholar databases using the keywords "EEN," "SICU", "critically ill patients," and "clinical outcomes." Studies published between 2005 and 2025, available in full text, and written in English or Turkish were included without restriction on study design. A total of 10 studies meeting the inclusion criteria were analyzed, including systematic reviews, meta-analyses, and clinical studies focusing on surgical intensive care populations.

Results: The reviewed studies demonstrated that EEN in surgical intensive care patients was associated with reduced infectious complications, shorter intensive care unit and hospital length of stay, and improved nutritional adequacy. Several studies reported a decrease in postoperative pulmonary complications and mortality rates among patients receiving EEN compared to delayed feeding. Additionally, EEN was shown to be well tolerated, with no significant increase in gastrointestinal intolerance or aspiration risk when appropriate patient selection and monitoring were applied. Most studies emphasized the importance of standardized feeding protocols and multidisciplinary collaboration to optimize

Conclusion: This integrative review indicates that EEN positively affects clinical outcomes in surgical intensive care patients. Initiating enteral feeding within the early phase of intensive care may reduce complications and support recovery. Nurse-led nutritional assessment and protocol-driven enteral feeding practices play a critical role in the successful implementation of EEN. Further randomized controlled studies focusing specifically on surgical intensive care populations are needed to strengthen the existing evidence.

Keywords: Early enteral nutrition, surgical intensive care unit, critically ill patients, clinical outcomes, nursing care

[P-299]

"More than a superficial finding? The relationship between seat belt injury and severe intra-abdominal trauma"

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Objective: Seat belt injury is an important clinical finding that may be associated with serious intra-abdominal injuries following blunt abdominal trauma. The aim of this study was to evaluate the clinical, radiological, and surgical characteristics of patients with seat belt injury and to assess the clinical course in this patient group.

Material and Methods: This study was conducted through a retrospective review of patients followed with a diagnosis of seat belt injury at the University of Health Sciences Türkiye, Ankara Etlik City Hospital General Surgery Clinic. Demographic data, clinical and laboratory findings at presentation, imaging results, need for surgical intervention, and clinical outcomes were evaluated based on patient medical records. The study was descriptive in nature, and no statistical comparisons were performed.

Results: A total of two patients with seat belt injury were included in the study. The median age was 71 years (IQR:68-74), and the sex distribution was equal; all patients were passengers in the vehicle. Although they were hemodynamically stable at presentation, admission lactate levels were markedly elevated (median 8.25 mmol/L; IQR:7.98-8.53), and free intraperitoneal fluid was detected in all cases. Imaging findings supported suspicion of intra-abdominal injury, with mesenteric injury and bowel wall thickening identified in half of the cases. Organ injury was present in all patients. Based on this clinical and radiological picture, all patients underwent surgical intervention, with the time to operation ranging from 4 to 6 hours; the amount of intra-abdominal bleeding was recorded as 500-600 cc. In the postoperative period, major complications developed in all cases, all required intensive care, and a fatal outcome was observed; the median length of hospital stay was 2.5 days (IQR: 2.25-2.75).

Conclusion: The literature reports that seat belt injury is a high-risk clinical marker, particularly for mesenteric and bowel injuries, and may be associated with increased morbidity and mortality due to delayed diagnosis even in hemodynamically stable patients. In our study, a severe clinical course was observed despite initial hemodynamic stability, accompanied by markedly elevated lactate levels, the presence of free intraperitoneal fluid on imaging, and extensive organ injuries. These findings support the notion that seat belt injury should not be regarded merely as a superficial sign of trauma, but rather as a potential harbinger of serious intra-abdominal injuries. In patients with seat belt injury, close clinical monitoring, low-threshold advanced imaging, and prompt surgical consultation are of vital importance. Our study represents a case series consistent with the literature, emphasizing seat belt injury as an indicator of severe trauma and generating hypotheses for future studies.

Keywords: Blunt abdominal trauma, intra-abdominal injury, mesenteric injury, seat belt injury, trauma surgery

Table 1. Demographic and clinical characteristics of patients with seat belt injury (n=2)

Parametre	Değer
Hasta sayısı	2
Yaş, yıl – medyan [IQR]	71,0 [68,0–74,0]
Cinsiyet	Erkek: 1 (%50) Kadın: 1 (%50)
BKİ (kg/m²) – medyan [IQR]	26,0 [25,0–27,0]
Sürücü / Yolcu durumu	Yolcu: 2 (%100)
Hemodinamik durum (stabil)	2 (%100)
Başvuru laktat düzeyi (mmol/L) – medyan [IQR]	8,25 [7,98–8,53]
Batında serbest sıvı varlığı	2 (%100)
Mezenterik yaralanma	1 (%50)
Barsak duvarında kalınlaşma	1 (%50)
Organ yaralanması	2 (%100)
İntraperitoneal kanama miktarı (cc) – medyan [IQR]	550 [525–575]
Hastanede yatış süresi (gün) – medyan [IQR]	2,5 [2,25–2,75]
Yoğun bakım ihtiyacı	2 (%100)

Table 2. Surgical findings and postoperative clinical outcomes

Parametre	Değer
Cerrahi uygulanan hasta sayısı	2 (%100)
Operasyon tipi	Tip 2: 1 (%50) Tip 3: 1 (%50)
Operasyona kadar geçen süre	4 saat, 6 saat
Majör komplikasyon gelişimi	2 (%100)
Relaparotomi gereksinimi	0
Mortalitenin varlığı	2 (%100)

Table 3. Summary of key clinical indicators associated with severe clinical course

Clinical indicator	Findings
Seatbelt finding	100%
Free fluid in the abdomen	100%
High referral lactate level (>8 mmol/L)	100%
Organ injury	100%
Need for surgery	100%
Need for intensive care	100%
Mortal clinical course	100%

[P-300]

Unexpected histopathological findings in appendectomy specimens: Analysis of Ordu University Training and Research Hospital

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Objective: Acute appendicitis (AA) is the most frequently performed emergency abdominal surgical procedure worldwide. While the primary pathogenesis involves luminal obstruction due to fecaliths or lymphoid hyperplasia, rare infectious, inflammatory, or neoplastic conditions may also lead to AA. This study aims to analyze the pathological results and unexpected findings of patients operated on with a diagnosis of AA at Ordu University Training and Research Hospital.

Material and Methods: The data of 337 patients who underwent emergency surgery for AA at Ordu University Training and Research Hospital, Department of General Surgery, between January 2020 and January 2026 were retrospectively reviewed. Patient demographics (age, gender) and histopathological reports were analyzed. Findings such as mucinous neoplasms, adenocarcinoma, parasitic infections, and endometriosis were categorized as "unexpected findings."

Results: Of the 337 patients, 218 (64.7%) were male and 119 (35.3%) were female, with a mean age of 38.8 years. Unexpected pathological results were detected in 10 patients (3%). The mean age of patients with unexpected findings (48.5 years) was significantly higher than the overall appendectomy group (p=0.012). The distribution of unexpected findings was as follows: Low-grade appendiceal mucinous neoplasia in 5 patients (1.57%), endometriosis in 2 patients (0.52%), adenocarcinoma in 1 patient (0.26%), Enterobius vermicularis in 1 patient (0.13%), and granulomatous inflammation in 1 patient (0.13%).

Conclusion: Although the most common causes of AA are lymphoid hyperplasia and fecaliths, neoplastic and non-inflammatory etiologies should be considered, especially in older patients. Routine histopathological examination of all appendectomy specimens is essential, regardless of whether they appear macroscopically normal, to ensure patients receive correct follow-up treatments such as chemotherapy or oncological surgery.

Keywords: Acute appendicitis, appendectomy, appendiceal neoplasms, histopatolological examination, unexpected pathological findings

[P-301]

Beyond acute appendicitis: Unexpected histopathological findings in appendectomy specimens- a four-year single-center experience

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Objective: Acute appendicitis is one of the most common causes of emergency abdominal surgery, and appendectomy remains the standard treatment. However, the necessity of routine histopathological examination of appendectomy specimens is still controversial. Appendices that appear macroscopically normal or simply inflamed may harbor clinically significant and unexpected pathologies that cannot be predicted preoperatively. In particular, neoplastic and premalignant lesions can only be diagnosed through histopathological evaluation, and their early detection is crucial for appropriate postoperative management and prognosis. This study aimed to evaluate the incidence, spectrum, and clinical impact of unexpected histopathological findings other than acute appendicitis in appendectomy specimens.

Material and Methods: This retrospective, single-center cohort study included adult patients (≥18 years) who underwent appendectomy for presumed acute appendicitis between January 2021 and December 2024. Patients with known malignancy, those who underwent interval appendectomy, incidental appendectomy during unrelated surgical procedures, or cases with missing histopathological data were excluded. Demographic characteristics, surgical approach, and histopathological findings were retrospectively analyzed. All pathological findings other than acute appendicitis were classified as incidental pathology.

Results: A total of 2.010 appendectomy specimens were evaluated, and incidental pathological findings other than acute appendicitis were identified in 33 cases (1.64%). The most frequent lesions were neuroendocrine neoplasms (n=12, 0.6%) and mucinous neoplasms (n=9, 0.45%). Patients with incidental pathology were significantly older and more frequently female compared with the overall cohort (p<0.05). All patients with neoplastic or premalignant lesions required additional postoperative evaluation, including imaging, colonoscopy, or oncological consultation, leading to changes in follow-up strategies.

Conclusion: Although unexpected histopathological findings in appendectomy specimens are relatively uncommon, they may have significant clinical implications. Routine histopathological examination enables early detection of lesions that cannot be identified by macroscopic assessment alone and that may directly influence postoperative management and surveillance. Therefore, routine histopathological evaluation of all appendectomy specimens should be maintained to ensure patient safety and optimal clinical outcomes.

Keywords: Acute appendicitis, appendectomy, ıncidental pathology, mucinous neoplasm, neuroendocrine neoplasm

[P-302]

General surgery consultations in a newly established city hospital: A first-year descriptive study

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Objective: Defining the consultation workload and service profile of general surgery clinics during the early period of newly established city hospitals is important for effective healthcare planning. In this study, we aimed to evaluate the distribution and characteristics of consultations requested from the General Surgery Clinic of Antalya City Hospital during its first year of operation.

Material and Methods: This descriptive study retrospectively reviewed consultations requested from the general surgery clinic between April 2024 and April 2025, following the opening of Antalya City Hospital. The source of consultations (emergency department, inpatient wards, or intensive care unit) was recorded. Consultation numbers were evaluated on a monthly basis to identify changes in workload over time.

Results: During the study period, a total of 3.674 consultations were evaluated by the general surgery clinic. Of these, 2.441 consultations (66.4%) originated from the emergency department. Monthly analysis demonstrated that the proportion of emergency department-based consultations ranged between 61% and 70% throughout the study period. While this proportion remained relatively stable, a noticeable increase in the total number of consultations was observed toward the end of 2024 and into early 2025. The majority of surgical interventions performed were appendectomy and diagnostic laparotomy related to perforation or trauma.

Conclusion: In newly established city hospitals, a substantial proportion of general surgery consultations originate from the emergency department, and the overall service workload increases significantly over time. This evaluation indicates that the interaction between the emergency department and general surgery, as well as the growing consultation burden, should be taken into account at an early stage in workforce planning, bed capacity management, and operating room organization. In addition, the allocation of an on-call general surgeon within the emergency department may also be considered.

Keywords: General surgery, consultation, emergency department, workload, retrospective descriptive study

[P-303]

A rare indication for emergency breast surgery

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Objective: Emergency breast surgery is a very rare condition in the management of breast malignancies. In this report, we present a patient who required emergency surgery due to tumor progression and bleeding despite receiving neoadjuvant chemotherapy.

Material and Methods: A 61-year-old female patient with a diagnosis of breast carcinoma, who had been receiving active chemotherapy at in a different hospital for 5 months, presented to our clinic because of an increase in tumor size and bleeding within the last week despite chemotherapy. Physical examination at admission revealed a fragile, partially ulcerated, and bleeding lesion with infectious looking surface, measuring approximately 20 cm in diameter on the anterior surface of the left breast, demonstrating an expansile growth pattern and a polypoid appearance. In addition, multiple hard, conglomerated lymph nodes fixed to the surrounding tissues were palpated in the left axillary region. Laboratory evaluation at admission revealed normocytic anemia. Positron Emission Computed tomography performed at presentation showed no evidence of distant metastasis.

Results: The patient underwent surgery the following day. Wide resection of the left breast including surrounding tissues and left axillary dissection were performed. The skin defect resulting from the resection was reconstructed using a split-thickness skin graft harvested from the anterolateral aspect of the left thigh. The postoperative course was uneventful, and the patient was discharged on postoperative day 2. Histopathological examination revealed metaplastic carcinoma; 8 cm raised from the skin and 20x8x12 cm in dimensions. The tumor consisted of 40% invasive ductal carcinoma and 60% undifferentiated pleomorphic sarcoma. Receptor status was negative for estrogen and progesterone receptors. The HER2 receptor score was +2, and fluorescence *in situ* hybridization analysis was pending. Additionally, 14 metastatic lymph nodes were identified in the axillary dissection specimen, all demonstrating extracapsular extension.

Conclusion: In this patient, due to tumor progression despite chemotherapy and uncontrollable bleeding and infection, emergency surgery was planned, and curative surgery was considered because there was no extramammarian involvement. Emergency surgical intervention in breast cancer is a rare occurrence; however, it should be considered as a treatment option in cases where chemotherapy is ineffective.

Keywords: Breast cancer, emergency surgery, pleomorphic sarcoma



Figure 1. A fragile, 20 cm diameter lesion exhibiting an expansive growth pattern and growing in a polypoid shape, originating from the anterior surface of the left breast, with areas of ulceration and bleeding.



Figure 2. The skin defect created after the resection was closed with a split-thickness skin graft taken from the anterolateral surface of the left leg.

[P-304]

The relationship between medical genetic screening and surgery in patients with familial Mediterranean fever (FMF)

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Objective: Familial Mediterranean fever (FMF) is a chronic autoinflammatory disease characterized by recurrent fever and serous inflammation attacks. FMF, recurrent fever and serositis (for example, peritonitis, pleurisy, pericarditis, synovitis) or erysipelas-like erythema attacks are characterized. Mediterranean fever (MEFV) is associated with mutations in the gene. In this study, we investigated genetic mutations in FMF patients and the effects of these mutations on BT symptoms and surgical outcomes in patients presenting to the emergency department with abdominal pain. In this way, we aimed to show that early medical genetic screening/diagnosis in FMF patients can reduce emergency hospital admissions and surgery.

Material and Methods: This study included 171 patients with MEFV gene mutations among 239 patients who presented to the medical genetics outpatient clinic of University of Health Sciences Türkiye, Bağcılar Training and Research Hospital and underwent MEFV gene mutation testing between January 1, 2021, and December 31, 2024. The genetic mutations in patients with MEFV gene mutations and the relationship between these mutations and the presentation to the emergency room, CT findings, and surgical history of patients presenting with abdominal pain were investigated.

Results: Of 240 patients examined for MEFV gene mutations, 171 patients with MEFV gene mutations were examined. A statistically significant difference was found between the number of mutations and CT findings ($p>0.05$). A statistically significant relationship was found between CT findings and surgical status ($p<0.05$). A significant relationship was found between the number of surgical cases and the number of emergency visits ($p<0.05$). The rate of ACMG class: VUS in patients with CT findings was statistically significantly higher than the rate of ACMG class: VUS in patients without CT findings ($p<0.05$).

Conclusion: The presence of CT findings plays a significant role in patients undergoing surgery. There is a correlation between emergency hospital admissions and surgically treated patients. The VUS variant is closely related to CT findings. In conclusion, our study did not find a significant difference between genetic mutations and emergency hospital admissions due to abdominal pain. However, CT findings are indicative of emergency hospital admissions due to abdominal pain in FMF patients. A statistically significant difference was found between the number of mutations and CT findings ($p<0.05$); while CT findings were more prevalent in those with a single mutation, the lower rate in those with two mutations is noteworthy. One case with four mutations had CT findings.

Keywords: Familial Mediterranean fever, genetic mutation, emergency admission

[P-305]

Clinical characteristics and treatment approaches of patients presenting to the emergency department due to rectal foreign bodies: A single-centre experience

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Objective: Patients presenting to the emergency general surgery department due to rectal foreign bodies, although rare, represent a group with important clinical decision points during diagnosis and treatment. This study aimed to descriptively evaluate the demographic, clinical, diagnostic and treatment-related characteristics of cases presenting to the General Surgery Clinic of University of Health Sciences Türkiye, Ankara Etlik City Hospital due to rectal foreign bodies.

Material and Methods: In this single-centre retrospective study, the records of patients evaluated as emergency cases due to rectal foreign bodies at the General Surgery Clinic of University of Health Sciences Türkiye, Ankara Etlik City Hospital were reviewed. Demographic data (age, sex); presentation time and symptoms; type and size of the foreign body; prior attempts at removal at home/outside the hospital; use of computed tomography (CT) and presence of perforation/free air; treatment method (manual, endoscopic or surgical); need for anaesthesia/sedation; complications; and length of hospital stay were recorded and summarised using descriptive statistics.

Results: A total of 9 patients presenting with rectal foreign bodies were included. All were male, with a mean age of 56±21.5 years (26-92). Sixty-six point seven per cent presented within 24 hours and 33.3% after more than 24 hours. The most common symptoms were pain (44.4%) and difficulty defecating (33.3%); 22.2% presented with bleeding. Foreign bodies were ≥10 cm in 77.8%. Plastic (44.4%) and glass (44.4%) were the most frequent materials; one case (11.1%) involved an organic object. Twenty-two point two per cent had a history of attempted removal at home or at an external centre prior to presentation. CT was performed in 55.6% and no perforation or free air was detected. Manual removal was performed in 33.3%, while surgery was required in 66.7%. Anaesthesia or sedation was required in 66.7%. No complications occurred. Mean hospital stay was 2.7±1.2 days (median 3 days).

Conclusion: The literature emphasises that management varies by case; foreign body size, delay in presentation and tissue injury findings are key factors determining the need for surgery and morbidity. In our study, consistent with the large size of most foreign bodies, the surgical requirement was high; however, no perforation or complications were observed. This suggests morbidity can be kept low with appropriate patient assessment and timely implementation of a stepwise treatment approach, and short hospitalisation indicates safe and effective clinical management.

Keywords: Rectal foreign body, emergency general surgery, stepwise treatment



Figure 1. ADBG.

ADBG: Standing plain abdominal X-ray demonstrating the rectal foreign body.

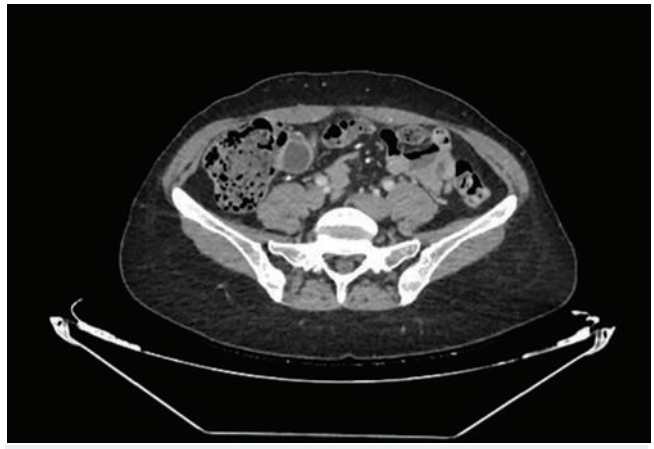


Figure 2. CT.

CT: Computed tomography.

Table 1. Descriptive characteristics of patients presenting with rectal foreign bodies (n=9)

Parameter	Value
Age (years)	56±21.5 (min-max: 26-92)
Gender	Male: 9 (100%)
Application period	≤24 hours: 6 (66.7%) >24 hours: 3 (33.3%)
Application symptom	Pain: 4 (44.4%) Bleeding: 2 (22.2%) Difficulty defecating: 3 (33.3%)
Foreign body type	Plastic: 4 (44.4%) Glass: 4 (44.4%) Vegetable/organic: 1 (11.1%)
Foreign object size	≥10 cm: 7 (77.8%) <10 cm: 2 (22.2%)
Attempted removal at home/outside the hospital	Present: 2 (22.2%) No: 7 (77.8%)
CT scan	Performed: 5 (55.6%) Not performed: 4 (44.4%)
Perforation/free air	None: 9 (100%)
Treatment method applied	Manual: 3 (33.3%) Surgical: 6 (66.7%)
Anaesthesia/sedation requirement	Yes: 6 (66.7%) No: 3 (33.3%)
Complications	None: 9 (100%)
Hospitalisation duration (days)	2.7±1.2 (median: 3)
Surgical requirement	Present: 6 (66.7%) No: 3 (33.3%)

CT: Computed tomography.

Table 2. Comparison of our study with the current literature

Study	n	Age (years)	Male (%)	Surgical intervention/ laparotomy (%)	Perforation (%)	Complications (%)	Length of stay
Our series (University of Health Sciences Türkiye, Ankara Etlik City Hospital)	9	56±21.5	100	66.7	0	0	2.7±1.2 days (median 3)
Süleyman et al., 2021 (Turk J Colorectal Dis)	12	Not reported	Not reported	16.7 laparotomy (2/12)	8.3 (1/12)	0 (no morbidity)	Not reported
Bisgin et al., 2023 (Turkish Journal of Trauma and Emergency Surgery)	2	Not reported	Not reported	19 Hartmann (4/21)	Not reported	9.5 (Clavien-Dindo III-IV)	Median 6 days (1-34)
Gemici et al., 2025 (Cumhuriyet Medical Journal)	15	Mean 33.1	100	≈40.0 laparotomy (5/15 milking + 1/15 colotomy)	Not reported	0	Not reported
Ploner et al., 2020 Systematic review + meta-analysis	54 articles	Not reported	Male/female ≈6:1	Not reported	Not reported	Total complications 30.4	Not reported

[P-306]

Necessity of imaging modalities in patients consulted for acute abdomen: A 10-year single-center experience

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Objective: This study aimed to evaluate the frequency and necessity of imaging modalities and the distribution of surgical pathologies in patients consulted from the emergency department to the general surgery clinic with a preliminary diagnosis of acute abdomen, and to emphasize the role of clinical evaluation in acute abdomen management.

Material and Methods: In this retrospective study, patients evaluated in the emergency department and consulted to the general surgery clinic with suspected acute abdomen between January 1, 2025, and December 31, 2025, were analyzed. Demographic characteristics, imaging modalities, hospitalization status, and clinical diagnoses were obtained from the hospital database. Clinical and radiological data of 2524 patients were evaluated. The results were compared with our similar study conducted at our institution 10 years earlier.

Results: The mean age was 54.9 years; 1381 patients (54.7%) were male and 1143 (45.3%) were female. CT was performed in 2296 patients (90.9%), ultrasonography in 1208 patients (47.9%), and both modalities in 980 patients (38.8%). Additionally, 1316 patients (52.1%) were evaluated directly with CT without prior ultrasonography based on clinical assessment. Advanced imaging such as MRCP was performed in 23 patients (0.9%), and repeat CT imaging during the same admission occurred in 27 patients (1.1%). Following surgical evaluation, 1948 patients (77.2%) were hospitalized. The most common diagnoses were ileus (552, 21.9%), acute appendicitis (484, 19.2%), acute cholecystitis (376, 14.9%), acute pancreatitis (208, 8.2%), incarcerated hernia (164, 6.5%), gastrointestinal perforation (48, 1.9%), and trauma (114, 4.5%; including stab wounds, firearm injuries, traffic accidents, falls, and burns). Patients not requiring admission were primarily diagnosed with non-specific abdominal pain, urinary tract infections, biliary colic, and gynecological pathologies.

Conclusion: Nearly 9 out of 10 patients underwent CT imaging, indicating extensive reliance on imaging. In surgical conditions such as incarcerated hernia and acute appendicitis, careful history and physical examination remain fundamental. Despite structural improvements in emergency services, CT utilization remains remarkably high. Similar findings to our 2017 study suggest no substantial improvement in acute abdomen evaluation. Surgical decision-making must rely primarily on clinical assessment, imaging should be selectively used, and advanced imaging before surgical evaluation should be restricted. Management of emergency departments by general surgeons should also be reconsidered.

Keywords: Acute abdomen, computed tomography, emergency department

[P-307]

Our electric arc burn cases in the last two years

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Objective: Electric arc burns are burns caused by the sudden release of energy from devices such as high-energy transformers due to faulty equipment or short circuits. Besides the blast effect of electrical energy, contact burns, flame burns due to clothing catching fire, and, worst of all, inhalation burns which involve respiratory damage, can also occur.

Material and Methods: Between January 1, 2024, and January 1, 2026, 18 cases treated at our Burn Center were evaluated in terms of age, gender, burn percentage, burn location, inhalation injury, presence of compartment syndrome, use of biodegradable temporary matrix (BTM), percentage of escharectomy and graft number, significant complications, mortality, intensive care unit stay, hospital stay, and abbreviated burn injury scale (ABSI) score.

Results: The mean age of the nineteen cases was 29.8 (16-53) and all were male. Burn percentages were 33.1% (7-75%), with head and neck burns in 11 (57.8%) cases, trunk burns in 15 (83.3%) cases, and extremity burns in 17 (94.4%) cases. Five (27.7%) cases had inhalation burns, and six (33.3%) cases had compartment syndrome. Seventeen (94.4%) cases underwent an average of 3.05 (1-8) escharectomy sessions, and 14 (77.7%) cases underwent an average of 1.8 (1-4) grafting sessions. Four (22.2%) cases required btm (body transplantation). The mean hospital stay was 30.1 (5-85) days. The need for intensive care was observed in 15 (83.3%) cases, and the average intensive care stay was calculated as 14.3 (1-67) days. Intubation was required in 7 (41.1%) cases, and these cases remained intubated for 19.2 (8-53) days. The average ABSI values were 7.1 (2-12). Mortality occurred in two (11.1%) cases.

Conclusion: Arc burns, while having effects similar to contact electrical burns, burn large surfaces due to blast effect. Inhalation burns and compartment syndrome are common, and the morbidity is quite high. Even in burn centers, these cases are complicated, with high ABSI scores and associated mortality. If possible, patients should be immediately referred after stabilization is achieved.

Table 1. Casting of electric arc burns

	Case n	Percentage %
Absi	18	7.11
Inhalation injury	5	27.7
Compartment	6	33,3
Btm	4	22,2
Intensive care	15	83.3
Intubation	6	33.3
Mortality	2	11.1

[P-353]

Early clinical experience with microwave energy ablation in simple anal fistula: A 20-patient case series

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Objective: Anal fistula treatment aims to eradicate sepsis while preserving continence. Conventional sphincter-sparing techniques often require seton placement and prolonged wound care. Microwave energy ablation (MEA) is a novel minimally invasive technique that induces controlled thermal destruction of the fistula tract. This study presents our initial clinical experience with MEA in simple anal fistulas.

Material and Methods: Twenty consecutive patients diagnosed with intersphincteric or low transsphincteric anal fistula underwent MEA. All procedures were performed under regional anesthesia in the lithotomy position. After identification of the external and internal openings, a microwave probe was introduced into the fistula tract, and circumferential thermal ablation was applied along the entire tract. The internal opening was subsequently sealed using focused microwave coagulation. No seton placement or sphincter division was performed in any patient. Patients were followed for three months, and postoperative pain (VAS), wound healing, discharge, recurrence, continence status, operative time, and hospital stay were recorded retrospectively.

Results: Twenty patients underwent MEA for a simple anal fistula. The mean operative time was approximately 5-10 minutes, and all patients were discharged after a one-day hospital stay. Postoperative pain was low and progressively decreased during follow-up (VAS 3-4 at week 1, 2-3 at month 1, and approximately 2 at month 3). Complete wound healing was achieved within 2-3 months in the majority of patients. Only one recurrence was observed during follow-up. This patient was found to have a previously unrecognized secondary fistula tract associated with abscess formation. No intraoperative or postoperative complications occurred, and no deterioration in continence was detected in any patient.

Conclusion: MEA appears to be a safe and feasible sphincter-preserving treatment for simple anal fistulas, providing minimal postoperative pain and a short operative time. Early recurrence was rare and was associated with an unrecognized secondary tract and abscess formation, highlighting the importance of careful preoperative tract evaluation.

Keywords: Anal fistula, microwave ablation, sphincter preserving treatment

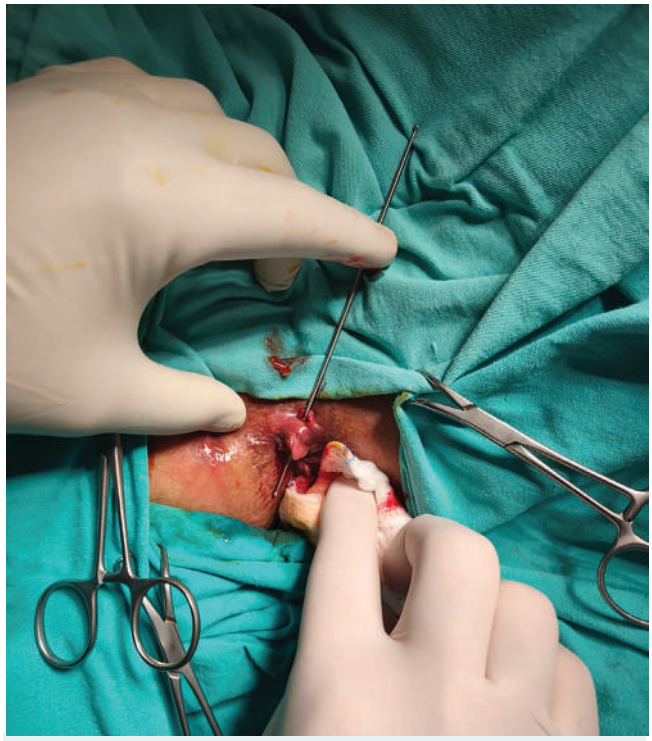


Figure 1. Recurrent case: Intraoperative identification of the primary fistula tract using a stylet probe.

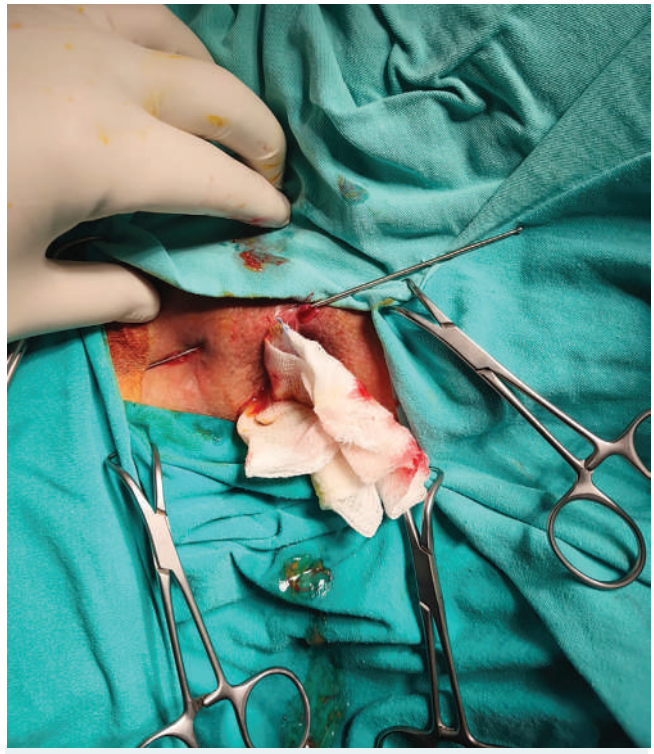


Figure 2. Recurrent case: Secondary fistula tract associated with abscess formation.

[P-354]

Factors affecting survival in metaplastic breast cancer: A single-center experience

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Objective: Metaplastic breast cancer (MBC) is a rare subtype of breast cancer characterized by the presence of both epithelial and mesenchymal components. It is known to exhibit a more aggressive clinical course and worse prognosis compared to other breast cancer subtypes. This study aimed to evaluate the clinical, pathological, and prognostic characteristics of patients with MBC who underwent surgery at our institution.

Material and Methods: Between 2017 and 2023, 31 patients diagnosed with MBC were identified. Three patients lost to follow-up were excluded, leaving 28 patients for retrospective analysis. Demographic characteristics, preoperative imaging findings, pathological data, molecular subtypes, surgical procedures, adjuvant therapies, and oncological outcomes were evaluated.

Results: All 28 patients were female, with a mean age of 55.1±16.1 years. The mean follow-up duration was 51.2±31.7 months. The tumor was located in the left breast in 17 (60.7%) patients and in the right breast in 11 (39.3%) patients. The most common tumor location was the upper outer quadrant (14 patients, 50%). At the time of diagnosis, 5 (17.9%) patients presented with ulcerated tumors. Preoperative staging revealed multicentric disease in 5 (17.9%) patients, axillary lymph node metastasis in 10 (35.7%) patients, and distant metastasis in 8 (28.6%) patients. The mean tumor size was 64.4±73.3 mm. A significant association was found between tumor size and disease-related mortality (114.2 mm vs. 64.4 mm, p=0.002). In patients with tumor diameter ≥4 cm, rates of disease progression (recurrence and metastasis) (60% vs. 23.1%) and mortality (60% vs. 7.7%) were significantly higher than in those with tumors <4 cm (p=0.048 and p=0.003, respectively). Regarding molecular subtypes, 3 (10.7%) patients were classified as Luminal, 7 (25%) patients as HER2-positive, and 18 (64.3%) patients as Triple-negative. Ki-67 proliferation index was >20% in all patients, with a mean value of 68.3±24.3%. E-cadherin expression was positive in 8 (28.6%) patients. Axillary metastatic lymph nodes were detected in 13 (46.4%) patients. No significant association was found between molecular subtypes, E-cadherin status, axillary lymph node metastasis, or Ki-67 index and disease progression or mortality. The presence of an ulcerated tumor was identified as an independent and strong poor prognostic factor for both local recurrence (80%) and mortality (100%) (p=0.002). During follow-up, disease progression occurred in 42.9%, locoregional recurrence in 35.7%, distant metastasis in 10.7%, and disease-related mortality in 35.7% of patients.

Conclusion: MBC exhibits an aggressive clinical behavior. Large tumor size and the presence of tumor ulceration are particularly associated with poor prognosis. Early diagnosis is of critical importance in improving survival outcomes in MBC patients.

Keywords: Breast cancer, metaplastic cancer, survival

[P-355]

Clinicopathological impact of MiNEN in gastric neuroendocrine neoplasms: A single-center experience

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Objective: Gastric neuroendocrine neoplasms (NENs) represent a heterogeneous group ranging from well-differentiated neuroendocrine tumors to high-grade neuroendocrine carcinomas (NECs). Tumors containing both neuroendocrine and non-neuroendocrine components are classified by the World Health Organization as mixed neuroendocrine-non-neuroendocrine neoplasms (MiNEN). MiNENs are considered to demonstrate more aggressive biological behavior compared with conventional NENs. However, comparative clinicopathological data in gastric cases remain limited. This study aimed to compare the clinicopathological characteristics of gastric NEN and MiNEN cases in our institutional series.

Material and Methods: Patients diagnosed with gastric neuroendocrine neoplasms between 2015 and 2025 were retrospectively reviewed. Pathology reports were converted into a structured dataset. Cases were classified as MiNEN when both neuroendocrine and non-neuroendocrine components were identified, and as non-MiNEN gastric NEN when only a neuroendocrine component was present. Groups were compared in terms of age, maximum tumor diameter, Ki-67 proliferation index, p53 percentage, total and metastatic lymph node counts, and recorded tumor grade. Continuous variables were expressed as median (IQR) and analyzed using non-parametric tests. Categorical variables were evaluated using chi-square or Fisher's exact tests. A p-value <0.05 was considered statistically significant.

Results: A total of 19 gastric cases were analyzed; 15 (78.9%) were non-MiNEN NEN and 4 (21.1%) were MiNEN. There was no statistically significant difference in age between groups [MiNEN: 72.5 (65.5-76.5) years vs. NEN: 63.0 (59.0-72.5) years; p=0.365]. Maximum tumor diameter was similar [MiNEN: 4.05 (2.98-6.25) cm vs. NEN: 3.05 (2.00-5.63) cm; p=0.337]. Although the Ki-67 proliferation index was higher in the MiNEN group, the difference did not reach statistical significance [60.0 (50.0-62.5) vs. 12.0 (5.0-55.0); p=0.191]. Likewise, p53 percentage was higher in MiNEN cases but without significance [40.0 (22.5-52.5) vs. 0.0 (0.0-6.2); p=0.204]. The total number of retrieved lymph nodes was comparable between groups [26.0 (18.5-36.0) vs. 24.0 (11.5-30.5); p=0.652]. However, metastatic lymph nodes were significantly higher in the MiNEN group [6.5 (4.5-10.0) vs. 0.0 (0.0-2.5); p=0.009]. Tumor grade distribution differed significantly (p=0.034); all MiNEN cases were recorded as NEC, whereas the non-MiNEN group showed a heterogeneous distribution of G1, G2, G3, and NEC cases.

Conclusion: In this single-center gastric series, MiNEN cases were associated with a significantly higher metastatic lymph node burden compared to non-MiNEN gastric NENs. Although no significant differences were observed in age, tumor size, Ki-67, or p53, the increased nodal metastasis suggests more aggressive biological behavior in MiNEN. Careful pathological evaluation for a MiNEN component is essential for accurate classification and appropriate surgical management.

Table 1. Clinicopathological distribution according to tumor grade and MiNEN status in gastric NEN

Variable	Grade 1 (n=3)	Grade 2 (n=7)	Grade 3 (n=2)	NEK (n=3)	MiNEN (n=4)	p
Age (years)	76.0 (74.0-76.0)	63.0 (52.0-66.5)	68.5 (65.8-71.2)	63.0 (59.0-64.0)	72.5 (65.5-76.5)	0.365
Sex (M/F)	0/3	6/1	0/2	2/1	4/0	0.245
Max tumor size (cm)	4.8 (2.7-7.0)	3.5 (2.0-4.0)	4.0 (3.0-5.0)	2.6 (2.4-5.9)	4.0 (3.0-6.2)	0.337
Ki-67 (%)	12.0 (6.0-36.0)	6.0 (4.0-8.5)	35.0 (35.0-35.0)	80.0 (75.0-80.0)	60.0 (50.0-62.5)	0.191
p53 (%)	0.0 (0.0-40.0)	0.0 (0.0-0.0)	2.5 (1.2-3.8)	5.0 (2.5-7.5)	40.0 (22.5-52.5)	0.204
Total LN (n)	1.0 (0,5-17.0)	19.0 (12.0-26.5)	23.0 (18.0-28.0)	25.0 (24.5-32.0)	26.0 (18.5-36.0)	0.652
Metastatic LN (n)	0.0 (0.0-0.0)	0.0 (0.0-3.5)	1.5 (0.8-2.2)	1.0 (0.5-2.0)	6.5 (4.5-10.0)	0.009

Continuous variables are presented as median (interquartile range, IQR). Categorical variables are expressed as counts. Between-group comparisons were performed using appropriate non-parametric tests for continuous variables and chi-square or Fisher's exact test for categorical variables. A p-value <0.05 was considered statistically significant. LN: Lymph node, NEC: Neuroendocrine carcinoma, MiNEN: Mixed neuroendocrine–non-neuroendocrine neoplasm.

[P-356]

Surgical management of Mirizzi syndrome type Va: A single-center experience

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Objective: Although Mirizzi syndrome is rare, the presence of a cholecystoenteric fistula in Type Va cases, along with challenging hepatocystic anatomy and an increased risk of bile duct injury, makes surgical management particularly complex. This study aimed to evaluate the diagnostic process, surgical approach, and short-term outcomes of Mirizzi Type Va cases based on our high-volume single-center experience.

Material and Methods: A total of 2,300 cholecystectomy cases performed at our center were retrospectively reviewed. Patients diagnosed with Type Va Mirizzi syndrome according to the Csendes classification were included in the study. Demographic characteristics, preoperative imaging modalities, timing of diagnosis (preoperative/intraoperative), fistula type, surgical approach, operative techniques applied, and postoperative outcomes were analyzed. Morbidity, mortality, and length of hospital stay were evaluated.

Results: Cholecystoenteric fistula consistent with Mirizzi Type Va was identified in 9 patients (0.39%). The median age was 61 years (min 39-max 75), and 55.6% of the patients were female. The cholecystoenteric fistula involved the duodenum in 6 cases and the colon in 3 cases. Diagnosis was established preoperatively in 22.2% of patients and intraoperatively in 77.8%. Surgery was initiated laparoscopically in 8 patients, with conversion required in 4 cases; primary open surgery was performed in 1 patient. Fistula repair varied according to surgeon preference, with double-layer primary repair ± omentopexy being the most commonly applied technique for duodenal fistulas (44.4%). Stapled wedge resection was performed in 2 cases (22.2%). In patients with colonic fistula, treatment consisted of right hemicolectomy (11.1%), primary repair (11.1%), and clip closure (11.1%). Postoperative morbidity developed in one patient (11.1%), presenting as biliary drainage from the surgical drain on postoperative day 1, which resolved spontaneously. One mortality related to cardiac morbidity was observed. The median length of hospital stay was 7 days.

Conclusion: Mirizzi Type Va syndrome is a condition that is most often recognized intraoperatively and requires a high level of surgical expertise for proper management. Since achieving the "critical view of safety" is frequently not feasible in these cases, early awareness and timely implementation of alternative surgical strategies are crucial to prevent bile duct injuries. Although a laparoscopic approach may be feasible in selected patients, the surgical strategy should be determined flexibly according to intraoperative findings.

[P-357]

Clinical and oncological outcomes of the standardized approach in gastrointestinal stromal tumor surgery at Cerrahpaşa Faculty of Medicine after 11 years

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Objective: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the gastrointestinal system, exhibiting a heterogeneous spectrum of clinical behavior. Currently, surgical resection forms the basis of curative treatment, and a negative surgical margin (R0) is considered the most important prognostic factor for long-term survival. Surgical technique, patient selection, and a multidisciplinary approach directly influence oncological outcomes. In this study, the clinical and oncological outcomes of GIST cases operated on by a single surgical team over an 11-year period were analyzed to evaluate the effectiveness of a standardized surgical approach.

Material and Methods: A retrospective analysis was performed on 20 patients who underwent surgery for GIST between 2015 and 2026. All patients were operated on by the same experienced team. Demographic characteristics, tumor diameter, mitotic index, AFIP risk stratification, surgical approach, use of adjuvant therapy, length of hospital stay, and follow-up outcomes were examined.

Results: The mean age of the 20 patients was 63 years, with equal gender distribution (10/10). Tumors were located in the stomach (75%), small intestine/duodenum (20%), and rectum (5%). The mean tumor diameter was 8.4 cm (0.3-12 cm). The mean mitotic index was 7.4/5 mm^2, and the median was 2/5 mm^2 (0-98); 15% of patients had ≥6/5 mm^2 mitotic activity. One patient had a markedly high index of 98/5 mm^2. According to the AFIP classification, 35% were very low risk, 20% low risk, 40% intermediate risk, and 5% high risk. Open surgery was performed in 70% and minimally invasive surgery in 30% of patients. R0 resection was achieved in all cases, with no intraoperative tumor rupture. The median hospital stay was 4 days (3-9), shorter after minimally invasive procedures. Two high-risk patients (10%) received adjuvant imatinib. One (8 cm, 6/5 mm^2, multifocal duodenal tumor, NF-1 and T-ALL history) had no recurrence. The other (AFIP 6A; 8 cm ileal tumor, 98/5 mm^2, lymph node metastasis) developed distant metastases 28 months postoperatively (5%). No recurrence occurred in the low or intermediate risk groups, and no GIST-related mortality was observed.

Conclusion: A standardized surgical approach performed by a single surgical team can achieve a high R0 resection rate and low morbidity in GIST cases. The absence of recurrence in low and moderate-risk groups supports surgical efficacy, while the development of metastasis in high-risk cases highlights the prognostic value of the risk stratification. Minimally invasive surgery can be safely applied in selected cases.

Keywords: Gastrointestinal stromal tumor, oncological outcomes, surgical resection

Table 1. Demographic, tumor and surgical characteristics (n=18)

Parameter	Value
Number of patience	20
Age (mean)	63
Gender (F/M)	10/10
Median follow-up time	24 month
Stomach	15 (75%)
Small intestine/duodenum	4 (20%)
Rectum	1 (5%)
Mean tumor diameter	8.4 cm (0.3-12 cm)
Mitotic index (mean)	7.4/5 mm
≥6 mitoses	3 patient (%15)
Histological type	
Spindle	14 (70%)
Epithelioid	3 (15%)
Mixed	3 (15%)
AFIP risk group	
Very low	7
Low	4
Medium	8
High	1
Surgical approach	
Open	14 (70%)
Minimally invasive	6 (30%)

AFIP: Armed Forces Institute of Pathology.

[P-358]

Artificial intelligence in emergency surgery: Current applications, ethical debates, and future perspectives

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Objective: Artificial intelligence (AI) has initiated a significant transformation in emergency surgical practice, driven by increasing patient volume, complex decision-making processes, and limited healthcare resources. AI-assisted systems have the potential to improve clinical decision-making by supporting diagnosis, treatment planning, education, and healthcare management. This article reviews the current applications of AI in emergency surgery, its ethical implications, role in surgical education, and future perspectives based on recent literature.

Material and Methods: AI is increasingly used in emergency surgery for diagnostic support, prediction of mortality and complications, and optimization of resource allocation. Particularly in trauma and intensive care surgery, real-time analysis of bedside clinical data enables accurate prediction of patient outcomes. AI-based tools such as POTTER and the Trauma Outcome Predictor have demonstrated high accuracy in predicting postoperative mortality and complications.

Results: AI shows potential in guiding complex decisions in emergency surgery, including situations involving treatment futility. However, its integration into clinical decision-making raises ethical concerns regarding

autonomy, accountability, and fairness in healthcare delivery. The extent to which AI should influence or replace human judgment remains controversial. Consequently, the implementation of human-supervised AI systems and the establishment of clear ethical frameworks are essential to maintain balanced and just clinical practice. AI-supported surgical simulation platforms offer personalized feedback and objective assessment of technical skills. Integration of AI algorithms into virtual reality, augmented reality, and mixed reality environments has been shown to shorten learning curves and improve preclinical competency evaluation. Additionally, these technologies facilitate individualized assessment in remote surgical education. In common emergency surgical conditions such as acute appendicitis, AI algorithms demonstrate promising diagnostic performance. Machine learning models including random forest, support vector machines, and decision trees can analyze clinical and imaging data to distinguish complicated from uncomplicated cases with high accuracy. This capability may support surgical decision-making in diagnostically ambiguous patients and reduce unnecessary surgical interventions.

Conclusion: The full potential of AI in emergency surgery has yet to be realized. Enhanced clinical integration, standardized ethical guidelines, and widespread adoption in surgical education are necessary to maximize its impact on patient safety and surgical outcomes. Future research supported by real-world data and strengthened multidisciplinary collaboration will be critical to ensuring a sustainable and effective transformation.

Keywords: Emergency surgery, artificial intelligence, clinical decision support systems, surgical

[P-359]

An innovative approach to pressure ulcer management in intensive care patients: Ultrasonic debridement

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Objective: Pressure ulcers are a serious health problem with incidence rates ranging from 1.4% to 36.4%, particularly in intensive care unit patients, due to immobilization, sedation, tissue perfusion disorders, and malnutrition. Stage III and IV ulcers represent deep tissue loss extending to the fascia, muscle, and bone. Surgical debridement may not always be feasible in these patients due to coagulopathy or hemodynamic instability. Ultrasonic debridement offers a minimally invasive alternative for preserving healthy tissue, minimizing bleeding, and managing pain in this patient group.

Material and Methods: Patients with stage 3 and 4 pressure ulcers admitted to level 2 and 3 intensive care units between January 2025 and July 2025 were prospectively evaluated. Patients were divided into two groups: 1) patients who underwent ultrasonic debridement (Figures 1 and 2); 2) patients who underwent surgical debridement. These patients were evaluated in terms of age, gender, debridement effectiveness, and post-debridement bleeding.

Results: A total of 60 patients were included in the study. The median age was 68.8 (range 40-94 years). There were 17 female and 13 male patients who underwent ultrasonic debridement, while 13 female and 17 male patients underwent surgical debridement. In terms of debridement effectiveness between the two groups, debridement was not effective in 5 patients who underwent ultrasonic debridement. Debridement effectiveness was high in all patients who underwent surgical debridement. No significant difference in debridement efficacy was observed between the two groups. Bleeding was observed in 1 patient undergoing ultrasonic debridement. Bleeding was observed in 19 patients undergoing surgical debridement. In terms of bleeding ($p<0.001$), ultrasonic debridement was found to be safer.

Conclusion: Ultrasonic debridement is an alternative debridement method for the treatment of pressure ulcers in intensive care patients due to the mobility of the device, its applicability at the patient's bedside, its improvement of patient comfort in pain management, and its effective removal of necrotic tissue. In addition, it has a low risk of bleeding due to its preservation of living tissue. Despite its high cost, it is an effective debridement method.

Keywords: Pressure ulcer, surgical debridement, ultrasonic debridement, intensive care

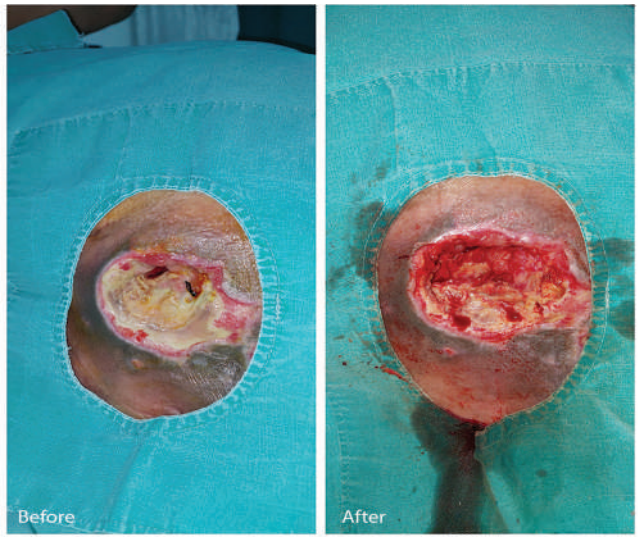


Figure 1. Before and after ultrasonic debridement in the sacrum region.



Figure 2. Before and after ultrasonic debridement in the trochanteric region.

[P-361]

Revision bariatric surgeries after sleeve gastrectomy: Indications and early clinical and metabolic outcomes

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Objective: Sleeve gastrectomy is one of the most commonly performed bariatric surgical procedures for the treatment of morbid obesity. Despite its effectiveness in achieving significant weight loss and metabolic improvement, some patients may experience insufficient weight loss, weight regain, or inadequate metabolic response, necessitating additional surgical interventions. Consequently, revision surgery has become an important option in obesity management. The indications for revision surgery, selection of the appropriate surgical technique, and the clinical and metabolic outcomes of these procedures play a critical role in patient management. However, data regarding early outcomes of revision surgeries following sleeve gastrectomy remain limited. This study aims to evaluate the indications and early clinical and metabolic outcomes of patients undergoing revision surgery after sleeve gastrectomy.

Material and Methods: This retrospective study included patients who underwent revision surgery following sleeve gastrectomy. Data regarding patient age, primary surgical procedure, type of revision surgery, pre- and post-revision body weight and body mass index (BMI) values, and metabolic parameters (HbA1c and lipid profile) were recorded. Continuous variables were presented as mean ± standard deviation. Clinical and metabolic parameters before and after revision surgery were compared.

Results: A total of 8 patients were included in the study. The mean age of the patients was 38.4±5.4 years. All patients had previously undergone sleeve gastrectomy as the primary procedure. The main indications for revision surgery were insufficient weight loss and inadequate metabolic response. Revision procedures included gastric bypass and re-sleeve surgery. The mean pre-revision body weight was 113.1±16.9 kg and the mean BMI was 41.2±5.8 kg/m^2. Post-revision follow-up revealed a mean body weight of 99.4±15.2 kg and a mean BMI of 36.3±5.3 kg/m^2. The average decrease in BMI after revision surgery was 4.9 kg/m^2. Evaluation of metabolic parameters showed an improvement trend in HbA1c levels after revision surgery. In the lipid profile analysis, decreases in triglyceride and LDL levels were observed.

Conclusion: Revision bariatric surgeries performed due to insufficient weight loss or inadequate metabolic response after sleeve gastrectomy may provide significant early weight loss and improvement in metabolic parameters. With appropriate patient selection, revision surgery represents an effective option in the treatment of obesity. However, larger patient series and long-term follow-up results are required to confirm these findings.

Keywords: Sleeve gastrectomy, revision bariatric surgery, insufficient weight loss, metabolic response, bariatric surgery

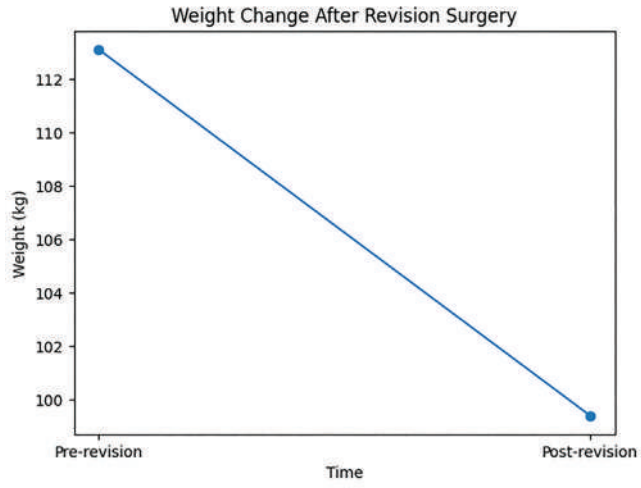


Figure 1. Change in body weight after revision surgery.

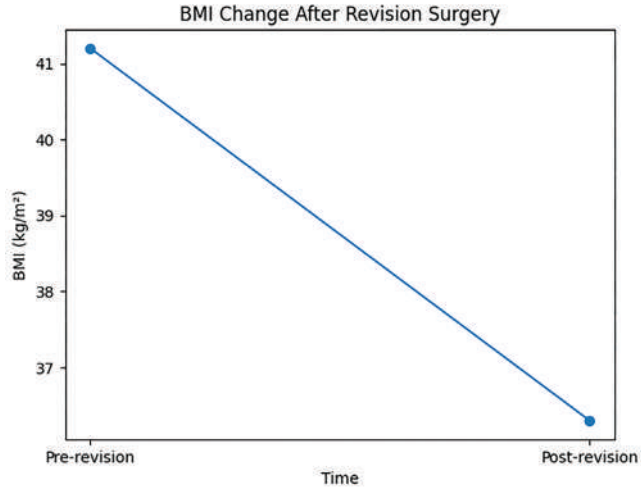


Figure 2. Change in body mass index (BMI) after revision surgery.

[P-362]

Change in ferritin levels at the 6th month after sleeve gastrectomy: A single-center analysis

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Objective: Laparoscopic sleeve gastrectomy is one of the most frequently performed bariatric surgical methods in the treatment of morbid obesity. Although it is a restrictive method, it can lead to a number of nutritional deficiencies in the early postoperative period. Serum ferritin levels are an important parameter reflecting the body's iron stores. Decreases in serum ferritin levels usually occur before the development of anemia. In this study, we aimed to evaluate the changes in serum ferritin levels before and at 6 months postoperatively in patients who underwent laparoscopic sleeve gastrectomy.

Material and Methods: Forty-eight patients (26 men, 22 women) who underwent Laparoscopic Sleeve Gastrectomy at our center between January 2025 and 2026 and had their serum ferritin levels measured preoperatively and at 6 months postoperatively were included in the study. All patients received a standard postoperative nutritional protocol and routine multivitamin (Argivit®) supplementation. Paired t-test and Wilcoxon test were used for statistical analysis. A p-value <0.05 was considered statistically significant.

Results: The mean preoperative serum ferritin levels were 90.2±88.8 ng/mL, and the mean postoperative 6-month level was 87.1±91.6 ng/mL. The median values were 64.5 and 60.5 ng/mL, respectively. The mean difference was not statistically significant (paired t-test p=0.73; Wilcoxon p=0.33). In patient-specific evaluation, serum ferritin levels fell below 30 ng/mL in 31% of cases and below 15 ng/mL in 17%. In some patients, a decrease in serum ferritin levels was detected even though serum hemoglobin levels did not reach the anemia threshold.

Conclusion: Even in the early period following laparoscopic sleeve gastrectomy, a decrease in serum iron stores can be observed. Although the average change was not statistically significant, approximately one-third of patients experienced insufficient serum iron stores. These findings indicate the existence of a clinically significant subgroup, even without statistical significance. The fact that serum ferritin levels precede the decrease in hemoglobin levels suggests that monitoring serum hemoglobin alone may be insufficient. Therefore, serum ferritin levels should be included as a routine monitoring parameter in patients who have undergone laparoscopic sleeve gastrectomy, and replacement planning should be done early when deemed necessary.

Keywords: Ferritin, nutritional deficiency, sleeve gastrectomy

[P-363]

Complication rate and management after sleeve gastrectomy surgery: A single center study

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Objective: Obesity is a modern public health problem affecting all segments of society. The obesity rate among the adult population in our country is 34%. In addition to medical treatments against obesity, surgical treatments are also used today. More than 50% of bariatric surgeries are laparoscopic sleeve gastrectomy (LSG). Surgical treatment maintains its popularity due to its low risk of complications and rapid results. LSG remains the most frequently performed independent bariatric operation because it both preserves the integrity of the digestive tract and is technically easier to perform compared to other operations. According to IFSO data, the postoperative complication rate after LSG is 2.12%.

Material and Methods: In our study, we examined laparoscopic sleeve gastrectomies performed at the General Surgery Clinic of İzmir Bozyaka Training and Research Hospital.

Results: Our study revealed that a total of 680 patients underwent LSG. 88% of the patients were female and 12% were male. The age range of the patients was 18-71 years. The average hospital stay after surgery was 4 days. The postoperative complication rate was 0.7% (5 patients). In our patients, intra-abdominal abscess formation due to leakage from the stapler line was observed after surgery. In these patients, external drainage catheter placement was performed by interventional radiology in the postoperative period. at the same time, stent placement was performed via gastroscopy to preserve the anastomosis line. During follow-up, intra abdominal abscess formation regressed in our patients, and they recovered their health.

Conclusion: Sleeve gastrectomy surgery is a solution that individuals around the world are turning to in the fight against obesity. Like any surgical procedure, sleeve gastrectomy carries various risks of complications. These complications can lead to life-threatening outcomes. Patients should be properly and comprehensively informed before the operation. While the postoperative complication rate is 0.7% in our clinic, this rate may vary in experienced centers. There is a need for multi center studies on this subject in our country.

Keywords: İzmir Bozyaka Training and Research Hospital, laparoscopic sleeve gastrectomy, obesity

[P-366]

Which technique should be preferred in concomitant elective laparoscopic cholecystectomy and inguinal hernia repair? A case series of 18 patients with a review of the literature

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Objective: Simultaneous elective laparoscopic cholecystectomy (LC) and inguinal hernia repair are considered advantageous approaches regarding patient comfort, anesthesia exposure, and cost-effectiveness. However, there is no clear consensus in the literature regarding the ideal technique selection and the risk of infection, particularly due to mesh use. This study aims to evaluate clinical outcomes of simultaneous LC and inguinal hernia repair to aid technique selection.

Material and Methods: Eigh-teen patients who underwent simultaneous LC and inguinal hernia repair under elective conditions at a single center between January 2021 and December 2025 were analyzed retrospectively. Demographics, comorbidities, hernia type, surgical technique, operative time, postoperative length of stay, and follow-up results were analyzed. The choice of surgical technique was determined based on patient characteristics and surgeon experience.

Results: Median age was 53 (26-75); 4 (22.2%) patients were female and 14 (77.8%) male. Bilateral inguinal hernias were present in two patients (11.1%); one underwent TAPP and the other TEP. In unilateral hernia cases (n=16), the most preferred technique was TAPP (56.3%), followed by TEP (25.0%) and open anterior repair (18.7%). The median operative time was 115 minutes, and the median postoperative stay was 1 day. No mesh infection or major complications were observed during follow-up. Seroma developed in two patients (11.1%) (one bilateral TEP, one unilateral TAPP). Scrotal pain was observed in three patients (16.7%) within the first 30 days, all in the TAPP group. No hernia recurrence was detected. One patient (5.6%) had an unexpected visit due to a hematoma at the LC trocar site; readmission was not required. This study demonstrates that simultaneous LC and inguinal hernia repair under elective conditions is a safe and feasible approach. Consistent with the literature, no increase in mesh infection risk was observed. While international guidelines report no significant superiority between TAPP and TEP regarding long-term results, they suggest selecting the technique based on surgeon experience and patient characteristics. In the presence of simultaneous LC, the TAPP technique may offer practical ease due to port compatibility and intra-abdominal evaluation. Short hospital stays and the absence of serious complications support the benefits of the minimally invasive approach. However, the small sample size and retrospective design are the study's main limitations.

Conclusion: Simultaneous elective LC and inguinal hernia repair is a safe approach. Regarding ideal technique selection, an individualized approach based on patient characteristics and surgeon experience should take precedence over the absolute superiority of a single method. Larger, prospective, and comparative studies are needed.

Keywords: Elective laparoscopic cholecystectomy, inguinal hernia, open anterior repair, TAPP, TEP

[P-367]

Re-operation due to postoperative deep neck hematoma after thyroidectomy: A single-center experience

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Objective: Postoperative deep neck hematoma after thyroidectomy is a rare but potentially life-threatening complication due to airway compression, laryngeal spasm, and edema, which may lead to acute airway obstruction. Early diagnosis and urgent surgical intervention are therefore critical. This issue has also been widely discussed in the context of the safety of thyroidectomy as a day-case procedure. We aimed to evaluate the clinical features, timing, and management outcomes of patients who required re-operation for postoperative neck hematoma and to present our single-center experience.

Material and Methods: Patients who underwent total thyroidectomy or lobectomy between 2020 and 2025 at the General Surgery Department of University of Health Sciences Türkiye, Şişli Hamidiye Etfal Training and Research Hospital were retrospectively reviewed. Those who developed postoperative neck hematoma requiring re-operation were included. Intraoperative nerve monitoring was used in all thyroidectomy procedures. Data regarding timing of hematoma, bleeding source, emergency management, and clinical outcomes were analyzed.

Results: A total of 1.115 patients underwent surgery (total thyroidectomy n=554; lobectomy n=561). Postoperative neck hematoma occurred in 7 patients (0.6%). Patients were aged 33-71 years; 6 were female and 1 male. Preoperative diagnoses were nodular goiter (n=3), Graves' disease (n=3), and primary hyperparathyroidism (n=1). Three patients underwent total thyroidectomy, three lobectomy, and one lobectomy with bilateral exploration. The time from initial surgery to re-operation ranged from 25 to 445 minutes. All patients were taken urgently to the operating room. The most common bleeding source was the left superior thyroid artery (n=4); one case originated from the Berry ligament and one from the left middle thyroid vein. All bleeding points were controlled with 3/0 silk sutures. Drains were present in five patients after the initial surgery and were reinserted after re-exploration. Three patients required intensive care monitoring. Hospital stay ranged from 1 to 4 days. Postoperative vocal cord examination revealed bilaterally mobile cords in all patients, and no mortality occurred.

Conclusion: Although postoperative deep neck hematoma after thyroidectomy is rare, it is a critical condition requiring urgent surgical intervention when it occurs. Hematomas generally develop in the early postoperative period; therefore, close monitoring of patients within the first 8 hours (480 minutes) is essential for early diagnosis. We believe that re-exploration of the thyroid bed with intraoperative nerve monitoring may be protective against vocal cord paralysis .O ur findings suggest that early recognition and prompt surgical intervention are crucial for airway safety and for reducing patient morbidity and mortality.

Keywords: Thyroidectomy, deep neck hematoma, intraoperative nerve monitoring

[P-370]

Regional distribution of public interest in robotic surgery in Türkiye: A comparative google trends analysis with other surgical techniques

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Objective: Robotic surgery has gained increasing visibility among minimally invasive surgical techniques, accompanied by growing public awareness. However, how public interest in robotic surgery is regionally distributed compared with other surgical techniques remains unclear. Online health-related search behavior may serve as an indirect indicator of public interest. Google Trends provides a suitable platform for comparative and region-based analyses. This study aimed to evaluate the regional distribution of public interest in robotic surgery in Türkiye, in comparison with laparoscopic and open surgery.

Material and Methods: Google Trends data were retrieved for Türkiye for the period 2007-2026 using the search terms "robotic surgery," "laparoscopic surgery," and "open surgery". Province-level data were analyzed to identify regions with the highest relative interest for each surgical technique. All values were interpreted as normalized relative interest scores ranging from 0 to 100, and regional patterns of robotic surgery interest were compared with those of other surgical techniques.

Results: High relative interest in robotic surgery was observed in non-metropolitan provinces such as Artvin (100), Karabük (92), and Düzce (92). Among metropolitan cities, İzmir (85), İstanbul (78), and Ankara (78) also demonstrated high relative interest in robotic surgery. Interest in laparoscopic surgery was most prominent in provinces such as Isparta (100), Yozgat (75), and Bolu (75), whereas interest in open surgery was concentrated in a limited number of provinces, particularly Kars (100) and Denizli (53) (Table 1). When these distributions are considered, interest in laparoscopic surgery appears to be more geographically balanced across the country, while interest in robotic surgery (blue shades) shows marked clustering in specific provinces (Figure 1). The province-level distribution of interest in robotic surgery was more heterogeneous compared with other surgical techniques.

Conclusion: Google Trends data indicate that public interest in robotic surgery in Türkiye varies markedly across regions. The presence of high interest in robotic surgery in non-metropolitan provinces, compared with other surgical techniques, suggests that public expectations and awareness may develop independently of local service availability. These findings highlight the importance of region-specific patient education and health communication strategies regarding surgical technologies.

Keywords: Robotic surgery, public interest, regional differences, surgical techniques

Table 1. Province-level distribution of public interest in robotic surgery compared with other surgical techniques (Google Trends, 2007-2026)

Surgical technique	Province	Relative interest score (0-100)
Robotic surgery	Artvin	100
Robotic surgery	Karabük	92
Robotic surgery	Düzce	92
Robotic surgery	Edirne	85
Robotic surgery	İzmir	85
Laparoscopic surgery	Isparta	100
Laparoscopic surgery	Yozgat	75
Laparoscopic surgery	Bolu	75
Laparoscopic surgery	Bursa	62
Laparoscopic surgery	Ankara	62
Open surgery	Kars	100
Open surgery	Denizli	53
Open surgery	Giresun	38
Open surgery	Zonguldak	30
Open surgery	Isparta	30

This table presents the province-level distribution of public interest in robotic, laparoscopic, and open surgery in Türkiye based on Google Trends data from 2007 to 2026. Values represent normalized relative interest scores ranging from 0 to 100 for each surgical technique. The table highlights regional differences in public interest in robotic surgery compared with other surgical approaches.

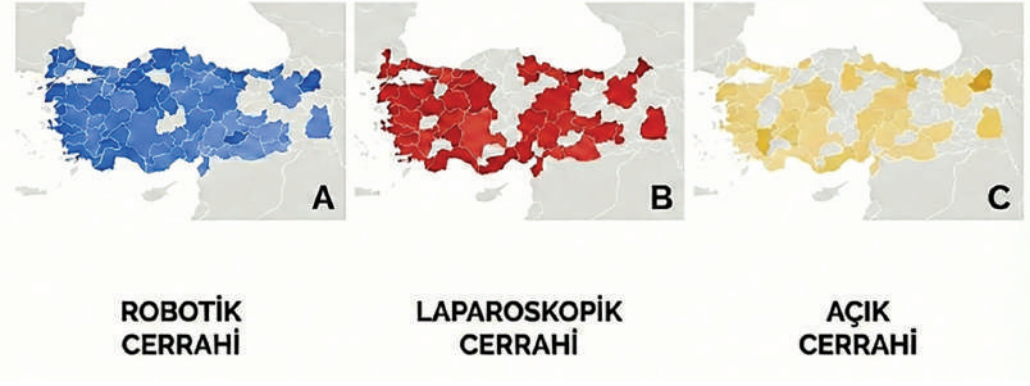


Figure 1. Province-level distribution of public interest in robotic, laparoscopic, and open surgery in Türkiye.

Province-level distribution of public interest in robotic (A), laparoscopic (B), and open surgery (C) in Türkiye based on Google Trends data from 2007 to 2026. Values represent normalized relative interest scores ranging from 0 to 100 for each search term. The maps illustrate distinct regional patterns and heterogeneity in public interest across different surgical techniques.

[P-371]

How should resection be performed in synchronous colon tumors

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Objective: There is no consensus on the surgical management of synchronous colon carcinomas. As the extent of resection increases, rates of morbidity and mortality also rise. This study is aiming to define appropriate resection limits in emergency and elective settings.

Material and Methods: Patients who underwent emergency or elective surgery for synchronous colorectal carcinoma at the Department of General Surgery, University of Health Sciences Türkiye, Gaziosmanpaşa Training and Research Hospital between 2023 and 2026 were retrospectively analyzed.

Results: A total of nine patients were included, eight operated electively and one emergently. The male-to-female ratio was 4:5, and the mean age was 69.8 years (range 57-77). Mean preoperative carcinoembryonic antigen level was 25.1 ng/mL (0.5-54.1), and mean CA 19-9 level was 36.9 U/mL (1.2-74.9). Six patients underwent open surgery and three laparoscopic surgery. Subtotal colectomy was performed in seven patients, and extended left hemicolectomy with endoscopic submucosal dissection (ESD) in two patients. The emergency case underwent a Hartmann procedure due to perforation of the tumor, and following detection of an additional transverse colon tumor during pre colostomy reversal colonoscopy, completion to subtotal colectomy was performed. One patient had three synchronous malignant tumors in the colon, and another had two synchronous colonic malignancies along with another primary malignancy in the lower pole of the right kidney, for which subtotal colectomy and partial nephrectomy were performed in the same session. Four patients had multiple polypoid lesions in addition to malignant foci detected on colonoscopy. No distant metastases were identified. There was no early postoperative (<30 days) mortality. Loss of MLH1, MLH2, MSH6, or PMS2 expression was not observed in any patient except two.

Conclusion: In patients diagnosed with synchronous colon tumors, subtotal colectomy or extended hemicolectomy encompassing tumor-bearing segments alongside appropriate lymph node dissection are both surgical procedures that can be safely chosen. Colon-preserving resection may be achieved in selected patients with polypoid malignant tumors excised within safe margins using endoscopic techniques such as ESD.

Keywords: Syncronous colon carcinomas, subtotal colectomy, left extended hemicolectomy, wide of resection

[P-372]

Nipple-sparing mastectomy and implant reconstruction in breast cancer: Our one-year experience in a single center

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Objective: Breast cancer is the most common malignancy in women, and surgical treatment continues to play a fundamental role in the local control of the disease. Surgical approaches aim not only for good oncological outcomes but also to improve quality of life and cosmetic results. In this respect, breast tissue reconstruction (MBC) and implant-based reconstruction have become increasingly preferred approaches in the appropriate patient group. MBC offers aesthetic advantages by allowing the preservation of the breast skin and, in appropriate cases, the nipple-areola complex, and also improves psychosocial well-being when combined with implant-based reconstruction. However, the feasibility of this surgical approach requires careful evaluation of many factors such as tumor size, tumor-to-breast ratio, multifocality, axillary status, and histopathological features. This study aims to present the results of patients diagnosed with breast cancer and treated with MBC and implant reconstruction in our clinic.

Material and Methods: This retrospective, single-center study included 17 patients diagnosed with breast cancer and undergoing MBCM and implant-based reconstruction between January 2025 and January 2026. Demographic characteristics, tumor characteristics, molecular subtypes, neoadjuvant therapy (NAT) status, surgical indications, axillary surgical approach, pathological staging, length of hospital stay, and early (≤30 days) surgical complications were analyzed. Statistical evaluation was performed using descriptive methods.

Results: The mean age of the patients was 44.8 years. The most frequent histological type was ductal carcinoma (70.6%), and the most common molecular subtype was luminal A (41.2%). The most frequent surgical indication was the presence of a widespread *in situ* component (41.2%). NAT was performed in 35.3% of the patients. In all cases, reconstruction was performed with a subpectoral implant after MBKM. The overall early complication rate was 29.4%, and the major complication rate was 11.8%.

Conclusion: Nipple-sparing mastectomy and implant-based reconstruction, when performed with appropriate patient selection and a multidisciplinary approach, is a safe and effective method in breast cancer surgery that offers acceptable early surgical outcomes.

Keywords: Breast cancer, nipple-sparing mastectomy, implant-based reconstruction, neoadjuvant therapy, surgical complications

Table 1. Demographic, clinical, and pathological characteristics of patients (n=17)

Feature	Value
Mean age (years)	44.8
Age distribution	36-66
Median age (years)	45
Breast involvement, side, n (%)	
• Left	10 (58.8%)
• Right	7 (41.2%)
Molecular subtype, n (%)	
• Luminal A	7 (41.2%)
• Luminal B	5 (29.4%)
• HER2 rich	4 (23.5%)
• Triple negative	2 (11.8%)
Mean tumor size (mm)	29.6
Tumor size distribution (mm)	6-80
Mean Ki-67 index (%)	21.2
Ki-67 distribution (%)	5-50

Table 2. Surgical indications and response to (NAT)

Feature	n	%
Surgical indications		
• Widespread *in situ* component	7	41.2
• Multicentric/multifocal tumor	5	29.4
• Large tumor/breast ratio	2	11.8
• Patient preference	2	11.8
• *BRCA1* gene mutation	1	5.9
NAT status		
• NAT not given	11	64.7
• NAT applied	6	
NAT response (n=6)		
• Complete pathological response	1	16.7
• Partial response	2	33.3
• Minimal residual disease	3	50

NAT: Neoadjuvant therapy.

Table 3. Surgical procedures, pathological staging, and results

Feature	
Surgical procedure performed	**Axillary surgical approach, n (%)**
• Sentinel lymph node biopsy	14 (82.4%)
• Axillary dissection	3 (17.6%)
Pathological stage (AJCC 8th edition), n (%)	
• Stage IA	6 (35.3%)
• Stage IIA	6 (35.3%)
• Stage IIB	5 (29.4%)
Mean length of stay (days)	6.4
Early complication (<30 days), n (%)	
• Total complication rate	5 (29.4%)
• Implant rejection/removal	1
• Implant exposure/removal	1
• Nipple necrosis	1
• Hematoma	1
• Wound dehiscence	1
• Major complication rate	2 (11.8%)
Percentage of patients without complications, n (%)	12 (70.6%)

[P-373]

Use of intraoperative C-arm fluoroscopy in the excision of clip-/guidewire-marked breast lesions in patients who have received neoadjuvant chemotherapy

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Objective: In patients who have received neoadjuvant chemotherapy, difficulties may occasionally be encountered in the accurate intraoperative localization of breast lesions marked with clips or guidewires. Surgical planning is generally based on the report and imaging provided by the radiologist who placed the guidewire. In this study, we aimed to demonstrate that fluoroscopic imaging with a C-arm-performed both before the start of surgery to visualize the surgical field and after specimen excision to image the specimen-can facilitate the surgical process and reduce operative time.

Material and Methods: After excision of the clip-/guidewire-marked lesion, the specimen is sent for perioperative mammographic evaluation, and the completeness of lesion removal is assessed in collaboration with a radiologist. Over the past year, perioperative C-arm fluoroscopy has been used in our clinic in selected patients who received neoadjuvant chemotherapy and had breast lesions marked with clips/guidewires to optimize surgical planning and provide intraoperative confirmation. Cases with anticipated difficulty in intraoperative localization based on preoperative imaging and surgeon judgment were considered selected cases. Following induction of anesthesia and sterile field preparation, the C-arm fluoroscopy unit is positioned over the surgical area. Using a fine-tipped forceps, the position of the marker clip relative to the guidewire is assessed in a single fluoroscopic view to guide incision site selection and excision planning. After lesion excision, the specimen is re-evaluated intraoperatively using C-arm fluoroscopy. Once removal of the marker clip is confirmed, the specimen is sent for mammographic examination for detailed assessment and documentation, and the procedure is concluded after radiologic confirmation.

Results: In our limited initial experience, intraoperative evaluation of the excised lesion using C-arm fluoroscopy in the operating room was observed to provide an approximate 15-20 minute time reduction compared with waiting for the results of perioperative mammography/specimen mammography. This approach was considered to accelerate the surgeon's intraoperative decision-making process, positively contribute to morale and motivation, and allow earlier initiation of procedure completion while awaiting mammography/specimen mammography confirmation.

Conclusion: In patients who have received neoadjuvant chemotherapy, intraoperative localization of clip- and guidewire-marked breast lesions can be challenging. Our early experience suggests that perioperative C-arm fluoroscopy, used both before surgery and after lesion excision, is effective for target verification, facilitates surgical decision-making, and shortens operative time. Although intraoperative specimen radiography provides valuable support, its diagnostic performance may vary due to technical and operator-related factors. When combined with perioperative mammography, C-arm fluoroscopy can be considered a complementary technique that enhances surgical accuracy and safety in selected cases.

Keywords: Breast cancer, clip-/wire localization, intraoperative decision support, neoadjuvant chemotherapy, specimen radiography

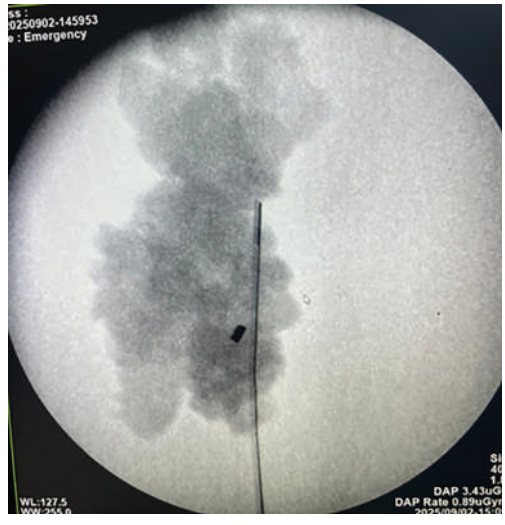


Figure 1. Specimen radiography.

Intraoperative C-arm fluoroscopic image demonstrating the relationship between the marker clip and the guidewire within the excised breast specimen.

[P-374]

Simultaneous implant reconstruction in breast cancer: Risk factors and complication analysis in a single-center series

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Objective: With the increasing adoption of skin-sparing mastectomy (SSM) and nipple-sparing mastectomy (NSM) in breast cancer surgery, immediate implant-based reconstruction has become a standard approach. However, the growing use of neoadjuvant therapies and the potential need for postoperative radiotherapy have made patient selection increasingly critical in terms of complication risk and surgical outcomes. This study aimed to evaluate early and late complications as well as potential risk factors in patients who underwent immediate permanent implant reconstruction in our single-center experience.

Material and Methods: A retrospective analysis was performed on 20 female patients who underwent mastectomy for breast cancer or prophylactic indications with simultaneous permanent implant reconstruction at our center over the past two years. Clinical stage (TNM), molecular subtype, history of neoadjuvant and adjuvant therapies, type of mastectomy (NSM/SSM), implant placement plane (prepectoral/subpectoral), and postoperative complications were recorded. Data were analyzed using descriptive statistical methods.

Results: The mean patient age was 44.1 years (range: 29-53), and the mean body mass index (BMI) was 26.2 kg/m^2 (range: 22-30). Active smoking was present in 30% of patients. Oncologic profile: At diagnosis, 70% of patients had invasive ductal carcinoma, 15% invasive lobular carcinoma, and 5% papillary carcinoma. Molecular subtype distribution was as follows: luminal A 40%, luminal B 35%, and triple-negative 10%. Two patients (10%) underwent prophylactic surgery. Neoadjuvant chemotherapy was administered in 45% of patients, and 45% received postoperative radiotherapy. The most common clinical stage was T2 (55%) with N0 disease observed in 60% of cases. Surgical data: NSM was performed in 85% of cases, while SSM was performed in 15%. Subpectoral implant placement was preferred in 19 patients, and prepectoral placement in one patient. The mean implant volume was 323 cc. Complications: Early complications included one case of skin necrosis, one case of nipple necrosis, and one case of wound complication. The overall implant loss rate was 10% (n=2). Both patients with implant loss had T2 disease, lymph node positivity, and had received neoadjuvant therapy; one patient had a BMI of 30, while the other was an active smoker. As a late complication, scar revision was required in six patients.

Conclusion: Immediate permanent implant reconstruction provides acceptable complication rates when appropriate patient selection is applied. However, the coexistence of neoadjuvant therapy, lymph node positivity, elevated BMI, and active smoking appears to constitute a notable risk profile for implant loss. Therefore, careful evaluation is recommended when considering single-stage implant reconstruction in this patient population.

Keywords: Breast, complication, implant

[P-375]

Prognostic value of HALP score in patients with gallbladder carcinoma

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Objective: Gallbladder carcinoma is an aggressive malignancy with poor prognosis. Recently, inflammation-based biomarkers have gained attention as potential prognostic indicators in various cancers. The hemoglobin, albumin, lymphocyte, and platelet (HALP) score reflects both nutritional and inflammatory status and has been associated with survival outcomes in several malignancies. However, its prognostic role in gallbladder carcinoma remains unclear. This study aimed to investigate the association between HALP score and overall survival in patients with gallbladder carcinoma.

Material and Methods: This retrospective study included patients diagnosed with gallbladder carcinoma at Bursa Uludağ University in 2010-2025. HALP score was calculated using the formula: HALP = hemoglobin × albumin × lymphocyte/platelet. Clinical and laboratory data were obtained from medical records. Overall survival was evaluated, and patients were categorized into groups according to their HALP scores. Survival outcomes were compared between groups.

Results: The mean age of the 85 patients was 70 years. There were 28 male and 57 female patients. The median HALP score of the patients was 44. In preliminary analyses, patients with lower HALP scores tended to have shorter overall survival, with a mean survival of 6 months. In contrast, patients with higher HALP scores had a longer mean survival of 12 months. The difference between the groups was statistically significant. These findings suggest that the HALP score may be associated with prognosis in patients with gallbladder carcinoma.

Conclusion: The HALP score may serve as a simple and easily accessible biomarker reflecting systemic inflammation and nutritional status in patients with gallbladder carcinoma. Further studies with larger patient cohorts are required to confirm its prognostic value.

Keywords: Gallbladder carcinoma, HALP score, survival

[P-378]

Metaplastic breast cancer: Case series

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Objective: Metaplastic breast carcinoma (MBC) is a rare subtype accounting for less than 1% of all invasive breast cancers. Clinically, it is typically observed in women over 50 years of age and is characterized by rapid growth, larger tumor size, lower rates of axillary lymph node involvement, and poorer prognosis compared with other breast cancer subtypes. Axillary lymph node metastasis has been reported in 25-30% of cases. Even in node-negative patients, recurrence rates range from 35-62% within 2-5 years. The risk of distant metastasis is higher than that of invasive ductal carcinoma. Due to its rarity, aggressive biological behavior, and limited response to standard treatment approaches, diagnosis and management remain challenging. In this study, we present a single-center series of 54 patients with MBC.

Material and Methods: A retrospective analysis was performed on 54 patients diagnosed with MBC and treated at our institution. Surgical management consisted of modified radical mastectomy or breast-conserving surgery. Axillary lymph node dissection or sentinel lymph node biopsy was performed when indicated. Demographic characteristics, surgical procedures, tumor size, axillary lymph node status, tumor stage, and adjuvant treatments were obtained from the institutional database. Statistical analyses were conducted using SPSS version 21. Continuous variables were expressed as mean ± standard deviation or median (interquartile range), as appropriate.

Results: A total of 54 female patients who underwent surgery between 2010 and 2025 were included in the study. The mean tumor diameter was 41.9 mm, and 83.3% of the patients had tumors larger than 20 mm. Histopathological evaluation demonstrated that the most common subtype was metaplastic carcinoma with mesenchymal differentiation (31.4%), followed by the squamous cell subtype (27.7%). Axillary lymph node metastasis was detected in 20.4% of the patients. Surgically, modified radical mastectomy was performed in 57.4% of cases, while 42.6% underwent breast-conserving surgery. Nearly all patients received postoperative adjuvant therapy. The lung was the most common site of distant metastasis.

Conclusion: Despite a relatively low rate of axillary lymph node involvement, MBC demonstrates aggressive clinical behavior characterized by large tumor size, high proliferation index, and hormone receptor negativity. Our single-center experience contributes to the existing literature regarding the clinicopathological features of MBC. A multidisciplinary approach and larger prospective studies are needed to optimize management strategies.

Keywords: Metaplastic, breast cancer, case series

[P-380]

Return to work after obesity surgery

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Objective: Obesity is a public health problem with increasing global prevalence and numerous comorbidities. Obesity surgery is considered an effective treatment option for achieving permanent weight loss and metabolic improvement. Reduced mortality and morbidity in the postoperative period, as well as increased functional capacity and reintegration into social life, are among the key indicators determining the success of the treatment. In this context, the return-to-work process after obesity surgery is important in terms of individual, social, and economic outcomes. The timing of return-to-work after obesity surgery varies depending on the surgical technique, perioperative complications, rate of weight loss, comorbidities, and the physical and psychosocial requirements of the individual's job. However, the literature shows limited data on the timing of return-to-work, suitability criteria, and long-term workforce participation after obesity surgery. This study was conducted to evaluate the postoperative return-to-work processes and the factors affecting this process in individuals who underwent bariatric surgery.

Material and Methods: Our study was conducted on patients who underwent bariatric surgery within the last year and are actively employed. Individuals who agreed to participate in the study were given questionnaires prepared via Google Forms.

Results: Patients invited to the study, 16 were actively employed. Eight (50.0%) patients reported taking at least threedays of sick leave due to health problems, and nine(56.2%) reported visiting a healthcare facility at least twice a year. The average postoperative hospital stay was 8.3±2.1 days. After returning to work following surgery, nine (56.2%) patients reported visiting ahealthcare facility at least once due to health problems, six (37.5%) reported taking sick leave due to health problems. Three pre-operative (18.7%) and one post-operative (6.2%) patients reported having to change jobs due to health problems. Post-operative work efficiency increased in six patients (37.5%), remained unchanged in eight patients (50.0%), and decreased in two patients (12.5%). During the return-to-work process, four of the six patients reported receiving support from their family, and two from their colleagues. One of three patients reported feeling like a burden to their colleagues before surgery, one after surgery, and one both before and after surgery. Eight patients (50.0%) reported experiencing psychological problems before surgery. Postoperatively, psychological problems decreased in four of these patients and increased in one. Access to appropriate postoperative dietary recommendations was available at work for eight patients (50.0%) and at home for fifteen patients (93.7%).

Conclusion: The findings indicate that developing supportive policies in workplaces and integrating them into the organizational culture to mitigate the challenges of the return-to-work process can improve employee job adjustment and productivity.

Keywords: Obesity and working life, obesity surgery, return to work after surgery

[P-381]

Postoperative intensive care patients the role of human factors and equipment use in fall prevention

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Objective: This study aimed to evaluate the role of human factors and equipment use in preventing falls among patients monitored in the postoperative intensive care unit (ICU). Postoperative ICU patients are at high-risk of falls due to factors such as altered consciousness, limited mobility, and the use of analgesic and sedative medications. In this context, the study aimed to systematically assess fall risk and to determine the contribution of nursing care practices to patient safety.

Material and Methods: This retrospective and descriptive study was conducted in the adult general ICU 3 of a training and research hospital. Between 01/06/2025 and 31/12/2025, the records of 835 ICU patients were reviewed. According to the inclusion and exclusion criteria, 381 patients were excluded, and the study sample consisted of 454 postoperative patients. Data were collected using the patient identification form and the İTAKİ fall risk assessment scale. As part of standard care practices, bedside rails, wheelchairs, patient lifting slings, transfer boards, walkers, and non-slip, appropriately sized slippers were used in the unit.

Results: The mean fall risk score of the patients included in the study was 19.66. Female patients had higher fall risk scores compared with male patients (21.09 vs. 17.81). Higher fall risk scores were observed in patients with a length of stay longer than three days, a body mass index ≥25, three or more drains or catheters, and the presence of chronic disease.

Conclusion: Postoperative intensive care patients were found to be at high-risk for falls. Nursing care practices focusing on human factors, along with the standard and appropriate use of fall-prevention equipment, play a significant role in enhancing patient safety and reducing fall risk.

Keywords: Fall risk assessment, patient safety, postoperative intensive care

Table 1. Distribution of equipment used to prevent falls in postoperative intensive care patients according to their areas of use

Equipment type	Equipment used
Bed safety	Bed rails
Transfer equipment	Patient lifting lifts, transfer boards
Mobilization equipment	Wheelchair, walker
Personal protective equipment	Non-slip, patient-sized slippers/shoes

Fall prevention equipment by application area.

Table 2. Distribution of fall risk scores according to patients' demographic and clinical characteristics

Variable	Category	Average fall risk score
Gender	Woman	21.09
Gender	Men	17.81
Hospitalization duration	>3 day	23.19
BMI	≥25	20.02
Chronic disease	Yes	20.11

Fall risk scores based on patients' demographic and clinical characteristics (low risk: <10 points, high-risk: ≥10 points).

[P-382]

Comparison of early phase inflammatory markers in open and laparoscopic right hemicolectomy

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Objective: With the widespread adoption of laparoscopic techniques today, laparoscopic surgery is increasingly preferred over open surgery due to the benefits of minimally invasive surgery. One of the proposed benefits is that it causes less trauma due to more minimal skin, subcutaneous tissue, and fascia incisions. In this study, the aim was to compare postoperative inflammatory markers in right hemicolectomy cases to assess the body's inflammatory response to trauma following these procedures.

Material and Methods: The study included 229 patients who underwent right hemicolectomy due to colon cancer between 2015 and 2025. Emergency cases and patients who underwent surgery for benign reasons other than colon cancer were excluded from the study. Preoperative and postoperative leukocyte, neutrophil, lymphocyte, and CRP values were recorded on days 1, 3, and 5 for the included patients. Before comparison, propensity score matching was performed at a 1:3 ratio, and 41 patients from the laparoscopy group were matched with 123 patients from the open surgery group. Age, gender, history of neoadjuvant therapy, and tumor histopathology were used for propensity score matching.

Results: Preoperative leukocyte, lymphocyte, neutrophil, and CRP values showed no difference between the two groups, indicating that the groups were evenly distributed. ($p>0.05$) On the first day after surgery, the CRP value was measured as an average of 105.11 in the open group and 79.91 in the laparoscopic group ($p=0.009$), showing that the CRP value was significantly lower in the laparoscopic group. Although statistically insignificant, the mean values of leukocytes, lymphocytes, and neutrophils on the first postoperative day tended to be lower in the laparoscopic group. There was no statistically significant difference in leukocyte, lymphocyte, and neutrophil values between the open and laparoscopic methods on the third postoperative day. On the 5th postoperative day, the mean CRP, leukocyte, and neutrophil values were minimally lower in the laparoscopic group, although this was not statistically significant.

Conclusion: In the comparison of early-phase acute-phase reactants in open and laparoscopic right hemicolectomy, it was determined that the CRP value on day 1 was significantly lower in the laparoscopic method. Although there was no difference between the groups on days 3 and 5, there was a tendency for lower values in the laparoscopic group.

Keywords: Inflammatory marker, laparoscopic, right hemicolectomy

[P-385]

Artificial intelligence-based prediction of length of hospital stay after colorectal surgery

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Objective: Length of hospital stay is among the most frequent concerns expressed by surgical patients. Colorectal procedures may necessitate prolonged hospitalization due to postoperative care requirements and potential complications. Artificial intelligence systems have recently become widely accessible and may serve as practical decision-support tools for clinicians in predicting hospital stay. This study aimed to assess the reliability of AI-assisted estimation of postoperative length of stay in patients undergoing colorectal surgery.

Material and Methods: This retrospective observational study included randomly selected patients operated between 2018 and 2026 at Hacettepe University Faculty of Medicine Hospital. Demographic features, perioperative characteristics, surgical details, and oncologic treatment data were extracted from medical records and standardized for analysis. A total of 90 patients representing nine different colorectal procedures were evaluated. These operations included right hemicolectomy, total abdominal colectomy, rectopexy, left hemicolectomy, abdominoperineal resection, sigmoid resection, colocolonic anastomosis, low anterior resection, and segmental colon resection. Exclusion criteria comprised age <18 years, missing data, mortality within 30 days, ICU stay >48 hours, concurrent major surgery, non-surgical complications likely to prolong hospitalization, and cases without AI-generated predictions.

Results: Forty-nine patients were male and 41 were female; median age was 64 years and median hospital stay was 8 days. Twenty-seven procedures were emergency and 63 elective. Eigh-teen patients received chemotherapy, nine radiotherapy, and four both. Stoma formation was performed in 11 patients and was significantly associated with emergency surgery (p=0.001). Allowing a ±1 day margin, accuracy rates were 77% for ChatGPT, 74% for Gemini, and 72% for Grok. Advanced age, comorbidity burden, emergency surgery, and stoma creation were associated with longer hospitalization. Because the dataset consisted of paired non-parametric measures, the Wilcoxon signed-rank test was applied; p<0.05 was considered significant. No difference was observed for GPT (p=0.642) or Gemini (p=0.851), whereas Grok demonstrated significant deviation (p=0.00021).

Conclusion: AI-based approaches may meaningfully support clinical decision-making when estimating hospital stay after colorectal surgery. Nevertheless, model performances are not interchangeable, making appropriate selection essential for routine practice.

Keywords: Artificial intelligence, colorectal surgery, clinical decision support systems

[P-386]

A single surgeon's 6-year experience in 181 cases of thyroid surgery: A retrospective analysis from a tertiary center

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Objective: Thyroid disorders are a common clinical challenge, with surgical intervention serving as a cornerstone of management for conditions ranging from symptomatic benign goiters to various types of thyroid carcinoma. The impact of surgeon volume on patient outcomes is a well-established principle in surgical oncology and endocrine surgery. High-volume surgeons, often defined as those performing more than 25 thyroidectomies annually, have consistently demonstrated lower rates of surgical complications such as permanent hypocalcemia and recurrent laryngeal nerve (RLN) injury. This is attributed to a refined surgical technique, meticulous attention to preserving the parathyroid glands and RLN, and a streamlined approach to complex cases. As such, single-surgeon series from high-volume tertiary centers serve as critical benchmarks for evaluating surgical safety and efficacy against international standards. This study retrospectively analyzes a single endocrine surgeon's 6-year experience, encompassing 181 consecutive thyroid surgeries. We present a comprehensive overview of patient demographics, the distribution of thyroid pathologies, and the indications for surgery.

Material and Methods: This retrospective cohort study included 181 consecutive patients who underwent thyroidectomy or lobectomy by a single endocrine surgeon at a tertiary referral center between March 2019 and August 2025. All procedures were performed under general anesthesia within a dedicated endocrine surgery unit.

Results: The cohort was predominantly female (85.1%) with a mean age of 53.9 years. The most common preoperative diagnoses were non-toxic multinodular goiter (37.0%) and papillary thyroid carcinoma (PTC) (23.2%). A significant proportion of non-toxic goiters (34.3%) were operated on due to two prior biopsies showing atypia of undetermined significance. The overall malignancy rate was 24.9%, consistent with published literature. The most frequent procedure was total thyroidectomy (61.9%), with bilateral central neck dissection performed in 14 PTC patients due to suspicious lymph nodes and in one patient with medullary thyroid carcinoma. The mean operation time was 85 minutes, and the average hospital stay was 1.2 days. Postoperative complications included transient hypocalcemia in 12.7% of patients and permanent hypocalcemia in 1.7%. A hematoma requiring reoperation occurred in a single hemodialysis patient. Transient voice quality reduction was observed in 2.8% of patients, with no permanent RLN palsy, superior laryngeal nerve injury, or swallowing difficulty.

Conclusion: The low incidence of complications highlights the safety and efficacy of thyroid surgery when performed by a specialized, high-volume surgeon in a dedicated center. These results align with international benchmarks and underscore the importance of surgical expertise in optimizing patient outcomes.

Keywords: Single surgeon, superior laryngeal nerve injury, thyroid surgery

Table 1. Complications and incidence rates

Complication	Incidence (n, %)	Details
Transient hypocalcemia (≤1 month)	23 (12.7)	Resolved with supplementation
Permanent hypocalcemia (>6 months)	3 (1.7)	Lifelong supplementation required
Hematoma requiring reoperation	1 (0.6)	Single hemodialysis patient
Transient voice reduction (≤6 weeks)	5 (2.8)	Resolved spontaneously or with voice therapy
Permanent RLN palsy	0 (0)	-
Superior laryngeal nerve injury	0 (0)	-
Swallowing difficulty	0 (0)	-
Tracheomalacia	0 (0)	- (All BAS-symptomatic patients informed preoperatively)
Infection	1 (0.6)	Superficial, managed medically
Total complications	33 (18.2)	-

RLN: Recurrent laryngeal nerve.

Table 2. Performed surgical procedures

Procedure	Number of patients (n, %)
Total thyroidectomy	112 (61.9%)
Hemithyroidectomy	45 (24.9%)
Total thyroidectomy + bilateral central neck dissection	15 (8.3%)
Completion thyroidectomy	5 (2.8%)
Other (e.g., subtotal)	4 (2.2%)
Total	181 (100%)

[P-387]

Clinicopathological characteristics and follow-up outcomes of patients undergoing hepatectomy for colorectal liver metastases: A single-center experience

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Objective: Colorectal liver metastases (CRLM) are among the most important factors determining the prognosis of colorectal cancer. In selected patients, hepatic resection constitutes the cornerstone of curative treatment. Previous studies have reported 3-year survival rates of 30-60% and 5-year survival rates of 16-51% following liver resection in patients with CRLM. This study aimed to descriptively evaluate the clinicopathological characteristics, treatment approaches, and follow-up outcomes of patients who underwent liver resection for CRLM at our center.

Material and Methods: This retrospective, single-center study included patients who underwent liver resection for CRLM. Demographic data, primary tumor characteristics, patterns of metastatic disease, surgical and oncological treatments, and follow-up data were reviewed. The data were analyzed using descriptive statistics and presented as median (range) or number (percentage).

Results: A total of 49 patients were included in the study. The median age at the time of liver resection was 59 years (25-85), and 65.3% of the patients were male. The primary tumor was located in the rectum in 55.1% of patients, in the left colon in 24.5%, and in the right colon in 14.3%. Liver metastases were synchronous in 44.9% and metachronous in 55.1% of cases. The median number of liver metastases was 1 (range, 1-11), and the median diameter of the largest metastasis was 4.0 cm (1.0-12.3). Bilobar involvement was present in 34.7% of patients. Resection of two or fewer segments was performed in 51.02% of patients, while resection of three or more segments was performed in 48.98%. At 24 months of follow-up, 73.47% of patients were alive, whereas 26.53% had died. No evidence of disease was observed in 24.5% of patients, while persistent or recurrent disease was present in 67.3%.

Conclusion: This single-center descriptive study demonstrates that, in patients undergoing surgical treatment for colorectal liver metastases, hepatic resection can provide acceptable long-term survival and disease control with careful patient selection. Despite heterogeneous metastatic patterns and varying tumor burdens, the achievement of disease-free follow-up in a substantial proportion of patients underscores the importance of a multidisciplinary approach and individualized treatment strategies. The findings highlight the central role of surgery in the management of colorectal liver metastases and reflect a valuable institutional experience that may serve as a basis for further survival analyses as well as prognostic and predictive modeling studies.

Keywords: Colorectal cancer, colorectal liver metastases, hepatectomy

Table 1. Liver metastases characteristics

Synchronous metastases	**22 (44.9%)**
Metachronous metastases	27 (55.1%)
Number of metastases, median (range)	1 (1-11)
Largest metastasis diameter, cm, median (range)	4.0 (1.0-12.3)
Bilobar involvement	17 (34.7%)

Timing, number, and distribution of liver metastases.

Table 2. Follow-up outcomes and disease status

Alive	28 (57.1%)
Deceased	18 (36.7%)
Disease-free follow-up	12 (24.5%)
Persistent/recurrent disease	33 (67.3%)

Patients' vital and oncological status.

Table 3. Demographics and primary tumor characteristics

Number of patients	**49**
Age, median (range)	59 (25-85)
Male	32 (65.3%)
Rectum	27 (55.1%)
Left colon	12 (24.5%)
Right colon	7 (14.3%)

Demographic characteristics of the patients and the location of the primary tumor.

[P-388]

Recurrence and omental metastasis 10 years after distal pancreatectomy in a young patient due to solid pseudopapillary tumor: Discussion of the decision for total pancreatectomy

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Objective: Solid pseudopapillary tumor is a rare pancreatic neoplasm with low malignant potential, typically observed in young patients. Although the prognosis after surgical resection is favorable, local recurrence and metastases are rarely reported during long-term follow-up. This case is presented to highlight the challenges in the surgical decision-making process due to recurrence and omental metastasis following a long-term follow-up period.

Material and Methods: This is the study of a patient undergoing treatment in our clinic.

Results: A 25-year-old male patient underwent a distal pancreatectomy 10 years ago due to an intra-abdominal mass, with the pathology reported as a solid pseudopapillary neoplasm. Following a 10-year period without follow-up, he was referred to our clinic after a pancreatic mass was detected during a routine check-up. The patient was asymptomatic at the time of admission, and his physical examination was unremarkable. Sectional imaging revealed an approximately 6.5×5.5 cm lesion at the head and body of the pancreas, along with multiple omental lesions, the largest measuring 2 cm. PET-CT demonstrated FDG uptake in the pancreas and omentum. After evaluation by the tumor board, an excisional biopsy was planned. During laparotomy, a mass in the pancreas and multiple malignant masses in the omentum were identified, and an omentectomy was performed. The pathological examination was reported as "Solid Pseudopapillary Tumor Metastasis" (Ki-67: 1%). Due to the low malignant character but the presence of progression, options for total pancreatectomy or continued observation are currently being evaluated by a multidisciplinary team.

Conclusion: In patients diagnosed with solid pseudopapillary tumors, recurrence and distant organ metastasis should be kept in mind even more than 10 years after surgery. Treatment decisions must be individualized, taking into account the patient's age and quality of life. Despite a low proliferation index in young patients, radical surgical decisions such as total pancreatectomy should be carefully evaluated. This case emphasizes the significance of long-term follow-up and an individualized treatment approach

Keywords: Omental metastasis, solid pseudopapillary tumor, total pancreatectomy

[P-389]

Laparoscopic appendectomy: A reliable multi-action approach and clinical outcomes

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Objective: Acute appendicitis is one of the most common abdominal pathologies requiring emergency surgery. Laparoscopic appendectomy offers advantages such as low morbidity, short hospital stay, and rapid recovery due to its minimally invasive nature. However, the sustainability of surgical success is possible not only through technical proficiency but also through a multi-faceted approach that involves the integrated management of preoperative, intraoperative, and postoperative processes.

Material and Methods: In this study, patients who underwent laparoscopic appendectomy with a diagnosis of acute appendicitis were retrospectively evaluated. The surgical process was examined under three main headings: preoperative optimization, step-by-step intraoperative surgical technique, and evidence-based postoperative follow-up. In the preoperative period, patients were optimized according to clinical, laboratory, and imaging findings. During the intraoperative phase, reliable multiple actions were performed step-by-step using the standard three-port technique. In the postoperative period, patients were followed up according to evidence-based monitoring protocols. Clinical outcomes were evaluated based on length of hospital stay, readmission rates, and postoperative complications. Complications were categorized according to the Clavien-Dindo classification.

Results: A total of 51 patients were included in the study. The median age of the patients was 36±8.97. Thirty-nine patients were male (76.5%), and 12 were female (23.5%). The median length of hospital stay was 1±0.40 days. The median time to readmission was 2±0.39 days. Postoperative complications were evaluated according to the Clavien-Dindo classification. Accordingly, no complications were detected in 49 patients (96.1%) (Clavien-Dindo 0). One patient (2.0%) developed a Clavien-Dindo class I complication, and one patient (2.0%) developed a Clavien-Dindo class II complication. No further complications were observed. No patient required conversion to open surgery, and no mortality was detected.

Conclusion: Laparoscopic appendectomy is a reliable and effective surgical method when performed using a multi-action approach that includes preoperative optimization, standardized intraoperative surgical steps, and evidence-based postoperative follow-up processes. This comprehensive approach provides positive clinical outcomes with low complication rates, short hospital stays, and limited readmission rates. The fact that postoperative complications are largely low-grade (Clavien-Dindo class I-II) indicates that the method is a predictable and manageable surgical option in terms of patient safety. Consequently, the structured multi-action approach integrated into laparoscopic appendectomy improves surgical quality and establishes an effective standard in modern acute appendicitis management.

Keywords: Laparoscopic appendectomy, surgical safety, reliable multi-action

[P-407]

Excisional biopsy with radiolabeled occult lesion localization (ROLL) in non-palpable inguinal and axillary lymph nodes: A single-center experience

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Objective: Radioguided Occult Lesion Localisation (ROLL) technique was developed to locate the target lesion intraoperatively in non-palpable lymph nodes; however, data in extra-mammary locations is lacking. The aim of this study is to evaluate the diagnostic efficacy and safety of excisional biopsy performed with ROLL in non-palpable lymph nodes and to demonstrate the clinical contribution of the ROLL technique in this patient group.

Material and Methods: Patients who underwent ROLL-guided excisional biopsy for non-palpable enlarged lymph nodes at Mersin University Faculty of Medicine between 2021 and 2025 were retrospectively reviewed. Patients who has palpable lymph nodes and diagnosed with breast cancer excluded from study. Patients were evaluated in terms of diagnostic adequacy, correlation of ultrasound with histopathology, complications, and differences between localizations.

Results: The study included 86 patients. The mean age was 52.9±16.5 years, and 55.8% of patients (n=48) were female. Thirty-two patients (37.2%) underwent surgery in the inguinal region, and 54 patients (62.8%) underwent surgery in the axillary region. The preliminary diagnosis were lymphoma/lymphoproliferative disease (n=46, 53.5%), suspected malignancy/metastasis (n=20, 23.3%), solid tumor (n=8, 9.3%), cutaneous lymphoma (n=7, 8.1%), inflammatory/infectious disease (n=3, 3.5%), and rheumatological disease (n=2, 2.3%). The mean ultrasound size of lymph nodes was 20.7±8.5 mm. Malignant histology was detected in a total of 21 patients (24.4%). When comparing lymph nodes removed from the axillary and inguinal regions, the mean USG size (23 vs. 15 mm) and the size of the excised lymph node (3.1±1.5 vs. 2.2±0.8 cm) were found to be statistically significant ($p<0.05$). Age was identified as the only significant predictor of malignancy (57.8±15.9 years vs. 51.3±16.5 years; $p=0.049$). Of the patients who underwent preoperative FNAB (n=31), 15.1% (n=13) were benign, 18.6% (n=16) were atypical/excision recommended, and 2.3% (n=2) were malignant. Of the 18 patients with atypical or malignancy reported on FNAB, true malignant histology was detected in 66.7% (n=12) (PPV: 66.7%). None of the 13 patients with benign FNAB results had malignant histology. Malignant histology was detected in 16.4% of the 55 patients who did not undergo FNAB. The mean length of hospital stay was 1.63±0.93 days. Complications were observed in 14 patients (16.3%), including seroma (n=7), hematoma (n=5), and abscess (n=2).

Conclusion: The ROLL-guided excisional biopsy performed at our clinic is an effective and safe method for non-palpable lymph nodes. In situations where imaging alone is insufficient, considering the diagnostic limitations and risk of false negatives associated with FNAB, the ROLL technique should be integrated into the diagnostic algorithm for this patient group.

Keywords: Lymph node excision, ROLL

[P-409]

Clinical outcomes of arterial reconstruction techniques in kidney transplant recipients with multiple renal arteries

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Objective: Over recent decades, refinements in operative techniques together with the use of contemporary immunosuppressive protocols have led to marked improvements in both graft function and patient survival. Despite these advances, the ongoing scarcity of suitable donor organs remains a significant limitation, compelling transplant surgeons to utilize grafts with complex anatomical features. In this context, vascular anatomical variations—most notably multiple renal arteries (MRA)—represent a frequent and clinically relevant challenge. In the present study, we retrospectively analyzed the effectiveness and clinical outcomes of the vascular reconstruction techniques employed in kidney transplant recipients with MRA.

Material and Methods: A total of 67 kidney transplant recipients were analyzed by dividing them into three groups according to the arterial anastomosis technique used: Epigastric artery anastomosis (group 1, n=21), double artery side-by-side anastomosis (group 2, n=36), and two separate iliac artery anastomoses (group 3, n=10). Postoperative urea, creatinine, complications, and Doppler ultrasound images were compared between the groups.

Results: The rates of seroma or hematoma development detected by ultrasonography in the postoperative period were found to be comparable between the groups (p=0.99). While no significant difference was found in early postoperative serum creatinine levels (p=0.73), the mean follow-up periods were also similar between the groups (p=0.82). Overall, no statistically significant difference was observed between the three arterial anastomosis techniques in terms of short-term postoperative clinical and laboratory results.

Conclusion: Multiple renal arteries can be safely managed using a variety of vascular reconstruction techniques without compromising graft function or increasing perioperative complication rates. In our cohort, no significant differences in clinical outcomes were observed among the different anastomotic strategies, suggesting that the choice of technique may be guided primarily by anatomical considerations and surgical expertise.

Keywords: Renal transplant, multiple artery, epigastric anastomosis



Figure 1. Renal artery anastomosis.

Table 1. Postoperative findings

Değişken	Grup 1	Grup 2	Grup 3	p
Postop US anormalliği (seroma/hematom), n (%)	6 (28.6)	10 (27.8)	3 (30.0)	0.99
Postoperatif kreatinin (mg/dL), ortalama ± SS	1.9±1.2	2.1±1.3	2.3±1.1	0.73

Table 2. Postoperastive creatinin

Değişken	Grup 1	Grup 2	Grup 3	p
Preoperatif kreatinin (mg/dL), ortalama ± SS	6.3±2.8	7.1±3.1	6.6±2.5	0.61
Preoperatif albumin (g/dL), ortalama ± SS	4.2±0.4	4.1±0.5	4.0±0.4	0.53

[P-410]

Evaluation of 4th-year medical students' perspectives on the general surgery specialty in the context of clerkship experience

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Objective: In recent years, it has been observed that medical students are increasingly distancing themselves from surgical specialties and leaning towards "lifestyle" specialties due to demanding working conditions and malpractice concerns. This study aims to evaluate the perceptions of 4th-year medical students regarding the general surgery specialty and to investigate the impact of early clinical exposure (clerkship experience) on their career choices.

Material and Methods: This observational, cross-sectional study included 133 4th-year medical students. The participants were divided into two groups: those who "have completed/are taking the general surgery clerkship" (n=65) and those who "have not yet taken it" (n=68). Data were collected using a 6-item questionnaire with a 5-point Likert scale, which evaluated demographic characteristics and professional perceptions (prestige, work-life balance, malpractice, professional satisfaction, and intention to choose surgery in the Medical Specialty Examination - TUS). Mann-Whitney U and chi-square tests were used for statistical analysis, with $p<0.05$ considered significant.

Results: The mean age of the participants was 23.3±0.8 years, and 53.4% were female. There was no significant difference between the groups in terms of age and gender ($p>0.05$). Initial interest in surgery and the perceived prestige of the profession were similarly high in both groups ($p>0.05$). Although agreement with the idea that "general surgeons can allocate enough time to their families" was low overall, this negative perception was significantly more pronounced in the group that had not yet taken the clerkship ($p<0.001$). Medicolegal anxiety regarding malpractice and complications was found to be significantly higher in the group with clerkship experience compared to the non-clerkship group ($p<0.001$). Conversely, the belief that general surgery provides adequate professional satisfaction ($p=0.048$) and the intention to choose general surgery in TUS ($p<0.001$) were significantly higher in the group that had received the clerkship training.

Conclusion: The general surgery clerkship increases students' medicolegal concerns, such as malpractice, as they face the realities of the field. However, operating room practice and clinical experience help mitigate unfounded prejudices regarding work-life balance, positively influencing the sense of professional satisfaction and the motivation to pursue a surgical career. To reduce vacancies in surgical residency programs, it is critical to increase active clinical involvement and foster positive role-model relationships during clerkship education.

Keywords: General surgery, clerkship, career choice

[P-412]

Surgical treatment and oncological outcomes in gastrointestinal stromal tumors: A single-center experience

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Objective: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the gastrointestinal tract. Surgical management is guided by tumor location, size, and risk classification, and laparoscopic approaches have become increasingly adopted. This study evaluated the clinicopathological features, surgical strategies, and oncological outcomes of patients undergoing surgery for GIST.

Material and Methods: Eighty-eight patients who underwent surgery for GIST between 2015 and 2025 were retrospectively analyzed. Demographic characteristics, tumor features, surgical approach, pathological risk classification (modified NIH), oncological treatment, recurrence, metastasis, and survival were assessed.

Results: Of the patients, 42 (47.7%) were female and 46 (52.3%) were male, with a mean age of 58.7±12.5 years (median, 61). The most common presenting symptoms were abdominal pain (60.2%) and upper gastrointestinal bleeding (31.8%). Emergency surgery was required in 22.7% (n=20), mainly due to bleeding. Tumor localization and risk distribution are summarized in Tables 1 and 2. Tumors were gastric in 72.7% and small intestinal in 26.1%. Within the stomach, the corpus (38.6%) and fundus (22.7%) were most frequently involved. Two incidental GISTs were detected during sleeve gastrectomy. High-risk disease was more common in non-gastric tumors (50.0%) than gastric tumors (21.9%). The median tumor diameter was 65 mm (5-450). Histologically, 55.7% were spindle cell type. Tumor necrosis, ulceration, and serosal invasion were observed in 48.9%, 34.1%, and 28.4%, respectively. Laparoscopic surgery was performed in 47.7% (n=42). The most common procedure was wedge resection (53.4%), followed by segmental resection and gastrectomy. Operative time and hospital stay were shorter in the laparoscopic group. R0 resection was achieved in 94.3%. Positive margins (4.5%) occurred in high-risk patients with tumor perforation. Adjuvant imatinib was administered to 28.4%, predominantly in high-risk cases; one patient received neoadjuvant therapy. Median follow-up was 4 years. Recurrence occurred in 4.5% and metastasis in 10.2%, most commonly to the liver. No recurrence or metastasis was observed in low-risk patients, whereas metastasis occurred in 30.8% of high-risk patients. Second primary malignancy was detected in 8.0%. Overall mortality was 3.4%.

Conclusion: Median follow-up was 4 years (1-10). Recurrence occurred in 4.5% and metastasis in 10.2%, most commonly to the liver. No recurrence or metastasis was observed in low-risk patients, whereas metastasis occurred in 30.8% of high-risk patients. Second primary malignancy was detected in 8.0%. Overall mortality was 3.4%. Laparoscopic surgery is safe and provides satisfactory oncological outcomes. The higher risk profile in non-gastric GISTs suggests the need for localization-specific follow-up, and risk stratification accurately predicts prognosis.

Keywords: Gastrointestinal stromal tumor, oncological outcomes

Table 1. Distribution of tumor localization

Localization	n (%)
Stomach	64 (72.7)
Corpus	34 (38.6)
Fundus	20 (22.7)
Antrum	6 (6.8)
Cardia	4 (4.5)
Small bowel	23 (26.1)
Jejunum	15 (17.0)
Duodenum	3 (3.4)
Ileum	3 (3.4)
Colorectal	1 (1.1)

Table 2. Pathological risk classification and metastasis according to tumor localization

Risk classification	Total (n=88)	Stomach (n=64)	Non-gastric (n=24)	Metastasis, n (%)
Very low	23 (26.1)	23 (35.9)	0 (0.0)	0 (0.0)
Low	25 (28.4)	19 (29.7)	6 (25.0)	0 (0.0)
Intermediate	14 (15.9)	8 (12.5)	6 (25.0)	1 (7.1)
High	26 (29.5)	14 (21.9)	12 (50.0)	8 (30.8)

[P-413]

Is minimally invasive truly superior? Pre-evaluating laparoscopic and open incisional hernia repair based on single-center experience

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Objective: Incisional hernia is a significant complication of abdominal surgery with considerable morbidity potential. Although laparoscopic repair is increasingly preferred due to its minimally invasive advantages, open surgery continues to play a role in complex defects. This study aims to compare the clinical performance of both approaches in light of the experience of İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine, Department of General Surgery.

Material and Methods: Patients operated on for incisional hernia in our clinic were treated either with an open or laparoscopic approach. The choice of surgical technique was determined by defect characteristics, patient comorbidities, number of previous operations, and abdominal wall integrity. The perioperative process and early clinical outcomes were evaluated based on institutional experience.

Results: The laparoscopic approach was observed to be associated with lower wound-site complications and faster functional recovery in appropriately selected patients. The reduced tissue trauma of minimally invasive surgery provided an advantage in early postoperative comfort. However, in large and complex defects, open surgery offered a more controlled field for anatomical reconstruction and component separation techniques. Particularly in cases with advanced abdominal wall weakness, the technical reliability of the open approach was prominent.

Conclusion: Our single-center experience demonstrates that there is no single "best" method for incisional hernia repair. While the minimally invasive approach offers early postoperative advantages, the key determinant of surgical success is appropriate patient selection and an experienced surgical team. Laparoscopic and open techniques are not competing approaches but complementary methods when applied with proper indication.

Keywords: Incisional hernia, laparoscopic repair, open surgery, abdominal wall, minimally invasive surgery

[P-414]

Patient profile, burn etiologies, and admission patterns in University of Health Sciences Türkiye, Antalya City Hospital burn center: A retrospective descriptive study

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Objective: This study aimed to evaluate the early-period patient profile, burn etiologies, age distribution, and admission patterns of the ACH Burn Center, which became operational in 2024. By analyzing data from the initial phase, we sought to describe the clinical workload of the center and to generate practical information that may guide future planning regarding patient referral pathways, bed capacity, and intensive care unit requirements.

Material and Methods: This retrospective descriptive study included all patients treated at the University of Health Sciences Türkiye, Antalya City Hospital, Burn Center between March 1, 2024, and February 3, 2026. Patients were evaluated according to age groups (0-18, 18-55, and over 55 years), burn etiology (flame, electrical, and scald burns), mode of admission, and treatment location. Admission routes were categorized as outpatient clinic visits or emergency medical services referrals. Treatment settings were classified as outpatient clinics, inpatient wards, or intensive care units.

Results: During the study period, a total of 4.237 patients were managed at the burn center. Of these, 3.741 patients (77.2%) were followed in the adult outpatient clinic and 205 patients (4.2%) in the pediatric outpatient clinic. Inpatient treatment was required for 305 adult patients (6.3%) and 205 pediatric patients (4.2%). Intensive care follow-up was necessary for 93 adults (1.9%) and 5 pediatric patients (0.1%). Flame burns were the most common etiology, accounting for 48.4% of all admissions. Among patients with flame burns, 48.4% were aged 18-55 years, 34.6% were aged 0-18 years, and 17% were older than 55 years. A substantial proportion of flame burn patients were admitted via emergency medical services. Electrical burns constituted a smaller proportion of overall cases but were predominantly observed in adults. Patients aged 18-55 years accounted for 82.4% of electrical burn cases. The rate of admission through emergency medical services for electrical burns was 58.8%, which was higher than that observed for other burn etiologies. Scald burns were more frequent in the pediatric population, with 62.8% of cases occurring in patients aged 0-18 years. Most scald burn patients were managed on an outpatient basis, and the emergency medical services admission rate for this group was 29%.

Conclusion: The early-period experience of this newly established burn center demonstrates that while outpatient visits constitute the majority of admissions, patients requiring inpatient and intensive care treatment represent a considerable clinical workload. The observed distribution of burn etiologies and age groups is consistent with the existing literature. These findings provide real-world data that may support future institutional planning and optimization of burn care services.

Keywords: Burn center, etiology, retrospective study

[P-415]

The effect of intraperitoneal bupivacaine on postoperative analgesia in laparoscopic donor nephrectomy

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Objective: Kidney transplantation is the gold standard treatment for end-stage renal disease. Laparoscopic donor nephrectomy (LDN) has become the preferred approach in living donors due to reduced morbidity and faster recovery compared to open surgery. However, postoperative visceral and port-site pain may delay recovery and impair patient comfort. Inadequate postoperative pain control may contribute to chronic pain development. Intraperitoneal local anesthetic instillation has been shown to improve pain control in laparoscopic surgery. This study evaluated the effect of intraperitoneal bupivacaine on postoperative pain following LDN.

Material and Methods: In this study, 120 adult living kidney donors who underwent LDN between January 1, 2021 and May 1, 2025 at University of Health Sciences Türkiye, Gaziantep City Hospital Organ Transplant Center were analyzed. Patients were divided into two groups: those who received 20 mL of 0.25% intraperitoneal bupivacaine at the end of surgery (group A, n=75) and those who did not (group B, n=45). Postoperative Visual Analog Scale (VAS) scores at 6, 12, and 24 hours and additional analgesic requirements were evaluated. A p-value <0.05 was considered statistically significant.

Results: Among 120 patients, 75 received intraperitoneal bupivacaine and 45 did not. VAS scores at 6 and 12 hours were significantly lower in group A compared to group B ($p<0.05$). No significant difference was observed at 24 hours ($p>0.05$). Additional analgesic requirements were lower in the bupivacaine group. No significant difference in complication rates was detected.

Conclusion: Intraperitoneal bupivacaine administration during LDN reduces early postoperative pain and analgesic requirements. Consistent with previous literature, this technique can be safely incorporated into multimodal analgesia protocols in living donors.

Keywords: Kidney transplantation, postoperative pain, donor nephrectomy

[P-416]

The role of artificial intelligence in robotic surgery: A bibliometric analysis

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Objective: The field of surgery is undergoing a profound technological transformation driven by minimally invasive approaches and rapid technological advancements. While robotic surgery enhances surgical precision, artificial intelligence (AI)-based methods increasingly support clinical decision-making processes. The widespread adoption of machine learning and computer vision technologies necessitates a systematic evaluation of thematic trends within the literature. In this context, bibliometric analysis provides a robust analytical framework for mapping the intellectual landscape of the field. This study aimed to analyze the scientific literature on robotic and AI technologies in surgery using bibliometric methods to identify publication trends, thematic evolution, and emerging research priorities.

Material and Methods: A bibliometric analysis was conducted using the Web of Science Core Collection database on January 22, 2026. The literature search employed combinations of the following keywords: "surgery OR surgical procedure OR operative procedure," "AI OR machine learning OR deep learning," and "robotic surgery OR robot-assisted surgery." The retrieved data were analyzed in RStudio using relevant bibliometric packages to examine publication trends, citation patterns, and keyword distributions.

Results: Analysis of 66 studies published across 43 journals between 2018 and 2026 revealed a marked acceleration in publication and citation output, particularly after 2022, with research productivity peaking during 2024-2025. The United States demonstrated clear leadership in global scientific production (n=671). Keyword network analyses indicated that AI and robotic surgery have rapidly moved from peripheral topics to the intellectual core of surgical research. Collectively, these findings suggest that the field is approaching a technology-driven paradigm shift, with surgical care increasingly evolving toward data-intensive and intelligent systems.

Conclusion: This bibliometric study delineates the intellectual structure of the global literature on robotic and AI-driven surgical technologies, identifies critical research gaps, and highlights evolving thematic trajectories and scientific production dynamics. Future research should prioritize addressing these gaps and generating robust evidence to support clinical integration. The growing incorporation of AI and robotic technologies is redefining perioperative care, clinical decision-making processes, and patient safety responsibilities, underscoring the strategic need to strengthen the roles and competencies of nurses within technology-mediated care environments.

Keywords: Artificial intelligence, robotic surgery, bibliometric analysis, surgical innovation, research trends

[P-417]

Clinical implications of the immune microenvironment in breast cancer: An analysis of tumor-infiltrating lymphocytes

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Objective: Breast cancer is a heterogeneous disease shaped not only by the biological characteristics of tumor cells but also by the dynamic structure of the tumor microenvironment (TMIC). Tumor-infiltrating lymphocytes (TILs), a key component of the TMIC, represent immune cells located in the tumor stroma and peritumoral connective tissue and are considered a histopathological indicator of the antitumor immune response. Recent studies have shown that high TIL levels are associated with better survival and treatment response, particularly in biologically aggressive subtypes, especially triple-negative breast cancer. It has been reported that TILs increase pathological complete response rates after neoadjuvant chemotherapy in this patient group, thus possessing not only prognostic but also predictive biomarker potential. This study aimed to evaluate the presence and level of TILs and their relationship with clinical and histopathological features in patients diagnosed with breast cancer, and to reveal the possible prognostic and predictive clinical implications of TILs.

Material and Methods: This retrospective and observational study included a total of 37 patients who underwent surgery between January 2024 and December 2025 and whose pathology reports indicated the percentage of TILs (transient ischemic epithelial cells). The relationship between the patients' demographic, clinical, and pathological data and their TILs levels was evaluated.

Results: The mean age of the patients was 60.1±9.2 years. 45.9% (n=17) of the cases were in the high TILs (≥20%) group. Lymphovascular invasion (58.8% vs. 15.4%; p=0.019) and perineural invasion (64.7% vs. 23.1%; p=0.024) were significantly higher in the high TILs group compared to the low TILs group. A positive correlation was found between high TILs and a high Ki-67 index (r=0.482; p=0.003). No significant association was observed between TILs levels and age, tumor size, stage, hormone receptor status, and HER2 status.

Conclusion: In breast cancer, high TILs levels are associated with aggressive tumor features such as lymphovascular invasion, perineural invasion, and a high proliferative index. These findings suggest that TILs may have prognostic significance as an indicator of the local immune microenvironment. Further prospective studies are needed to elucidate their role, particularly in luminal subtypes.

Keywords: Tumor-infiltrating lymphocytes, lymphovascular invasion, perineural invasion, Ki67, prognostic markers

Table 1. Descriptive statistics of demographic and clinicopathological characteristics of patients (n=37)

Feature	Value
Age (years)	60.1±9.2
Tumor grade	
Grade 1	12 (32.4%)
Grade 2	20 (54.1%)
Grade 3	5 (13.5%)
Immunohistochemistry	
ER status (positive)	33 (89.2%)
PR status (positive)	29 (78.4%)
HER2 status (positive)	4 (10.8%)
Molecular typing	
Luminal A	8 (21.6%)
Luminal B	26 (70.3%)
Other (triple-/HER2+)	3 (8.1%%)
Ki-67 median (min-max)	10 (2-50%)
Lymphovascular invasion (present)	13 (35.1%)
Perineural invasion (present)	15 (40.5%)
Multifocality (present)	32 (86.5%)
Mean tumor size (mm)	15.5 (6-37)
TILs median (min-max)	10 (1-70%)
TILs categories	
<10%	13 (35.1%)
10-19%	7 (18.9%)
≥%20	17 (45.9%)

min-max: Minimum-maximum, TILs: Tumor-infiltrating lymphocytes.

Table 2. Comparison of clinicopathological variables according to TILs categories

Feature	TILs <10% (n=13)	TILs 10-19% (n=7)	TILs ≥20% (n=17)	p
Age (mean ± SD)	62.2±10.1	58.6±8.3	59.4±8.9	0.562
Grade (1/2/3)	5/6/2	2/4/1	5/10/2	0.872
ER positive (n, %)	12 (92.3%)	7 (100%)	14 (82.4%)	0.512
PR positive (n, %)	11 (84.6%)	6 (85.7%)	12(70.6%)	0.456
HER2 positive (n, %)	1 (7.7%)	0 (0%)	3 (17.6%)	0.432
Median Ki-67	10%	15%	20%	0.003
Lymphovascular invasion (present, %)	2 (15.4%)	2 (28.6%)	10 (58.8%)	0.019
Perineural invasion (present, %)	3 (23.1%)	2 (28.6%)	11 (64.7%)	0.024
Median tumor size (mm)	14	16	15	0.897

SD: Standard deviation.

Table 3. Correlation between TILs and continuous variables

Variable	Correlation coefficient (r)	p-value
Age	-0.172	0.312
Ki-67	0.482	0.003
Tumor size	0.022	0.003

TILs: Tumor-infiltrating lymphocytes.

[P-419]

The place of urachal cyst and related anomalies in the scientific literature: A bibliometric analysis based on PubMed

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Objective: Urachal canal anomalies,and particularly urachal cysts,are largely represented in the literature by case reports and limited series due to their rarity and heterogeneous clinical manifestations. The aim of this study is to reveal the historical development, thematic structure, prolific authors, institutions, and countries of the scientific literature published on urachal canal cysts and related anomalies based on the PubMed database,and to analyze research trends in the field using bibliometric methods.

Material and Methods: Studies published in the PubMed database between 1956 and 2026 were searched using the keywords"urachal cyst,"urachus cyst","urachal anomaly,","urachal anomalies", and "urachal remnant". The data obtained were analyzed using Bibliometrix (R)-based software. Publication production trends,author and institutional contributions, distribution by country, keyword frequencies, Lotka and Bradford laws, thematic maps, and time-dependent topic trends were evaluated.

Results: A total of 924 publications published in PubMed between 1956 and 2026 were analyzed. The publications appeared in 364 journals; a total of 4.216 authors contributed. The annual growth rate was 2%,with a particularly noticeable increase in production after the 2000s. Bradford's Law showed that the literature was concentrated in a limited number of core journals. The most productive sources included the Journal of Pediatric Surgery, Cureus, Hinyokika Kiyo: Acta Urologica Japonica, Urology, and The Journal of Urology. Production dynamics supported a clustering tendency in Journals Focused on Pediatric Surgery and Urology. The US led production by country, followed by Japan, China, South Korea, and ürkiye. Analysis of corresponding authors revealed that most publications involved contributions from a single country, with limited international collaboration. Consistent with Lotka's Law, most authors contributed with a single publication, while a limited core group showed continuity. At the institutional level, universities/hospitals based in Japan and North America were particularly prominent. Keyword and theme analyses showed that the literature was concentrated on-the clinical-demographic axis; "humans", "male", "female" "adult", and "infant, newborn" were the most frequent terms. In thematic mapping, imaging, prenatal diagnosis, and surgical approaches were among the main themes, while topics such as cystectomy, immunohistochemistry, and urachus/ pathology/surgery represented a more niche cluster. Trend analyses revealed that descriptive/pathology-heavy themes dominated in the early period, while imaging,minimally invasive surgery, and outcome-focused themes have increased in recent years.

Conclusion: This PubMed-based bibliometric analysis revealed that the literature on urachal canal cysts/urakus anomalies showed a steady but increasingly rapid production trend in recent years between 1956 and 2026; publications were concentrated around a small number of core journals (particularly in pediatric surgery and urology). Production is predominantly sourced from the US and Japan, with limited international collaboration and author contributions clustered around a small core group. The thematic pattern shows that, alongside basic clinical-demographic and imaging-focused themes, more specialized sub-themes such-as pathology/surgery (cystectomy, immunohistochemistry) are becoming increasingly prominent. By presenting a structural map of the literature on a scattered and rare clinical topic, this study provides a measurable reference framework for future multicenter, standardized, and outcome-focused research.

Keywords: Bibliometric analysis, clinical research trends, PubMed, urachal cyst, ureteral anomalies

Table 1.

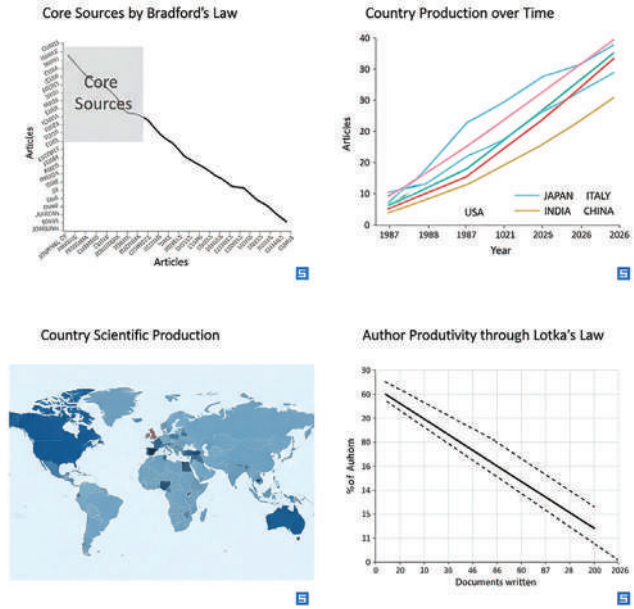
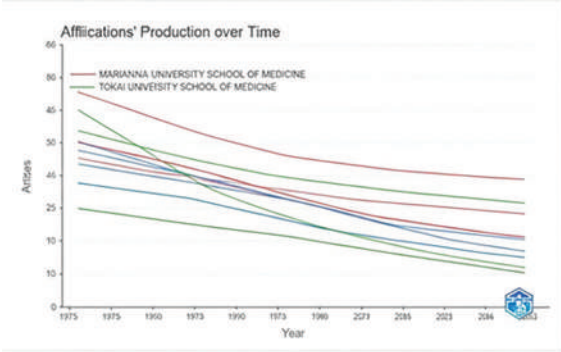
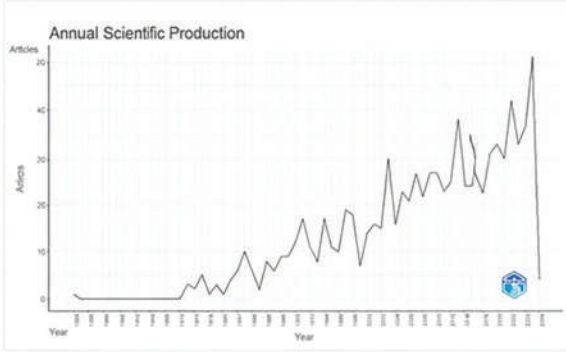
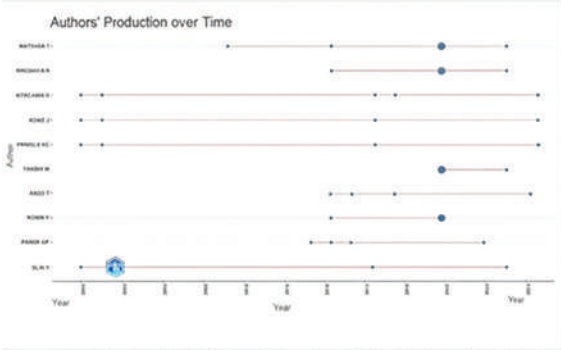


Table 2.







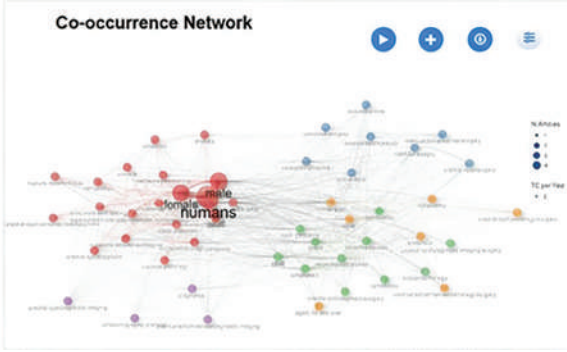
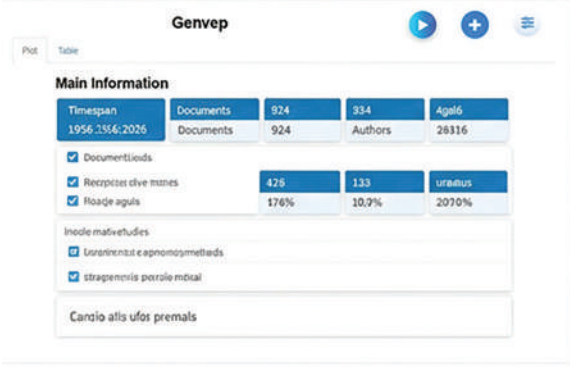
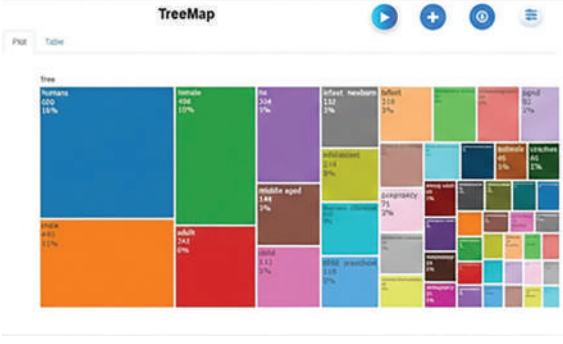


Table 3.







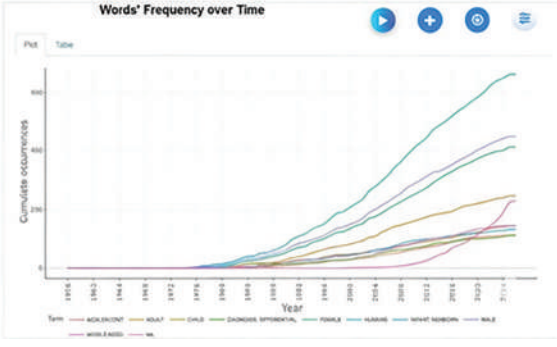


Table 4.

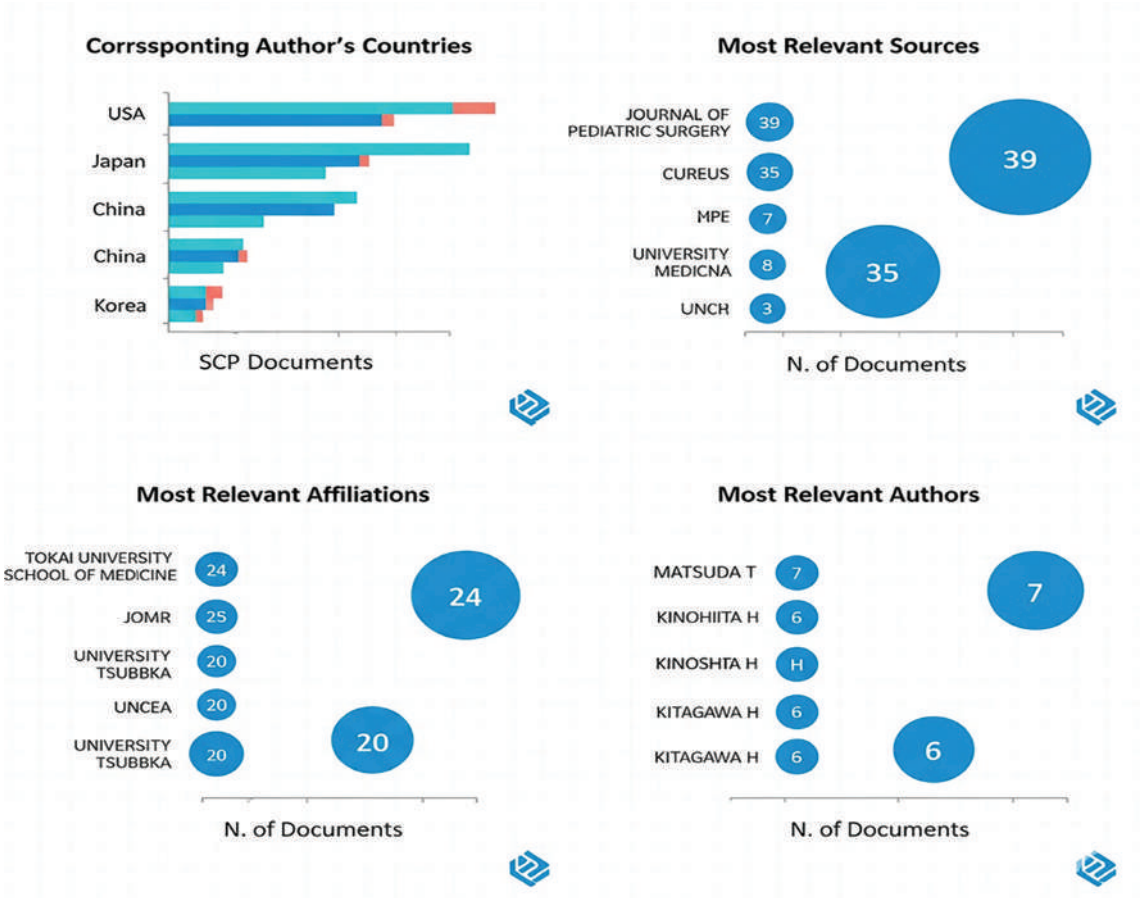
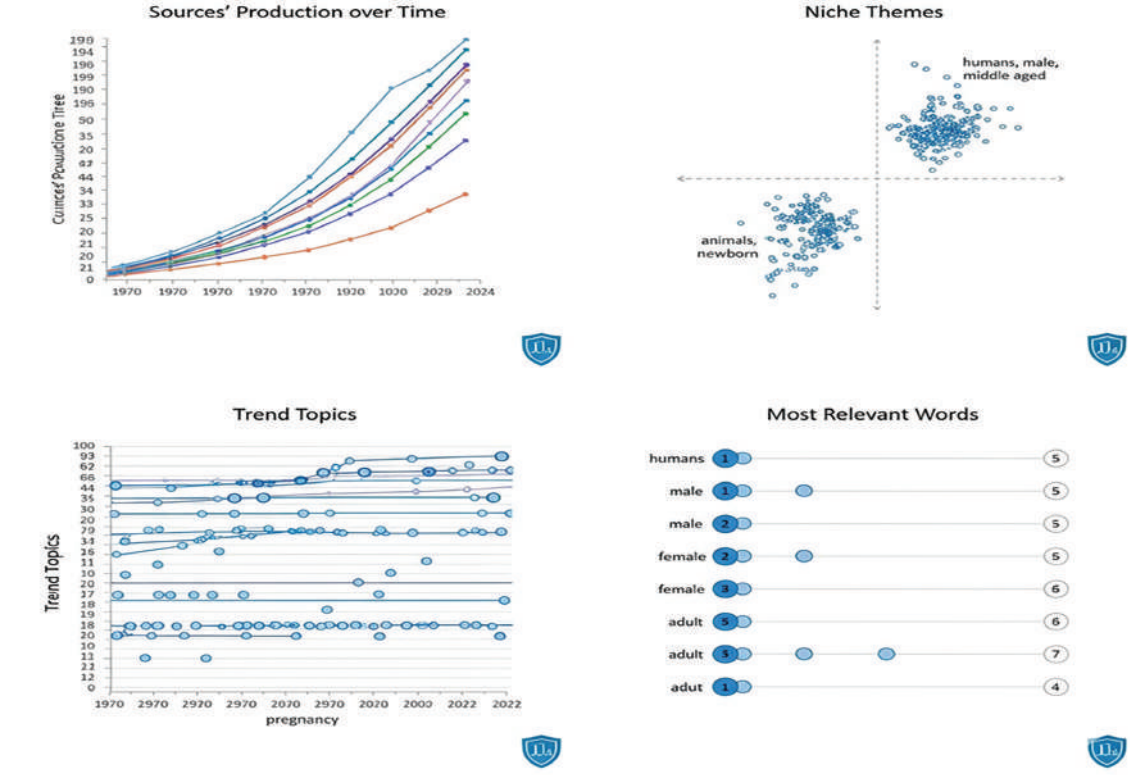


Table 5.



[P-420]

The etiology of surgical referrals from a second-level district hospital: Why can't we treat patients locally?

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[2]*University of Health Sciences Türkiye, Ankara Etlik City Hospital, Ankara*

[3]*Etimesgut Martyr Sait Ertürk State Hospital, Ankara*

Objective: We aimed to examine the etiological causes and organizational dynamics-of surgical referrals from secondary-level district hospitals to higher-level centers,assess the burden on the system in terms of local treatment options,determine the extent to which these referrals could be prevented,and reveal the potential cost implications for the healthcare system.

Material and Methods: In this retrospective observational study,patients referred from Payas State Hospital to other tertiary healthcare institutions for general surgical reasons were evaluated. Records of referrals made between January 2025 and January 2026 were reviewed, and a total of 75 patients were included in the study. Demographic data and clinical characteristics (age, gender, ASA score, triage code, hemodynamic status, andpresence/number of comorbidities), timing-of referral (during/after hours, weekday/weekend), referral etiology (primary and detailed reasons), referral logistics (transportation vehicle, distance,and-duration), and on-site treatment options were obtained from patient files and referral records. All variables were analyzed using descriptive statistics; continuous variables were presented as mean ± standard deviation or median (interquartile range), while categorical variables were presented as-counts and percentages.

Results: Seventy-five patients referred to a tertiary center for surgical reasons were included. The mean age was 44.1±18.0 years (median 40; range 27.5-58.5), and 54.7% were female. ASA distribution was ASAI 24.0%, ASAII 53.3% and ASA III 22.7%, with no ASA IV cases. Triage categories were yellow 68.0% and green 32.0%, with no red triage; 4.0% of cases were unstable. Comorbidity was present in 46.7%,with a mean of 0.83±1.10 (median 0; range 0-1). The most common diagnoses were urgent surgical need (30.7%), acute abdomen (29.3%), and follow-up for cholecystitis/pancreatitis/ileus (21.3%). Referrals occurred outside working hours in 77.3% and on weekends in 26.7%. Main referral reasons were lackof relevant specialists (60.0%) and equipment/devices (38.7%), while blood product shortage was rare (1.3%). The leading specific causes were absenceof a general surgeon (50.7%), CT malfunction/unavailability (18.7%), and lack of ultrasound (14.7%), followed by lack of anesthesia/staff (5.3%), endoscopy (4.0%), MRI and blood stock (each 2.7%), and patient request (1.3%). Transfers were mainly by regular transport (80.0%) or 112 ambulance (20.0%). Mean transfer distance and time were 14.1±18.7 km and 14.1±19.4 min (both median 8; IQR: 8-8), with no need for accompanying healthcare personnel. In-all cases, on-site treatment was-not feasible, primarily due to lack of specialist physicians (58.7%) and equipment/devices (40.0%), and rarely blood center limitations (1.3%).

Conclusion: This-study demonstrates that most surgical-referrals from secondary district hospitals to tertiary-centers stem from systemic and organizational constraints rather than clinical necessity. The predominance of stable, low-to-moderate risk patients suggests that referrals are driven more by deficiencies in human resources and basic infrastructure than by disease severity. The clustering of referrals during non-working hours and the prominence of factors such as lack of service continuity and basic imaging capacity contribute to unnecessary congestion and resource imbalance at tertiary centers. From-a-policy perspective,addressing referrals solely as an "advanced center requirement" is insufficient; targeted strengthening-of-human resources and basic infrastructure at the secondary level could substantially reduce referral burden. Viewed through a sociological lens,referral decisions reflect institutional capacity, shift conditions,and risk perception rather than isolated clinical judgment. Consequently, effective strategies should focus on-system-level planning and institutional design, enabling referral reduction while preserving patient safety and healthcare system efficiency.

Keywords: Cost effectiveness, on-site treatment, secondary hospital, surgical referral, tertiary healthcare

Table 1. Demographic and clinical characteristics of patients (n=75)

Parametre	Değer
Yaş (yıl), ortalama ± SS	44,1 ± 18,0
Yaş (yıl), medyan (ÇAA)	40 (27,5–58,5)
Cinsiyet	
Kadın	41 (%54,7)
Erkek	34 (%45,3)
ASA skoru	
ASA I	18 (%24,0)
ASA II	40 (%53,3)
ASA III	17 (%22,7)
ASA IV	0 (%0,0)
Triyaj kodu	
Yeşil	24 (%32,0)
Sarı	51 (%68,0)
Kırmızı	0 (%0,0)
Hemodinamik durum	
Stabil	72 (%96,0)
Unstabil	3 (%4,0)
Komorbidite varlığı	
Yok	40 (%53,3)
Var	35 (%46,7)
Tanı kategorisi	
Acil cerrahi ihtiyacı	23 (%30,7)
Akut batın	22 (%29,3)
Takip (kolesistit/pankreatit)	16 (%21,3)
Yumuşak doku enfeksiyonu	6 (%8,0)
GİS kanama	3 (%4,0)
Malignite şüphesi / tümör	2 (%2,7)
Elektif cerrahi ihtiyacı	3 (%4,0)

Table 2. Time of application and organizational factors (n=75)

Parametre	Değer
Başvuru zamanı	
Mesai içi (08:00–17:00)	17 (%22,7)
Mesai dışı / Nöbet	58 (%77,3)
Başvuru günü	
Hafta içi	55 (%73,3)
Hafta sonu	20 (%26,7)

Table 3. Referral etiology: Primary and secondary causes (n=75)

A. Sevk Ana Nedenleri

Sevk Ana Nedeni	n	%
İlgili branş eksikliği	45	60,0
Donanım / cihaz eksikliği	29	38,7
Kan ürün yetersizliği	1	1,3
Yoğun bakım yetersizliği	0	0,0
Yüksek risk / defansif tıp	0	0,0
Sosyal endikasyon	0	0,0
Diğer	0	0,0

B. Sevk Detay Nedenleri

Sevk Detay Nedeni	n	%
Genel cerrah yok	38	50,7
BT bozuk / yok	14	18,7
USG yok	11	14,7
Anestezi / personel yok	4	5,3
Endoskopi yok	3	4,0
MR yok	2	2,7
Kan stoğu yok	2	2,7
Hasta talebi	1	1,3

Table 4. Referral logistics and system load (n=75)

Parametre	Değer
Sevk aracı	
112 ambulans	14 (%18,7)
Özel ambulans	1 (%1,3)
Mutat taşıt	60 (%80,0)
Sevk mesafesi (km)	
Ortalama ± SS	14,1 ± 18,7
Medyan (ÇAA)	8 (8–8)
Sevk süresi (dk)	
Ortalama ± SS	14,1 ± 19,4
Medyan (ÇAA)	8 (8–8)
Refakatçi sağlık personeli	
Yok	75 (%100)
Var	0 (%0,0)

Table 5. On-site treatment facilities and necessary missing resources (n=75)

Parametre	Değer
Yerinde tedavi mümkünlüğü	
Hayır	75 (%100)
Evet	0 (%0,0)
Yerinde tedavi için gerekli eksik kaynak	
Cihaz / donanım	30 (%40,0)
Uzman hekim	44 (%58,7)
Yoğun bakım	0 (%0,0)
Kan merkezi	1 (%1,3)

Table 6. Distribution of referrals by age groups and seasons (n=75)

Parametre	n (%)
Yaş grubu	
< 65 yaş	63 (%84,0)
≥ 65 yaş	12 (%16,0)
Mevsimlere göre başvuru	
Kış (Aralık–Şubat)	28 (%37,3)
İlkbahar (Mart–Mayıs)	16 (%21,3)
Yaz (Haziran–Ağustos)	12 (%16,0)
Sonbahar (Eylül–Kasım)	19 (%25,4)

[P-423]

A rare complication: Management of wire fracture during preoperative radiological wire localization in breast surgery

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Objective: Wire-guided excision is a widely-used and effective method for the surgical management of non-palpable breast lesions or suspicious microcalcifications. The overall complication rate has been reported to range between 2-10% in the literature. Wire-related complications are quite rare. The rate of wire fracture is reported to be less than 0.1%. In this study, we present a rare case of wire fracture occurring during radiological localization and discuss the management strategies of this complication with literature.

Material and Methods: A 59-year-old female patient underwent screening mammography, which revealed scattered punctate microcalcifications in the upper-outer quadrant of the left breast, classified as BI-RADS 4C. No palpable lesion was detected on physical examination. An excisional biopsy using wire-guided localization was planned. During the radiological localization procedure, the radiology department reported that the wire had fractured within the breast tissue. Careful and wider surgical excision was performed with the wire guidance. Complete removal of the wire and suspicious microcalcifications, and all fractured wire segments was confirmed by specimen mammography and anteroposterior chest x-ray intraoperatively. The patient was followed for 24 hours postoperatively and was discharged without any complications. Histopathological examination revealed findings consistent with fibrocystic changes (fibrosis, adenosis, ductal ectasia) and chronic mastitis. As the patient remained asymptomatic, annual clinical and imaging follow-up was recommended.

Results: Wire-guided excision of breast lesions is a safe and widely-used technique. The overall complication rate has been reported to range between 2-10% in the literature. The most common complications include hematoma (2-5%), infection (1-3%), and seroma. Positive surgical margin rates vary between 15-40% depending on the lesion type. Wire-related complications are less common. The incidence of wire migration has been reported to range between 0.1-0.7%, while wire fracture is reported to occur in less than 0.1% of cases. Possible causes of wire fracture include excessive manipulation, traction or tension during surgery, and structural weakness of the wire. Retained wire fragments may lead to serious complications such as migration, chronic inflammation, pain, and progression into the thoracic cavity. Therefore, intraoperative assessment of wire integrity, routine specimen mammography, and additional imaging in suspicious cases are recommended.

Conclusion: Wire-guided excision is a safe method for non-palpable breast lesions. Wire fracture is a rare but clinically significant complication. Awareness of this condition by both surgeons and radiologists, along with a multidisciplinary approach and the use of intraoperative imaging, plays a crucial role in preventing retained foreign bodies within the tissue.

Keywords: Intraoperative complication management- breast surgery, preoperative complication, wire-guided excisional biopsy

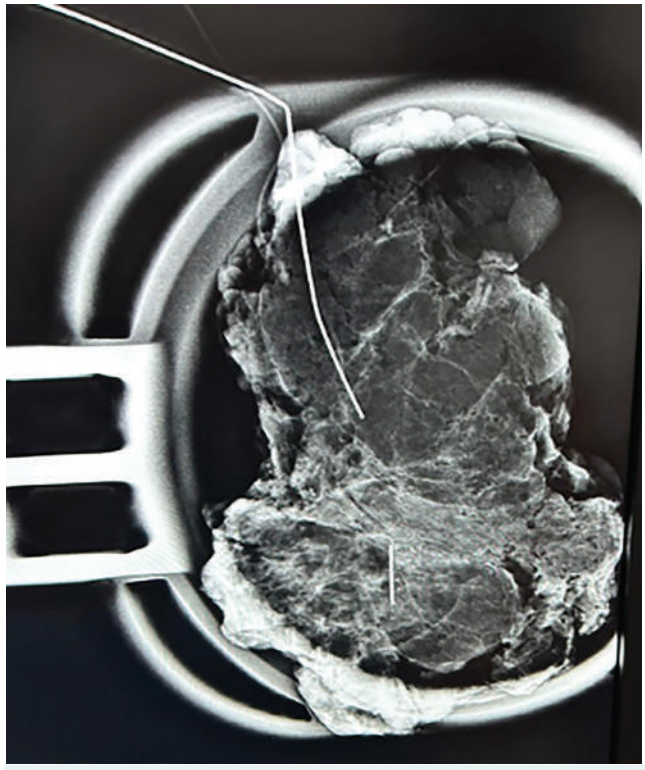


Figure 1. Examination of the specimen by mammography confirming complete removal of the microcalcification cluster and all fractured wire segments.

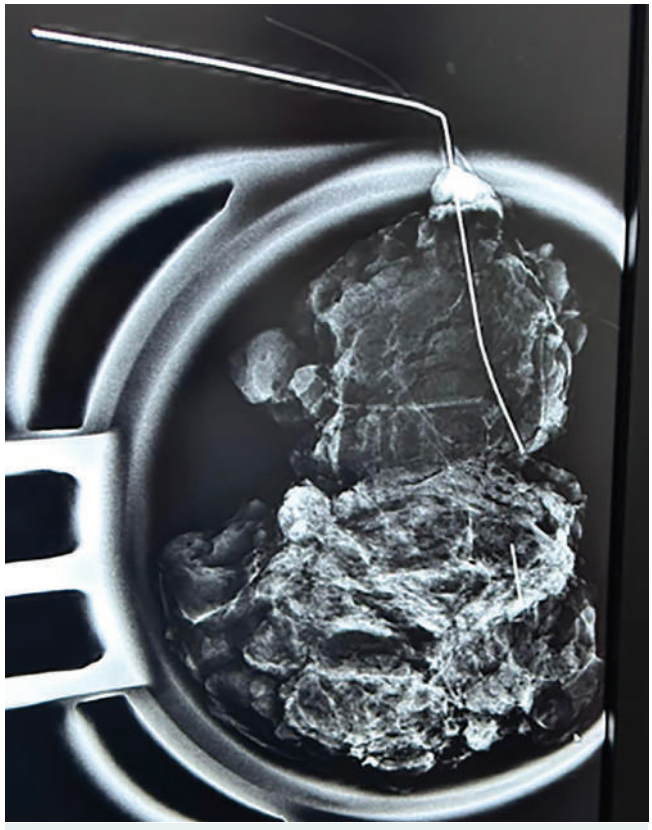


Figure 2. Examination of the specimen by mammography confirming complete removal of the microcalcification cluster and all fractured wire segments.

[P-424]

The role of open surgery in recurrent inguinal hernia after laparoscopic primary repair: Is national data needed?

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[2]*ENKA Schools, İstanbul*

Objective: Recurrences following laparoscopic inguinal hernia repair (TEP/TAPP) remain a significant clinical challenge in surgical practice. Although anterior open repair is frequently preferred in this patient group, the existing literature largely consists of small case series, with insufficient national-level data regarding technical preferences, complication profiles, and long-term outcomes. This study aims to share our single-center experience and lay the groundwork for a multicenter national study.

Material and Methods: Patients who had previously undergone laparoscopic inguinal hernia repair and subsequently required open surgery for recurrence at Koç University Hospital between 2020 and 2025 were retrospectively reviewed. Demographic data, type of primary repair, side of recurrence, open repair technique employed, complications, and recurrence status during follow-up were recorded.

Results: Seven patients were included (mean age: 64.1±6.9; all male). Six patients had undergone TEP and one had undergone TAPP as the primary procedure. The distribution of recurrences was four right-sided, two left-sided, and one bilateral. Lichtenstein repair was performed in six patients and Shouldice technique in one. In one patient, the procedure was initiated laparoscopically and converted to open surgery. Mean operation duration was 114.3±37.1 minutes. Postoperatively, one patient developed hematoma and one developed orchitis. Median follow-up was 24 months (IQR: 5-42), with no re-recurrence detected in any patient.

Conclusion: Anterior open repair is a viable option for recurrent inguinal hernia following laparoscopic primary repair, with acceptable re-recurrence rates in the short-to-medium term; however, complication rates should not be overlooked. The existing literature on surgical management of recurrent inguinal hernia predominantly addresses recurrences after open primary repair. A multicenter, national-scale retrospective study is needed to reliably characterize complication predictors, technical preferences, and long-term re-recurrence rates. The data presented herein serve as a preliminary study toward this goal, with the aim of establishing a collaborative protocol.

Keywords: Inguinal hernia, recurrence, laparoscopy

[P-425]

An innovative approach in the management of hepatic hydatid cysts: Laparoscopic PAIR

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Objective: The liver is the most commonly affected organ in hydatid disease. Although not every hepatic hydatid cyst requires intervention, surgery has traditionally been regarded as the standard treatment. In recent decades, minimally invasive techniques with outcomes comparable to open surgery have increasingly been adopted.We present a modified minimally invasive approach termed laparoscopic PAIR for selected hepatic hydatid cysts. In conventional practice, percutaneous puncture-aspirate-inject-reaspirate (PAIR) is performed under ultrasonographic guidance by interventional radiologists, provided that an adequate thickness of hepatic parenchyma overlies the cyst. Cysts lacking this safety margin are typically referred for surgery. In such cases, we perform PAIR under laparoscopic guidance in the operating room under general anesthesia. The procedural steps mirror classical PAIR, but visualization is achieved laparoscopically rather than with ultrasonography.

Material and Methods: With the patient in the supine position, pneumoperitoneum was established via an infraumbilical trocar. After diagnostic laparoscopy, additional trocars (one 10-mm and two accessory ports; total three trocars) were placed according to cyst location. Following careful isolation of the operative field, puncture, aspiration, injection of scolicidal agent, and re-aspiration were performed in accordance with the standard PAIR technique. Puncture was intentionally made at the dome of the cyst. Only Gharbi type I and II cysts were included. All patients received albendazole at 15 mg/kg/day for at least 20 days preoperatively.

Results: Over a 13-month period, laparoscopic PAIR was performed in 7 patients with a total of 11 cysts. Three patients were female and four were male; mean age was 48.3±15.9 years. Seven cysts were located in the right lobe and four in the left lobe. Mean cyst diameter was 91.2±24.3 mm. Mean operative time was 118.6±15.5 minutes, and mean hospital stay was 3.3±2.3 days.Routine drainage was not performed; drains were placed selectively when minimal leakage was suspected. Drain output was typically serous, and no viable or non-viable scolices were detected. Four patients underwent simultaneous treatment of two cysts. No anaphylaxis, infection, bile leakage, or recurrence occurred. One case required conversion to laparoscopic unroofing.

Conclusion: Laparoscopic PAIR appears to be a feasible and safe alternative for selected hepatic hydatid cysts unsuitable for percutaneous intervention. The absence of major complications in this preliminary series may relate to controlled operating room conditions and direct laparoscopic visualization. Larger comparative studies are warranted.

Keywords: Hydatid cyst, puncture-aspiration-injection-reaspiration (PAIR), minimally invasive surgical procedures

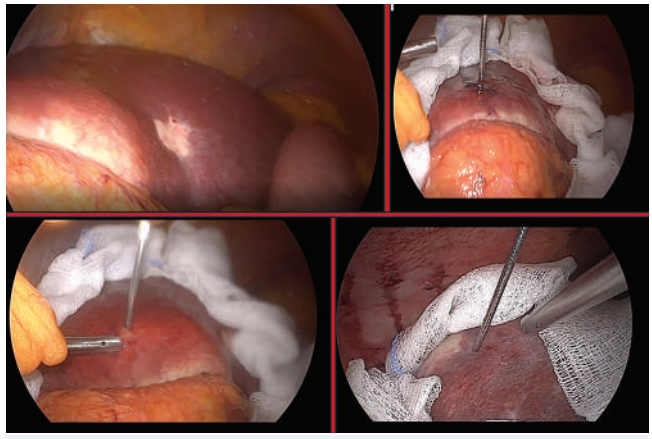


Figure 1. Intraoperative image.

[P-426]

Is routine drain placement necessary in acute appendicitis? A single-center retrospective study

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Objective: Acute appendicitis is one of the most common causes of emergency abdominal surgery, and appendectomy remains one of the most frequently performed emergency surgical procedures. Intraoperative drain placement has traditionally been used during appendectomy to prevent postoperative intraabdominal infections and fluid collections. However, the routine use of drains remains controversial. Recent studies suggest that routine drain placement does not significantly reduce postoperative complications and may be associated with prolonged hospital stay. Despite this, drain usage is still commonly preferred, particularly in cases of complicated appendicitis, and there is no clear consensus regarding its necessity. The aim of this study was to evaluate the impact of intraoperative drain use on postoperative outcomes in patients undergoing surgery for acute appendicitis.

Material and Methods: A total of 50 patients who underwent appendectomy for acute appendicitis over a one-year period were included in this retrospective study. Patients were divided into two groups according to intraoperative drain usage: drain group and no-drain group. Demographic characteristics, type of appendicitis (complicated or uncomplicated), drain usage, duration of hospital stay, postoperative fever, and reoperation rates were analyzed and compared between the two groups.

Results: Drain placement was performed in 23 patients (46%), while 27 patients (54%) did not receive a drain. The mean length of hospital stay was 3 days in the drain group and 1.8 days in the no-drain group. Patients who received a drain had a longer hospital stay compared to those without drains. Reoperation rates were similar between the two groups, and no clear reduction in reoperation or postoperative complications was associated with drain usage. Postoperative fever rates did not differ significantly between groups. Drain placement was more frequently preferred in cases of complicated appendicitis.

Conclusion: Odur findings suggest that routine drain placement during appendectomy for acute appendicitis does not provide a significant benefit in reducing postoperative complications and may be associated with prolonged hospital stay. Therefore, drain usage should not be routine and should be selectively applied based on intraoperative findings and patient characteristics. Further prospective studies with larger patient populations are needed to support these findings.

Keywords: Acute appendicitis, drain placement, appendectomy, postoperative complications, length of hospital stay

[P-427]

Retrospective analysis of repair using the TEPP and TAPP techniques in patients diagnosed with bilateral inguinal hernia

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Objective: There are many techniques available for the surgery of patients diagnosed with bilateral inguinal hernia. Laparoscopic techniques have many advantages over open surgical techniques. Less pain after surgery, smaller incisions, and less tissue trauma. Rapid recovery and return to work; most patients can return to daily activities within 1 week. Cosmetically superior, with smaller and more aesthetic scars. An advantage in bilateral hernias is that both sides can be repaired in a single session. Advantageous in recurrent hernias, especially if a hernia has recurred after open surgery. The only disadvantages are the need for general anesthesia and higher costs. Advantages of laparoscopic techniques over open surgical techniques.

Material and Methods: The files of patients diagnosed with bilateral inguinal hernia who underwent laparoscopic total extraperitoneal (TEP) and laparoscopic transabdominal preperitoneal (TAPP) surgery at Ataşehir Florence Nightingale Hospital between September 2022 and December 2025 were retrospectively reviewed. Patients were evaluated in terms of their surgery, postoperative data, and demographic characteristics. The data of patients operated on with these two techniques were compared with each other.

Results: A total of 77 patients were examined in this study. Of these patients, 55 (71.43%) underwent surgery using the laparoscopic TEP technique, and 22 patients (28.57%) underwent surgery using the laparoscopic TAPP technique. The reason for surgery using the TAPP technique was due to previous lower abdominal surgery in these patients. Of the 55 patients who underwent TEP, 20 (36.3%) were female and 35 (63.7%) were male, with an average age of 36.3 years. All 55 patients had a bilateral inguinal diagnosis. The average hospital stay was 1.07 days for the TEP technique and 1.23 days for the TAP technique. Ecchymosis was observed in 3 patients in the TEP technique and 2 patients in the TAP technique. Postoperative seroma was observed in 3 patients with the TEP technique and in 1 patient with the TAP technique. Wound site infection was observed in 1 patient with the TEP technique and in 2 patients with the TAP technique. There were no bilateral recurrences with either technique. Unilateral recurrence was observed in 2 patients with the TEP technique and in 1 patient with the TAP technique.

Conclusion: No significant difference was observed between laparoscopic TEP and laparoscopic TAPP hernia repair in terms of superiority. It is considered appropriate to decide which method to use based on the surgeon's experience and the patient's surgical history.

Keywords: Bilateral inguinal herni, TEP, TAPP

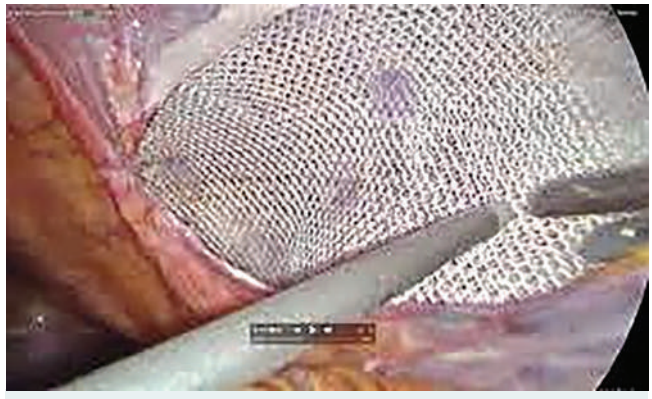


Figure 1. Retrospective analysis of repair using the TEPP and TAPP techniques in patients diagnosed with bilateral inguinal hernia.

[P-428]

Characteristics of recurrent gastrointestinal tumors

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Objective: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors originating from the gastrointestinal system. They originate from the precursors of the interstitial Cajal cells, located in and around the myenteric plexus, which regulate peristalsis. They are most commonly seen in the stomach, and less frequently in the small intestine, colon, rectum, and omentum.

Material and Methods: This article evaluates the gender, medical treatment use, age, tumor localization, elective/emergency status, time of recurrence, and follow-up period of 9 patients who experienced recurrence among 75 GIST patients treated between 2009 and 2025.

Results: Recurrence occurred in 75 patients (12%), 5 of whom were female and 4 male. All were receiving medical treatment for GIST. The mean age at the time of their first surgery for GIST was 61.5 (49-68). The primary tumor locations were jejunum, stomach, ileum, colon, and rectum. Seven patients (78%) underwent elective surgery, and two patients (22%) underwent emergency surgery. The mean time to recurrence was (26.3±23.8) months, and the mean follow-up period was 65 months.

Conclusion: In this study, the GIST recurrence rate was found to be 12%, and the mean time to recurrence was 26 months.

Keywords: GIST, gastrointestinal stromal tumor, surgical oncology

[P-429]

Comparison of short and long term outcomes of surgical technique selection in distal rectal cancer

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Objective: The diagnosis and treatment of rectal cancer constitute a complex process requiring a multidisciplinary approach. Although there are certain differences between APR and ULAR in terms of clinical and surgical outcomes, tumor location, extent of invasion, and surgeon experience play key roles in patient selection. With advances in surgical techniques, both quality of life and oncological outcomes have improved. The choice of surgical method should be individualized in order to achieve optimal benefit for each patient.

Material and Methods: We compared the preoperative and postoperative outcomes of abdominoperineal resection and ultra-low anterior resection, performed in 63 patients aged 29-82 years who underwent surgery for rectal cancer at our clinic between 2015 and 2024, with each other and with the existing literature.

Results: Clinical and demographic differences were observed between APR and LAR surgical techniques; however, no statistically significant differences were found between the groups in terms of age (APR: 59.73±9.73; LAR: 59.48±14.11; p=0.935), sex distribution (APR: 72.50% male; LAR: 91.30% male; p=0.146), or BMI categories (p=0.149). Histopathological evaluation demonstrated similar rates of lymphatic invasion (APR: 58.97%; LAR: 63.64%; p=0.932), venous invasion (APR: 56.41%; LAR: 54.55%; p=1.000), and perineural invasion (APR: 38.46%; LAR: 36.36%; p=1.000) between the groups. Bowel obstruction was observed in 7.89% of APR patients and 13.04% of LAR patients (p=0.833). Stoma retraction occurred only in the APR group at a rate of 3.03% (p=1.000), whereas parastomal hernia was detected only in the LAR group at a rate of 10% (p=0.268). Regarding surgical approach, the open/laparoscopic surgery rates were 40%/60% in the APR group and 30.43%/69.57% in the LAR group (p=0.626). The distal surgical margin measured 4.00 (2.5-5.25) cm in APR patients and 2.00 (1.25-2.75) cm in LAR patients, demonstrating a statistically significant difference (p=0.008). Furthermore, the absence of local recurrence in any patient may be associated with improvements in surgical technique and increased surgical experience.

Conclusion: In patients with distal rectal cancer undergoing abdominoperineal resection or ultra-low anterior resection, no significant difference in oncological outcomes has been observed, consistent with the literature, and the choice of surgical technique appears to depend mainly on tumor localization and patient characteristics. Therefore, current approaches favor individualized treatment strategies that consider patient comfort and functional outcomes, with minimally invasive surgical techniques preferred whenever feasible to achieve optimal results.

Keywords: Cancer, rectum, surgical technique

[P-430]

Surgical and endoscopic treatment of colonic volvulus: our clinical experience and results, Bartın State Hospital

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Objective: Colon volvulus is an acute abdominal condition requiring prompt diagnosis and treatment. The treatment approaches, morbidity, mortality, and recurrence rates of cases operated on at Bartın State Hospital between 2010 and 2024 were evaluated and compared with the literature.

Material and Methods: Thirty-six patients diagnosed with KV and treated over a 10-year period were retrospectively examined. Age, gender, preoperative WBC, lactate, and CRP levels, colon diameter on abdominal CT (APCT), treatment protocols,morbidity and mortality rates, and recurrence at 1-year follow-up were compared. Twenty-five (69.4%) were female and 11 (30.6%) were male, with a mean age of 78 (range 48-95). Twenty-five (69.4%) had comorbidities (CVA, HT, DM, or severe CHF). Abdominal pain, distension, constipation, and vomiting were the most common symptoms. Approximately half of the cases had a history of previous attacks. ADBG (we believe it is not a definitive diagnostic tool due to its low sensitivity) was used to diagnose 70% of the cases, while APCT (superior to ADBG for diagnosis) was performed on all patients. Colon diameter was found to be 6-10 cm in those who underwent endoscopic procedures and ≥10 cm in those who underwent resection. Sigmoid colon volvulus was detected in 34 patients, cecal volvulus in 1 patient, and transverse colon volvulus in 1 patient.

Results: Surgical treatment was performed on 22 patients: 12 (54%) underwent resection and colostomy, 5 (22%) underwent resection and anastomosis (in patients with good general condition), 2 (9%) underwent detorsion, 1 (4%) underwent right hemicolectomy + ileotransversostomy (in cecal volvulus), 1 (4%) underwent detorsion and sigmoidopexy, and 1 (4%) underwent transverse colon resection and anastomosis. The remaining 14 patients were treated with endoscopic decompression. The mortality rate was 5.5% (2 patients, due to necrosis and delayed diagnosis). Endoscopic decompression was recorded at 20% and postoperative recurrence rates at 25%. Delayed presentation to the emergency department, high WBC, lactate, and CRP levels increased the need for resection. Emergency decompression and elective sigmoid resection resulted in low mortality; however, emergency resection in the presence of gangrene or perforation was associated with increased mortality and morbidity rates.

Conclusion: In the treatment of colonic volvulus, endoscopic interventions are the preferred choice in uncomplicated cases. Surgical treatment is required in patients with necrosis, perforation, or a transverse colon diameter >11 cm. Sigmoidopexy may be an appropriate option in cases without shock or necrosis. In patients with stable general condition, endoscopic decompression should be the first choice; however,in cases of gangrene, ischemia, or perforation, surgical intervention is mandatory along with optimal fluid resuscitation and preoperative preparation.

Keywords: Colonic volvulus, endoscopic decompression, sigmoidopexy

[P-431]

Obstructive defecation syndrome is a spectrum: Diagnosis-based surgical algorithm

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Objective: Obstructive defecation syndrome (ODS) represents a heterogeneous clinical spectrum in which rectal prolapse, rectocele, and functional impairment coexist in varying degrees. This study aimed to determine the diagnostic surgical approach, the percentage distribution of the methods used, and the preferred surgeries after recurrence in patients who underwent surgery due to ODS.

Material and Methods: Retrospectively, a total of 44 patients who underwent surgical treatment for ODS at our clinic were evaluated. Patients were grouped according to the predominant anatomical pathology as rectal prolapse, pelvic relaxation, and rectocele. The surgical methods applied in each diagnostic group were analyzed in terms of number and percentage. In addition, secondary surgeries performed in patients who experienced recurrence after primary surgery were recorded.

Results: Of the 23 patients diagnosed with rectal prolapse, 82.6% underwent laparoscopic ventral mesh rectopexy (LVMR). In the remaining patients, altemeier (4.3%), laparoscopic suture rectopexy (4.3%), LAR + laparoscopic suture rectopexy (4.3%), and delorme (4.3%) procedures were preferred. Of the 14 patients diagnosed with pelvic organ prolapse, 85.7% underwent LVMR and 14.3% underwent ventral mesh rectopexy (VMR). In the 7 patients diagnosed with rectocele, all surgical approaches were transperineal rectocele repair; 42.9% used the mesh technique and 57.1% used the non-mesh technique. Three patients who developed recurrent ODS after LVMR or VMR underwent secondary surgery: two patients underwent stapler transanal rectal resection (STARR), and one patient underwent transperineal rectocele repair (without mesh). In one case where laparoscopic suture rectopexy was performed, full-thickness rectal injury developed intraoperatively, and primary repair was performed. This same patient underwent re-operation via laparotomy on the third day due to early postoperative bleeding. In one patient who underwent Delorme surgery, ileus and anal stricture developed, requiring emergency colostomy followed by elective LAR. In one patient who underwent LVMR, an enterocutaneous fistula developed, and fistula repair was performed via elective surgery.

Conclusion: ODS is not a homogenous disease that can be treated with a single surgical technique. The surgical approach should be individualized according to the dominant anatomical and functional phenotype of the disease, rather than isolated diagnoses. A diagnosis-based algorithmic approach facilitates the selection of appropriate surgery and contributes to the determination of rational secondary surgical strategies in cases of recurrence.

Keywords: Obstructive defecation syndrome (ODS), rectal prolapse, rectocele

Table 1. Surgical methods applied according to diagnosis

Diagnosis	Surgical method	n	%
Rectal prolapse (n=23)	LVMR	19	82.6
	Altemeier	1	4.3
	Laparoscopic suture rectopexy	1	4.3
	LAR + laparoscopic suture rectopexy	1	4.3
	Delorme	1	4.3
Pelvic organ prolapse (n=14)	LVMR	12	85.7
	VMR	2	14.3
Rectocele (n=7)	TP rectocele repair (with mesh)	3	42.9
	TP rectocele repair (without mesh)	4	57.1

In 3 patients who developed recurrent obstructive defecation syndrome after LVMR or VMR, secondary surgery was performed: STARR (Stapler Transanal Rectum Resection) in 2 patients and transperineal rectocele repair (without mesh) in 1 patient.

[P-432]

Retrospective analysis of patients operated on due to intestinal obstruction

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Objective: Mechanical intestinal obstruction is a surgical problem that still presents difficulties in terms of diagnosis and treatment modalities today. In this study, we aimed to examine the etiological analysis of our cases operated on due to intestinal obstruction.

Material and Methods: A retrospective analysis was performed on 54 patients who were admitted to our clinic with a diagnosis of intestinal obstruction between January 2019 and December 2023, and who underwent surgery after a mechanical cause was found through necessary physical examination and imaging methods. The patients' gender, age, cause of obstruction, previous surgeries (if any), postoperative complications, and mortality rates were recorded.

Results: Of the patients operated on, 30 were male and 24 were female. The average age of men was 55 and that of women was 50. The overall average age was 52, and the age range was determined as (20-95). When the causes of obstruction were examined, the most common waspostoperative adhesions (42 patients, 77.7%), followed by incarcerated hernias (inguinal and incisional, 6 patients, 11.1%), tumors (5 patients, 9.2%), and volvulus (1 patient, 1.8%). When the most frequent cause of adhesions was examined, it was determined that they were caused by previous operations (ulcus perforation, cholecystectomy, gastrectomies, gynecological operations, and appendectomy). The necessary surgical procedure was applied to the patients according to the cause of intestinal obstruction. The most important criterion affecting mortality and morbidity in patients was the timing of intervention and appropriate resuscitation performed preoperatively. Our complication rate in the postoperative period was 16.6%, and mortality was 5.5%. The most frequently encountered problems, especially in delayed cases, were infection (7.4%), paralytic ileus (3.7%), and anastomotic problems (5.5%).

Conclusion: In conclusion, when examining the causes of mortality and morbidity in intestinal obstruction, it was emphasized that early and accurate diagnosis, good preoperative resuscitation, and prompt surgery of patients presenting with mechanical intestinal obstruction are important in minimizing complications and mortality, and preventing intestinal damage.

Keywords: A retrospective analysis of experience in intestinal obstructions

[P-433]

Early outcomes of laser hemorrhoidoplasty in our series

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Objective: Hemorrhoidal disease is one of the most common anorectal disorders worldwide and significantly affects individuals' quality of life. It is among the most frequently encountered conditions in patients presenting to general surgery outpatient clinics. Treatment options include medical management, minimally invasive interventions, and surgical procedures. This study aimed to evaluate the early outcomes of patients who underwent laser hemorrhoidoplasty in our clinic.

Material and Methods: The data of patients who underwent laser hemorrhoidoplasty for hemorrhoidal disease in our clinic between January 2025 and January 2026 were retrospectively analyzed. Treated patients were evaluated in terms of demographic characteristics, clinical features, operative details, and postoperative outcomes. A one-year follow-up was also analyzed.

Results: A total of 25 patients who underwent laser hemorrhoidoplasty for hemorrhoidal disease were included in the study. Of these, 19 were male and 6 were female, with a mean age of 50.6 years. Seventeen patients had grade III and 8 patients had grade II hemorrhoidal disease. The mean number of hemorrhoidal packages per patient was 2. Laser hemorrhoidoplasty was performed on each package using an average of 6-8 applications, with a power of 6 watts and a total energy of 18 joules per package. The mean hospital stay was 1 day, and no postoperative pain was observed. At the one-year follow-up, patients were re-evaluated, and persistent symptoms were noted in 5 patients. The gender, hemorrhoid stage, and one-year post-treatment symptom status of the 25 patients included in the study are presented as percentages

Conclusion: Laser hemorrhoidoplasty is a minimally invasive technique used in the surgical management of hemorrhoidal disease. Consequently, in appropriately selected patients, it can be considered a safe and effective treatment option, offering a short postoperative recovery period and minimal or no pain, thereby providing a comfortable therapeutic approach.

Keywords: Hemorrhoidal disease, laser hemorrhoidoplasty, recovery period

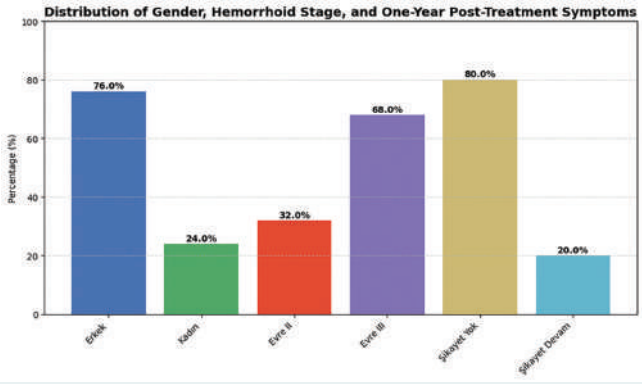


Figure 1. The gender, hemorhoid stage, and one-year post-treatment symptom status of the 25 patiens included in the study are presented as percentages.

[P-434]

The importance of laboratory parameters in the development of perianal fistula following perianal abscess

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Objective: Perianal fistula development after perianal abscess is common and increases patient morbidity. This study aimed to evaluate the potential role of inflammatory and hematological laboratory parameters at the time of admission in predicting perianal fistula development in patients presenting with perianal abscess.

Material and Methods: This retrospective, single-center study included 15 patients who underwent surgical drainage for perianal abscess at Hacettepe University between 2020 and 2025. Patients were followed for one year and divided into two groups according to the development of perianal fistula: Those who developed fistula (n=11) and those who did not (n=4). Demographic characteristics, including age, sex, and presence of diabetes mellitus, were recorded. Laboratory parameters at admission included white blood cell count, neutrophil and lymphocyte counts, C-reactive protein (CRP), neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR), and mean platelet volume (MPV). Data were analyzed using descriptive statistics.

Results: The mean age of the patients was 44.5 years, and 11 patients (73.3%) were male. During the follow-up period, perianal fistula developed in 73.3% of the patients. Higher white blood cell count, CRP, and NLR values were observed in patients who developed fistula. When a CRP cut-off value of 10 mg/L was applied, the majority of patients who developed fistula had CRP levels above this threshold. The mean CRP level in the fistula group was approximately 12 mg/L, and the mean NLR was 6.90. In contrast, patients without fistula development had lower CRP and NLR values. Changes in neutrophil and lymphocyte counts were consistent with the observed increase in NLR. No marked differences were observed between the groups in terms of PLR and MPV.

Conclusion: Elevated inflammatory laboratory parameters at admission in patients presenting with perianal abscess may serve as risk indicators for subsequent perianal fistula development. In particular, CRP ≥10 mg/L and elevated NLR appear to be practical and easily applicable parameters that may contribute to clinical decision-making. Prospective studies with larger patient cohorts are needed to further clarify the clinical utility of these findings.

Keywords: Perianal abscess, perianal fistula, C-reactive protein

[P-435]

Short- and mid-term outcomes of laser hemorrhoidoplasty: A single-center experience

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Objective: Introduction hemorrhoidal disease is a common anorectal condition that significantly affects quality of life. Conventional surgical techniques are often associated with postoperative pain and prolonged recovery. Laser hemorrhoidoplasty has emerged as a minimally invasive alternative in recent years. This study aimed to evaluate the short- and mid-term clinical outcomes of laser hemorrhoid surgery.

Material and Methods: This retrospective, single-center study included 32 patients with grade I-III hemorrhoidal disease who underwent laser hemorrhoidoplasty. Demographic characteristics, postoperative pain (VAS), length of hospital stay, time to return to daily activities, postoperative bleeding, patient satisfaction, recurrence, and reoperation rates were analyzed. Data were obtained from medical records and telephone-based patient-reported outcomes. Descriptive statistical analysis was performed.

Results: The mean age was 46.3±14.1 years, and 71.9% of patients were male. Grade II-III hemorrhoidal disease was present in 81.2% of cases. The median postoperative VAS score was 2 (IQR: 0-3), with 78.1% of patients reporting VAS ≤3. Median length of hospital stay was 1 day, and median time to return to daily activities was 2 days. Postoperative bleeding occurred in only two patients, both of whom required early reoperation (6.3%). Additionally, six patients underwent reoperation due to recurrent hemorrhoidal symptoms (18.8%). Patient satisfaction was 90.6%, and 87.5% of patients would recommend the procedure. The recurrence rate was 25%.

Conclusion: Laser hemorrhoidoplasty provides low postoperative pain and rapid recovery. Although postoperative bleeding and reoperation rates require careful consideration, high patient satisfaction supports the feasibility of this technique in clinical practice.

Keywords: hemorrhoidal disease, laser hemorrhoidoplasty, minimally invasive surgery

[P-436]

Clinical outcomes of crystallized phenol application in patients with uncomplicated pilonidal sinus disease

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Objective: Pilonidal sinus disease commonly affects young and active individuals and may result in considerable discomfort and work absenteeism. Although surgical techniques remain effective, they are associated with postoperative morbidity and extended recovery periods. Consequently, minimally invasive and outpatient treatment modalities have gained growing interest.

Material and Methods: In this retrospective study, 110 patients with uncomplicated pilonidal sinus disease containing a maximum of two pits were included. Twenty-seven patients (24.5%) were female and 83 (75.5%) were male, with a mean age of 24 years. Local anesthesia was achieved using lidocaine infiltration prior to the procedure. In patients with narrow sinus openings preventing clamp insertion, minimal incision was performed to widen the orifice. After mechanical curettage and removal of hair and debris, crystallized phenol was liquefied near body temperature and applied at an 80% concentration into the cavity. The mean procedure time was 10 minutes. No routine prophylactic antibiotics were administered. The first follow-up visit was scheduled 15-20 days after the initial session, and all patients were followed for 6 months.

Results: During the 6-month follow-up, recurrence was observed in 25 patients (22.7%), while 85 patients (77.3%) remained recurrence-free. Among the recurrence group, 16 patients (64%) had two pits. Single-session treatment was sufficient in 35 patients (31.8%). Complications included abscess formation in 7 patients (6.4%) and transient severe sacral pain in 2 patients (1.8%). Abscess cases were successfully managed with antibiotics and drainage.

Conclusion: Crystallized phenol application appears to be an effective, safe, and minimally invasive treatment option for uncomplicated pilonidal sinus disease when appropriate patient selection is applied. The short mean procedure time of 10 minutes, outpatient feasibility, and the absence of routine antibiotic requirement represent significant clinical advantages. The observed success rate of 77.3% and the manageable complication profile support the clinical applicability of this technique. An increased number of pits may be associated with a higher risk of recurrence. These findings suggest that crystallized phenol can be considered a viable alternative to surgical treatment in selected patients. Nevertheless, prospective and comparative studies with longer follow-up periods are required to further validate these results.

Keywords: Pilonidal sinus, crystallized phenol, minimally invasive treatment



Figure 1. A patient with a single pit treated with phenol.

Table 1. Patient demographic characteristics (n=110)
Variable value
Total number of patients 110
Female 27 (24.5%)
Male 83 (75.5%)
Mean age (years) 24
Follow-up duration 6 months

Table 2. Clinical outcomes
Parameter value
Recurrence-free 85 (77.3%)
Recurrence 25 (22.7%)
Single-session success 35 (31.8%)
Abscess formation 7 (6.4%)
Transient severe sacral pain 2 (1.8%)
Overall complication rate (8.2%)

[P-437]

Breast hamartoma as a rare benign entity: Surgical outcomes, risk factors for concomitant malignancy, and follow-up results: A single-center retrospective study

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Objective: Breast hamartomas are rare benign breast lesions with diagnostic challenges in imaging and histopathology. There is no consensus on the optimal management or follow-up strategy following excisional biopsy. The aim of our study was to evaluate the follow-up data of patients who were diagnosed with breast hamartoma by excisional biopsy in our center.

Material and Methods: This retrospective study included patients diagnosed with breast hamartoma after excisional biopsy between 2018 and 2024. Demographic, clinical, surgical, and pathological characteristics, along with follow-up outcomes, were analyzed.

Results: A total of 23 female patients (median age 46 years) were included. The most common symptom was a palpable mass (56%), and 30% were referred after lesion detection in screening. Radiological imaging revealed that 17 patients (72%) were categorized as BI-RADS 4a. Preoperative core biopsy showed fibroepithelial lesions in 52% of patients. Lumpectomy was performed in 21 patients, while the remaining two patients underwent reduction mammoplasty. The median lesion size was 40 mm. During a median follow-up of 42 months, no recurrence, *in situ* carcinoma, or breast cancer was observed.

Conclusion: Breast hamartomas exhibit a benign course, and no malignancy was detected during follow-up. Routine breast cancer screening protocols appear sufficient for these patients, and no additional follow-up strategy is necessary post-excision.

Keywords: Benign breast lesion, breast cancer risk, hamartoma

[P-438]

Clinical, biochemical, and surgical characteristics of patients with pheochromocytoma: A single-center retrospective study

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Objective: Pheochromocytoma is a rare endocrine tumor that requires a multidisciplinary approach due to its variable clinical presentation and challenges in perioperative management. This study aims to descriptively evaluate the demographic, clinical, biochemical, and surgical characteristics of patients who underwent surgery with a diagnosis of pheochromocytoma.

Material and Methods: Twenty-five patients who underwent surgical treatment for pheochromocytoma at our center were included in this retrospective descriptive study. Demographic data, admission findings, hypertension characteristics, biochemical diagnostic methods, tumor characteristics, preoperative preparation process, surgical approach, perioperative complications, and follow-up results were recorded. Continuous variables were presented as median and minimum-maximum values, while categorical variables were presented as numbers and percentages.

Results: The median age of the patients was 57 years; 72% were female, and 72% were classified as ASA III. The most common findings at admission were hypertension (44%) and incidentaloma (40%), while the distribution of symptoms included headache (40%), palpitations (40%), and sweating (32%). Sustained hypertension was observed in 84% of patients, while paroxysmal hypertension occurred in 16%. Diagnosis was established via plasma metanephrines in 52% and 24-hour urine analysis in 48% of cases; median metanephrine was 385.0 (min-max 4.4-4111.0), and median normetanephrine was 1400.0 (min-max 61.0-42880.0). While 48% of patients had a diagnosis of pheochromocytoma preoperatively, 52% were not preoperatively predicted. Of the tumors, 68% were located in the right adrenal gland with a median diameter of 40 mm (14-120); extra-adrenal localization was detected in 4%. In preoperative preparation, alpha-blockade was administered to 60% (median duration 20 days, 0-150) and beta-blockade to 40%. The surgical approach consisted of laparoscopic (56%) and open adrenalectomy (44%), with a median operative time of 120 minutes (45-315). Intraoperative hypertensive crisis occurred in 12%, while postoperative complications were observed in only one patient (Clavien-Dindo 3A); the median hospital stay was 6 days (3-11). Resolution of hypertension was achieved in 76% of patients postoperatively. No malignancy/metastasis, recurrence, or mortality was detected during a median follow-up of 21 months (2-32) (Table 1).

Conclusion: This retrospective series confirms the heterogeneous clinical presentation of pheochromocytoma, frequently manifesting as incidentalomas or via atypical symptoms. Nevertheless, guideline-concordant preoperative medical optimization and surgical management maintained low rates of intraoperative hypertensive crises and postoperative complications. The safe, frequent utilization of laparoscopic adrenalectomy aligns with the documented efficacy of minimally invasive surgery. Furthermore, postoperative hypertension resolution in most patients, alongside the absence of recurrence or mortality, underscores the favorable outcomes attainable in specialized centers. These descriptive findings emphasize the critical role of early diagnostic suspicion, meticulous preoperative preparation, and multidisciplinary management in pheochromocytoma care (Table 2).

Keywords: Adrenal tumor, adrenalectomy, hypertension, metanephrine, pheochromoc

Table 1. Demographic, clinical, biochemical, and surgical characteristics of patients with pheochromocytoma

PARAMETRE	AÇIKLAMA / BİRİM
Hasta sayısı	25
Yaş (yıl)	52.7 ± 13.4; medyan 57.0 [45.0–62.0] (min–maks 25.0–75.0)
Cinsiyet	Erkek: 7 (28%); Kadın: 18 (72%)
ASA	ASA II: 7 (28%); ASA III: 18 (72%)
Baskın başvuru bulgusu	Hipertansiyon: 11 (44%); Baş ağrısı: 3 (12%); Çarpıntı: 1 (4%); İnsidentaloma: 10 (40%)
Paroksismal hipertansiyon	Yok: 21 (84%); Var: 4 (16%)
Sürekli hipertansiyon	Yok: 4 (16%); Var: 21 (84%)
Baş ağrısı	Yok: 15 (60%); Var: 10 (40%)
Çarpıntı	Yok: 15 (60%); Var: 10 (40%)
Terleme	Yok: 17 (68%); Var: 8 (32%)
Tanı testi	Plazma metanefrin: 13 (52%); 24 saat idrar: 12 (48%)
Metanefrin düzeyi	n=25; medyan 385.0 [65.0–1196.0] (min–maks 4.4–4111.0)
Normetanefrin düzeyi	n=25; medyan 1400.0 [737.0–5352.0] (min–maks 61.0–42880.0)
Preop feokromasitoma tanısı	Hayır: 13 (52%); Evet: 12 (48%)
Genetik test	Yapılmadı: 15 (60%); Pozitif: 4 (16%); Negatif: 6 (24%)
Tümör tarafı	Sağ: 17 (68%); Sol: 8 (32%)
Tümör çapı (mm)	40.0 [31.0–60.0] (min–maks 14.0–120.0)
Ekstra-adrenal (paraganglioma)	Hayır: 24 (96%); Evet: 1 (4%)
Malign/metastatik	Hayır: 25 (100%)
Preop alfa-blokaj	Hayır: 10 (40%); Evet: 15 (60%)
Alfa-blokaj süresi (gün)	20.0 [20.0–20.0] (min–maks 0.0–150.0)
Beta-blokaj	Hayır: 15 (60%); Evet: 10 (40%)
Cerrahi yaklaşım	Açık: 11 (44%); Laparoskopik: 14 (56%)
Ameliyat süresi (dk)	120.0 [120.0–175.0] (min–maks 45.0–315.0)
İntraop hipertansif kriz	Yok: 22 (88%); Var: 3 (12%)
Postop komplikasyon	Yok: 24 (96%); Var: 1 (4%)
Clavien–Dindo	0: 24 (96%); 3A: 1 (4%)
Hastanede yatış süresi (gün)	6.0 [4.0–7.0] (min–maks 3.0–11.0)
Postop hipertansiyonun düzelmesi	Hayır: 6 (24%); Evet: 19 (76%)
Nüks	Hayır: 25 (100%); Evet: 0 (0%)
Takip süresi (ay)	21.0 [11.0–25.0] (min–maks 2.0–32.0)
Takipte mortalite	Hayır: 25 (100%); Evet: 0 (0%)

Table 2. Comparison of the current study with contemporary and reliable literature

ÇALIŞMA (YAZAR, YIL)	TASARIM / ÖRNEKLEM	LİTERATÜRDE RAPORLANAN ANA BULGU	ÇALIŞMAMIZ (n=25)	BİZİM SERİ İLE YORUM
Bojoga ve ark., 2024	UK çok merkezli ulusal veri; **2007** PPGL operasyonu	Operasyonların **%69'u laparoskopik**; **medyan yatış 4 gün**; merkezlerin **%48'inde** periop protokol var; alfa-blokajda phenoxybenzamine sık tercih.	Laparoskopik **%56**; yatış **medyan 6 gün [4–7]**	Bizde laparoskopik oranı yüksek; yatış süresi UK verisine göre daha uzun
Wang ve ark., 2023	Sistematik derleme + güncel meta-analiz	**Preop α-blokaj**, "α-blokaj yok"a kıyasla **daha stabil intraop hemodinami** veya **daha iyi periop sonuç** sağlamamış; daha güçlü RCT lere ihtiyaç vurgulanıyor.	Alfa-blokaj **%60**; intraop hipertansif kriz **%12**; postop komplikasyon **%4**	Literatürde α-blokajın sonuçlara etkisi tartışmalı; bizim seride düşük komplikasyon ve kriz oranları, uygun seçilmiş hastalarda/iyi anestezi-cerrahi koordinasyonunda güvenli sonuçlar elde edilebildiğini destekler
Bojoga ve ark., 2024 (PMC tam metin)	UK uygulama analizi (PPGL cerrahisi)	"2016 sonrası" dönemde yatış süresinin azaldığı; **medyan 3–4 gün** düzeylerinin raporlandığı belirtiliyor.	Yatış **medyan 6 gün**	Bizde yatış daha uzun; bu, olası daha temkinli takip, komorbidite dağılımı (ASA III oranı yüksek) olabilir
Fagundes ve ark., 2022	Güncel derleme (perioperatif yönetim)	Cerrahi/anestezi yönetimindeki gelişmelerle fonksiyone PPGL cerrahisinde mortalitenin **yaklaşık %0–2.9** aralığına gerilediği vurgulanıyor.	Mortalitenin olmaması **(%0)**	Serimizin mortalitesiz seyri, güncel derlemelerdeki "düşük mortalite" çerçevesiyle uyumlu; tek merkez küçük seri olduğundan genellenebilirlik sınırlıdır.
Taïeb ve ark., 2023	Klinik konsensüs/guideline	PPGL yönetiminde biyokimyasal tanı, görüntüleme, genetik değerlendirme ve perioperatif hazırlığın standardizasyonu vurgulanır.	Genetik test: yapılmadı **%60**, pozitif **%16**, negatif **%24**; preop tanı **%48**	Serimiz, kılavuzların vurguladığı "tanı + periop hazırlık" eksenini sahada yansıtıyor; genetik testin her olguda uygulanmaması gerçek yaşam pratiği ile uyumlu bir bulgudur.
Zhang ve ark., 2022	Sistematik derleme + meta-analiz (RLA vs TLA)	Retroperitoneal ve transperitoneal laparoskopik yaklaşımların etkinlik/güvenlik karşılaştırmaları; hemodinami ve periop sonuçlarda yaklaşım farkı tartışılır.	Laparoskopik oran **%56**; intraop kriz **%12**	Bizde yaklaşım alt kırılımı (RLA/TLA) olmadığı için doğrudan kıyas sınırlı; ancak minimal invaziv cerrahinin uygulanabilirliği ve düşük komplikasyon oranı literatür çerçevesiyle uyumlu.

[P-439]

The importance of preoperative parameters in detecting lymph node metastases in patients with medullary thyroid cancer

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Objective: This study aims to establish objective criteria for surgical planning in patients diagnosed with medullary thyroid cancer (MTC). It evaluates the relationship between preoperative calcitonin (CT) and carcinoembryonic antigen (CEA) levels, as well as preoperative inflammation indices (NLR, PLR, and SII), with the clinicopathological and molecular characteristics of MTC. Additionally, it assesses the utility of these parameters in predicting lymph node (LN) metastases. Accurate prediction of LN metastases may help unnecessary extensive surgical dissections, improve patient comfort, and reduce complications while enhancing survival outcomes.

Material and Methods: A retrospective analysis was conducted on patients aged 18-90 who underwent surgery for MTC at Ankara Bilkent City Hospital between 2019 and 2024. The patients' clinical examination findings, laboratory results, surgical notes, pathology reports, imaging data, age, and gender were reviewed. A total of 54 patients diagnosed with MTC (2.25% of all thyroid cancers) were identified. After excluding four patients due to missing laboratory results, surgical notes, or pathology reports, the study proceeded with 50 patients. Preoperative and postoperative CT, CEA, NLR, PLR, and SII values, pathological staging, immunohistochemical staining results, and surgical notes were meticulously examined and recorded. Patients were categorized into groups with and without LN metastases, and the effect of the analyzed parameters on LN metastasis was statistically evaluated. Statistical analyses were performed by BUİSTDAM.

Results: No statistically significant relationship was found between LN metastases and patient age, gender, preoperative CT, CEA, NLR, PLR, or SII levels. However, the presence of LN metastases was significantly higher in nodules with microcalcifications detected ultrasonography ($p=0.010$) and in nodules that stained positively for chromogranin A in pathology reports ($p=0.031$).When comparing preoperative and postoperative CT, CEA, and hemoglobin (Hb) levels, a statistically significant decrease was observed regardless of the type of surgery performed ($p=0.004$, $p=0.039$, and $p=0.002$, respectively). Biochemical improvement was detected in 68.75% of patients postoperatively. Among patients who underwent only total thyroidectomy (BTT), 93.3% achieved biochemical improvement and were included in a follow-up program.In stage 1-2 patients (those without LN metastases), postoperative CT levels were significantly lower ($p=0.003$).

Conclusion: This study demonstrates the relationship between preoperative CT and CEA levels, as well as inflammation scores, with LN metastases in MTC patients. It also highlights the significance of postoperative biomarker changes in evaluating surgical success and patient recovery. However, considering the study's limitations, larger-scale and prospective studies are needed to validate these findings. This approach could contribute to the development of multidisciplinary treatment protocols and help improve long-term survival rates while minimizing complications in MTC patients.

Keywords: Medullary thyroid cancer, calcitonin, carcinoembryonic antigen

[P-440]

Laparoscopic and open approaches in adrenal mass surgery: A single-center experience from 2012 to 2025

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Objective: Adrenal masses are being detected with increasing frequency in clinical practice due to the widespread use of advanced imaging modalities, and patients requiring surgical treatment constitute a significant subgroup. Although laparoscopic adrenalectomy is currently accepted as the gold standard approach for the surgical management of benign adrenal masses, factors such as tumor size, hormonal activity, and suspicion of malignancy continue to play a decisive role in the selection of the surgical approach. The aim of this study was to evaluate the demographic characteristics, hormonal activity status, surgical approaches, and perioperative outcomes of patients who underwent surgical treatment for adrenal masses at a tertiary education and research hospital.

Material and Methods: Patients who underwent surgical treatment with the diagnosis of adrenal mass between 2012 and 2025 were retrospectively analyzed. Demographic data, tumor sizes, adrenal gland localization (right/left), hormonal activity status, surgical approaches (laparoscopic or open), conversion rates from laparoscopic to open surgery, and histopathological diagnostic subgroups were recorded. The obtained data were evaluated using descriptive statistical methods.

Results: A total of 140 patients were included in the study. Of these, 41 were male (29.3%) and 99 were female (70.7%). Sixty-five masses were located in the right adrenal gland (46.4%) and 75 in the left adrenal gland (53.6%). The mean tumor size was 5.02 cm, with a minimum of 1.4 cm and a maximum of 20 cm. Hormone-active adrenal masses were identified in 65 patients (46.4%), while non-functioning adrenal masses were present in 86 patients (61.4%); metastatic involvement was observed in 9 patients (6.4%). Among hormone-active patients, Cushing syndrome was detected in 36 cases (55.4%), Conn syndrome in 16 cases (24.6%), and pheochromocytoma in 13 cases (20.0%). Regarding the surgical approach, laparoscopic adrenalectomy was performed in 103 patients (73.6%), whereas primary open surgery was applied in 23 patients (16.4%). Conversion from laparoscopic to open surgery was required intraoperatively in 14 patients (13.6%).

Conclusion: This large patient series demonstrates that the laparoscopic approach can be safely and effectively applied at a high rate in adrenal mass surgery in tertiary centers. Larger tumor size and the presence of hormonal activity were found to be associated with the need for open surgery or conversion from laparoscopic to open surgery. It was concluded that adrenal surgery can be performed effectively and safely with acceptable morbidity rates in experienced centers.

Keywords: Adrenal mass, adrenalectomy, surgery

[P-441]

Intraoperative parathyroid hormone dynamics in predicting surgical cure in double parathyroid adenomas in primary hyperparathyroidism

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Objective: The incidence of double adenomas in primary hyperparathyroidism (pHPT) ranges between 2-20% and represents an important cause of persistent disease. In this study, we aimed to evaluate intraoperative parathyroid hormone (iPTH) dynamics in predicting surgical cure in patients with double adenomas.

Material and Methods: We retrospectively analyzed patients who underwent parathyroidectomy for pHPT between 2015 and 2025 and achieved surgical cure after removal of two pathological glands. In all operations, peripheral venous blood samples for iPTH measurement were obtained pre-excision and at the 10th and 20th minutes after excision. A ≥50% decrease in PTH compared to the pre-excision value was considered sufficient for surgical success. For the 8 patients with persistent disease after the first operation, iPTH values from both the first and second surgeries were evaluated. Among patients cured after the first surgery, iPTH measurements were analyzed separately in 19 patients in whom measurements were obtained after removal of both pathological glands, and in 7 patients in whom iPTH was measured after removal of the first gland and again after removal of the second gland. In total, 49 iPTH measurements were evaluated. Normocalcemia at 6 months was defined as surgical cure. Two criteria were assessed for predicting surgical cure: •Method 1: >50% decrease in iPTH at the 10th and/or 20th minute compared to the pre-excision value. •Method 2: >50% decrease in iPTH at the 10th and/or 20th minute plus a decline to within or below the normal reference range (PTH <65 ng/mL). Sensitivity, specificity, positive predictive value (PPV), negative predictive value, and overall accuracy were calculated. False-positive and false-negative rates were compared.

Results: Thirty-four patients (mean age 57 years) were included; 28 (82.4%) were female and 6 were male. Surgical cure was achieved with a single operation in 26 patients, while 8 (23.5%) required reoperation due to persistent disease. Of the second adenomas, 20 (59%) were located contralaterally and 14 (41%) ipsilaterally. For predicting surgical cure, Method 1 had 6 (12.2%) false positives, whereas Method 2 had none (p=0.0312). False-negative rates were 1 (2.9%) and 2 (4.1%) patients for Methods 1 and 2, respectively (p=1). Although Method 2 showed slightly lower sensitivity (94.1% vs. 97.1%), it demonstrated higher specificity (100% vs. 60%), PPV (100% vs. 84.6%), and overall accuracy (95.9% vs. 85.7%).

Conclusion: Double adenomas carry a high risk of persistent disease, with most second adenomas located contralaterally. In addition to a >50% decrease in iPTH, a decline into the normal reference range improves overall performance, significantly reduces false positives, and may help minimize the risk of persistent disease.

Keywords: Primary hyperparathyroidism, double adenoma, intraoperative parathyroid hormone

Table 1. Distribution of true and false positives, true and false negatives in Methods 1 and 2

Criteria	TP	TN	FP	FN	Total (N)
Method 1	33	9	6	1	49
Method 2	31	15	0	2	49

Table 2. Sensitivity, specificity, PPV, NPV, and overall accuracy of Methods 1 and 2

Criteria	Sensitivity	Specificity	PPV	NPV	Accuracy
Method 1	97.1% (85.1-99.5)	60.0% (35.7-80.2)	84.6% (70.3-92.8)	90.0% (59.6-98.2)	85.7% (73.3-92.9)
Meyhod 2	94.1% (80.9-98.4)	100.0% (79.6-100.0)	100.0% (89.3-100.0)	88.2% (65.7-96.7)	95.9% (86.3-98.9)

[P-442]

The relationship between tumor size and hounsfield unit values in adrenal masses and their correlation with pathological results

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Objective: Tumor size and computed tomography (CT) Hounsfield Unit (HU) values are used as key criteria in predicting malignancy risk in the management of adrenal masses. However, in selected patient populations who undergo surgery, it is unclear to what extent these parameters predict pathological outcomes. In this study, we aimed to evaluate the relationship between tumor size and HU values and pathological results in patients who underwent adrenal surgery.

Material and Methods: Seventy-eight patients who underwent adrenal surgery were retrospectively analyzed. Tumor size was classified based on the largest diameter as <4 cm, 4-6 cm, and ≥6 cm. CT attenuation values were categorized as <10 HU and ≥10 HU. Pathological results were grouped as adrenocortical adenoma and non-adenoma lesions (pheochromocytoma, myelolipoma, cysts, and malignant tumors). Chi-square and Fisher's exact tests were used for comparisons between groups.

Results: Among the 78 cases, adrenocortical adenoma was detected in 37 patients (47.4%) and non-adenoma pathology in 41 patients (52.6%). Seven cases (9.0%) were malignant. The rate of non-adenoma pathology increased significantly in parallel with tumor size (<4 cm: 32.4%; 4-6 cm: 52.9%; ≥6 cm: 86.4%; p=0.00032). All malignant cases were in the ≥6 cm group, and no malignancy was detected in masses <6 cm (p=0.00034). No significant association was found between HU value and pathological results (<10 HU: 55.4% non-adenoma; ≥10 HU: 33.3% non-adenoma; p=0.405). When size and HU were evaluated together, the non-adenoma rate was 30.8% in the <4 cm and <10 HU group, whereas it increased to 76.7% in the ≥4 cm and <10 HU group (p=0.001).

Conclusion: In patients undergoing adrenal surgery, increasing tumor size is strongly associated with non-adenoma pathology and malignancy. Malignancy was detected only in masses ≥6 cm. HU values provided limited contribution in predicting pathological outcomes in this selected surgical population. Tumor size remains the most decisive factor in the surgical decision-making process for adrenal masses.

Keywords: Adrenal mass, tumor size Hounsfield unit

Table 1. Combined analysis of tumor size and Hounsfield unit (HU) values with pathological outcomes. Table showing the comparative analysis of tumor size, size cut-off value, CT attenuation (HU) values, and size + HU combinations with adenoma, non-adenoma, and malignant pathology rates in patients undergoing adrenal surgery. Increasing tumor size is significantly associated with non-adenoma pathology and malignancy, whereas HU value alone shows limited predictive value for pathological outcomes

Değişken	Grup	Adenom n (%)	Non-adenom n (%)	Malign n (%)	Toplam	p değeri
Tümör boyutu	<4 cm	25 (67.6)	12 (32.4)	0 (0)	37	
	4–<6 cm	8 (47.1)	9 (52.9)	0 (0)	17	
	≥6 cm	3 (13.6)	19 (86.4)	6 (27.3)	22	**0.00032***
Boyut cut-off	<6 cm	33 (61.1)	21 (38.9)	0 (0)	54	
	≥6 cm	3 (13.6)	19 (86.4)	6 (27.3)	22	**0.00034†**
BT attenüasyonu (HU)	<10 HU	25 (44.6)	31 (55.4)	–	56	
	≥10 HU	4 (66.7)	2 (33.3)	–	6	**0.405**
Boyut + HU kombinasyonu	<4 cm & <10 HU	18 (69.2)	8 (30.8)	0 (0)	26	
	≥4 cm & <10 HU	7 (23.3)	23 (76.7)	5 (16.7)	30	
	<4 cm & ≥10 HU	3 (75.0)	1 (25.0)	0 (0)	4	
	≥4 cm & ≥10 HU	1 (50.0)	1 (50.0)	1 (50.0)	2	**0.001‡**

* Ki-kare testi (non-adenom patoloji için)
† Fisher exact testi (malignite için)
‡ Fisher exact testi (boyut + HU kombinasyonu için)

[P-443]

Diagnostic challenges in gallbladder adenomyomatosis: A retrospective analysis of clinical, radiological, and histopathological findings

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Objective: Adenomyomatosis is a benign lesion of the gallbladder; however, it poses diagnostic challenges. Clinically, it is frequently associated with cholelithiasis and may often be overlooked in the preoperative period due to its non-specific symptoms. This study aimed to evaluate the demographic, clinical, radiological, and pathological characteristics of patients who underwent cholecystectomy at the University of Health Sciences Türkiye, Ankara Etlik City Hospital General Surgery Clinic between October 2022 and October 2025 and were histopathologically diagnosed with adenomyomatosis, as well as to assess the concordance between radiological diagnosis and histopathological findings.

Material and Methods: A total of nine cases that underwent laparoscopic cholecystectomy during the specified period and were reported as adenomyomatosis on pathological examination were retrospectively analyzed. The patients' age, sex, presenting symptoms, indication for surgery, presence of gallstones, radiological findings (US and MRI/MRCP), type of adenomyomatosis, localization, gallbladder wall thickness, associated pathologies, and radiology-pathology concordance were evaluated.

Results: Seventy-seven point eight percent of the cases were female, and the mean age was 53.3±8.7 years. The most common presenting symptom was abdominal pain (77.8%), and the most frequent indication for surgery was cholelithiasis (77.8%). All patients underwent laparoscopic cholecystectomy. Gallstones were present in 77.8% of the patients. On ultrasonography, the most common diagnoses were adenomyomatosis (44.4%) and cholelithiasis (44.4%), whereas no significant findings were detected in 66.7% of the cases who underwent MRI/MRCP. Histopathological examination revealed that 77.8% of the cases were of the focal type, and 66.7% were located in the fundus. The mean gallbladder wall thickness was 3.25 mm. The most common associated pathology was cholelithiasis (22.2%). No dysplasia or malignancy was detected in any of the cases. Radiology-pathology concordance was achieved in only 44.4% of the cases.

Conclusion: Despite its benign nature, adenomyomatosis is a gallbladder pathology that is frequently overlooked in the preoperative period and may be confused with malignancy. As reported in the literature, imaging modalities may not always accurately reflect the type and extent of adenomyomatosis. This is consistent with the low radiology-pathology concordance rate observed in our study. In our series, the predominance of the focal type and fundus localization supports the most commonly reported morphological pattern in the literature. These findings once again emphasize that, despite the benign nature of adenomyomatosis, routine histopathological examination of surgical specimens is indispensable for clinical safety.

Keywords: Adenomyomatosis, cholelithiasis, gallbladder, histopathology, laparoscopic cholecystectomy

Table 1. Demographic characteristics

Variable	Category	n	%
Sex	Female (f)	7	77.8
	Male (m)	2	22.2
Age(year)	mean±SS	53.3±8.7	
	Median (min-max)	51 (45-69)	

Table 2. Clinical characteristics

Değişken	Kategori	n	%
Semptom	Karın ağrısı	7	77.8
	Karın ağrısı, hazımsızlık, şişkinlik	1	11.1
	Karın ağrısı, bulantı	1	11.1
Operasyon Endikasyonu	Kolelitiazis	7	77.8
	Adenomyomatozis	2	22.2
Safra Taşı Varlığı	Var	7	77.8
	Yok	2	22.2
Operasyon Tipi	Laparoskopik	9	100

Table 3. Imaging findings

Değişken	Kategori	n	%
USG Tanısı	Adenomyomatozis	4	44.4
	Kolelitiazis	4	44.4
	Kolesistit	1	11.1
MR/MRCP Tanısı	Yok	6	66.7
	Adenomyomatozis	2	22.2
	Polip	1	11.1
Adenomyomatozis Tipi	Fokal	7	77.8
	Segmenter	2	22.2
Lokalizasyon	Fundus	6	66.7
	Fundus ve korpus	2	22.2
	Korpus	1	11.1
Duvar Kalınlığı (mm)	Ortalama ± SS	3.25 ± 1.1	
	Medyan (min–maks)	3 (2–5)	

Table 4. Pathological findings

Variable	Category	n	%
Accompanying pathology	None	5	55.6
	Cholelithiasis	2	22.2
	Cholecystitis	1	11.1
	Cholesterolosis	1	11.1
Dysplasia/malignancy	None	9	100
Radiology/pathology compatibility	Yes	4	44.4
	No	5	55.6

[P-444]

Serum vitamin B12 levels and etiological distribution before liver transplantation a single-center experience

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Objective: Vitamin B12 levels are frequently altered in liver diseases. Markedly elevated serum Vitamin B12 levels may be observed in advanced cirrhosis, hepatocellular carcinoma (HCC), and fulminant hepatitis. The aim of this study was to evaluate pre-transplant serum vitamin B12 levels and their relationship with underlying disease etiology in patients undergoing liver transplantation.

Material and Methods: This retrospective study included 60 patients who underwent liver transplantation at our center between 2024 and 2025. Pre-transplant serum vitamin B12 levels (pg/mL) and etiological diagnoses were recorded from patient files. Etiologies were classified as HBV, HBV + HCC, alcoholic cirrhosis, NASH, autoimmune hepatitis, cryptogenic cirrhosis, fulminant hepatitis, HCC, and other causes. Descriptive statistics and intergroup comparisons were performed. A p-value <0.05 was considered statistically significant.

Results: Serum Vitamin B12 levels ranged between 197 and 771 pg/mL. Patients with fulminant hepatitis and alcoholic cirrhosis had significantly elevated vitamin B12 levels (>2000 pg/mL) ($p<0.05$). High levels were also observed in patients with HCC. In contrast, NASH, cryptogenic cirrhosis, and some HBV-related cases showed relatively lower vitamin B12 levels. A statistically significant difference in serum vitamin B12 levels was found among etiological groups.

Conclusion: Pre-transplant serum vitamin B12 levels differ significantly according to liver disease etiology. Extremely high levels were detected in fulminant hepatitis and advanced HCC, whereas relatively lower levels were observed in NASH and cryptogenic cirrhosis. Preoperative vitamin B12 measurement may serve as a supportive biomarker in assessing disease severity and prognosis in liver transplant candidates.

Keywords: Liver transplantation, vitamin B12, etiology

[P-445]

Risk stratification approach based on clinical and imaging findings in patients with invasive and premalignant lesions in cholecystectomy specimens

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Objective: Gallbladder carcinoma is a clinically important malignancy due to its aggressive course and late diagnosis, despite its low incidence. Invasive malignancy and true premalignant gallbladder lesions may be detected incidentally following cholecystectomy performed for benign indications; however, in most cases, no specific preoperative clinical or imaging findings suggestive of malignancy are observed. The aim of this study was to evaluate the clinical and imaging characteristics of invasive and true premalignant lesions detected in cholecystectomy specimens and to identify meaningful patterns for risk stratification.

Material and Methods: This single-center, retrospective, observational study reviewed the pathology reports of 1,588 adult patients who underwent cholecystectomy for benign indications between 1, January, 2024 and 31, December, 2025. Cases with invasive gallbladder malignancy or true premalignant lesions—defined as biliary intraepithelial neoplasia (BilIN), epithelial dysplasia, or adenoma—were identified. Demographic characteristics, clinical presentation, laboratory findings, imaging results, surgical data, and pathological outcomes of these patients were analyzed in detail. Descriptive statistics were used, and proportion comparisons and binomial testing were applied where appropriate.

Results: Among 1,588 cholecystectomy specimens, one invasive gallbladder adenocarcinoma (0.06%) and nine true premalignant lesions (0.57%) were identified, yielding a combined invasive/premalignant incidence of 0.63%. The majority of premalignant lesions were low-grade BilIN, with only one case of adenoma; no high-grade dysplasia was observed. The invasive malignancy was a 20 mm adenocarcinoma staged as pT3, with lymphovascular invasion present. All invasive and premalignant cases occurred in female patients, and 80% were aged 50 years or older (median age: 57). The exclusive female distribution was statistically significant compared with the expected sex distribution (binomial test, $p<0.05$). Most patients (90%) underwent elective surgery for biliary colic. Acute cholecystitis was uncommon, and no cholestatic laboratory pattern was observed. On ultrasonography, gallbladder wall thickening ≥5 mm was detected in 60% of cases, while no patient demonstrated a mass or imaging-based suspicion of malignancy. All invasive and premalignant lesions were detected incidentally (100%).

Conclusion: Although invasive and true premalignant gallbladder lesions are rare in cholecystectomies performed for benign indications, they may remain completely silent clinically and radiologically and can be detected incidentally even at advanced stages. The incidence rates observed in our center appear to be consistent with those reported in the literature (0.1-0.4%) and in national series from Türkiye (approximately 0.2-0.3%). These findings suggest that reliance on a single clinical or radiological alarm sign may be insufficient, and that risk stratification approaches incorporating female sex, older age, and non-specific imaging findings may improve preoperative awareness.

Keywords: Gallbladder carcinoma, incidental carcinoma, cholecystectomy, premalignant lesions, risk stratification

Table 1. Histopathological distribution of cholecystectomy specimens for benign disease (n=1.588)

TABLO 1. BENİGN ENDİKASYONLARLA YAPILAN KOLESİSTEKTOMİLERDE HİSTOPATOLOJİK SONUÇLARIN DAĞILIMI (N = 1588)		
Histopatolojik Sonuç	**Hasta Sayısı (n)**	**Oran (%)**
Benign inflamatuvar değişiklikler*	1093	68,8
Pilorik metaplazi	225	14,2
İntestinal metaplazi	46	2,9
Kolesterol polip	129	8,1
Adenomiyomatozis	85	5,4
Gerçek premalign lezyonlar†	9	0,57
İnvaziv safra kesesi karsinomu	1	0,06
Toplam	1588	100

* Akut/kronik kolesistit, kolesterolozis vb.
† Biliyer intraepitelyal neoplazi (BilIN), epitelyal displazi, adenom

Table 2. Clinical and pathological features of invasive and premalignant gallbladder lesions (n=10)

TABLO 2. İNVAZİV VE PREMALİGN SAFRA KESESİ LEZYONU SAPTANAN OLGULARIN KLİNİK, GÖRÜNTÜLEME VE PATOLOJİK ÖZELLİKLERİ (n = 10)					
Değişken	**n**	**%**	**Değişken**	**n**	**%**
Kadın cinsiyet (p=<0.05*)	10	100	WBC ≥10 ×10³/μL	3	30
≥50 yaş	8	80	CRP yüksekliği	3	30
Medyan yaş (min–maks)	57	(29–65)	Kolestatik laboratuvar paterni	0	0
Elektif cerrahi	9	90	Safra taşı varlığı	8	80
Biliyer kolik endikasyonu	9	90	US duvar kalınlığı ≥5 mm	6	60
Premalign lezyon (BilIN / adenom)	9	90	Perikolesistik sıvı	2	20
İnvaziv adenokarsinom	1	10	US kitle/malignite şüphesi	0	0
İnsidental tanı	10	100	İleri görüntüleme (BT/MRCP)	1	10

[P-446]

Outcomes of percutaneous gallbladder drainage in high-risk surgical patients: A bridge treatment vs. surgery

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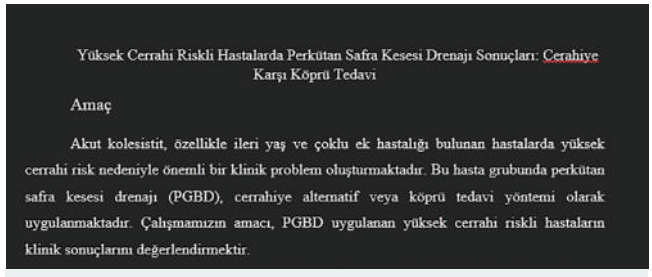
Objective: Acute cholecystitis poses a significant clinical problem, particularly in elderly patients with comorbidities, due to its high surgical risk. In this patient group, percutaneous gallbladder drainage (PGBD) is used as an alternative or bridging treatment to surgery. The aim of our study is to evaluate the clinical outcomes of high-surgical-risk patients undergoing PGBD.

Material and Methods: This study included patients who underwent PGBD and were followed up in our Interventional Radiology unit between April 2021 and July 2025. Demographic characteristics, comorbidities, indications for the procedure, procedure-related complications, mortality rates, and the need for surgery during the follow-up period were evaluated.

Results: The mean age was 71.9, with an age range of 33-94. 46 patients (45.54%) were male and 55 (54.45%) were female. The most common comorbidities were diabetes mellitus (32.6%, n=33), hypertension (28.7%, n=29), and coronary artery disease (19.8%, n=20). A large proportion of patients had multiple comorbidities. Regarding the indications for the procedure, acute cholecystitis was found in 84.1% (n=85), gallbladder perforation in 9.9% (n=10), and emphysematous cholecystitis in 6.9% (n=7). Fifteen patients died before being discharged from the hospital. The mean hospital stay was 21 (1-56) days, the mean catheter removal time was 27.2 (1-60) days, and the mean follow-up period was 36 (0-48) months. Procedure-related complications were observed in 15.8% (n=16) of patients. Complications included severe post-procedure pain (n=5), intra-gallbladder hemorrhage (n=4), catheter displacement (n=4), and intra-abdominal bile leakage (n=3). Additional intra-abdominal drains were placed in patients who developed intra-abdominal bile leakage. The overall mortality rate was 14.8%. The majority of patients who died were those followed in the intensive care unit due to comorbidities and had a higher mean age. During the follow-up period, 19.8% (n=20) of patients were discharged, and 15.8% (n=16) underwent cholecystectomy. The mean cholecystectomy time was 2 months. In four of the patients who underwent surgery, laparoscopic surgery was converted to open surgery. Of these patients, one underwent partial cholecystectomy, one underwent choledoch-jejunostomy due to choledochal injury, and two underwent open cholecystectomy.

Conclusion: PGBD is a safe and effective method for managing acute cholecystitis and its complications in elderly patients and those with high surgical risk. Thanks to its acceptable complication rates and the advantages it provides as a bridging treatment to surgery, it can be considered an effective treatment option in the appropriate patient group.

Keywords: Acute cholecystitis, high surgical risk, percutaneous cholecystostomy


Yüksek Cerrahi Riskli Hastalarda Perkütan Safra Kesesi Drenajı Sonuçları: Cerrahiye Karşı Köprü Tedavi

Amaç

Akut kolesistit, özellikle ileri yaş ve çoklu ek hastalığı bulunan hastalarda yüksek cerrahi risk nedeniyle önemli bir klinik problem oluşturmaktadır. Bu hasta grubunda perkütan safra kesesi drenajı (PGBD), cerrahiye alternatif veya köprü tedavi yöntemi olarak uygulanmaktadır. Çalışmamızın amacı, PGBD uygulanan yüksek cerrahi riskli hastaların klinik sonuçlarını değerlendirmektir.

Figure 1. Outcomes of percutaneous transhepatic cholecystostomy in high-risk surgical patients.

[P-447]

Bibliometric analysis of subtotal cholecystectomy publications

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Objective: Subtotal cholecystectomy has emerged as a critical damage-control strategy for managing difficult gallbladders when complete cholecystectomy poses unacceptable risk of bile duct injury. Despite growing clinical adoption, no comprehensive bibliometric analysis has characterized the scholarly landscape of this technique. This study aimed to quantify publication trends, identify leading contributors, and map the evidence base for subtotal cholecystectomy.

Material and Methods: A bibliometric analysis was conducted using PubMed-indexed publications on subtotal cholecystectomy. Data extracted included publication year, journal, first author, title, and open access status. Temporal trends were analyzed across decades (pre-1990, 1990s, 2000s, 2010s, 2020s). Study types were classified based on title keywords into categories including case reports/series, reviews/meta-analyses, cohort studies, technique papers, and clinical trials. Descriptive statistics summarized publication patterns, journal distribution, and author productivity.

Results: A total of 567 publications spanning 1954-2026 were identified, contributed by 509 unique first authors across 196 journals. Publication activity demonstrated exponential growth: only 21 papers appeared before 1990, compared to 302 (53.3%) in the 2020s alone. Annual output peaked at 63 publications in 2025. Surgical Endoscopy was the leading journal with 55 publications (9.7%), followed by Cureus (n=28, 4.9%) and American Surgeon (n=26, 4.6%). The most prolific first authors were Lucocq J (n=7), Lunevicius R, Ramírez-Giraldo C, and Kohga A (n=6 each). Title-based classification revealed case reports/series (n=43, 7.6%), reviews/meta-analyses (n=39, 6.9%), technique/method papers (n=36, 6.3%), and cohort studies (n=34, 6.0%). Notably, only 3 publications (0.5%) were identified as clinical trials. Open access availability was 40.7% (n=231 with PMC indexing).

Conclusion: The literature on subtotal cholecystectomy has expanded significantly, with more than half of all publications appearing in the last decade. This increase reflects the growing acceptance of subtotal cholecystectomy as a safe salvage procedure for difficult cholecystectomies. However, the evidence base remains limited due to the predominance of case reports and retrospective studies and the striking lack of randomized controlled trials. Future research priorities should include prospective multicenter studies comparing fenestration and reconstruction subtypes, standardized outcome reporting, and randomized trials evaluating long-term outcomes. The concentration of publications in surgical endoscopy journals highlights the relevance of this technique to minimally invasive surgical practices.

Keywords: Difficult cholecystectomy, subtotal cholecystectomy, bibliometric analysis, minimally invasive surgery

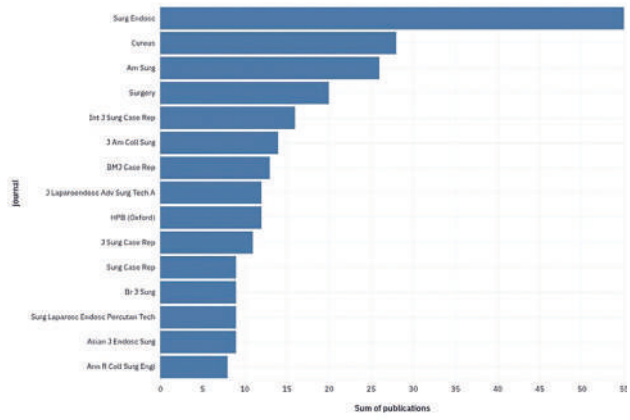


Figure 1. Distributions of the articles to journals.

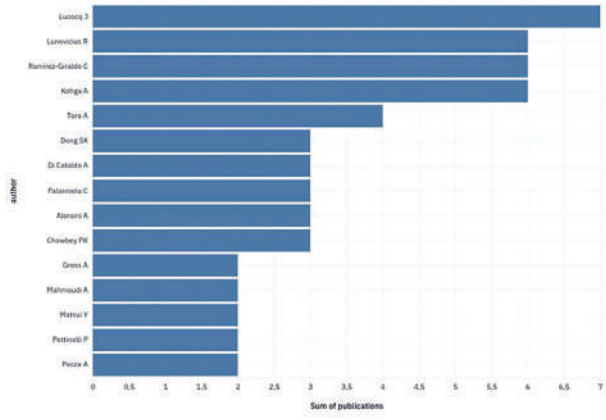


Figure 2. Top authors.

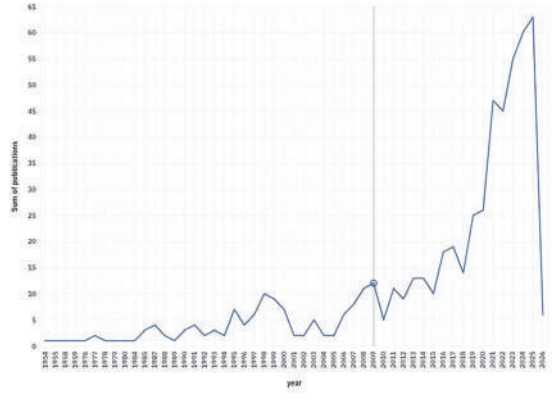


Figure 3. Publication trends.

[P-448]

Gastric diverticula: Diagnostic challenges, adrenal lesion mimicry, and conservative management outcomes - a single-center case series

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Objective: Gastric diverticula are among the rarest forms of gastrointestinal diverticular disease and are most often detected incidentally. Although symptoms are frequently attributed to coexisting gastric pathology rather than the diverticulum itself, data regarding diagnostic pitfalls and optimal management strategies remain limited. This study aimed to evaluate the clinical characteristics, diagnostic challenges, and outcomes of conservative management in patients diagnosed with gastric diverticula.

Material and Methods: This single-center retrospective case series included adult patients who underwent upper gastrointestinal endoscopy between September 2024 and December 2025. Patients in whom gastric diverticula were identified during endoscopic evaluation were included. Demographic characteristics, presenting symptoms, diverticulum location and type, associated gastric pathology—particularly *Helicobacter pylori* infection—imaging findings, management strategies, and clinical outcomes during follow-up were reviewed.

Results: Five patients (three females and two males; median age 67 years, range 35-81) were identified. Two patients were asymptomatic, with diverticula detected incidentally. Three patients presented with epigastric pain and/or dyspepsia. Diverticula were located in the fundus in two patients and in the antrum in three patients. Four diverticula were classified as true diverticula. In one patient, an ulcer-related antral pseudodiverticulum associated with significant food retention was identified, resulting in severe symptoms. Despite its size and symptomatic presentation, this lesion regressed both clinically and morphologically following medical therapy. *Helicobacter pylori* infection was detected in four patients, including all symptomatic cases. In one case, a posterior fundal gastric diverticulum mimicked a left adrenal mass on abdominal computed tomography, prompting endocrine evaluation before endoscopic confirmation. All patients were managed conservatively, and no surgical intervention was required.

Conclusion: This case series highlights the heterogeneous presentation of gastric diverticula and underscores several important clinical lessons. Posterior fundal diverticula may mimic adrenal lesions on cross-sectional imaging, representing a significant diagnostic pitfall. Ulcer-related antral pseudodiverticula with food retention may represent a reversible condition rather than a fixed structural abnormality and can be successfully managed with medical therapy. Overall, symptoms are often driven by associated gastric pathology, and an individualized conservative management strategy is appropriate for most patients.

Keywords: Adrenal lesion mimicry, conservative management, food retention, gastric diverticulum, pseudodiverticulum

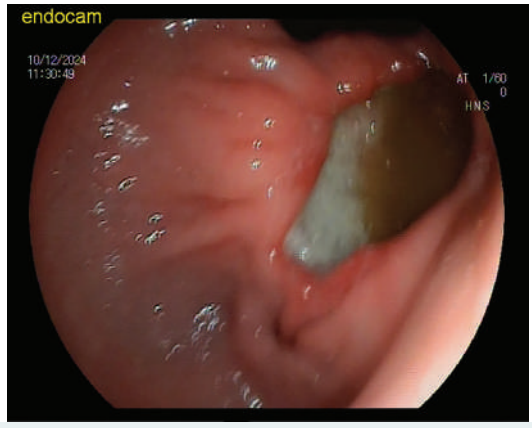


Figure 1. Ulcer-related antral pseudodiverticulum with food retention. Upper gastrointestinal endoscopy demonstrating an ulcer-related antral pseudodiverticulum. Marked food retention is observed within the diverticular cavity. This finding suggests that clinical symptoms may be driven by the associated ulcer disease rather than the diverticulum itself.



Figure 2. Computed tomography appearance of an antral pseudodiverticulum. Abdominal computed tomography demonstrating an ulcer-related antral pseudodiverticulum (red box). The cystic configuration and location of the lesion may mimic other intraabdominal masses, highlighting the importance of endoscopic correlation for accurate diagnosis.

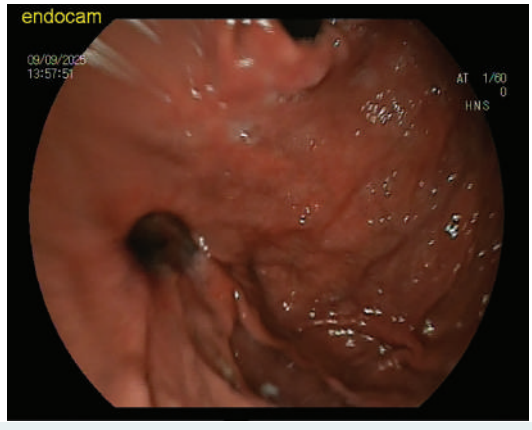


Figure 3. Endoscopic appearance of a posterior fundal gastric diverticulum. Upper gastrointestinal endoscopy demonstrating a true (congenital) gastric diverticulum located on the posterior wall of the gastric fundus. Due to its posterior fundal location, this lesion may mimic left adrenal pathology on cross-sectional imaging, representing an important diagnostic pitfall.

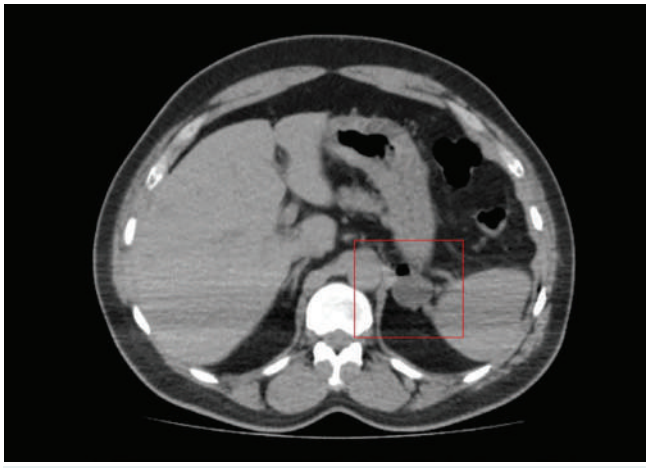


Figure 4. Computed tomography appearance of a posterior fundal gastric diverticulum. Abdominal computed tomography demonstrating a gastric diverticulum arising from the posterior wall of the gastric fundus (red box). Due to its retrogastric location and cystic appearance adjacent to the left adrenal gland, this lesion may mimic an adrenal mass, representing an important diagnostic pitfall. Endoscopic correlation is essential for accurate diagnosis.

[P-449]

Frailty-based risk stratification in emergency general surgery: A systematic review and meta-analysis of 30-day mortality and patient-centered outcomes

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Objective: Emergency general surgery is associated with substantial mortality and morbidity, particularly among older patients and those with significant comorbidity. Chronological age alone may fail to capture physiologic reserve and vulnerability to surgical stress. Accordingly, frailty assessment has gained prominence for preoperative risk communication, planning the required level of care, and supporting shared decision-making. We aimed to synthesize the evidence on the association between frailty and early clinical outcomes in emergency general surgery, and to quantify this relationship through meta-analysis.

Material and Methods: Following a PRISMA-based approach, we searched for studies assessing frailty in emergency general surgery populations and included eligible reports. Frailty instruments (Clinical Frailty Scale, modified Frailty Index, and other validated tools) were recorded. The primary outcome was 30-day mortality. Secondary outcomes included major complications, length of stay, and escalation of post-discharge care needs/loss of independence. Data suitable for pooling were synthesized using a random-effects model, with effects reported as odds ratios (OR).

Results: Across included studies, frail patients consistently experienced higher early mortality. Frailty was also associated with clinically meaningful patient-centered outcomes beyond death, including major postoperative complications, prolonged hospitalization, and increased need for post-discharge support or loss of independence. In the pooled analysis, frailty was significantly associated with increased 30-day mortality (pooled OR: 2.91; 95% CI: 2.00-4.23, p<0.001). The direction of effect remained consistent across different frailty instruments, supporting frailty as a broadly applicable risk marker within heterogeneous emergency surgical indications.

Conclusion: Frailty is a strong predictor of adverse short-term outcomes in emergency general surgery. Incorporating rapid, pragmatic frailty tools into routine risk stratification may enhance the quality of risk communication, facilitate proactive planning of perioperative care level, and strengthen shared decision-making. Prospective studies with standardized definitions and patient-centered endpoints are warranted to refine instrument selection and establish actionable clinical thresholds.

Keywords: Frailty, emergency general surgery, 30-day mortality

[P-450]

Comparison of quality of life and general health status in kidney transplant recipients and hemodialysis patients

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Objective: End-stage renal disease (ESRD) is a serious health condition that significantly affects individuals' quality of life in multiple dimensions. Dialysis and kidney transplantation are the primary treatment modalities for sustaining the lives of patients with ESRD. The effects of these treatments on quality of life vary, and existing literature suggests that kidney transplant recipients generally report higher quality of life compared to hemodialysis patients. This study aims to compare and evaluate the quality of life of transplant and dialysis patients followed at Marmara University Pendik Training and Research Hospital in specific domains.

Material and Methods: This cross-sectional study was conducted with patients undergoing kidney transplantation and hemodialysis at Marmara University Pendik Training and Research Hospital. Ethical approval (dated 19.11.2024) and institutional permission were obtained. Data were collected through face-to-face surveys after receiving written informed consent from participants. The questionnaire consisted of two parts: the first included socio-demographic questions, and the second utilized the Turkish-validated version of the SF-36 form. SF-36 is a reliable and validated scale composed of eight subdomains that assess physical and mental health. Data were analyzed using SPSS software through the Mann-Whitney U and Kolmogorov-Smirnov tests, with a significance level set at "p<0.05".

Results: The study reached 88% of the target sample (n=155), including 59 dialysis and 96 transplant patients. Significant differences were found in 7 of the 8 SF-36 subdomains (physical functioning, role limitations due to physical health, role limitations due to emotional problems, vitality, mental health, bodily pain, and general health), with transplant patients scoring higher than dialysis patients (p-values respectively: <0.001, <0.001, <0.001, <0.001, <0.001, 0.003, 0.024). No statistically significant difference was observed in the "social functioning" subdomain (p=0.093).

Conclusion: The findings indicate that kidney transplant patients have higher quality of life in both physical and psychological dimensions compared to hemodialysis patients. However, no significant difference was found between the two groups in terms of social functioning. These results highlight kidney transplantation as a more favorable treatment option in improving quality of life among ESRD patients.

Keywords: Kidney transplantation, hemodialysis, quality of life

[P-451]

Clinical habits or medical necessity? Safety and cost analysis of discontinuing routine postoperative tests (hemogram-biochemistry) in elective laparoscopic cholecystectomy

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Objective: Conventional surgical practice frequently involves the request of routine blood counts and biochemical tests in the postoperative period, irrespective of the patient's clinical condition. Nevertheless, "Choosing Wisely" campaigns and ERAS protocols advocate the utilisation of evidence-based and cost-effective strategies for patient management. The objective of this study is to evaluate the impact of discontinuing routine haematology and biochemistry monitoring on patient safety and the resulting cost-effectiveness in uncomplicated elective laparoscopic cholecystectomy cases.

Material and Methods: The files of 956 patients who underwent elective laparoscopic cholecystectomy were retrospectively reviewed. In order to ensure the homogeneity of the study, cases with major intraoperative complications or conversion to open surgery were excluded from the analysis. The patients' ASA scores, the early postoperative clinical findings (tachycardia, hypotension, etc.), and the 30-day postoperative major events (need for ERCP, reoperation, biliary tract injury) were examined. The indications for postoperative laboratory tests were categorised as either "clinical suspicion" or "routine". The rates at which these tests influenced clinical decisions, including imaging, prolonged hospitalisation and reoperation, were then compared. The presence of events such as readmission within 30 days, delayed bleeding, and biliary tract injury was also examined.

Results: Of 956 patients (mean age: 50.4±13.7, 70.2% female), 98.3% were postoperatively stable. Labs were omitted in 698 patients and requested in 230 (199 routinely, 31 upon clinical suspicion). Symptom-driven tests altered management in 10 patients, whereas routine tests merely prolonged hospitalization in 38 (p=0.009). These prolongations reflected defensive medicine addressing isolated anomalies, generating unnecessary costs. No major surgical complications occurred in the routine group; the sole event was an unpredictable cardiac pathology. Multivariate analysis identified advancing age (OR: 1.013, 95% CI: 1.002-1.025, p=0.027) and higher ASA scores as independent predictors for unnecessary testing, while gender was insignificant (p=0.301). Patients with ASA ≥3 were 2.3 times more likely to undergo routine testing, regardless of clinical status (OR: 2.298, 95% CI: 1.447-3.649, p<0.001).

Conclusion: The request for routine tests in stable patients following uncomplicated elective laparoscopic cholecystectomy does not represent a medical necessity, but rather a defensive habit that results in the inefficient use of resources. The present study demonstrates that tests only influence decisions when there is clinical suspicion. In the interest of patient safety and cost-effectiveness, this conventional routine should be wholly discontinued in favour of a symptom-driven clinical approach.

Keywords: Laparoscopic cholecystectomy, cost analysis, Choosing Wisely

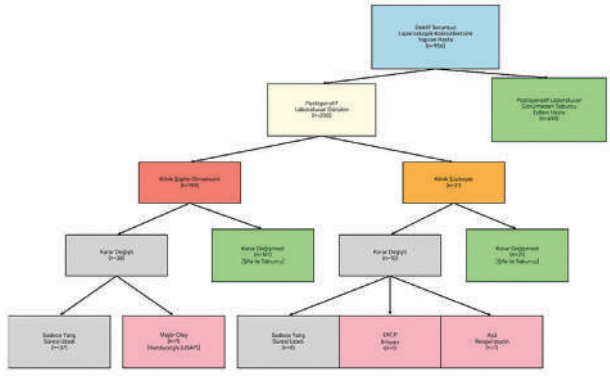


Figure 1. Flow chart.

[P-461]

A rare cause of acute abdomen: Perforated jejunal diverticulitis and surgical management

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Objective: Small bowel diverticulosis is a rare clinical entity, most commonly seen in the jejunum after the duodenum, and is typically classified as acquired "false" diverticula. While usually asymptomatic, complications such as diverticulitis, perforation, hemorrhage, or obstruction may develop in 10-30% of cases. Among these, perforation is one of the most serious complications, with mortality rates reaching up to 40%. The aim of this study is to present the surgical management of a case admitted with signs of acute abdomen and diagnosed with perforated jejunal diverticulitis.

Material and Methods: A 64-year-old male patient with a history of lung cancer with brain metastasis presented to the emergency department with severe abdominal pain lasting for 2 hours. The diagnostic workup included physical examination, laboratory tests (WBC, CRP), and multi-slice contrast-enhanced abdominal computed tomography (CT). The patient was diagnosed with acute abdomen and underwent exploratory laparotomy, with the surgical procedure determined based on intraoperative findings.

Results: Physical examination revealed tenderness in all four quadrants and defense in the left quadrant; laboratory tests showed WBC: 5 and CRP: 35. CT imaging revealed multiple diverticula reaching 2.5 cm in diameter in jejunal loops, stranding in peridiverticular fat tissue, and free air in the left upper quadrant. Surgical exploration identified a perforated diverticulum 60 cm distal to the Treitz ligament, accompanied by fibrinopurulent exudate in the surrounding tissues. Due to the wide base of the diverticulum and extensive inflammation, a 10 cm segmental small bowel resection with end-to-end anastomosis was performed. Pathological examination confirmed serosal active chronic inflammation. The patient was discharged without complications on the 6th postoperative day.

Conclusion: Jejunal diverticulitis should be considered in the differential diagnosis of acute abdominal pain, particularly in the elderly population. CT is the gold standard for diagnosis. In the presence of perforation, simple diverticulectomy carries risks of leakage and recurrence; therefore, segmental resection of the affected segment with primary anastomosis is the safest surgical approach to reduce morbidity and mortality.

Keywords: Acute abdomen, jejunal diverticulum, perforation

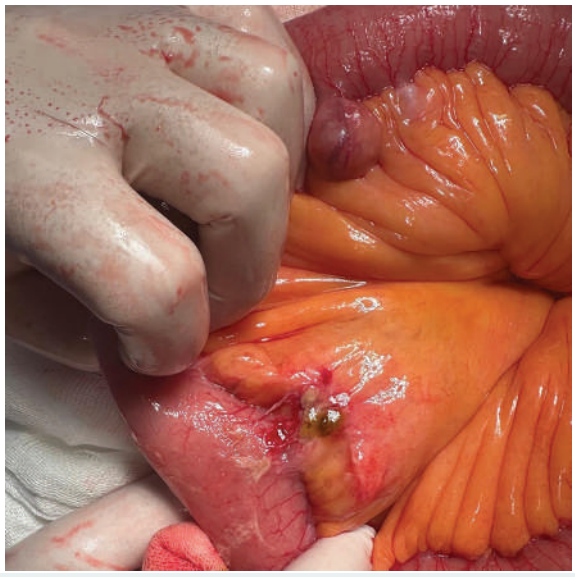


Figure 1. Intraoperative appearance of perforated diverticulum during laparotomy.

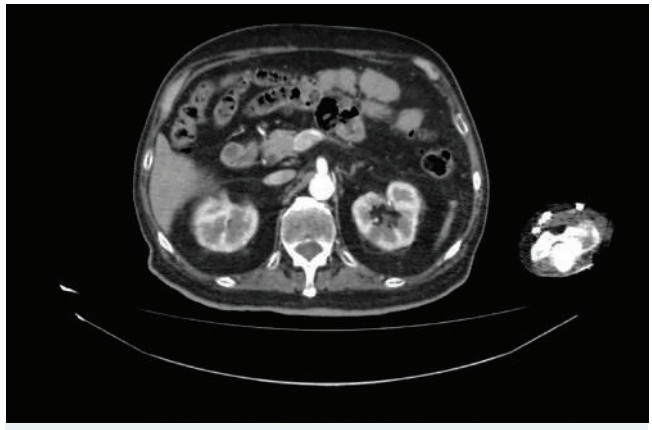


Figure 2. Computed tomography (CT) ımage of jejunal diverticula.

[P-479]

Evaluation of the necessity of re-excision in patients with positive surgical margins after breast-conserving surgery: Analysis of residual malignancy in re-excision specimens

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Objective: Although re-excision is the standard approach for patients with positive surgical margins after breast-conserving surgery (BCS), residual malignancy is not detected in all re-excision specimens. This situation may lead to potentially unnecessary surgical interventions, increased morbidity, and additional patient burden. The aim of this study was to compare the clinicopathological characteristics of patients with and without residual malignancy in re-excision specimens, to identify potential factors associated with residual malignancy, and to contribute to more rational and individualized clinical decision-making regarding the necessity of re-excision.

Material and Methods: This retrospective, single-center study was conducted at Hacettepe University and included patients who underwent re-excision due to positive surgical margins following BCS between 2018 and 2026. A total of 37 patients were evaluated. A positive surgical margin was defined as the presence of invasive carcinoma or ductal carcinoma *in situ* (DCIS) at the inked surgical margin. Patients who received neoadjuvant therapy were excluded from the study. Patients were divided into two groups according to the presence (Group 1) or absence (Group 2) of residual malignancy in the re-excision specimen. Continuous variables were expressed as mean ± standard deviation, and categorical variables as numbers and percentages. Group comparisons were performed using descriptive statistical methods.

Results: The mean age of the study population was 51.9 years. Residual malignancy was detected in 14 patients (37.8%), while no malignancy was identified in 23 patients (62.2%). The mean age was lower in patients with residual malignancy compared with those without residual malignancy (48.1 vs. 54.2 years). The rate of concomitant DCIS was 85.7% in patients with residual malignancy and 95.7% in those without residual malignancy. High tumor grade (Grade 3) was more frequently identified in patients without residual malignancy than in those with residual malignancy (60.9% vs. 28.6%). A low rate of residual malignancy was identified in patients with single positive surgical margins and a limited invasive component. Among the 14 patients with residual malignancy, five required a second re-excision due to persistent positive surgical margins in the re-excision specimen.

Conclusion: Routine re-excision in all patients with positive surgical margins after BCS may result in unnecessary surgical procedures in a substantial proportion of patients. An individualized patient selection strategy based on clinicopathological risk factors may contribute to a more accurate determination of the necessity for re-excision. This approach may help reduce patient morbidity and improve clinical decision-making. Further prospective studies with larger patient cohorts are warranted to validate these findings.

Keywords: Breast-conserving surgery, positive surgical margin, re-excision

[P-480]

Impact of treatment approaches on recurrence in granulomatous mastitis cases: A single-center experience

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Objective: Granulomatous mastitis is a chronic inflammatory breast disease that can clinically and radiologically mimic malignancy and presents a challenge for clinicians due to high recurrence rates during treatment. Although recent consensus studies recommend individualizing treatment decisions according to the clinical subtype of the disease and advise against the routine use of surgery as first-line therapy, surgical treatment is still frequently used as an initial approach in daily clinical practice. This study aimed to evaluate the clinical outcomes and the effect of medical and surgical treatment approaches on recurrence in patients with granulomatous mastitis followed at our center.

Material and Methods: Patients diagnosed with granulomatous mastitis and followed at our center over the past five years were retrospectively evaluated. Demographic characteristics, presenting symptoms, diagnostic methods, treatment approaches, and follow-up outcomes were analyzed. Treatment approaches were classified into two groups: medical treatment (topical and/or oral corticosteroids) and surgical treatment (segmental excision). Recurrence was defined as the development of a new lesion in the same breast after achieving clinical and/or radiological remission. Treatment groups were compared in terms of recurrence rates.

Results: A total of 26 patients were included in the study. Unilateral breast involvement was observed in 23 patients (88.5%), and the most common presenting complaints were breast mass (n=13, 50%) and pain (n=13, 50%). Diagnosis was predominantly established by tru-cut biopsy (n=19, 73.1%). Surgical treatment was performed in 11 patients (42.3%), while 15 patients (57.7%) received medical treatment. The median follow-up duration was 22 months (range, 4-60 months). Recurrence occurred in 7 of the 11 surgically treated patients (63.6%) and in 4 of the 15 medically treated patients (26.7%). Although recurrence rates were higher in the surgical treatment group, no statistically significant difference was observed between the treatment groups due to the limited sample size (p=0.06).

Conclusion: The higher recurrence rates observed in patients undergoing surgical treatment support the view that surgery should not be reflexively used as first-line therapy in granulomatous mastitis. Treatment decisions should be individualized according to disease stage and clinical subtype.

Keywords: Granulomatous mastitis, recurrence, steroid therapy

[P-481]

Early postoperative outcomes and oncologic safety of video endoscopic nipple-sparing mastectomy and axillary evaluation with immediate breast reconstruction in breast cancer patients

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Objective: Video endoscopic nipple-sparing mastectomy (VENSM) with axillary evaluation and immediate breast reconstruction (IBR) is an evolving technique in the surgical management of breast cancer. This study aims to evaluate the oncological safety, cosmetic outcomes, and early postoperative results of this minimally invasive approach.

Material and Methods: Between January 2021 and December 2025, a prospective cohort of breast cancer patients underwent VENSM with axillary evaluation (sentinel lymph node biopsy or axillary lymph node dissection) and IBR at Bursa Uludağ University Faculty of Medicine, General Surgery Department. Patient demographics, tumor characteristics, surgical details, oncological outcomes, and early postoperative results were collected and analyzed.

Results: A total of 224 patients underwent mastectomy where 57 (25.4%) were bilateral, 167 (74.6%) were unilateral. 103 (46%) had implant-based reconstruction. A total of 22 patients (9.82%) had VENSM in the cohort and 40 mastectomy and implant-based reconstructions were performed. The median follow-up period was 8 months. The mean age of the patients was 48 years. Pathological analysis confirmed positive margins in one case (4.5%). The sentinel lymph node biopsy was performed in all patients, and 3 patients underwent axillary lymph node dissection. The mean operative time was 210 minutes, and the median hospital stay was 1 days. Early postoperative complications included minor wound complications in one breast (2.5%) and nipple areola complex in three breasts (7.5%), all of which were managed conservatively. In total two implants (5%) were lost during follow-up. Overall complication rates were higher in conservative mastectomy and reconstruction group (n=32, 15.84%, p=0.81), with higher implant loss rates (n=8, 7.76%, p=0.84). The cosmetic outcomes were rated with Breast-Q.

Conclusion: The early results of this study demonstrate that VENSM with axillary evaluation and IBR is an oncologically safe and cosmetically favorable option for selected breast cancer patients. The technique is associated with minimal complications and excellent cosmetic outcomes. Further studies with longer follow-up are needed to confirm these findings and assess long-term oncological safety.

Keywords: Breast cancer, early outcomes, video endoscopic nipple-sparing mastectomy



Figure 1. Trans-axillary approach for video endoscopic nipple-sparing mastectomy (VENSM) with implant-based reconstruction. Postoperative first-week appearance in a patient who underwent total mastectomy with implant-based reconstruction.

[P-482]

Small intestine and vermiform appendix lengths in healthy adults: Intraoperative morphometric data from a living donor cohort

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Objective: Small intestine and vermiform appendix lengths are critical anatomical parameters in bariatric surgery and short bowel syndrome management. However, reliable normative data from direct *in vivo* measurements in healthy individuals are limited. This study aimed to establish reference values in healthy living liver donors and investigate the potential morphometric relationship between these structures.

Material and Methods: Data from 99 healthy living liver donors representing a multi-ethnic population were analyzed retrospectively. Intraoperative measurements were performed using a standardized technique: small intestine length (SIL) from the ligament of Treitz to the ileocecal valve, and appendix length from base to tip. Relationships between morphometric and anthropometric variables were evaluated.

Results: The mean SIL was 630±104.7 cm, and the mean appendix length was 84.8±21.1 mm. SIL was significantly greater in males (654.8 cm vs. 601.5 cm, p=0.011), while no sex-based difference was found for appendix length (p=0.389). A weak but significant positive correlation was found between SIL and appendix length (r=0.237, p=0.021). An appendix length ≥8 cm was associated with a higher probability of SIL >600 cm. Additionally, Meckel's diverticulum was incidentally detected in 2.0% (n=2) of donors. Notably, the retrocecal appendix position was observed in only 4.0% of donors, which is significantly lower than rates reported in appendicitis series.

Conclusion: This study provides reference values for SIL and appendix length based on direct measurements in healthy individuals. The weak relationship between SIL and appendix length suggests a biological continuum based on shared embryological origin and immunological roles but should not be used as a standalone clinical predictor.

Keywords: Appendix, living donors, small intestine



Figure 1. Meckel's diverticulum. Intraoperative view of an incidental Meckel's diverticulum detected during surgery in a healthy living donor (prevalence: 2.0%).

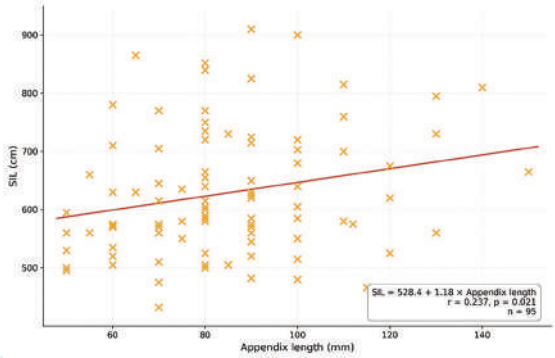


Figure 2. Correlation between small intestine length (SIL) and appendix length. Scatter plot illustrating the relationship between SIL and appendix length (n=95). The linear regression equation is SIL=528.4+1.18×appendix length (mm). The plot demonstrates a weak but statistically significant positive correlation (r=0.237, p=0.021).

Table 1. Small intestine and appendix length measurements by sex

Parameter	Entire cohort	Female	Male	p-value*
SIL (cm)	630.0±104.7	601.5±91.1	654.8±110.2	**0.011**
Appendix (mm)	84.8±21.1	82.8±21.4	86.5±21.0	0.389

Data are presented as mean ± standard deviation. * Differences between groups were evaluated using Student's t-test. SIL: Small intestine length.

[P-483]

Approach to splenic artery aneurysm - a single-center 13-year retrospective analysis

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Objective: Splenic artery aneurysm is an abnormal dilatation of the splenic artery and is usually asymptomatic; however, rupture may present with sudden abdominal pain, hemorrhagic shock, and high mortality. Clinical significance increases particularly in female patients, pregnancy, and conditions such as portal hypertension.

Material and Methods: Patients diagnosed with splenic artery aneurysm at İstanbul University-Cerrahpaşa, Cerrahpaşa Faculty of Medicine between 2013 and 2026 were evaluated retrospectively. Demographic data; clinical presentation, imaging modality, aneurysm diameter, location, multifocality, treatment applied, and follow-up outcomes were obtained from medical records.

Results: Of the 41 patients, 34 were female, and the age range was 27-80 years. The median aneurysm diameter was 18 mm (range: 5-70). The mean follow-up duration was 42.5 months. Twenty-nine patients were asymptomatic, while 12 were symptomatic with abdominal pain. The management strategy was determined according to the patient's clinical status and aneurysm characteristics. One patient was evaluated emergently due to rupture; one patient was diagnosed during pregnancy. Surgical treatment was performed in eight patients; transcatheter coil embolization was used in three patients (definitive treatment in two patients and a preoperative attempt prior to surgery in one patient). The remaining patients were managed with conservative follow-up. Aneurysm diameter was significantly larger in patients who underwent an intervention compared with the follow-up group (median 45 mm vs. 13.5 mm). Postoperative collection was observed in two patients.

Conclusion: In conclusion, splenic artery aneurysms present with a broad clinical spectrum. While regular imaging follow-up may be an appropriate option for small and asymptomatic aneurysms, active treatment with surgery or embolization can be safely applied in symptomatic or large aneurysms, as well as in high-risk situations such as pregnancy and rupture.

Keywords: Aneurysm, splenectomy, embolization

[P-488]

Bibliometric analysis of machine learning and artificial intelligence applications in postoperative pancreatic fistula (2020-2026)

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Objective: Postoperative pancreatic fistula (POPF) remains a major determinant of morbidity and mortality after pancreaticoduodenectomy (Whipple procedure). In recent years, machine learning (ML) and artificial intelligence (AI)–based predictive models have increasingly been applied to surgical complication forecasting. This study aimed to bibliometrically evaluate publication trends, thematic structure, and scientific production dynamics of ML/AI applications in POPF following pancreaticoduodenectomy.

Material and Methods: Publications between 2020 and 2026 were retrieved from PubMed using the following query: ("pancreaticoduodenectomy" OR "Whipple procedure") AND ("postoperative pancreatic fistula" OR "pancreatic fistula" OR "POPF") AND ("machine learning" OR "artificial intelligence" OR "deep learning" OR "neural network"). Data were analyzed using Bibliometrix/Biblioshiny. Annual scientific output, country and institutional contributions, author productivity (Lotka's law), core journals (Bradford's law), keyword co-occurrence networks, thematic mapping, and temporal keyword trends were assessed.

Results: A total of 31 publications were included. Output markedly increased after 2023, peaking in 2024-2025. The studies involved 289 authors (≈10 authors per article), with no single-author publications. The international collaboration rate was 19.35%. China emerged as the leading contributor, particularly after 2023, followed by the United States, the Netherlands, Italy, and Germany. The University of Zurich and several Chinese institutions were prominent at the institutional level. Frequently occurring keywords included "retrospective studies," "risk factors," "humans," "pancreaticoduodenectomy/adverse effects," and "ROC curve," indicating a predominantly retrospective, risk-modeling-based methodology. Thematic mapping identified "machine learning" and "postoperative complications/etiology" as motor themes, whereas "deep learning" and "neural networks" appeared as low-density, emerging themes. These findings suggest a transitional phase from conventional clinical risk assessment toward ML-driven predictive modeling.

Conclusion: Between 2020 and 2026, AI/ML research in POPF after pancreaticoduodenectomy accelerated significantly, yet remains concentrated in a limited number of countries and institutions and is largely retrospective in design. Thematic analysis indicates that ML has become the field's driving theme, while deep learning and neural networks are still in early developmental stages. By quantitatively delineating growth patterns and methodological orientations, this study highlights priority gaps—multicenter datasets, prospective validation, standardization, and generalizable modeling—thereby providing a roadmap for future research.

Keywords: Pancreaticoduodenectomy, postoperative pancreatic fistula, machine learning



Figure 1.



Figure 2.

[P-489]

Comparison of preoperative, perioperative and postoperative outcomes of emergency and elective inguinal hernia surgery in geriatric patients using antiaggregants

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Objective: The proportion of the geriatric population is increasing worldwide, leading to continuous updates in medical management for elderly patients. Polypharmacy is common in this group, and antiplatelet therapy is among the most frequently prescribed treatments. However, these agents complicate surgical decision-making due to increased perioperative bleeding risk and potential rises in morbidity and mortality. This study aimed to compare preoperative characteristics and postoperative outcomes of elective and emergency inguinal hernia repair in patients over 65 years of age receiving antiplatelet therapy.

Material and Methods: This retrospective study included patients over 65 years who underwent inguinal hernia surgery between January 2025 and February 2026 while receiving regular antiplatelet therapy (acetylsalicylic acid, clopidogrel, P2Y12 receptor antagonists, GPIIb/IIIa receptor antagonists, or combination therapy). Patients were divided into two groups: Group 1 (emergency surgery) and Group 2 (elective surgery). Preoperative evaluation included age, gender, ASA score, and comorbidities. Postoperative complications were assessed using the Clavien-Dindo classification. Postoperative bleeding, seroma, hematoma, wound infection, chronic pain, recurrence, and length of hospital stay were compared.

Results: A total of 101 male patients were included; 29 (28%) underwent emergency surgery and 72 (72%) underwent elective surgery. The mean age was 75 years, with no significant age difference between groups ($p<0.35$). However, the ASA score was significantly higher in the emergency group ($p<0.001$). Operative time was significantly longer in the emergency group (mean 88 minutes) compared to the elective group (mean 62 minutes) ($p<0.001$). Postoperative complications showed no statistically significant differences between groups. Seroma occurred in 3.6% of emergency cases and 6.9% of elective cases ($p=1$). Hematoma was observed in 21.4% of emergency patients and 9.7% of elective patients ($p<0.18$). Chronic pain occurred in 32.1% of emergency patients and 16.7% of elective patients ($p<0.15$). Recurrence was detected in 7.1% of emergency cases and 4.2% of elective cases ($p<0.61$).

Conclusion: Elective inguinal hernia repair in geriatric patients receiving antiplatelet therapy can be performed safely with acceptable complication rates in patients with an appropriate preoperative risk profile. Delaying surgery may result in emergency presentation, higher preoperative risk, and increased morbidity. Therefore, elective surgery under optimal conditions may improve postoperative outcomes in this patient population.

Keywords: Inguinal hernia, geriatrics, antiplatelet

ANTİAGREGAN KULLANAN GERİATRİK HASTALARDA ACİL VE ELEKTİF İNGÜİNAL HERNİ CERRAHİSİNİN PREOPERATİF,PERİOPERATİF VE POSTOPERATİF SONUÇLARININ KARŞILAŞTIRILMASI

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GİRİŞ

Dünya genelinde geriatrik popülasyonun oranı normal popülasyona göre artmakta ve geriatrik hastalarda tıbbi operasyon ve medikasyonların sürekli güncellenmesine neden olmaktadır.Geriatrik hastalarda polifarmasi sık görülmekle birlikte en sık kullanılan ilaç gruplarından olan antiagregan tedaviler ,perioperatif kanama riski açısında cerrahi karar sürecini zorlaştırırken morbidite ve mortalitede de artışa neden olmaktadır .Bu çalışmada antiagregan kullanan 65 yaş üstü hastalarda elektif ve acil ingüinal herni cerrahisinin preoperatif ,perioperatif ve postoperatif sonuçlarının karşılaştırılması amaçlanmıştır.

YÖNTEMLER

Bu retrospektif çalışmaya Ocak 2025-Şubat 2026 yılları arasında kliniğimizde ingüinal herni nedeniyle opere edilen ,düzenli antiagregan tedavi alan (asetilsalisik asit,klopidogler, P2Y12 (ADP) Reseptör Antagonistleri, GPIIb/IIIa Reseptör Antagonistleri veya multiple tedavi)hastalar dahil edildi . Çalışmaya dahil edilen hastalar grup 1 (acil) ,grup 2 (elektif) olarak 2 gruba ayrılmıştır Hastaların preoperatif değerlendirmede yaş ,cinsiyet ,ASA skorları ,ek hastalıkları değerlendirilirken,postoperastif komplikasyonlar Clavien-Dindo sınıflamasına göre analiz edildi .Postoperatif kanama,seroma ,yara yeri enfeksiyonu,hastanede kalım süresi ,kronik ağrı ve nüks açısından karşılaştırılarak değerlendirildi .

BULGULAR

Çalışmaya dahil edilen 101 hastanın 29'u (%28) acil, 72'si (%72) elektif cerrahi geçirmiştir.Tüm hastalar erkek cinsiyete sahiptir.Yaş ortalaması 75'tir (72.8 ±77.0). Gruplar arasında yaş açısından istatistiksel olarak anlamlı bir fark saptanmamıştır($p<0.35$) .Buna karşın ASA skoru acil grupta 3,0 (3,0±4,0) ile elektif gruba kıyasla 2,0 (2,0 ±4,0) istatistiksel olarak anlamlı biçimde daha yüksek bulunmuştur ($p<0,001$)..

Operatif parametreler incelendiğinde cerrahi süresinin acil grupta elektif gruba kıyasla istatistiksel olarak anlamlı düzeyde daha uzun olduğu görülmüştür. Cerrahi süresi acil grupta ortalama 88,0(77.8 ± 103.2) dakika iken elektif grupta medyan 62,0 (53.8 –±72.0) dakika olup istatistiksel olarak anlamlı bulunmuştur ($p<0,001$).

Postoperatif komplikasyonlar değerlendirildiğinde acil cerrahi yapılan 1 hastada (%3.6) elektif cerrrahi yapılanlarda 5 hastada (%6,9) seroma , acil cerrahi yapılanlardan 6 hastada (%21.4),elektif cerrahi yapılanlardan 7 hastada (%9.7) hematom , acil cerrahi yapılan 9 hastada (%32.1) ,elektif cerrahi yapılan 12 hastada (%16.7) kronik ağrı ve acil cerrahi yapılan 2 hastada (%7.1elektif cerrahi yapılan 3 hastada (%4.2) nüks saptanmış olup bu bulgular istatistiksel olarak anlamlı bulunamamıştır ($p<1,p<0.18,p<015,p<0.61$).

SONUÇLAR

Antiagregan kullanan geriatrik hastalarda elektif inguinal herni onarımı, preoperatif risk profili uygun hastalarda kabul edilebilir postoperatif komplikasyon oranları ile güvenli bir şekilde uygulanabilmektedir. Buna karşılık cerrahinin ertelenmesi acil başvuruya, daha yüksek preoperatif risk profiline ve belirgin şekilde artmış postoperatif morbiditeye yol açmaktadır. Bu nedenle geriatrik antiagregan kullanan hastalarda, uygun koşullarda elektif cerrahinin tercih edilmesi postoperatif sonuçları iyileştirebilir.

Figure 1. Comparison of preoperative, perioperative and postoperative outcomes of emergency and elective inguinal hernia surgery in geriatric patients using antiaggregants.

Table 1. Results

Değişken	Test	Acil (n=28) Med/n [IQR%]	Elektif (n=72) Med/n [IQR%]	p-değeri
Yaş	Mann-Whitney U	75.0 [72.8-77.0]	75.0 [73.0-83.0]	0.357
ASA	Mann-Whitney U	3.0 [3.0-4.0]	2.0 [2.0-3.0]	***
Anestezi süresi	Mann-Whitney U	88.0 [77.8±103.2]	62.0 [53.8±72.0]	***
Operasyon süresi	Mann-Whitney U	80.5 [69.0-97.2]	54.0 [45.0-61.0]	***
Yatış süresi	Mann-Whitney U	1.0 [1.0-2.0]	1.0 [1.0-2.0]	0.274
Komplikasyon	Chi-square	14 (50.0%)	24 (33.3%)	0.189
Seroma	Fisher's exact	1 (3.6%)	5 (6.9%)	1.0
Hematom	Fisher's exact	6 (21.4%)	7 (9.7%)	0.181
Ağrı	Chi-square	9 (32.1%)	12 (16.7%)	0.152
Nüks	Fisher's exact	2 (7.1%)	3 (4.2%)	0.617
Ek hastalık	Chi-square	20 (71.4%)	40 (55.6%)	0.219
Anti-agregan	Chi-square	28 (100.0%)	18 (25.0%)	***

[P-494]

Three port laparoscopic sleeve gastrectomy: One year single center results

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Objective: Laparoscopic sleeve gastrectomy (LSG) is a widely performed and effective procedure in the surgical management of morbid obesity. The conventional technique typically requires four to five ports. This study aimed to evaluate the safety, feasibility, and early clinical outcomes of the three-port LSG technique.

Material and Methods: Patients who were scheduled for three-port LSG between January 2024 and January 2025 were retrospectively analyzed. A total of 54 patients were initially planned for a three-port approach. Due to intraoperative technical requirements, a fourth port was inserted in three patients, and these cases were excluded from the final analysis. The study cohort consisted of 51 patients. The evaluated parameters included: demographic characteristics, operative time, number of staplers used, length of hospital stay, intraoperative and postoperative complications, Clavien-Dindo classification, percentage of excess weight loss (%EWL), percentage of total weight loss (%TWL), comorbidity response. All procedures were performed by the same surgical team.

Results: The mean age of the patients was 35.7±9.4 years, and the mean body mass index (BMI) was 43.3±3.0 kg/m^2. Females constituted 70.5% of the study population. The mean operative time was 61.3±5.4 minutes. No intraoperative complications were observed. The overall postoperative morbidity rate was 5.8% (3/51). According to the Clavien-Dindo classification: One patient developed a Grade I complication, one patient required blood transfusion due to postoperative bleeding (Grade II), one patient underwent reoperation under general anesthesia due to a Veress needle-related injury (Grade IIIb). The major complication rate was 1.9%. No staple-line leakage or mortality was observed. A fourth port was required in 3 patients (5.5%). The mean length of hospital stay was 2-3 days. The mean %EWL was 77.6%, and the mean %TWL was 33%. A complete response was achieved in the majority of obesity-related comorbidities.

Conclusion: Three-port LSG demonstrated a low major complication rate (1.9%), acceptable operative time, and satisfactory early weight loss outcomes in this series. When performed by an experienced surgical team in appropriately selected patients, the three-port approach may represent a safe and feasible alternative to the conventional multi-port technique.

Keyword: Laparoscopic sleeve gastrectomy



Figure 1. Three port laparoscopic sleeve gastrectomy.



Figure 2. Three port laparoscopic sleeve gastrectomy.

[P-496]

Does debridement technique affect bacterial load? A comparison of jet lavage and surgical debridement

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Objective: Diabetic foot ulcers are among the most serious and costly complications of diabetes mellitus. The development of infection in these patients prolongs the healing process and increases the risk of major amputation. Debridement is a cornerstone in infection control, as it facilitates both the removal of necrotic tissue and the reduction of bacterial load. In recent years, jet lavage-assisted debridement has emerged as a technique that enhances mechanical cleansing. However, the effect of this method on bacterial load, in comparison with conventional surgical debridement, remains unclear. The aim of this study is to compare the effects of jet lavage-assisted debridement and conventional surgical debridement on bacterial load in diabetic foot ulcers.

Material and Methods: This study was designed as a prospective, randomized controlled trial. Patients diagnosed with Wagner grade 2-3 diabetic foot ulcers were included in the study. The patients were randomized into two groups: Group A: Jet lavage-assisted debridement. Group B: Conventional surgical debridement. From each patient, tissue biopsy samples were obtained from the wound bed both before debridement and after debridement. Microbiological evaluation was performed using a quantitative culture method, and the results were expressed as colony-forming units per gram (CFU/g). A p-value of <0.05 was considered statistically significant.

Results: According to the findings obtained at the end of the study, a statistically significant reduction in bacterial load after debridement was observed in the jet lavage group ($p<0.001$). The reduction in bacterial load was significantly greater compared to the conventional surgical debridement group.In addition, the need for repeat debridement was lower in the jet lavage group. Clinically, the wound bed appeared cleaner and more suitable for granulation tissue formation.

Conclusion: According to the results of our study, jet lavage-assisted debridement may be a more effective method than conventional surgical debridement in reducing bacterial load in diabetic foot ulcers. This technique may contribute positively to infection control, wound healing, and the overall success of surgical treatment. We believe that integrating jet lavage-assisted debridement into surgical practice, in appropriately selected patients, may be beneficial.

Keywords: Chronic wound, diabetic foot

[P-497]

Use of cadaveric iliac vein graft in recipient after laparoscopic right donor nephrectomy

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Objective: In living donor kidney transplants, laparoscopic harvesting of the right kidney is technically challenging due to the short and thin-walled nature of the right renal vein. This anatomical limitation can increase the risk of vascular complications and graft failure during implantation. Various venous lengthening techniques are used to overcome these challenges and ensure a tension-free, safe anastomosis. The aim of this study is to evaluate the technical feasibility and clinical outcomes of using a cadaver iliac vein graft for lengthening the right renal vein in cases undergoing laparoscopic right donor nephrectomy.

Material and Methods: Consecutive laparoscopic donor nephrectomy cases performed at our center were retrospectively reviewed. In this study, cases undergoing right donor nephrectomy were analyzed in terms of recipient and donor demographic characteristics, the anatomical structure of the renal vein, and the vascular reconstruction techniques applied. In cases where the right renal vein was found to be thin-walled and of insufficient length for anastomosis during the operation, venous lengthening was performed using a cadaveric iliac vein segment during the "back-table" preparation phase. Technical success was evaluated using parameters such as hot and cold ischemia times, peroperative vascular complications, and long-term graft survival.

Results: Of the 96 laparoscopic donor nephrectomy cases examined, 13 (13.5%) were from right donor nephrectomy. The mean age of recipients was 43 (27-69; 5 women, 8 men), and the mean age of donors was 49 (24-63; 10 women, 3 men). Due to right renal vein anatomy, reconstruction with a cadaveric iliac vein graft was performed in 10 cases (77%). No intraoperative complications occurred in any of the cases that underwent vascular reconstruction, and cold ischemia times remained within clinically acceptable limits despite the additional time spent in back-table preparation. No renal vein thrombosis, vascular stenosis, or primary graft failure related to the use of venous lengthening grafts was observed in the postoperative period. During a median follow-up period of 20 months (1-60 months), two patients died due to COVID-19 and one patient died due to pulmonary mycosis. The kidney function of the 10 surviving patients is within normal limits.

Conclusion: Venous lengthening with a cadaveric iliac vein graft after laparoscopic right donor nephrectomy offers a reliable and permanent solution to the technical challenges posed by a short renal vein. This approach allows for the safe expansion of the donor pool for centers that traditionally prefer the left kidney due to surgical difficulties.

Keywords: Right donor nephrectomy, laparoscopic nephrectomy, renal vein extension, cadaveric iliac graft, vascular reconstruction, renal transplantation, right laparoscopic donor nephrectomy, renal vein lengthening, cadaveric iliac vein graft

[P-500]

The diagnostic value of mammography in young breast cancer patients

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Objective: Currently, mammography is the most commonly used imaging method for breast cancer screening in the population over 40 years of age. While it is not routinely used for screening in the population under 40, its use is recommended for identifying and supporting diagnoses of lesions with a high suspicion of malignancy during physical examination. Current studies show that mammography has high sensitivity, particularly in less dense breasts.

Material and Methods: Based on this information, in order to evaluate the contribution of mammography to diagnosis in breast cancer patients diagnosed under the age of 40, 65 patients under the age of 40 who underwent surgery at University of Health Science Türkiye, Kayseri City Training and Research Hospital between 2023 and 2025 were retrospectively evaluated.

Results: Mammography was not performed in 35 operated patients (53.8%), whereas 30 patients (46.2%) underwent mammographic evaluation. Among those who underwent mammography, 3 patients (10%) were reported as BI-RADS 0, while 27 patients (90%) had BI-RADS 4-6 findings. Of the 16 patients classified as BI-RADS 6, mammography was performed after histopathological confirmation and prior to treatment, following breast ultrasound and magnetic resonance imaging (MRI) by breast surgery specialists. In contrast, cases without mammography were managed by surgeons without breast surgery subspecialization. These findings indicate that mammography use in young patients may vary according to physician specialization. At initial diagnosis, 39 patients (60%) were in advanced stages. Specifically, 29 patients (44.6%) were stage III and 10 patients (15.4%) stage IV. Early-stage breast cancer (stage I-II) was observed in 26 patients (40%). When stratified by stage, the diagnostic contribution of mammography appeared independent of disease stage.Regarding surgical management, 25 patients (38.5%) underwent mastectomy, while 40 patients (61.5%) received breast-conserving surgery. No statistically significant association was found between mammography use during diagnosis and surgical treatment. Among mastectomy patients, mammography was not used in 17 (26.16%) and was used in 8 (12.31%). Similarly, among breast-conserving surgery patients, mammography was not performed in 18 (27.69%) and was performed in 22 (33.84%). Breast MRI was performed in all patients who did not undergo mammography.

Conclusion: Current guidelines recommend clinical mammography for all patients aged 30 and over with palpable masses and suspicious findings for breast cancer. In our cases, it was observed to contribute to the diagnosis. Mammography should not be avoided due to young breasts or dense breast tissue.

Keywords: Mammography, young breast cancer

Table 1. Preference for mammography in diagnosis of breast cancer in patients under 40 years of age

Viewing preference	n	%
Mammogram taken	35	53.8
Mammogram not performed	30	46.2
Total	**65**	**100**

Table 2. Mamografi çekilen hastalar BI-RADS dağılımı (n=30) (2023-2025)

Mammography result	n	%
BI-RADS 0	3	10.0
BI-RADS 4	5	16.7
BI-RADS 5	6	20.0
BI-RADS 6	16	53.3
Total	**30**	**100**

BI-RADS 4-6 constitutes the patient group in which mammography supports diagnosis (n=27, 90%).

[P-501]

The role of preoperative CA19-9 in predicting resectability and survival in intrahepatic cholangiocarcinoma: A single-center retrospective study

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Objective: Intrahepatic cholangiocarcinoma (ICC) is a primary liver malignancy known for its aggressive clinical course and low surgical resectability rates. Surgical resection remains the only curative treatment option. In this study, we aimed to evaluate the clinicopathological characteristics, surgical outcomes, and the impact of tumor marker levels on survival in patients diagnosed with ICC at our center over the last 10 years.

Material and Methods: A total of 43 patients (21 males, 22 females) diagnosed with ICC between 2015 and 2025 at our center were retrospectively analyzed. Patients were divided into two groups: Surgical resection (Group 1, n=10) and inoperable/advanced disease (Group 2, n=33). Demographic data, preoperative CA19-9 levels, and overall survival were analyzed and compared between the groups.

Results: The median age of the entire cohort was 68 years (range: 35-84). Eleven patients underwent surgical exploration, and one patient was deemed inoperable intraoperatively, resulting in a resectability rate of 23.2%. R0 resection was achieved in 80% (n=8) of the patients in Group 1. The median overall survival was 28.5 months (range: 2-56 months) in Group 1, whereas it was significantly shorter at 3 months (range: 1-26 months) in Group 2. The median CA19-9 level was 138.5 U/mL in Group 1, while marker levels in Group 2 showed a wide distribution, reaching extremely high values up to 920,926 U/mL in some cases. In Group 1, 20% of patients (n=2, at 24 and 56 months) were still alive at the time of analysis and continued follow-up. In contrast, 85% of patients in Group 2 died within the first 6 months after diagnosis.

Conclusion: Our findings demonstrate that surgical resection, particularly achieving R0 margins, is the most important determinant of survival in patients with ICC. Overall survival was markedly longer in patients who underwent curative resection compared to those with unresectable disease. Significantly elevated preoperative CA19-9 levels in the inoperable group suggest that this marker may reflect increased tumor burden and aggressive tumor biology. However, CA19-9 alone is insufficient to determine surgical resectability and should be considered as an adjunctive biomarker in preoperative risk stratification and clinical decision-making. Larger prospective multicenter studies are needed to validate these findings.

Keywords: Intrahepatic cholangiocarcinoma, CA19-9, surgical resectability

[P-505]

The effect of intracorporeal knot-tying in laparoscopic appendectomy on the learning curve of laparoscopic intracorporeal suturing

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Objective: For surgeons engaged in laparoscopic surgery, suturing and knot-tying techniques are of critical importance. With the development and widespread adoption of reconstructive surgeries in the new century, laparoscopic suturing has gained even greater significance. Laparoscopic suturing techniques are more technically demanding than conventional open surgical suturing techniques, and the learning curve is considerably longer. This is primarily because, unlike in open surgery, the surgeon operates using a two-dimensional image in laparoscopic surgery and lacks depth perception. In addition, the tactile feedback that allows assessment of suture tension in open surgery is largely absent in laparoscopic procedures. During the operation, patient positioning, trocar placement, and the surgeon's stance often restrict both the surgeon's movements and the maneuverability of the suturing instruments. In most cases, surgical manipulation is limited to the angles permitted by the trocars. Furthermore, factors beyond the surgeon's direct control-such as camera angle, the movements of the assisting surgeon, and patient respiratory motion-also contribute to movement limitations. These and similar challenges encountered in advanced laparoscopic procedures may sometimes make such operations difficult or even impossible to perform. Therefore, learning and effectively applying intracorporeal knot-tying techniques in laparoscopic appendectomy is of great importance for achieving laparoscopic proficiency prior to performing advanced laparoscopic surgeries.

Material and Methods: In our clinic, 801 laparoscopic appendectomy surgeries have been performed by residents over the past 10 years. In 670 of these laparoscopic appendectomy cases, the appendix was secured using intracorporeal surgical knot tying, with two intracorporeal knots placed proximally and one placed distally. These cases were evaluated in terms of their contribution to resident training prior to advanced laparoscopic surgeries.

Results: Before starting laparoscopic surgery, surgeons must know basic entry and suturing techniques, both in theory and practice. By learning intracorporeal knot tying during laparoscopic appendectomy in our clinic, residents develop key skills: seeing in 3D on a 2D screen, hand-eye coordination, working with limited touch sensation, operating in a small space, handling the camera, placing trocars, and controlling instruments with both hands for intracorporeal suturing. Keeping up with new technology and combining it with open surgery experience makes even complex laparoscopic procedures possible and successful.

Conclusion: Intracorporeal suturing is one of the most difficult skills in laparoscopic surgery. The goal is to create an ideal suture, and attention to detail is essential. With experience, even complex intracorporeal anastomoses can be performed. Mastering safe laparoscopic suturing techniques helps surgeons gain experience before advanced procedures and improves their success in advanced laparoscopic surgery.

Keywords: Intracorporeal knot, laparoscopic appendectomy, learning curve

[P-506]

Postoperative pain management approach in patients undergoing anti-reflux surgery for hiatal hernia

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Objective: Postoperative pain following laparoscopic hiatal hernia repair significantly impacts patient recovery, hospital length of stay, andhealthcare resource utilization. Traditional opioid-based anesthesia protocols are associated with substantial complications including postoperative nausea and vomiting (PONV), respiratory depression, delayed discharge, and potential for dependence. Recent advancesin regional anesthesia techniques, long-acting local anesthetic formulations, and multimodal opioid-sparing protocols havedemonstrated promising outcomes in reducing opioid consumption while maintaining effective analgesia. This comprehensive review examines contemporary evidence-based pain management strategies for hiatal hernia repair surgery.

Material and Methods: A systematic literature review was conducted acrossfive databases (SciSpace Deep Search, Google Scholar, and PubMed), retrieving 636 articles. Following artificial intelligence-powered relevance ranking and deduplication, 125 unique paperswere identified. Studies were filtered to include only publicationsfrom 2019 onwards to ensure maximum currency of evidence. The top 30 most relevant studies were analyzed in detail, including randomized controlled trials, cohort studies, and systematic reviews evaluating regional anesthesia techniques (crural blocks, fascial plane blocks), local anesthetic infiltration strategies, opioid-free anesthesia protocols (OFAP), and multimodal systemic analgesic regimens.

Results: OFAP demonstrated superior clinical outcomes compared to opioid-based protocols (OBAP). OFAP achieved 94.3% same-day discharge rates versus 60.7% with OBAP ($p<0.001$), with median length of stay of 0 days versus 1 day ($p=0.006$). OFAP significantly reducedperioperative nausea and retching (0% versus 15.6%, $p=0.020$) while maintaining comparable pain control. Post-discharge opioid requirements were significantly lower with OFAP (66.7% versus 100%, $p<0.001$), with odds of same-day surgery 8.21 times greater (95% CI: 3.10-21.71; $p<0.001$). Regional anesthesia showed opioid-sparing effects: crural blocks reduced daily morphine requirements by 2 mg with decreased peak pain scores. A systematic review of 12 studies (983 patients) demonstrated that multimodal opioid-free anesthesia significantly reduced early postoperative pain, PONV incidence, and analgesic consumption while improving quality of recovery (QoR-40) scores. Combination systemic regimens provided superior analgesia: at 45 minutes post-surgery, acetaminophen monotherapy resulted in mean pain scores of 7.91, while acetaminophen plus pethidine achieved 5.99 and acetaminophen plus parecoxib achieved 6.87 on the numeric rating scale.

Conclusion: Contemporary evidence supports a paradigm shift toward multimodal, opioid-sparing approaches. Opioid-free anesthesia protocols facilitate same-day discharge, reduce opioid-related complications, and decrease post-discharge opioid requirements while maintaining effective pain control. Regional anesthesia demonstrate opioid-sparing benefits as valuable adjuncts. Multimodal systemic analgesic combinations consistently outperform monotherapy. Implementation of individualized, evidence-based multimodal pain management strategies should beprioritized to optimize patient outcomes, enhance recovery, andminimize healthcare resource utilization in clinical practice.

Keywords: Crural block/crural infiltration, cruroplasty/crural repair, laparoscopic hiatal hernia repair, minimally invasive surgery, nissen fundoplication

[P-507]

Bibliometric analysis of the literature on splenic endometriosis: A PubMed-based evaluation

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Objective: Splenic endometriosis is an extremely rare clinical entity, and its diagnosis and treatment are often established through postoperative histopathological examination. This study aimed to systematically analyze the bibliometric characteristics of the literature addressing the relationship between splenic endometriosis and splenectomy and to reveal the dynamics of scientific production in this field.

Material and Methods: Publications retrieved using the keywords (endometriosis [Title/Abstract]) AND (spleen OR splenic) AND (splenectomy OR surgery OR histopathology) in the PubMed database were evaluated using bibliometric analysis methods. Publications were examined in terms of production by year, journal and author distribution, country and institutional contributions, keyword trends, and within the framework of Bradford and Lotka laws. Analyses were performed using Bibliometrix/Biblioshiny software.

Results: A total of 31 publications published between 1976 and 2026 across 30 journals were analyzed, involving 136 authors with a mean of 4.42 authors per paper and no single-author publications. The international collaboration rate was low (3.23%), with an annual publication growth rate of 1.4% and a marked increase after 2015. Source analysis demonstrated a highly dispersed publication pattern, with no core journal identified; the Journal of Minimally Invasive Gynecology was the most frequent source (n=2), while most journals contributed only a single article. Lotka analysis revealed predominantly single-publication authorship, with the most productive author contributing only two publications. Country output was mainly concentrated in the United States, Italy, China, Israel, and France. Keyword analysis identified "humans," "female," "adult," and "diagnosis, differential" as the most frequent terms, with increasing prominence over time of themes related to endometriosis diagnosis and magnetic resonance imaging.

Conclusion: Splenic endometriosis is an exceptionally rare entity, most often diagnosed only by postoperative histopathology, and to date lacks a dedicated bibliometric evaluation. To our knowledge, this study is among the first to systematically map the splenic endometriosis literature using PubMed-based bibliometric indicators. The low publication volume and dispersed authorship and journal distribution suggest that a mature research ecosystem has not yet developed, which may partly explain the lack of standardized clinical management. Keyword and trend analyses indicate a temporal shift in focus from surgical techniques toward diagnostic challenges, differential diagnosis, and imaging, particularly magnetic resonance imaging. The concentration of contributions within a limited number of institutions further reflects the fragmented and case-based nature of the field. Overall, this study delineates the current structure of the literature and highlights the need for future multicenter, standardized research to improve diagnostic approaches.

Keywords: Bibliometric analysis, PubMed, rare diseases, splenic endometriosis, surgical pathology

[P-508]

High trauma score accidents: Tractor accidents

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Objective: Tractor accidents typically occur in rural areas, involving drivers and passengers without protective equipment, and exhibiting characteristics of both in-vehicle and out-of-vehicle traffic accidents, often resulting in high trauma scores. Given our hospital's characteristics as a regional referral hospital for traumatology, we believe that trauma scoring systems and evaluation based on these scores are crucial, as we can conduct detailed examinations and provide necessary consultations.

Material and Methods: Between January 1, 2024, and December 31, 2025, 10 cases evaluated in our hospital's emergency department or referred to our emergency department from other centers were assessed. The patients' age, gender, trauma ultrasound (e-FAST) results (if performed), CT scans taken in the emergency department and after admission, and surgical notes were evaluated to determine their current pathologies, clinical or intensive care unit needs, and mortality rates. Based on these findings, the new injury severity score (NISS) was calculated.

Results: The mean age of the patients included in the study was 55.5 (21-83), and all 10 patients were male (100%). e-FAST was applied in 6 (60%) cases, with 4 (66.7%) cases being positive and 2 (33.3%) cases being negative. Of the 4 cases that were considered positive for e-FAST, 3 (75%) were due to hemothorax and 1 (25%) case was due to widespread intra-abdominal fluid. The mean NISS score in the cases was 25.3 (13-41), and 4 (40%) cases were admitted to the thoracic surgery clinic and 6 (60%) cases were admitted to the intensive care unit. Mortality occurred in 2 cases with a NISS score of 41 in the intensive care unit. The mean NISS scores of the 4 patients admitted to the thoracic surgery clinic were 13.2 (9-18), while the mean NISS scores of the patients admitted to the intensive care unit were 35 (13-41).

Conclusion: The NISS score indicates the need for intensive care and is a highly accurate indicator of mortality. Tractor injuries, occurring frequently in rural areas due to the lack of protective equipment and the common occurrence of being crushed under the vehicle, are cases with high morbidity and mortality and should be rapidly referred to tertiary healthcare centers.

Keywords: Traffic accident, tractor, NISS

[P-509]

Biliary obstruction after deceased donor liver transplantation: Incidence and risk factors

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Objective: Biliary complications remain a significant source of morbidity following liver transplantation (LT). Among these, biliary anastomotic stricture (BAS) has been reported in some series at rates as high as 40%. BAS is commonly attributed to biliary ischemia, small bile duct diameter, and the need for multiple anastomoses. In addition, several recipient- and donor-related factors -including demographic characteristics, etiology, MELD-Na score, donor age, graft-to-recipient weight ratio, and cold/warm ischemia times- have been investigated as potential risk factors. In contrast to the extensive literature on BAS after living-donor LT, studies focusing on deceased-donor LT are limited. This study aimed to evaluate the incidence of BAS after deceased-donor LT and to analyze potential recipient- and donor-related risk factors.

Material and Methods: Patients who underwent deceased-donor LT at our center between January 1, 2019, and February 6, 2025, were included. Prospectively recorded data were retrospectively reviewed. Patients with follow-up shorter than 12 months, those undergoing living-donor LT, patients who died within 90 days, and those who developed rejection were excluded. Recipient and donor age, age difference, sex and Rh incompatibility, body mass index, MELD-Na score, cold and warm ischemia times, and intraoperative transfusion volume were evaluated. Time to BAS development and follow-up duration were recorded. In all patients, duct-to-duct biliary anastomosis was performed using interrupted 6/0 polypropylene sutures. Patients presenting with signs of biliary obstruction and/or cholangitis underwent CT to assess graft vascularity and MRCP for biliary evaluation. The cohort was divided into BAS and non-BAS groups for comparison.

Results: A total of 48 patients met the inclusion criteria. Fifteen (31.3%) were female, and the mean age was 56 (18-69) years. BAS developed in 16 patients (33%), with a median time to diagnosis of 4.7 (0.3-20) months. Median follow-up was 50 (12-85) months. In the final study year, only one case of BAS was observed. None of the evaluated variables were statistically significant predictors of BAS in univariate analysis.

Conclusion: The incidence of BAS in this series was relatively high (33%), and no significant risk factors were identified. This may be related to the limited sample size and evaluated parameters. The marked reduction in BAS during the final study year suggests a potential effect of increasing institutional experience and technical refinement. Larger, multicenter prospective studies are needed to better define risk factors for BAS following deceased-donor LT.

Keywords: Cadaveric liver transplant, biliary anastomosis stenosis

Table 1. Patient characteristics

	Total	BAS -	BAS +	p
n	48	32	16	
Donor age	45.5 (17-83)	44 (19-83)	46 (17-69)	0.861
Donor gender M	24 (50%)	15 (62.5%)	9 (37.5%)	0.38
Donor BMI	25.98±3.32	26.00±3.54	25.95±2.93	0.958
Recipient age	56 (18-69)	55 (18-66)	58.5 (27-69)	0.273
Recipient gender F	15 (31.3%)	8 (53.3%)	7 (46.7%)	0.161
Recipient BMI	26.11±4.19	26.43±4.30	25.59±4.02	0.518
Donor-recipient gender mismatch				
No	25 (52.1%)	17 (68%)	8 (32%)	0.836
F→M	16 (33.3%)	11 (68.8%)	5 (31.3%)	
M→F	7 (14.6%)	4 (57.1%)	3 (42.9%)	
Donor-recipient age difference	13.5 (0-44)	16 (0-41)	11 (2-44)	0.518
D < R	33 (68.8%)	21 (63.6%)	12 (36.4%)	0.742
D > R	15 (31.3%)	11 (73.3%)	4 (26.7%)	
Meld NA	17 (15-29)	17 (15-23)	18 (15-29)	0.379
Cold ischemia time	513 (246-827)	492.5 (303-827)	582.5 (246-812)	0.457
Warm ischemia time	76 (25-215)	75 (25-121)	84 (35-215)	0.135
Blood transfusion	13.5 (2-36)	11.5 (2-36)	15 (2-32)	0.717
Length of hospital stay	16 (10-31)	16 (10-31)	17 (11-30)	0.462

[P-510]

Parathyroid adenoma located between the bifurcated branches of the recurrent laryngeal nerve: A rare case of primary hyperparathyroidism

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Objective: Primary hyperparathyroidism (PHPT) is most commonly caused by a solitary parathyroid adenoma and is curatively treated by surgery, the success of which depends on precise localization and careful dissection. Extralaryngeal bifurcation or trifurcation of the recurrent laryngeal nerve (RLN) represents a clinically significant variation, as preservation of all branches is crucial to prevent vocal cord paralysis. When early branching occurs, localization of a parathyroid adenoma between the nerve branches complicates dissection and increases the risk of injury. We present a rare case of a parathyroid adenoma located between bifurcated RLN branches and discuss the surgical approach in light of the literature.

Material and Methods: A 29-year-old female patient presented with complaints of fatigue and muscle weakness. Preoperative laboratory evaluation revealed a serum calcium level of 11.5 mg/dL, 25-OH vitamin D level of 17 ng/mL, and PTH level of 210 pg/mL. The findings were consistent with PHPT. SPECT/CT imaging demonstrated focal increased radiotracer uptake in a mildly hypodense nodular lesion measuring approximately 12×8 mm, located posterior to the mid-inferior portion of the right thyroid lobe. Neck ultrasonography revealed a 13×16 mm iso- to hypoechoic nodular lesion inferior to the right thyroid gland, outside the thyroid capsule. Both imaging modalities were considered compatible with a parathyroid adenoma. Minimally invasive parathyroid adenoma excision was planned. In the preoperative period, the lesion was marked by the department of nuclear medicine using the radioguided occult lesion localization technique. During intraoperative exploration, early bifurcation of the RLN was observed, and the parathyroid adenoma was found to be located between the two nerve branches. Under intraoperative nerve identification and monitoring, and with gamma probe guidance, the parathyroid adenoma was carefully dissected and completely excised. Postoperatively, serum calcium decreased to 9.2 mg/dL and PTH to 32.1 pg/mL. No postoperative hoarseness or vocal cord paralysis developed. Biochemical normocalcemia was achieved, and the patient's symptoms resolved.

Results: RLN bifurcation increases the risk of nerve injury during surgery. Although parathyroid glands may lie medial or posterior to the nerve due to embryologic migration, localization between its branches is exceedingly rare. As preoperative imaging cannot reliably predict nerve variations, selective excision under intraoperative nerve monitoring is recommended. Intraoperative view demonstrating early extralaryngeal bifurcation of the RLN, with the parathyroid adenoma located between the two nerve branches. The adenoma was excised under careful microdissection and intraoperative nerve monitoring. This rare anatomical variation increases the risk of nerve injury, highlighting the importance of meticulous surgical technique and anatomical awareness.

Conclusion: Parathyroid adenoma located between the bifurcated branches of the RLN represents a rare anatomical variation. Careful dissection and intraoperative nerve monitoring are critical for surgical success. Reporting such cases contributes to increased surgical awareness and prevention of potential complications.

Keywords: Recurrent laryngeal nerve, parathyroid adenoma, recurrent laryngeal nerve variation

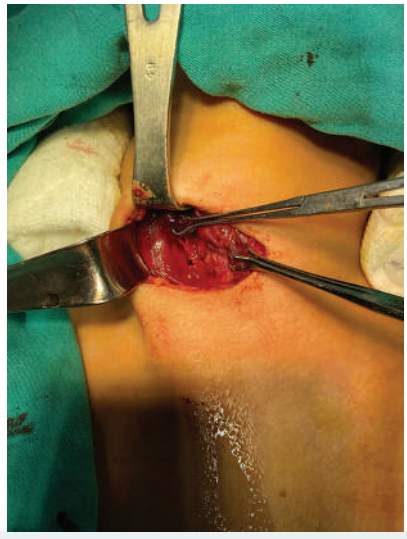


Figure 1. Parathyroid adenoma located between the bifurcated branches of the recurrent laryngeal nerve.

[P-515]

An alternative approach in acute inguinal hernia: Hernioscopy

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Objective: Inguinal hernia repair is one of the most frequently performed surgical procedures in general surgery, using both open and laparoscopic techniques. However, postponement of elective surgery by some patients leads to an increased number of emergency admissions. In patients presenting with acute incarcerated inguinal hernia, mechanical obstruction may necessitate emergency bowel resection, resulting in a significant increase in morbidity and mortality. On the other hand, when spontaneous reduction of the hernia sac occurs after induction of anesthesia, evaluation of the abdominal organs contained within the sac is often not feasible. In such cases, the inability to exclude potential pathological processes may force the surgeon to proceed with diagnostic laparotomy. At this point, hernioscopy, as a less invasive alternative to diagnostic laparotomy, gains clinical importance.

Material and Methods: Hernioscopy is a technique that enables diagnostic laparoscopy through a single trocar inserted via the hernia sac, performed under low insufflation pressure without the need for additional incisions. A review of the literature reveals that hernioscopy was first described in 1992; however, subsequent reports remain limited.

Results: In our clinic, hernioscopy was performed in selected patients. Following standard open surgical technique, the hernia sac was dissected free, a purse-string suture was placed on the peritoneum, and a 10-mm trocar was inserted to allow laparoscopic evaluation. In our practice, hernioscopy was performed in a total of seven patients who underwent surgery for incarcerated inguinal hernia in whom the contents of the hernia sac could not be clearly evaluated intraoperatively. No pathological findings were detected in the bowel loops in any of the cases. In the presence of pathological findings, continuation with laparoscopic intervention using additional ports or conversion to laparotomy based on a risk-benefit assessment was considered. Particularly in patients with hemodynamic instability or significant comorbidities, in whom laparotomy was expected to increase morbidity and mortality, diagnostic laparoscopy performed via the hernia sac provides an important alternative approach that supports and accelerates the surgeon's intraoperative decision-making process.

Conclusion: In patients undergoing emergency surgery with a preliminary diagnosis of incarcerated hernia, in whom the contents of the hernia sac cannot be clearly evaluated and there is a risk of underlying bowel pathology, hernioscopy using the hernia sac should be considered, especially in situations where laparotomy may lead to a significant increase in morbidity and mortality or when laparoscopic surgery cannot be continued due to patient-related comorbidities.

Keywods: Acute hernia, hernioscopy, strangulated hernia



Figure 1. Hernioscopy procedure. Image of a hernioscopy procedure performed using a trocar inserted into the hernia sac.

[P-516]

Our 7-year clinical experience with parastomal hernias

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Objective: Parastomal hernias are uncommon but clinically significant complications that may develop following stoma creation. There is no clear consensus in the literature regarding the optimal management and treatment of these patients. This study aimed to retrospectively evaluate the demographic and clinical characteristics of patients who underwent surgery for parastomal hernia in our clinic.

Material and Methods: This retrospective study included 45 patients who underwent surgical treatment for parastomal hernia at the General Surgery Department of University of Health Sciences Türkiye, Gülhane Training and Research Hospital between January 2018 and January 2025. Patient demographics, including age and sex, were recorded. Preoperative laboratory parameters, including hemoglobin, leukocyte, platelet, and albumin levels, were evaluated to assess baseline clinical status. Imaging modalities used for diagnosis, stoma type, mesh use during surgical repair, and whether the operation was performed under elective or emergency conditions were reviewed using patient files and the hospital information system. The mean age of the patients was 62 years (range: 28-86), and 22 patients (48.9%) were male and 23 (51.1%) were female.

Results: Evaluation of stoma types revealed loop ileostomy in 25 patients (55.6%), loop colostomy in 9 patients (20%), end ileostomy in 2 patients (4.4%), end colostomy in 8 patients (17.8%), and urostomy in 1 patient (2.2%). The mean preoperative hemoglobin level was 12.59 g/dL, mean leukocyte count was 7.02×10^9/L, mean platelet count was 226.5×10^9/L, and mean albumin level was 3.98 g/dL. Computed tomography was the most commonly used imaging modality, performed in 35 patients (77.8%), while ultrasonography was used in 10 patients (22.2%). All patients underwent surgical repair for parastomal hernia. The majority of procedures were performed under elective conditions in 44 patients (97.8%), whereas only 1 patient (2.2%) required emergency surgery. Repair without mesh was performed in 41 patients (91.1%), while mesh reinforcement was used in 4 patients (8.9%).

Conclusion: Parastomal hernias represent clinically important complications with heterogeneous clinical presentations and management strategies. The fact that all patients in this study underwent surgical treatment and that most procedures were performed electively highlights the central role of surgery in their management. The relatively limited use of mesh suggests that surgical decision-making was individualized based on patient-specific and intraoperative factors. These findings emphasize the importance of tailored surgical planning in the management of parastomal hernias. Further prospective studies with larger patient populations are needed to establish standardized treatment protocols and optimize surgical outcomes.

Keywords: Parastomal hernia, clinical experiences

[P-520]

The effect of anti-thymocyte globulin (ATG) use on postoperative surgical complications and graft function in living donor renal transplant patients

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Objective: Renal transplantation is considered to be the most effective treatment option compared to dialysis for patients with end-stage renal failure. One of the commonly used agents as an induction immunosuppressive after transplantation is anti-thymocyte globulin (ATG). In this study, the effects of ATG use on postoperative surgical complications and graft functions are evaluated.

Material and Methods: The data of 76 patients who underwent living donor kidney transplantation at Marmara University Pendik Training and Research Hospital between 2015 and 2020 and met the research criteria were retrospectively examined. Surgical complications, graft function (serum creatinine, eGFR) were examined. The chi-square test, Fisher's exact test, t-test, ANOVA test and Mann-Whitney U test were used for statistical analyses, and the significance level was determined as $p<0.05$.

Results: Thirty-three (43.42%) of the patients received ATG and 43 (56.58%) received basiliximab. A total of 22 patients (28%) developed surgical complications. These complications were observed in 7 patients (21.2%) in the ATG group and in 15 patients (34.9%) in the basiliximab group. These complications include hemorrhage (n=5), vascular complications (renal artery or vein thrombosis or stenosis) (n=3), urinary complications (ureteral stenosis, hematuria, bladder dysfunction, vesicoureteral reflux) (n=8), lymphocele (n=2) and surgical site infections (n=5). There was no significant relationship between ATG use and the development of surgical complications ($p=0.193$). There was a significant change in serum creatinine levels over time ($p=0.024$), but ATG use did not show a significant effect on creatinine ($p=0.780$) and eGFR ($p=0.660$). The bacterial infection rate was found to be low in the ATG group and CMV positivity was found to be high; however, these differences are not statistically significant.

Conclusion: There was no significant effect of ATG use on surgical complications, graft function and delayed graft function. ATG was preferred more often in recipients with a high immunological risk (PRA positive, high HLA missmatch number, pretransplant DSA positive). Therefore, when interpreting the results obtained, it should be taken into account that patients who were given ATG initially had a higher immunological risk profile.

Keywords: Anti-thymocyte globulin, surgical complication, renal transplantation

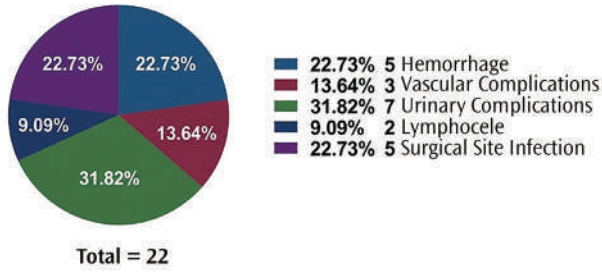


Figure 1. Distribution of surgical complications.

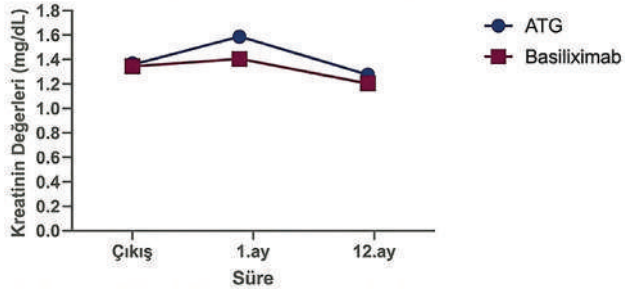


Figure 2. Evolution of serum creatinine levels according to induction therapy: ATG vs. basiliximab.

[P-521]

Rare but critical: Our clinical experience in the diagnosis and surgical management of Spigelian hernia

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Objective: Spigelian hernia is an important abdominal wall hernia that is prone to diagnostic delay due to its rarity, variable clinical presentation, and often inconspicuous findings on physical examination, carrying a risk of emergency presentation and complications. The aim of this study was to present the clinical characteristics, diagnostic process, surgical management, and outcomes of patients with Spigelian hernia who underwent emergency surgical treatment at the General Surgery Department of University of Health Sciences Türkiye, Ankara Etlik City Hospital, and to compare our findings with the literature.

Material and Methods: Five patients who underwent emergency surgical treatment for Spigelian hernia at University of Health Sciences Türkiye, Etlik City Hospital were retrospectively analyzed. Demographics, comorbidities, and risk factors; clinical presentation and diagnostic delay; imaging modalities and CT reports; surgical approach and repair technique; postoperative complications, hospital stay, follow-up,and recurrence data were evaluated using descriptive statistics.

Results: The mean age of the patients was 64.0±14.6 years, with 80% being female. All patients had comorbidities, with a mean ASA score of 2.6±0.9. A history of previous abdominal surgery was present in 80%, and chronic constipation in 60% of cases. All patients presented with abdominal pain. The mean time from symptom onset to diagnosis was 45.6±27. Four hours, with diagnostic delay (≥48 hours) observed in 60% of cases. A palpable mass was noted in 80% of patients, while in one case (20%) the diagnosis was made solely through imaging. Incarceration occurred in 60% and strangulation in 20%. CT imaging was crucial, diagnosing 80% of cases, although the explicit mention of "Spigelian hernia" in reports was low. All patients underwent open surgical repair, with mesh used in 60% (most commonly in the IPOM position). Postoperatively, seroma developed in one patient (20%), while surgical site infection and ileus were not observed. ICU admission was required in 40%, the mean hospital stay was 5.0±3.0 days, and no recurrence was observed during a mean follow-up of 20.4±8.8 months.

Conclusion: The experience at University of Health Sciences Türkiye, Etlik City Hospital demonstrates that, despite its rarity, Spigelian hernia is a clinically significant pathology, particularly in emergency presentations, with a high risk of diagnostic delay (60%) and complications such as incarceration and strangulation. Although CT played a decisive role in diagnosis in our series,the low frequency of explicit mention of "Spigelian hernia" in CT reports suggests that diagnostic success depends not only on imaging but also on clinical suspicion and radiological reporting awareness. From a surgical perspective, mesh repair was performed in 60% of cases under emergency conditions; no surgical site infections were observed, and no recurrence was noted during follow-up exceeding 20 months. These findings align with the diagnostic challenges emphasized in the literature, highlighting the need for increased awareness for early diagnosis and supporting that, with proper patient selection and technique, mesh repair can be a safe and effective option even in emergency cases. This series, providing real-world data on the diagnosis and management of this rare pathology, offers a practical guide for clinicians and underscores the need for further support from larger case series.

Keywords: Abdominal wall hernia, incarceration, mesh repair, Spigelian hernia, strangulation



Figure 1. CT image (axial) of a large Spigelian hernia.

Table 1. Demographic characteristics and comorbidity profile (n=5)

Parameter	Value
Age (years), mean ± SD	64.0±14.6
Age, median (Q1-Q3)	62 (54-71)
Sex-male, n (%)	1 (20%)
Sex-female, n (%)	4 (80%)
Body mass index (kg/m²), mean ± SD	29.2±5.9
Obesity (BMI ≥30), n (%)	1 (20%)
ASA score, mean ± SD	2.6±0.9
Charlson comorbidity index, median (min-max)	0 (0-9)
Presence of additional disease, n (%)	5 (100%)
Chronic cough/COPD, n (%)	1 (20%)
Chronic constipation, n (%)	3 (60%)
Previous abdominal surgery, n (%)	4 (80%)
Multiparity ≥2 (among female patients), n (%)	4/4 (100%)

Table 2. Clinical presentation findings

Parameter	Value
Admission type-emergency, n (%)	5 (100%)
Symptom duration (days), mean ± SD	2.0±1.0
Time from symptom onset to diagnosis (hours), mean ± SD	45.6±27.4
Diagnostic delay >48 hours, n (%)	3 (60%)
Abdominal pain, n (%)	5 (100%)
Palpable mass, n (%)	4 (80%)
Diagnosis by imaging despite absence of palpable mass on physical examination, n (%)	1 (20%)
Nausea and vomiting, n (%)	3 (60%)
Incarceration, n (%)	3 (60%)
Strangulation, n (%)	1 (20%)

Table 3. Imaging findings

Parameter	Value
Imaging modality-CT, n (%)	2 (40%)
Imaging modality-ultrasonography (USG), n (%)	1 (20%)
Imaging modality-CT + USG, n (%)	2 (40%)
Cases diagnosed by CT, n (%)	4 (80%)
Spigelian hernia explicitly stated in CT report, n (%)	1 (25%)
Content reported on CT-omentum, n (%)	1 (25%)
Content reported on CT-small bowel, n (%)	2 (50%)
Content reported on CT-colon, n (%)	0

Table 4. Surgical characteristics

Parameter	Value
Surgical approach-open surgery, n (%)	5 (100%)
Repair type-primary, n (%)	2 (40%)
Repair type-mesh, n (%)	3 (60%)
Mesh use in emergency cases, n (%)	3 (60%)
Mesh position-sublay, n (%)	1 (33%)
Mesh position-IPOM, n (%)	2 (67%)
Mesh fixation-suture, n (%)	2 (67%)
Mesh fixation-stapler/tacker, n (%)	1 (33%)
Defect closed primarily, n (%)	2 (40%)
Bowel resection, n (%)	0

Table 5. Postoperative outcomes and follow-up

Parameter	Value
Operative time (min), mean ± SD	82.0±36.8
Postoperative complications, n (%)	1 (20%)
Surgical site infection, n (%)	0
Seroma, n (%)	1 (20%)
Postoperative ileus, n (%)	0
Intensive care unit admission, n (%)	2 (40%)
Length of ICU stay (days), median (min-max)	2 (2-6)
Length of hospital stay (days), mean ± SD	5.0±3.0
Follow-up duration (months), mean ± SD	20.4±8.8
Recurrence, n (%)	0

[P-524]

Laparoscopic transabdominal preperitoneal inguinal hernia repair (TAPP) in a young training clinic: Two-year experience

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Objective: Inguinal hernias are among the most commonly encountered surgical conditions in general surgery practice. Surgical repair is recommended for their treatment, and various surgical techniques are currently employed for this purpose. One of these techniques is laparoscopic inguinal hernia repair.

Material and Methods: The aim of this study was to present the early outcomes of transabdominal preperitoneal (TAPP) inguinal hernia repair performed on patients in a newly established general surgery clinic.

Results: A retrospective analysis was conducted on 102 patients who underwent TAPP inguinal hernia repair at our general surgery clinic between January 2024 and January 2026. Of these patients, 98 (96.1%) were male and 4 (3.9%) were female. The mean age was 55.6 years, and the mean body mass index was 26.8 kg/m^2. According to preoperative anesthesia assessment, 18 patients were classified as ASA I (17.6%), 72 as ASA II (70.6%), and 12 as ASA III (11.8%). Regarding hernia laterality, 51 patients (50%) had right-sided, 31 (30.4%) left-sided, and 20 (19.6%) bilateral inguinal hernias. Intraoperative findings revealed 48 (47.1%) direct, 46 (45.1%) indirect, 7 (6.9%) pantaloon, and 1 (1%) femoral hernia. The mean operative time was 60.9 minutes. The mean postoperative hospital stay was 1.67 days. During a two-year follow-up period, hernia recurrence was observed in 2 patients. Early postoperative complications included inguinal seroma in 2 patients, scrotal edema in 1 patient, inguinal hematoma in 2 patients, trocar site bleeding in 1 patient, and subcutaneous ecchymosis. All patients received appropriate medical management and follow-up during the postoperative period.

Conclusion: The TAPP procedure has recently become a commonly preferred method for inguinal hernia repair due to its advantages of reduced postoperative pain and shorter hospital stay, which facilitate a faster return to daily activities. In our clinic, laparoscopic inguinal hernia repair was successfully performed during the learning curve with low complication and recurrence rates, and these results support its dissemination within the general surgery residency training program.

Keywords: Hernia repair, inguinal hernia, TAPP

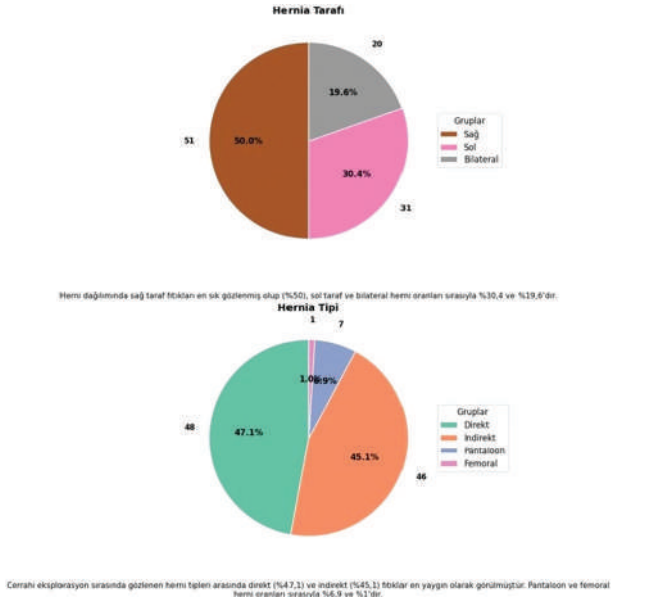


Figure 1. Characteristics and side distribution of hernias.

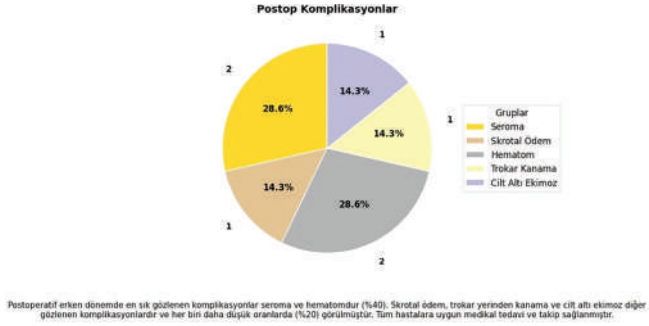


Figure 2. Rates of complications.

[P-525]

Minimally invasive pancreatic surgery: Our robotic and laparoscopic experiences

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Objective: Pancreatic cancers remain among malignancies with high mortality rates due to both theiraggressive biological behavior and the limited chance of curative surgical treatment at thetime of diagnosis. In recent years, minimally invasive approaches including laparoscopic androbotic techniques have been increasingly preferred because of their potential benefits onintraoperative and postoperative morbidity and mortality. However, comprehensive data, particularly regarding long-term outcomes and complication profiles, remain limited.

Material and Methods: In this study, laparoscopic and robotic pancreatic surgeries performed in our clinic between 2020 and 2025 were retrospectively reviewed. Various parameters were compared, including operative duration, anesthesia induction and extubation times, intraoperative blood loss andblood product transfusion requirements. Postoperative outcomes such as thromboembolic events, atelectasis, surgical site infections and mortality were analyzed. Conversion rates tolaparoscopic or open surgery and length of stay in the intensive care unit were also evaluated. In light of similar studies reported in the literature, the current status of laparoscopic and robotic pancreatic surgery and potential future trends were assessed. The aim was toprovide data that may help clarify the advantages and limitations of minimally invasive pancreatic surgery and contribute to surgical decision-making processes.

Results: In robotic pancreatic surgery cases, parameters related to surgical and anesthesiological processes were observed to improve significantly over time. A gradual reduction in operative duration was noted in later cases, indicating more efficient perioperative management. In accordance with learning curve data reported in the literature, increasing team experience led to a more predictable and stable surgical workflow. Postoperative complication rates in robotic pancreatic surgery were found to be lower compared to laparoscopic surgery. Anastomotic leakage, thromboembolic events and mortality were observed in a limited number ofcases. These findings may be associated with the precise dissection capability and stable visualization provided by robotic surgical systems.

Conclusion: Robotic pancreatic surgery appears to be a safe and feasible approach in our clinic withrespect to early surgical and clinical outcomes. The improvement observed in operative processes over time and the trend toward shorter operative durations are consistent with reports from other experienced centers. Increasing surgical and anesthesiological team experience and improved perioperative coordination support the role of robotic surgery as aneffective and sustainable option in pancreatic surgery.

Keywords: Laparoscopic pancreatic surgery, robotic pancreatic surgery

[P-526]

Stove burn complicated as diabetic foot: Case presentation

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Objective: Diabetes mellitus (DM) is a systemic disease that negatively affects the wound healing process and significantly increases the risk of chronic wound formation in patients with burn. Microvascular circulation disorders, peripheral neuropathy, prolonged inflammation, and susceptibility to infection in diabetic individuals can hinder the normal healing process of burn wounds.

Material and Methods: This case report aims to examine the progression of a chronic wound in a diabetic patient and the effect of an interdisciplinary approach to wound care on wound healing.

Results: Fifty-one-year-old male patient with a history of DM and hypertension presented to the burn unit with a second-degree burn on the plantar surface of his left foot due to a thermal burn. The burn occurred approximately 5 days earlier as a result of contact with a stove. The patient's HbA1C value was determined to be 9.6% and his blood glucose value was 282 mg/dL; findings of peripheral neuropathy and circulatory disorders were evaluated. The patient had a history of peripheral neuropathy and smoking. The patient's wound was followed up and treated by the burn unit on an outpatient basis for approximately two weeks. Due to possible uncontrolled DM, the patient's burn wound did not heal and had complicated as diabetic foot, so the patient was transferred to the Chronic Wound Care Team. The Chronic Wound Care Team sequentially applied autolytic debridement and epithelialization-supporting products to the patient's wound. At the same time, the patient's glycemic control was ensured, and signs of infection were closely monitored. The patient's wound completely healed after approximately three weeks of follow-up and treatment in outpatient clinic conditions.

Conclusion: Following the wound care applied, an increase in granulation tissue in the wound bed and a significant acceleration in the epithelialization process were observed. This case demonstrates that burn wounds in diabetic individuals carry a high risk of chronicity and that successful wound healing is possible through interdisciplinary collaboration. It should always be kept in mind that coordinated work between Burn and Chronic Wound Care Teams is critical for the effectiveness of wound management.

Keywords: Burn, chronic wound, diabetes mellitus, interdisciplinary work



Figure 1.
Initial appearance of the wound



Figure 2.
Appearance of the wound at postoperative week 1



Figure 3.
Appearance of the wound at postoperative week 2





Figure 1. The course of diabetic foot ulcer developing after a stove burn.

[P-528]

Characteristics of recurrent retroperitoneal soft tissue sarcomas

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Objective: Retroperitoneal soft tissue sarcomas constitute approximately 12-15% of all soft tissue sarcomas. Mortality is generally due to unresectable recurrent tumor complications rather than distant metastasis. In this study, the characteristics of patients with recurrent retroperitoneal soft tissue sarcoma were investigated.

Material and Methods: In this study, gender, age, presenting complaint, length of hospital stay, tumor diameter, histopathological type, type of resection, organ resection, and time of recurrence were evaluated in 30 of 49 retroperitoneal soft tissue sarcoma patients who experienced recurrence and were treated between 2009 and 2025.

Results: Recurrence occurred in 30 (61%) of the 49 patients, 17 (57%) of whom were female and 13 (43%) were male. The mean age at the time of the first surgery for retroperitoneal soft tissue sarcoma was 55 (28-81). Abdominal pain was the most frequent presenting complaint, occurring in 46.6% of patients. The mean postoperative hospital stay was 9 (2-24) days. The mean tumor diameter was 16.4 (3.5-36) cm. Thirteen different histopathological types were identified, the most frequent being dedifferentiated liposarcoma, seen in ten patients (33%). R0 resection was performed in nineteen patients (64%), R1 resection in ten patients (33%), and R2 resection in one patient (3%). Organ resection was performed in sixteen patients (53%) due to invasion. The mean time to recurrence was 40 (5-220) months.

Conclusion: In this study, the recurrence rate in retroperitoneal soft tissue sarcoma was found to be 61%, and the mean time to recurrence was 40 months.

Keywords: Sarcoma, retroperitoneal soft tissue sarcoma, surgical oncology

[P-529]

Retroperitoneal tumors: A review of six cases

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Objective: The retroperitoneal region is a complex potential space bordered by vital organs: anteriorly by the peritoneum, colon and mesocolon, liver, pancreas, and stomach. Posteriorly, it is bounded predominantly by muscular structures: the psoas, quadratus lumborum, transversus abdominis, and iliac muscles. Depending on tumor location, the diaphragm, ipsilateral kidney, ureter, and gonadal vessels may be adjacent. Medially, the boundaries may be defined by the vertebrae, paraspinal muscles, inferior vena cava, and aorta.

Material and Methods: The clinical findings, imaging modalities used for diagnosis, surgical course, and final histopathological characteristics of patients operated on in our clinic between 2023 and 2025 with a prediagnosis of "retroperitoneal tumor" were reviewed.

Results: A total of 6 (six) patients underwent surgery; mean age was 60.2 (56-67) years, and the female-to-male ratio was 4:2. Three patients had primary retroperitoneal tumors; the remaining three had secondary tumors, two presented with recurrence in the setting of prior total hysterectomy and oophorectomy, and one had a recurrence of a chordoma with very low malignant potential. The tumors primarily diagnosed were "high-grade malignant mesenchymal tumor (with areas showing rhabdomyosarcoma and leiomyosarcoma differentiation)"; high-grade liposarcoma; and retroperitoneal fibrosis. Among the secondary tumors, one patient, who had been operated on 7-8 times in the neurosurgery clinic due to chordoma, had an invasive 8.5 cm mass over the left iliopsoas; the other two had previously been operated on by the obstetrics and gynecology clinic 8 years and 2 years earlier for "granular cell ovarian tumor" and "mesonephric adenocarcinoma," respectively. The mean longest tumor diameter was 18.3 (8.5-30) cm; the largest measured 30×29×14 cm and weighed 14.5 kg. Surgical margins were negative in all patients, and they have continued their lives without recurrence to date.

Conclusion: All retroperitoneal tumors we operated on were large-volume lesions. Due to the retroperitoneal location, a multidisciplinary approach is required, and survival can be prolonged by achieving negative surgical margins and by close follow-up for recurrence.

Keywords: Retroperitoneal tumors, liposarcoma, soft tissue sarcoma

[P-530]

Initial interpretation of symptoms in acute appendicitis and the decision process for hospital admission

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Objective: The aim of this pilot study is to evaluate the effect of symptom duration, initial interpretation of pain, home interventions, and social factors on the decision-making process for hospital admission in patients diagnosed with acute appendicitis; and to explore perceptual and behavioral factors that may be associated with delayed admission.

Material and Methods: This single-center, descriptive, and exploratory pilot study involved administering a closed-ended questionnaire to 30 patients diagnosed with acute appendicitis or perforated appendicitis. The questionnaire examined the duration of symptoms, the initial assessment of pain, actions taken at home, the influence of the social environment and information sources, and the decision-making process leading to hospital admission. Clinical information was recorded by the physician. The study did not include any personally identifiable data, and all analyses were performed on an anonymized dataset. Delayed referral was dichotomized as "delay present" for all options except the "no delay" response. Categorical variables were presented with descriptive statistics. Fisher's exact test was used for exploratory comparisons, and $p<0.05$ was considered statistically significant.

Results: Twenty-three patients (76.7%) were diagnosed with acute appendicitis, and 7 (23.3%) with perforated appendicitis. %53.3 patients (n=16) had symptoms lasting more than 12 hours. Sixteen patients (53.3%) said they "did not take the pain seriously at first," 10 (33.3%) said they took it "somewhat seriously," and 4 (13.3%) said they took it "seriously from the beginning." Twenty-seven patients (90%) stated that they did not consider the possibility of appendicitis at the onset of symptoms. Twelve patients (40%) researched their symptoms on the internet. Forty percent of families (n=12) accelerated the referral process, while 53.3% (n=16) reported no effect, and 6.7% (n=2) reported delaying the referral. Thirteen patients (43.3%) stated that they delayed going to the hospital because they felt better after taking painkillers. No statistically significant relationship was found between delayed presentation and not taking the pain seriously at first ($p>0.99$), not considering the possibility of appendicitis ($p=0.43$), and relief after taking painkillers ($p>0.99$). There was a trend toward less delay in seeking medical attention among patients who assessed their pain as "severe from the outset" ($p=0.119$).

Conclusion: In conclusion, this study suggests that delayed presentation in patients with acute appendicitis may be related to the initial interpretation of symptoms and patient perception rather than clinical findings. The findings indicate that the effect of patient perception and decision-making processes on delayed presentation could be more clearly demonstrated in prospective studies with larger samples.

Keywords: Appendicitis, delay, application

Table 1. Patients' perceptual and behavioral characteristics related to symptom recognition and the decision-making process for seeking hospital care (n=30)

Perceptual/behavioral characteristics	n (%)
Didn't take the pain seriously at first	16 (53.3)
Not considering the possibility of appendicitis at first	27 (90.0)
Searching for symptoms online	12 (40.0)
Relieved after taking painkillers and postponing the application	13 (43.3)
Not making the decision to go to the hospital on their own (family/environmental influence)	14 (46.7)

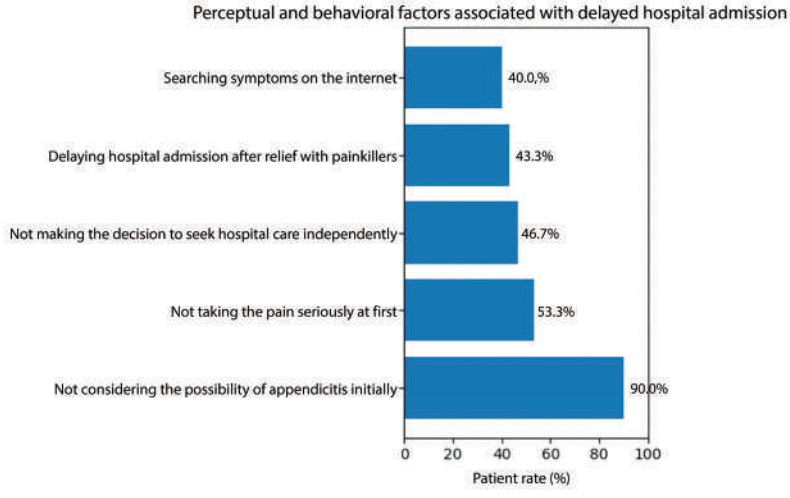


Figure 1. Application delay.

[P-531]

Surgical site infections after ileostomy and colostomy closure: A single-center experience

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Objective: The creation of an ostomy or colostomy may be required temporarily or permanently for the management of various pathological conditions, including congenital anomalies, colonic obstruction, inflammatory bowel disease, bowel trauma, and gastrointestinal malignancies. One of the most common complications following ostomy closure is surgical site infection (SSI). Compared to many other surgical procedures, the risk of SSI is relatively higher in ostomy closure operations. Therefore, meticulous adherence to sterile techniques by both the surgeon and operating room nurse is strongly recommended. In this study, we aimed to analyze the data of patients who developed SSI after ostomy closure.

Material and Methods: This retrospective study included 34 patients who underwent ostomy or colostomy closure between January 1, 2023, and January 1, 2026, at İzmir Katip Çelebi University, Atatürk Training and Research Hospital. Demographic characteristics, comorbidities, and length of hospital stay were evaluated.

Results: Among the 34 patients, 18 underwent ostomy closure and 16 underwent colostomy closure. Fourteen patients (41.2%) were female and 20 (58.8%) were male. In the colostomy closure group, 4 of 16 patients (25%) developed SSI. Two were female and two were male. All infected patients had at least one comorbidity. The mean hospital stay was 8.75 days (range: 6-11) in infected patients and 6.0 days (range: 3-8) in non-infected patients. In the ostomy closure group, 7 of 18 patients (38.9%) developed SSI. Two were female (28.6%) and five were male (71.4%). All infected patients had at least one comorbidity, and three had three or more comorbidities. The mean hospital stay was 13.14 days (range: 8-23) in infected patients and 5.36 days (range: 4-7) in non-infected patients. Additionally, one patient developed an anastomotic leak, resulting in a mortality rate of 2.94%.

Conclusion: SSI after ostomy closure is a common complication that significantly prolongs hospital stay. The presence of comorbidities appears to increase the risk of infection. Strict adherence to sterile techniques and strong collaboration between surgeons and nurses may help reduce this complication.

Keywords: Ostomy-colostomy closure, infection

Table 1. Ostomy patients

Ostomy patients	Infected	Uninfected
	7	11
Average stay duration	13.14	5.36
Age	64.85	66.90

Ostomy patients with and without infection, age, and average length of hospital stay.

Table 2. Colostomy patients

Colostomy patients	Infected	Uninfected
	4	12
Average stay duration	8.75	6.0
Age	66.50	58.25

Colostomy patients with and without infection, age, and average length of hospital stay.

[P-532]

Outcomes of stoma closure after emergency resection in patients operated for perforated diverticulitis

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Objective: The choice between Hartmann's procedure and resection with primary anastomosis plus diverting loop ileostomy in patients undergoing emergency surgery for perforated diverticulitis remains controversial. It is well established that stoma reversal rates are lower and closure times are significantly longer in patients undergoing Hartmann's procedure compared to those with loop stomas. In this study, we aimed to compare stoma closure rates and timing in patients who underwent emergency surgery with stoma formation due to diverticular perforation.

Material and Methods: We retrospectively analyzed patients who underwent emergency surgery for perforated diverticulitis with stoma formation at İzmir Katip Çelebi University Atatürk Training and Research Hospital between January 1, 2021, and January 1, 2026. Data regarding stoma closure status and timing were evaluated.

Results: A total of 36 patients underwent emergency surgery for perforated diverticulitis. Stoma formation was performed in 29 patients. Five patients who died in the postoperative period were excluded from the study. Among the remaining 24 patients, 5 underwent resection with primary anastomosis and diverting loop ileostomy, while 19 underwent Hartmann's procedure. Stoma closure was achieved in all patients (100%) with loop ileostomy. In contrast, 7 of the 19 patients (36.8%) who underwent Hartmann's procedure had not undergone stoma reversal at the time of analysis. In the Hartmann group, stoma closure was performed between 4 and 60 months postoperatively. In the loop ileostomy group, closure was achieved significantly earlier, between 8 and 14 weeks.

Conclusion: Stoma formation is frequently required in emergency surgery for perforated diverticulitis. Our findings suggest that resection with primary anastomosis and protective loop ileostomy may provide higher stoma closure rates and significantly shorter time to reversal compared to Hartmann's procedure. This approach may reduce the likelihood of permanent stoma and improve postoperative outcomes.

Keywords: Loop ileostomy, perforated diverticulitis, stoma closure

[P-533]

Clinicopathological comparison of perforated and non-perforated acute appendicitis cases

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Objective: Acute appendicitis is one of the most common surgical abdominal pathologies. Approximately 20-30% of cases present as complicated appendicitis with perforation. Appendiceal perforation can significantly increase morbidity and mortality rates. The aim of this study was to compare the clinical, laboratory, intraoperative, and histopathological data of patients who underwent surgery for appendicitis, both perforated and non-perforated.

Material and Methods: The data of 521 patients with acute appendicitis who underwent surgery between January 2016 and June 2025 were retrospectively reviewed. Patients were grouped according to the status of appendix perforation (non-perforated, perforated, plastron). Parameters such as age, duration of symptoms, laboratory values (WBC, CRP, neutrophil, lymphocyte, bilirubin), and radiological findings (appendix diameter) were compared between groups.

Results: The rates of perforation and plastron increased significantly with increasing age and duration of symptoms ($p<0.001$). In patients with perforation and plastron, preoperative leukocyte, neutrophil, CRP, total bilirubin, and indirect bilirubin levels were significantly higher than in the non-perforated group ($p<0.001$). Lymphocyte levels were significantly lower in patients with perforation and plastron. The appendix diameter was significantly smaller in non-perforated patients compared to those with perforation and plastron ($p<0.001$).

Conclusion: Advanced age, prolonged symptom duration, and elevated inflammation markers (WBC, CRP, neutrophil) along with decreased lymphocyte and elevated bilirubin levels are important clinical and pathological indicators of perforation risk in acute appendicitis cases. These findings may assist clinicians in assessing perforation risk earlier and optimizing treatment management.

Keywords: Non-perforated appendicitis, perforated appendicitis

[P-534]

A new surgical approach to incisional hernia; simultaneous hernia repair and abdominoplasty

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Objective: Simultaneous ventral hernia repair and abdominoplasty is a combined surgical approach that provides aesthetic improvement along with restoration of abdominal wall function. This study aimed to evaluate the clinical outcomes, complications, and wound management strategies of 42 patients who underwent concurrent ventral hernia repair and abdominoplasty, in light of the relevant literature.

Material and Methods: A total of 42 patients who underwent simultaneous ventral hernia repair and abdominoplasty were retrospectively analyzed. Demographic characteristics, types of hernia, concomitant surgical procedures, postoperative complications, and follow-up outcomes were assessed. Reconstructive surgical interventions and wound care strategies applied in patients who developed skin necrosis were also evaluated.

Results: Skin necrosis occurred in 5 of the 42 patients (11.9%). One of these patients was treated with a free skin graft harvested from the anterolateral thigh region, while the remaining cases were successfully managed using vacuum-assisted closure therapy. Concurrent cholecystectomy was performed in eight patients. During the mean follow-up period, no ventral hernia recurrence was observed. No major morbidity or mortality was recorded.

Conclusion: With appropriate patient selection and meticulous surgical technique, the simultaneous application of ventral hernia repair and abdominoplasty is a safe and effective approach. Skin necrosis is the most common serious complication; however, it can be successfully treated using modern wound management techniques.

Keywords: Abdominoplasty, combined surgery, skin necrosis, ventral hernia repair, wound management



Figure 1. Early postoperative abdominal appearance after simultaneous ventral hernia repair and abdominoplasty.

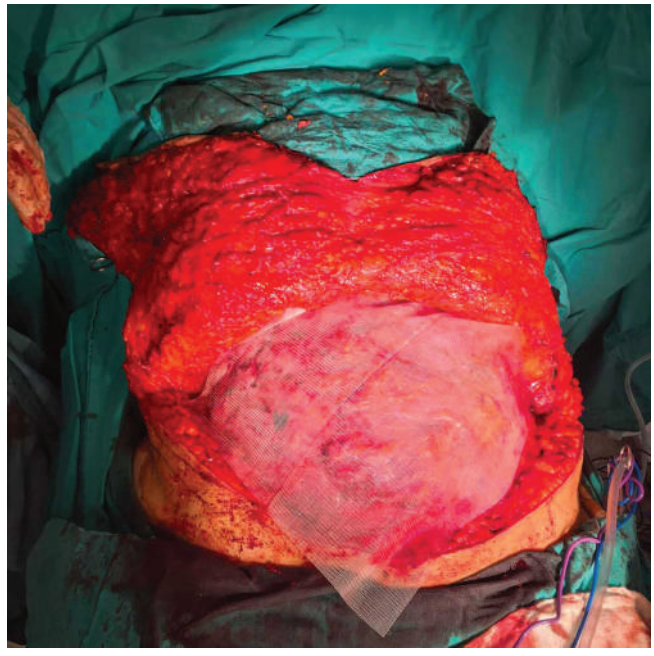


Figure 2. Intraoperative view of abdominal wall reconstruction following ventral hernia repair and abdominoplasty.



Figure 3. Intraoperative view showing mesh fixation and coverage of the hernia defect during abdominal wall reconstruction.



Figure 4. Preoperative view of the abdominal wall defect.

[P-535]

False decrease in oxygen saturation following subareolar isosulfan blue dye injection

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Objective: Sentinel lymph node biopsy (SLNB) is a widely used and reliable method for axillary staging in early-stage breast cancer surgery, with a low morbidity rate and a reported accuracy exceeding 90%. The most commonly used dyes during SLNB are isosulfan blue and methylene blue. Although rare, clinically noteworthy complications following isosulfan blue administration include a decrease in oxygen saturation due to methemoglobinemia or false readings related to pulse oximetry interference. Such events may lead to unnecessary interventions and concern during the perioperative period. In this study, we aimed to investigate whether the perioperative decrease in oxygen saturation observed after subareolar injection of isosulfan blue dye for sentinel lymph node identification was attributable to true hypoxemia or to a false measurement caused by pulse oximetry.

Material and Methods: A total of 30 patients who underwent surgery for a diagnosis of breast cancer and received SLNB were included in the study. Patients' demographic characteristics, histopathological diagnoses, surgical procedures performed, and perioperative oxygen saturation values were recorded. SpO_2 values measured by pulse oximetry before and after dye injection were compared. In patients who were found to have a decrease in oxygen saturation, arterial blood gas analysis was performed to assess true oxygen saturation.

Results: Invasive ductal carcinoma was present in 27 patients, invasive lobular carcinoma in 2 patients, and ductal carcinoma *in situ* in 1 patient. The mean age was 53.8 years (range: 32-75). Breast-conserving surgery plus SLNB was performed in 21 patients, modified radical mastectomy in 4 patients, and simple mastectomy plus SLNB in 5 patients. Fifteen patients underwent surgery following neoadjuvant chemotherapy. The mean SpO_2 value measured prior to dye injection was 99.1%, which decreased to 91.5% after injection. However, arterial blood gas analysis performed during the same period revealed a mean oxygen saturation of 97.4%. No postoperative respiratory complications were observed in any of the patients.

Conclusion: The decrease in oxygen saturation observed on pulse oximetry following isosulfan blue dye injection during SLNB does not reflect true hypoxemia. This phenomenon should be considered a measurement artifact, and in cases of clinical suspicion, confirmation with arterial blood gas analysis is recommended. Recognition of this condition may help prevent unnecessary interventions.

Keywords: Sentinel lymph node biopsy, isosulfan blue dye, breast cancer

[P-536]

Bilateral mastectomy with immediate reconstruction in a single stage

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Objective: At Maltepe University Faculty of Medicine Hospital, the outcomes of immediate silicone-based breast reconstruction performed in the same session for patients undergoing mastectomy due to a cancer diagnosis were investigated.

Material and Methods: The data of 313 patients who underwent surgery for a diagnosis of breast cancer between 2020 and 2025 were reviewed. Patients who underwent axillary dissection following sentinel lymph node biopsy were excluded from the study, and the remaining patients were divided into three groups: segmental mastectomy, simple mastectomy, and bilateral mastectomy with silicone-based reconstruction. Postoperative hospital stay duration, pain levels, and patient satisfaction were evaluated.

Results: As expected, the shortest time to discharge was observed in patients who underwent segmental mastectomy alone (median 1 day), whereas the median hospital stay was 3 days in the silicone-based reconstruction group, and the difference was statistically significant. Postoperative wound-site complications were found to be more frequent in patients who underwent reconstruction, and visual analog scale pain scores were significantly higher in this group. When patients' postoperative aesthetic satisfaction was assessed on a 10-point scale, the simple mastectomy group was found to be dissatisfied, while the other two groups showed no significant difference, with satisfaction scores of 7.8/10 in the segmental mastectomy group and 8.1/10 in the reconstruction group.

Conclusion: Although segmental mastectomy still appears to be the best option in terms of patient satisfaction, the option of silicone-based reconstruction should be offered preoperatively, taking into account the patient's age, family history, and expectations.

Keywords: Breast cancer, immediate silicone-based reconstruction

[P-537]

The effect of parathyroid autotransplantation on parathyroid hormone levels during total thyroidectomy

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Objective: Hypocalcemia due to hypoparathyroidism after total thyroidectomy is one of the common complications of surgery and may follow a transient or permanent course. Permanent hypoparathyroidism negatively affects patients' quality of life and may require long-term calcium and active vitamin D supplementation. Parathyroid autotransplantation is considered a salvage strategy aimed at preserving the function of parathyroid tissue that is thought to be devascularized intraoperatively or inadvertently excised. However, the effect of this approach on the parathyroid hormone (PTH) recovery process remains controversial in the literature. This study aimed to compare the postoperative PTH recovery process in patients with and without parathyroid autotransplantation.

Material and Methods: This retrospective comparative cohort study included 152 patients who underwent total thyroidectomy at the Endocrine Surgery Clinic of Konya City Hospital. Patients were divided into a parathyroid autotransplantation group (PAT, n=70) and a control group without autotransplantation who developed hypoparathyroidism at postoperative 24 hours (n=82). Serum PTH and calcium levels were measured preoperatively and at postoperative 24 hours, 1 month, 6 months, and 12 months. Biochemical recovery was defined as serum calcium ≥8.5 mg/dL and PTH ≥15 pg/mL. Groups were compared using appropriate statistical tests, with $p<0.05$ considered significant.

Results: The study population consisted of 20 males (13.1%) and 132 females (86.9%). Mean age was similar between the PAT and control groups (49.4±13.1 vs. 48.7±12.7 years, $p>0.05$). PTH levels at postoperative 24 hours were significantly higher in the PAT group ($p<0.001$). At 1 month, biochemical recovery was observed in 65% of the PAT group and 40% of the control group ($p=0.01$). Although median PTH and calcium levels were comparable, recovery rates were higher in the PAT group based on threshold analysis. No significant differences were observed at 6- and 12-month follow-up. Biochemical recovery was defined as a serum calcium level ≥8.5 mg/dL and a parathyroid hormone (PTH) level ≥15 pg/mL at the corresponding follow-up time point. The proportion of patients (%) meeting the recovery criteria at each follow-up time point was calculated, and intergroup comparisons were performed using the chi-square test or Fisher's exact test, as appropriate.

Conclusion: Parathyroid autotransplantation accelerates the biochemical recovery of parathyroid function after total thyroidectomy, particularly in the early postoperative period. However, similar recovery rates are achieved in both groups during long-term follow-up. In light of these findings, autotransplantation of parathyroid glands that are considered devascularized intraoperatively or inadvertently excised may be regarded as an effective surgical approach for preserving parathyroid function and facilitating early biochemical recovery.

Keywords: Parathyroid autotransplantation, parathyroid hormone recovery, total thyroidectomy

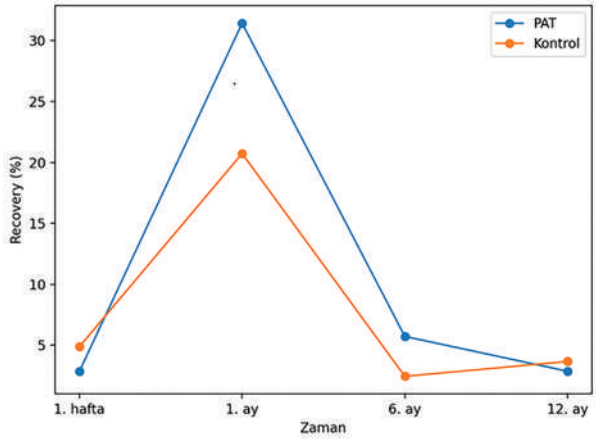


Figure 1. Time course of biochemical recovery in patients with and without parathyroid autotransplantation.

Table 1. Calcium and PTH levels over time

Variable	PAT	Control	p
Calcium-preoperative	9.40 (9.10-9.70)	9.40 (9.10-9.60)	0.798
PTH-preoperative	33.95 (21.72-43.85)	47.10 (38.55-50.25)	0.300
Calcium-24th hour	7.85 (7.40-8.30)	7.75 (7.50-8.10)	0.452
PTH-24th hour	10.30 (3.94-25.10)	5.57 (2.45-8.80)	p<0.001
Calcium-1st week	8.55 (8.00-8.80)	8.45 (7.60-8.85)	0.867
PTH-1st week	11.90 (10.60-19.25)	15.45 (7.39-39.95)	0.711
Calcium-1st month	9.10 (8.70-9.62)	8.80 (8.25-9.40)	0.188
PTH-1st month	23.25 (18.28-39.57)	27.05 (14.90-33.88)	0.731
Calcium-6th month	8.95 (8.35-9.05)	7.75 (7.50-8.68)	0.080
PTH-6th month	17.10 (15.25-35.25)	14.40 (7.13-15.30)	0.106
Calcium-12th month	8.60 (8.30-8.75)	8.75 (8.40-8.80)	0.918
PTH-12th month	18.50 (15.20-26.07)	22.30 (7.63-49.60)	0.788

Data are presented as median (25th-75th percentile). Intergroup comparisons were performed using the Mann-Whitney U test.

[P-538]

The road to total pancreatectomy: Preoperative planning or peroperative necessity?

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Objective: Pancreatic surgery is one of the most complex fields of general surgery due to its high mortality and morbidity rates and technical challenges. Postoperative pancreatogenic diabetes mellitus (DM) (type 3c DM) is one of its most significant complications. The absence of both insulin and glucagon makes glycemic regulation difficult. Deciding between pancreatoduodenectomy, distal pancreatectomy, and total pancreatectomy (TP) techniques can sometimes be complex process. TP is surgical procedure applied in multifocal lesions, particularly in intraductal papillary mucinous neoplasm (IPMN). Furthermore, it may be preferred to avoid anastomosis in patients at high risk of developing postoperative pancreatic fistula.

Material and Methods: TP cases performed in our clinic between January 2021 and December 2025 were evaluated. We analyzed whether the decision for TP was made based on preoperative radiological assessment or peroperative surgical findings and presented the reasons behind these decisions.

Results: Fifteen TP cases were performed in our clinic over the last five years. Of these patients, 8 were male and 7 were female. The mean age was 56 (min-max: 42-78). TP was planned for seven patients based on preoperative evaluations. Radiological imaging in these patients revealed lesions involving both the caput and the corpus or cauda of the pancreas. In eight patients, TP was performed due to peroperative findings and technical reasons. In 4 of 8 patients,the decision for TP was made because contrary to preoperative radiological tests the lesion size was larger, the locations were multiple, or the lesion extended toward the body and tail of the pancreas. TP was preferred in one patient due to severe pancreatic atrophy and the inability to clearly identify the Wirsung duct. In another patient, TP was chosen because the mass invaded the portal and splenic veins, necessitating vascular reconstruction. In the remaining 2 patients, TP was preferred to avoid postoperative pancreatic fistula. A common feature of these two patients was the need for gastrectomy in addition to pancreatic surgery. One patient had second center as gastric mass, and total gastrectomy was added to the surgery. In the other patient, the pancreatic mass was adherent to the posterior corpus of the stomach and distal subtotal gastrectomy was added. For these reasons, Roux-en-Y anastomosis was preferred in these patients in order to avoid pancreatic anastomosis.

Conclusion: TP is procedure rarely preferred among pancreatic surgeries but can be inevitable in selected patients. Although its indications are still not clearly defined, it is preferred in lesions that can involve the entire pancreas, such as IPMN, and in patients with high risk of developing postoperative pancreatic fistula. Determining the decision for TP in either the preoperative or peroperative period is challenging; multidisciplinary evaluation and intraoperative surgical experience plays decisive role in this process.

Keywords: Pancreas, pancreatectomy, peroperative, preoperative, total

[P-539]

From the emergency department to general surgery: Clinical course and management of traumatic pancreatic injuries

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Objective: Traumatic pancreatic injuries are rare but complex lesions associated with significant morbidity. This study aimed to evaluate the demographic characteristics, injury severity, surgical management strategies, and clinical outcomes of patients with pancreatic trauma admitted to the emergency department and treated in the general surgery clinic.

Material and Methods: Patients hospitalized for pancreatic trauma at University of Health Sciences Türkiye, Ankara Etlik City Hospital, Department of General Surgery, were retrospectively reviewed. Demographic data, mechanism of injury, laboratory and imaging findings, AAST pancreatic injury grade, surgical procedures, postoperative complications, ICU and hospital length of stay, and mortality rates were analyzed.

Results: Eight patients were included. The median age was 33 years, and 87.5% were male. Blunt and penetrating trauma were equally distributed. Concomitant extra-pancreatic organ injury was present in 75% of patients, and major vascular injury in 25%. Blood transfusion within 24 hours was required in 37.5%. The median Glasgow Coma Scale score was 15, and hypotension occurred in 25%. Amylase and lipase levels varied widely. FAST examination was negative in all patients. Computed tomography (CT) was performed in 87.5%, suggesting pancreatic injury in 37.5% and ductal injury in 25%. The median AAST grade was 1. Drainage alone was the most common surgical approach (62.5%), while distal pancreatectomy was performed in 25%. No patient required pancreaticoduodenectomy or necrosectomy. Drains were placed in all patients, and no damage control surgery was performed. All patients were managed in the ICU (median 3 days); median hospital stay was 14 days. The overall complication rate was 75%, most commonly pancreatic fistula (50%), followed by pancreatitis (37.5%) and intra-abdominal abscess (25%). No sepsis, organ failure, delayed hemorrhage, or mortality was observed.

Conclusion: Traumatic pancreatic injuries remain diagnostically challenging and are associated with substantial morbidity, even in low-grade injuries. Despite the predominance of low AAST grades in this cohort, complication rates were high, highlighting the clinical burden of pancreatic trauma. While mortality rates of 10-30% have been reported in the literature, often related to major associated injuries and delayed diagnosis, no mortality occurred in our series. Early surgical evaluation, appropriate patient selection, limited surgical strategies, and effective intensive care management may explain these favorable outcomes. In selected cases, organ-preserving approaches such as drainage alone may be sufficient. Close monitoring and management in experienced centers remain essential.

Keywords: Pancreatic trauma, emergency surgery, aast classification

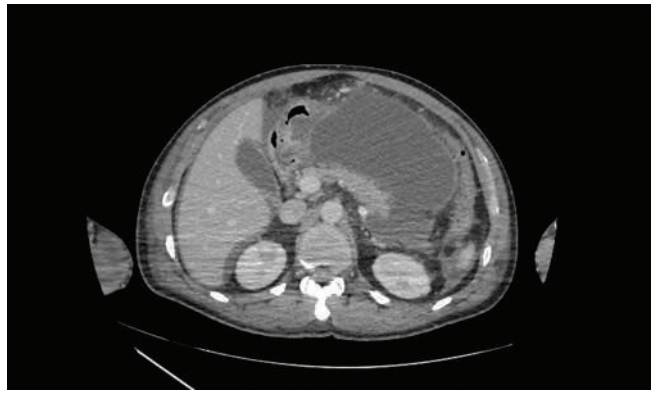


Figure 1. Traumatic pankreas injury AAST grade 3. Transection of the tail of the pancreas following an in-vehicle traffic accident.

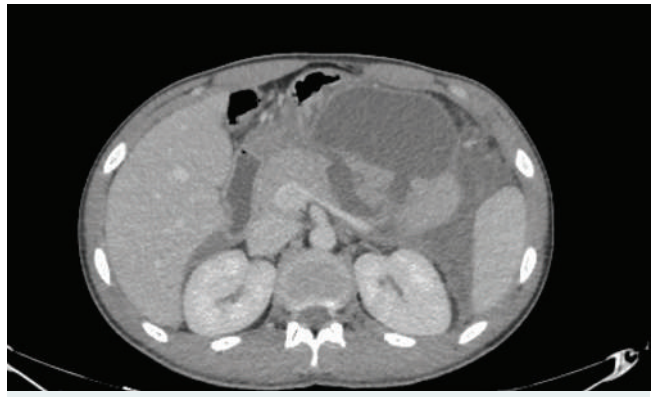


Figure 2. Traumatic pankreas injury AAST grade 3. Transection of the pancreatic tail parenchyma following blunt trauma.

Table 1. Demographics–trauma characteristics–application/lab–imaging	
Variable	**Value**
Age, y	33.0 (25.5-39.2)
Male sex	7 (87.5)
Female sex	1 (12.5)
Mechanism–blunt	4 (50.0)
Mechanism–penetrating	4 (50.0)
Cause–traffic accident	3 (37.5)
Cause–stab wound	3 (37.5)
Cause–firearm injury	1 (12.5)
Cause–other	1 (12.5)
Glasgow Coma Scale score	15.0 (15.0-15.0)
Hypotension on admission	2 (25.0)
Base deficit	-3.2 (-5.7 to- -0.8)
Lactate, mmol/L	2.2 (1.1-3.1)
Hemoglobin, g/dL	14.2 (11.8-15.0)
White blood cell count, $\times 10^3/\mu L$	14.8 (12.2-16.2)
Amylase, U/L	59.0 (55.0-200.2)
Lipase, U/L	138.1 (48.7-305.4)
FAST positive	0 (0.0)
CT performed	7 (87.5)
Suspected pancreatic injury on CT	3 (37.5)
Suspected pancreatic duct injury	2 (25.0)
MRCP/ERCP performed	0 (0.0)
Associated injury	6 (75.0)
Liver injury	1 (12.5)
Splenic injury	1 (12.5)
Gastric injury	2 (25.0)
Duodenal injury	0 (0.0)
Hollow viscus injury	2 (25.0)
Major vascular injury	2 (25.0)
Transfusion within 24 h	3 (37.5)
PRBC units within 24 h	0.0 (0.0-1.2)

Table 2. Injury severity and surgical management	
Variable	**Value**
AAST pancreatic injury grade (I-V)	1.0 (1.0-2.2)
Time from injury to surgery, h	3.0 (1.8-39.0)
Operative time, min	95.0 (88.8-120.0)
Primary procedure-drainage only	5 (62.5)
Primary procedure-primary repair	1 (12.5)
Primary procedure-distal pancreatectomy	2 (25.0)
Primary procedure_pancreaticoduodenectomy (Whipple)	0 (0.0)
Primary procedure-necrosectomy/debridement	0 (0.0)
Primary procedure-packing	0 (0.0)
Primary procedure-damage control laparotomy	0 (0.0)
Splenectomy	3 (37.5)
Duct management-unknown	6 (75.0)
Duct management-ligation/resection	2 (25.0)
Duct management-preserved	0 (0.0)
Duct management-stent/ERCP	0 (0.0)
Drain placement	7 (87.5)
Damage control surgery	0 (0.0)
Open abdomen	0 (0.0)
Relook/relaparotomy	0 (0.0)

[P-540]

Clinical characteristics, treatment approaches, and outcomes of common bile duct injuries following cholecystectomy over the last five years: A single-center experience

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Objective: Cholecystectomy is one of the most commonly performed surgical procedures in general surgery for the treatment of gallbladder diseases. Although the widespread use of laparoscopic techniques has reduced overall surgical morbidity, common bile duct injuries remain rare but potentially serious complications. These injuries are associated with prolonged hospital stay, the need for additional interventions, and long-term biliary complications. Early diagnosis and appropriate management are the most important factors determining prognosis in common bile duct injuries. The type of injury, timing of recognition, and initial management in experienced centers have a direct impact on long-term outcomes. In this study, we aimed to evaluate the clinical characteristics, treatment strategies, and outcomes of patients who developed common bile duct injury following cholecystectomy at our center over the last five years.

Material and Methods: In this retrospective study, six patients who were diagnosed with common bile duct injury following cholecystectomy within the last five years at our institution were analyzed. Patient age, sex, body mass index (BMI), ASA scores, whether the surgery was performed under elective or emergency conditions, surgical approach (laparoscopic/open), timing of injury recognition (intraoperative/postoperative), type of injury, and distribution according to the Strasberg classification were recorded. Diagnostic modalities, treatment strategies (endoscopic, percutaneous, and surgical), postoperative complications, and follow-up outcomes were evaluated.

Results: The mean age of the patients was 57.5 years, and the mean BMI was 26.8 kg/m². All patients underwent elective cholecystectomy. Common bile duct injury was recognized intraoperatively in one patient, whereas in the remaining patients, the diagnosis was established postoperatively based on clinical findings. The main reasons for postoperative presentation included bile leakage, jaundice, abdominal pain, and cholangitis. Injuries were distributed among Strasberg types B, C, D, and E. Ultrasonography, MRCP, and ERCP were used during the diagnostic process. Treatment modalities included ERCP with stent placement, percutaneous drainage, primary surgical repair, T-tube placement, and hepaticojejunostomy, depending on the clinical condition of the patient and the type of injury. Some patients required additional interventions and experienced prolonged hospital stay. Long-term follow-up revealed complications such as biliary stricture and recurrent cholangitis.

Conclusion: Common bile duct injuries are rare but serious complications of cholecystectomy, and early diagnosis and appropriate treatment are the most important factors determining prognosis. The type of injury, timing of diagnosis, and initial management in experienced centers have a significant impact on long-term outcomes. A multidisciplinary approach and individualized treatment strategies are essential to reduce morbidity.

Keywords: Common bile duct injury, cholecystectomy, biliary injuries, Strasberg classification, treatment approaches

[P-541]

Our experience with pancreaticogastrostomy as a reconstruction technique after pancreaticoduodenectomy

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Objective: One of the most important complications that may occur after pancreaticoduodenectomy is the development of a pancreatic fistula. One of the reconstruction techniques used after pancreatic resection is pancreaticogastrostomy. In this study, we aimed to present the clinical outcomes of patients who underwent pancreaticogastrostomy reconstruction for pancreatic drainage following pancreaticoduodenectomy and to compare the results with the existing literature.

Material and Methods: In this study, 13 patients who underwent pancreaticogastrostomy reconstruction following pancreaticoduodenectomy for periampullary tumors between January 2023 and January 2026 in the Department of General Surgery at İzmir Bakırçay University Çiğli Training and Research Hospital were evaluated in terms of demographic data, postoperative complications, and length of hospital stay.

Results: Of the 13 patients included in our study, 6 were female and 7 were male. The ASA scores of the patients were determined to be II-III. The mean age of the patients was 59.3 years. Morbidity was observed in 3 patients. Among these patients, one developed gastrointestinal bleeding, one experienced evisceration, and one had a leak from the hepaticojejunostomy anastomosis. The overall morbidity rate was 38%. One patient died on postoperative day 4 due to pulmonary embolism, resulting in a mortality rate of 7%. The mean operative time was 252 minutes, and the mean length of hospital stay was 8.3 days. According to the International Study Group on Pancreatic Surgery (ISGPS) classification, postoperative pancreatic fistula (POPF) Grade A biochemical leak was observed in 2 patients; these patients had no clinical findings and recovered with conservative management. These results are comparable to the morbidity and mortality rates reported in the literature following pancreaticoduodenectomy. No clinically relevant pancreatic fistula developed in our patients according to the ISGPS classification.

Conclusion: In our country, pancreaticogastrostomy reconstruction is not commonly performed after pancreaticoduodenectomy. In this study, our morbidity and mortality rates were found to be comparable to those reported in the literature. No clinically significant pancreatic fistula was observed. Although larger case series are needed to further evaluate the safety of this reconstruction technique in patients undergoing pancreaticoduodenectomy, we believe that it may represent a viable alternative method due to its technical simplicity and low morbidity and mortality rates.

Keywords: Pancreaticoduodenectomy, pancreaticogastrostomy, pancreatic fistula, postoperative morbidity and mortality

[P-542]

Long-term outcomes and quality of life following surgical management of gastrointestinal bezoars

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Objective: Gastrointestinal bezoars are relatively rare but can lead to serious complications such as obstruction or perforation, often requiring surgical intervention. While acute surgical outcomes are well-documented, long-term post-operative quality of life and nutritional status are less frequently studied. This study evaluates the long-term follow-up results and patient satisfaction in a cohort of patients operated on for bezoars.

Material and Methods: We conducted a retrospective survey study of patients who underwent abdominal surgery in our tertiary care surgical center for bezoars between 2020 and 2024. Data were collected via a structured questionnaire assessing post-operative symptoms (pain, nausea, vomiting), nutritional difficulties, general health status, and overall surgical satisfaction (scored 1-5). Collected data are analysed, numerical values, categorical variables are presented in percentages and statistical evaluations were done using the R package.

Results: The cohort consisted of 24 patients. Follow-up duration ranged from 1 to 5 years. At the time of follow-up, 65% (n=16) reported no current gastrointestinal complaints, while 35% (n=8) experienced intermittent symptoms, most commonly nausea or mild abdominal pain. Regarding nutritional habits, 53% (n=10) reported experiencing difficulties post-operatively. The most frequent nutritional issues identified were heartburn/reflux (48%), weight loss (25%), early satiety (21%), and dysphagia (12%). Despite these symptoms, the mean general health assessment score was 3.8/5. Patient satisfaction with the surgical outcome was high, with a mean score of 4.3/5. Notably, 80% of patients reported satisfaction scores of 4 or 5. Only 20% (n=5) of the cohort required follow-up or additional treatment at other healthcare facilities following their initial discharge.

Conclusion: Surgical treatment of gastrointestinal bezoars provides high long-term patient satisfaction and good general health outcomes. However, a significant portion of patients experience long-term nutritional sequelae, particularly reflux and early satiety. These findings suggest that postoperative management should include detailed nutritional counseling and long-term monitoring for reflux-related symptoms to improve the quality of life in this patient population.

Keywords: Bezoar surgery, patient satisfaction, post-operative follow-up

[P-543]

A hidden mimicker in the acute abdomen: Omental infarction-clinical characteristics, treatment approach, and outcomes (single-center experience)

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Objective: Omental infarction is a rare condition in patients presenting with acute abdomen, yet it can mimic common surgical pathologies both clinically and radiologically, making it diagnostically challenging. This study aimed to evaluate the clinical characteristics, laboratory and imaging findings, treatment approaches, and clinical outcomes of patients diagnosed with omental infarction, with a particular focus on the role of computed tomography (CT) in the diagnostic and clinical decision-making process.

Material and Methods: A total of 11 patients diagnosed with omental infarction in our clinic were included in the study. The patients were retrospectively analyzed based on demographics, presentation, clinical findings, laboratory parameters, imaging methods, CT findings, treatment approach (conservative or surgical), and clinical outcomes. Descriptive statistics were presented as mean ± standard deviation, median (interquartile range), and percentages.

Results: The mean age of the 11 patients was 44.4±13.1 years, with 63.6% being male. All presented with subacute abdominal pain, most commonly in the right lower quadrant (36.4%). Rebound and guarding were absent, and fever and nausea/vomiting were rare (9.1%). Laboratory results showed a mean leukocyte count of 10.8±3.6×10³/μL and CRP of 48.4±57.0 mg/L. Imaging revealed that 63.6% of patients underwent only CT, while 36.4% had both CT and ultrasound. Omental infarction was diagnosed preoperatively in 90.9% of cases. Lesions were mostly right-sided (72.7%), with an average diameter of 32.8±13.9 mm. Treatment was conservative in 63.6% and surgical in 36.4%, with diagnostic uncertainty being the main surgical indication. The CT-based approach helped avoid unnecessary surgery in 63.6%. The median hospital stay was 3 days, and all patients experienced pain relief without complications or recurrences.

Conclusion: Omental infarction, although it mimics appendicitis and other causes of acute abdomen, can generally be managed safely without surgery when diagnosed accurately with CT. Literature emphasizes CT's role in reducing unnecessary surgeries by clarifying the diagnosis, with conservative treatment being sufficient in most cases. Surgery is only needed in selected patients with persistent pain, clinical deterioration, or diagnostic uncertainty. Our series supports this approach, with a high preoperative diagnostic rate (90.9%) and successful conservative management in 63.6% of cases. The absence of complications suggests that conservative management has a high safety profile. However, surgery may shorten hospital stays, and factors like high leukocyte counts could indicate conservative treatment failure. Therefore, a strategy of "CT diagnosis + close monitoring + surgery in selected cases" seems reasonable. Early CT use and selective surgery can reduce unnecessary operations and optimize resource use.

Keywords: Acute abdomen, differential diagnosis, omental infarction

Tablo 3. Tedavi yaklaşımı ve klinik sonlanımlar

Değişken	Sonuç
Konservatif tedavi	Evet 7 (%63,6), Hayır 4 (%36,4)
Antibiyotik tedavisi	Evet 11 (%100)
Analjezik tedavi	Evet 11 (%100)
Cerrahi uygulandı	Evet 4 (%36,4), Hayır 7 (%63,6)
Cerrahi endikasyon	Tanı belirsizliği 3 (%27,3), Klinik kötüleşme / komplikasyon 1 (%9,1)
Cerrahi yaklaşım	Laparoskopik 2 (%18,2), Açık 2 (%18,2)
Patolojik doğrulama	Evet 3 (%27,3), Hayır 8 (%72,7)
BT sayesinde gereksiz cerrahiden kaçınıldı	Evet 7 (%63,6), Hayır 4 (%36,4)
Hastanede yatış süresi (gün)	3,0 ± 1,7; Medyan 3,0 (2,0–3,5); Min–Maks 1,0–7,0
Ağrının gerilemesi	Evet 11 (%100)
Komplikasyon	Yok 11 (%100)
Yeniden başvuru	Evet 9 (%81,8), Hayır 2 (%18,2)
Takip süresi (ay)	4,5 ± 5,4; Medyan 1,0 (0,5–8,0); Min–Maks 0,0–15,0
Nüks	Yok 11 (%100)

Tablo 4. Omental enfarkt olgularında bizim serimizin güncel literatürle karşılaştırması

Çalışma	Tasarım / Popülasyon	n	Yaş (ortalama)	Erkek (%)	Preoptanı (CT)	Konservatif tedavi (%)	Konservatif başarısızlık (%)	Primer cerrahi (%)	Yatış süresi (gün)	Komplikasyon / Mortalite
Bizim serimiz (Tekmerkez, 2026)	Retrospektif seri / erişkin akut karın	11	44,4	63,6	90,9%	63,6	0*	36,4	Medyan 3 (1–7)	Komplikasyon 0, nüks 0, mortalite 0
Medina-Gallardo ve ark., 2020	Sistematik derleme / CT tanılı olgular	146	45,7	61,1	CT tanılı kohort	73,3	15,9	26,7	Konservatif 5,1–5,5; Cerrahi 2,5	Mortalite yok; postop komplikasyon bildirilmedi
Nubi ve ark., 2009	Tek merkez seri / pediatrik	10	5–14 yaş aralığı	60,0	CT ile %100 (USG ek tanı %20)	40,0 (başlangıç)	30,0 (konservatiften cerrahiye geçti)	60,0 (laparoskopi)	Konservatif 4; Laparoskopi postop 2	Mortalite yok; "uneventful recovery"

Table 1. Demographic and presentation–clinical characteristics (n=11)

Variable	Result
Age (year)	44.4±13.1; median 40.0 (37.0-56.0); min-max 25.0-67.0
Sex	Male 7 (63.6%), female 4 (36.4%)
Comorbidities	Present 1 (9.1%), absent 10 (90.9%)
Presentation	Emergency 11 (100%)
Pain onset	Subacute 11 (100%)
Pain location	Right lower quadrant 4 (36.4%), right upper quadrant 2 (18.2%), left lower quadrant 2 (18.2%), diffuse 3 (27.3%)
Pain duration at presentation (hours)	42.4±26.8; median 48.0 (20.0-72.0); min-max 6.0-72.0
Rebound tenderness	Absent 11 (100%)
Guarding	Absent 11 (100%)
Fever (>38 °C)	Present 1 (9.1%), absent 10 (90.9%)
Nausea/vomiting	Present 1 (9.1%), absent 10 (90.9%)

Table 2. Laboratory and imaging findings

Variable	Result
Leukocytes (10^3/μL)	10.8±3.6; median 9.6 (8.0-12.8); min-max 7.2-18.2
CRP (mg/L)	48.4±57.0; median 23.0 (14.0-63.5); min-max 1.8-184.0
Imaging modality	CT 7 (63.6%), CT+US 4 (36.4%)
Omental infarction diagnosis on CT	Yes 10 (90.9%), no 1 (9.1%)
Lesion localization on CT	Right 8 (72.7%), left 3 (27.3%)
Typical finding on CT	Present 10 (90.9%), absent 1 (9.1%)
Largest lesion diameter on CT (mm)	32.8±13.9; median 30.0 (21.5-40.0); min-max 15.0-60.0
Initial diagnosis	Non-specific abdominal pain 7 (63.6%), acute appendicitis 3 (27.3%), cholecystitis 1 (9.1%)

[P-544]

Primary repair of penetrating gluteal and sphincteric injury due to ceramic fracture in a domestic setting

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Objective: Penetrating gluteal and perianal injuries secondary to domestic accidents are uncommon and require careful evaluation due to the potential risk of anal sphincter damage. We present a case of penetrating trauma occurred after falling onto a ceramic structure, which fractured upon impact, leading to a gluteal injury with partial involvement of the anal sphincter complex. The surgical management of the injury and the early functional outcomes are discussed.

Material and Methods: Patient presented to ED with penetrating injury to the gluteal and perianal regions after slipping on a wet floor while attempting to sit on a toilet, resulting in a forceful fall onto and subsequent fracture of toilet. Physical examination revealed a 6×18 cm laceration in left gluteal region causing a defect in muscle tissue, and a 4×15 cm laceration in the presacral area partially involving fibers of the external anal sphincter. Digital rectal examination demonstrated preserved sphincter tone, and rectum assessed as intact. The patient had a recent history of AMI and was receiving dual antiplatelet therapy; however, no active arterial was observed during PE. CT with IV+rectal contrast showed no evidence of rectal contrast extravasation.

Results: Patient was taken to emergency surgery in collaboration with plastic surgery team. Irrigation removal of ceramic fragments were performed. Intraoperative evaluation demonstrated that the integrity of external anal sphincter was largely preserved, with only minimal fiber disruption. Due to the contaminated nature of the wound and the limited extent of sphincter injury, primary sphincter repair was not performed. Full-thickness lacerations of the gluteus maximus were reconstructed. Hemostasis was achieved and soft drains were placed in both compartments, and the subcutaneous tissues were approximated carefully to avoid ischemia, followed by primary skin closure. In the postoperative period, wound care was maintained with frequent dressings, and a soft diet was initiated. LMWH was started on postoperative day 0, and the patient's previous dual antiplatelet regimen was resumed on day 2. During follow-up, no hematoma, infection, wound dehiscence, fecal incontinence or additional complications were observed. Patient was discharged after receiving wound care instructions. By postoperative day 20, complete wound healing was achieved. After 6-week follow-up, Wexner score was 0, indicating full continence. The patient experienced partial functional limitation related to the gluteal muscle injury; however, symptoms regressed with physiotherapy.

Conclusion: In cases of partial external anal sphincter injury where continence and overall tissue integrity are preserved, favorable outcomes can be achieved with limited surgical intervention and meticulous wound care. This case report aims to emphasize the importance of individualized decision-making in the surgical management of penetrating trauma involving sphincter injury, highlighting that treatment strategies should be determined on a case-by-case basis.

Keywords: Penetrating trauma, gluteal injury, sphincter injury

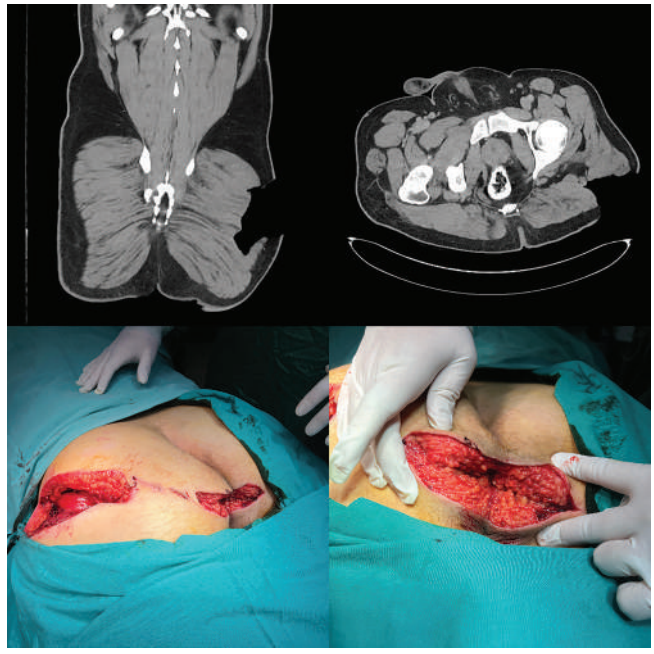


Figure 1. Computed tomography (CT)-scan and intraoperative images. On CT images, the extent of the gluteal defect is demonstrated, and no rectal contrast extravasation is observed. Intraoperative images obtained after sterile irrigation following the trauma are also presented.



Figure 2. Wound healing process. The collage demonstrates the immediate postoperative appearance on day 0 following primary repair of the gluteal and perianal lacerations, as well as well-healed wound appearance on postoperative day 25 after suture removal. No infection, wound dehiscence, or tissue necrosis was observed during the follow-up period.

[P-545]

Surgical management of severe blunt liver trauma unresponsive to packing: The role of liver resection

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Objective: Severe blunt liver trauma remains one of the most challenging entities in trauma surgery. Although non-operative management has become standard in hemodynamically stable patients, high-grade (AAST IV-V) injuries accompanied by hemodynamic instability still mandate urgent operative intervention. Damage control strategies prioritize rapid hemorrhage control, prevention of the lethal triad, and staged definitive management. Perihepatic packing is widely accepted as an initial life-saving maneuver; however, persistent bleeding despite packing requires, anatomical or non-anatomical liver resection. This study evaluates surgical strategies for blunt liver trauma unresponsive to packing and the role of liver resection in hemorrhage control.

Material and Methods: This retrospective analysis included seven patients with AAST grade IV-V blunt liver injuries who underwent operative management. Demographic characteristics, injury severity (ISS, APACHE II), transfusion requirements, operative details, and postoperative outcomes were analyzed (Table 1). Surgical management followed damage control principles. Initial packing was performed in hemodynamically unstable patients, followed by planned depacking. In cases of ongoing hemorrhage, portal triad clamping (PTC), hepatic resection (segmentectomy or right hepatectomy) were undertaken in accordance with established hepatobiliary trauma techniques. Outcomes assessed included ICU stay, total hospitalization, morbidity, and mortality.

Results: The median patient age was 29 years (range 25-69), and the majority were male. Two patients had AAST grade V injuries. Hemodynamic instability on admission was common, with hypotension and elevated lactate levels (up to 7.0 mmol/L). Five required subsequent depacking and definitive procedures. Liver resections included segment 6 resection, segment 6-7 resection, segment 8 resection, and right hepatectomy (n=2). Median operative times ranged from 105 to 355 minutes. Transfusion requirements were reflecting severe hemorrhage. ICU stay ranged from 4 to 108 days, and total hospitalization up to 150 days. Postoperative complications included biliary fistula, pleural effusion, thoracostomy requirement, and reoperations for associated injuries. Notably, no mortality occurred in this series.

Conclusion: Packing effectively controls venous parenchymal bleeding; however, major hepatic vein may remain refractory. In such cases, inflow control via PTC, mobilization of the right liver lobe, resectional debridement of fragmented segments, and direct vascular repair become mandatory. Anatomical resection, including right hepatectomy, may be lifesaving when parenchymal destruction is extensive. The absence of mortality in our series suggests that timely escalation from packing to definitive resection can improve survival in selected patients. In severe blunt liver trauma early recognition of packing failure and prompt transition to anatomical or non-anatomical resection may reduce mortality and optimize outcomes in high-grade hepatic injuries.

Keywords: Blunt liver trauma, liver resection, perihepatic packing

[P-546]

Has non-operative management become the gold standard in blunt hepatic trauma?

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Objective: The liver is the most frequently injured solid organ in blunt abdominal trauma. Historically, surgery was the primary management strategy; however, non-operative management (NOM) has recently emerged as the standard of care for hemodynamically stable patients. This study evaluates our institutional experience with operative and non-operative approaches in the management of blunt liver injuries.

Material and Methods: We retrospectively analyzed 34 patients treated for blunt abdominal trauma and varying degrees of hepatic injury at our clinic between 2016 and 2025.

Results: The mean patient age was 39 years (range: 17-73). Radiological evaluation revealed Grade 1-2 injuries in 19 patients (55.8%), Grade 3-4 in 11 (32.3%), and Grade 5 in 4 (11.7%). NOM was initiated in 19 patients (55.8%), including 16 with isolated Grade 1-2 injuries and three stable patients with Grade 3-4 injuries. Within the NOM group, two patients required laparotomy for non-hepatic reasons (one for small bowel perforation on the 3rd day; one for hemodynamic deterioration on the 2nd day). Notably, no direct liver intervention was required in these cases as no active bleeding was observed. Furthermore, three patients undergoing splenectomy for concomitant splenic trauma required no hepatic intervention. One Grade 2 patient with a 6 cm hemangioma was successfully managed with NOM followed by elective ablation. In contrast, severe cases required intensive surgical management. One Grade 4 patient with renal avulsion died postoperatively despite complex vascular and hepatic repair. Among four Grade 5 patients, two were discharged after lobectomy, one was transferred for biliary fistula management, and one died on the 2nd postoperative day. Overall, 22 patients (64.7%) were successfully managed without direct surgical intervention to the liver.

Conclusion: In blunt liver trauma, hemodynamic stability, peritoneal signs, and concomitant organ injuries should be prioritized over radiological grading when selecting treatment modalities. Our findings suggest that NOM is a safe and effective “gold standard” for Grade 1-3 and selected Grade 4 injuries, provided there is access to high-quality intensive care and rapid diagnostic imaging.

Keywords: Blunt liver trauma, non-operative approach

[P-551]

Incidental appendiceal neuroendocrine tumor in a patient presenting with clinical acute appendicitis: Surgical approach and review of the literature

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Objective: Appendiceal neuroendocrine tumors (NETs) are rare neoplasms of the gastrointestinal system but represent the most common tumor of the appendix. They are generally asymptomatic and frequently detected incidentally during histopathological examination following appendectomies performed for acute appendicitis. Tumor size, localization, and histological stage are determinant factors in treatment planning. Although simple appendectomy is generally considered curative for tumors smaller than 1 cm, positive surgical margins or the presence of risk factors may necessitate extensive surgical resection. We present a case of a patient operated on for acute appendicitis where, despite a NET smaller than 1 cm, a right hemicolectomy was recommended due to associated risk factors.

Material and Methods: A 22-year-old male patient presented to the emergency department with right lower quadrant pain, nausea, and anorexia persisting for 24 hours. Physical examination revealed tenderness and defense at McBurney's point. Laboratory tests showed elevated CRP (24 mg/L) without leukocytosis. Upon computed tomography findings consistent with acute appendicitis, the patient underwent a laparoscopic appendectomy. No gross pathology was observed in surrounding tissues during the operation, and the patient was discharged on the first postoperative day.

Results: Histopathological examination of the specimen revealed a well-differentiated (Grade 1) neuroendocrine tumor measuring 0.7x0.5 cm in the proximal appendix. Immunohistochemical staining was positive for chromogranin and synaptophysin, with a Ki-67 proliferation index of 2%. The tumor was reported to invade the mucosa, submucosa, and muscularis propria, with no evidence of lymphovascular or perineural invasion. Critically, tumor continuity was detected at the proximal surgical margin. Although the tumor size was less than 1 cm (T1a), a right hemicolectomy was recommended in accordance with ENETS and NANETS guidelines due to risk factors including location at the appendiceal base, positive surgical margins.

Conclusion: Appendiceal NETs generally have an excellent prognosis, and simple appendectomy is sufficient for tumors smaller than 1 cm without risk factors. However, as demonstrated in this case, even with small tumor dimensions, factors such as location at the appendiceal base, positive surgical margins increase the risk of metastasis. Consequently, detailed histopathological examination is crucial for incidental tumors detected after acute appendicitis, and treatment decisions must be personalized by evaluating risk factors rather than relying solely on tumor size.

Keywords: Appendiceal neuroendocrine tumor, incidental, right hemicolectomy

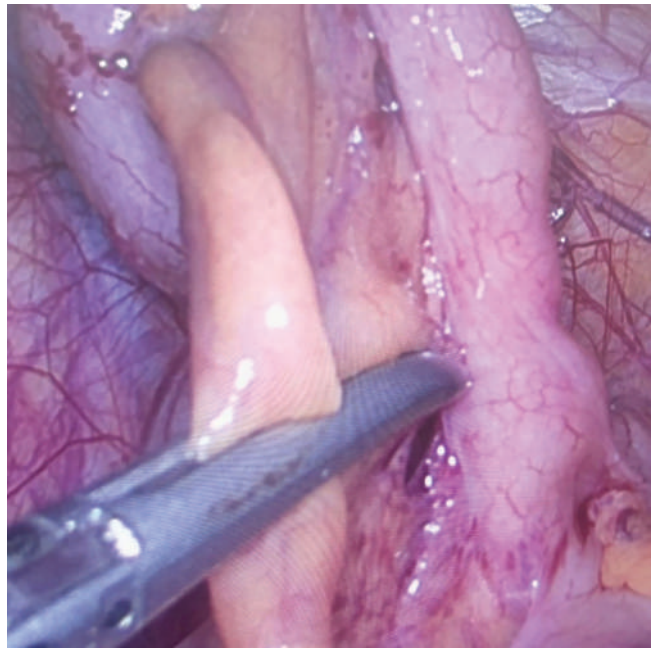


Figure 1. Intraoperative laparoscopic view of the appendix.

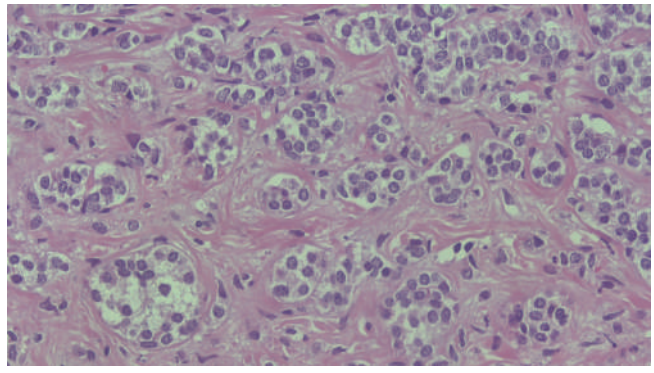


Figure 2. Microscopic appearance of the laparoscopic appendectomy specimen.

[P-561]

Comparison of pre-treatment and post-surgical status of the axilla in patients with locally advanced breast cancer who showed complete radiological response on positron emission tomography (PET-CT) after neoadjuvant treatment: A single-center retrospective study

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Objective: Breast cancer is the most common cancer in women. Despite the widespread use of screening programs in our country and worldwide, advanced/locally advanced stage cancers are still being detected. The effectiveness of adjuvant and neoadjuvant therapy has increased in patient groups where it has been shown to contribute to the prognosis. Therefore, neoadjuvant therapy has become preferred not only in locally advanced stage cancer but also in patients with indications at an early stage. The complete clinical/radiological response achieved with neoadjuvant therapy has also led to deescalation in surgical treatment. This study aims to evaluate the surgical outcomes in patients with locally advanced breast cancer who achieved a complete clinical/radiological response after neoadjuvant therapy.

Material and Methods: Between 2023 and 2025, 291 patients underwent surgery for breast cancer. Of these, 54 received neoadjuvant treatment for locally advanced breast cancer and subsequently underwent surgery. Of these 54 patients, 41 with complete axillary response after treatment were included in the study. Demographic characteristics, primary tumor pathologies, axillary lymphadenopathy (LAP) involvement in preoperative and postoperative imaging studies, and the number of lymph nodes involved as a result of axillary surgery were recorded for each patient.

Results: Forty-one female patients were examined. The mean age was 53.6 (min: 34, max: 71). Tumor pathology of the patients was: 23 (56.09%) invasive ductal carcinoma, 1 (2.4%) invasive mucinous carcinoma, 3 (7.3%) invasive lobular carcinoma, 1 (2.4%) inflammatory breast cancer, and 13 (31.7%) invasive breast carcinoma. It was observed that 16 patients underwent breast-conserving surgery (BCS) and 25 patients underwent mastectomy. Sentinel lymph node biopsy (SLNB) was positive in 21 (51.2%) patients (2 micrometastases and 1 suspected LAP were evaluated as positive). SLNB was negative in 20 (48.8%) patients. Level 2 axillary lymph node dissection was performed on 15 patients who tested positive.

Conclusion: In locally advanced breast cancer, its contribution to the prognosis in the neoadjuvant period has been proven. The issue of permanent de-escalation of axillary surgery and breast surgery has also come to the fore. Complete radiological response after treatment suggests that axillary surgery may be abandoned in this patient group. In our study, we observed that SLNB positivity (after neo-adjuvant treatment) was 51.2% in patients with complete radiological response in the axillary spectrum. However, this does not mean that all SLNB-positive patients should undergo axillary dissection. Targeted axillary surgery in a selected patient group is effective in reducing comorbidities associated with axillary surgery.

Keywords: Breast cancer, neoadjuvant therapy, axillary de-escalation

Table 1. Tumor pathology distribution

Tumor pathology	Number (%)
Invasive ductal carcinoma	23 (56.09%)
Invasive breast carcinoma	13 (31.7%)
Invasive lobular carcinoma	3 (7.3%)
Invasive mucinous carcinoma	1 (2.4%)
Inflammatory breast cancer	1 (2.4%)

Table 2. Distribution of pathological features in patients with positive SLNB after neoadjuvant treatment

Tumor pathology	Number (%)
Invasive ductal carcinoma	11 (52.3%)
Invasive breast carcinoma	7 (33.3%)
Invasive lobular carcinoma	1 (4.7%)
Invasive mucinous carcinoma	1 (4.7%)
Inflammatory breast cancer	1 (4.7%)

[P-562]

Clinical course, diagnostic process, and treatment approaches in Paget's disease of the breast: A retrospective single-center study

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Objective: Although Paget's disease of the breast is rare, it is frequently associated with underlying ductal carcinoma *in situ* (DCIS) or invasive breast cancer, and delays in diagnosis are common. This study aimed to evaluate the demographic characteristics, clinical presentation, diagnostic process, imaging and pathological features, treatment approaches, and clinical outcomes of patients diagnosed with Paget's disease of the breast.

Material and Methods: This retrospective study included a total of 2 patients diagnosed with Paget's disease of the breast. Demographic data, symptom duration, presenting symptoms, diagnostic delay, initial point of presentation, imaging findings (mammography, ultrasonography, and magnetic resonance imaging), pathological characteristics (presence of pure Paget's disease, association with DCIS or invasive cancer, tumor type, grade, hormone receptor status, HER2, and Ki-67), surgical and adjuvant treatments, follow-up duration, and recurrence status were recorded. Descriptive statistics were presented as median (IQR) or number (percentage).

Results: The median age of the patients was 60 (50-71) years. The median symptom duration was 12 (3-18) months, and the median interval between symptom onset and biopsy was 12 (2-18) months. The most common presenting symptoms were eczema (28.6%), nipple discharge (23.8%), ulceration (23.8%), and pain (23.8%). Diagnostic delay (≥6 months) was observed in 52.4% of patients, most commonly due to dermatological manifestations in the absence of a palpable breast mass (e.g., pruritus, rash). On mammography, suspicious findings were detected in 57.1% and malignant findings in 19.0% of cases, while ultrasonography revealed malignant features in 28.6%. Magnetic resonance imaging was performed in 10 patients, of whom 60% showed findings suggestive of malignancy. Pure Paget's disease was identified in 9.0% of cases, whereas DCIS and invasive cancer were present in 66.7% and 47.6%, respectively. The most common tumor type was invasive ductal carcinoma (90.5%), and 52.4% of tumors were high grade (G3). Mastectomy was performed in 71.4% of patients, and sentinel lymph node biopsy was carried out in 76.2%. The median follow-up duration was 15 (5-24) months, and the recurrence rate during follow-up was 14.3%.

Conclusion: Paget's disease of the breast is most commonly associated with underlying DCIS and/or invasive breast cancer and is notable for diagnostic delays. In our study, the presence of a diagnostic delay of ≥6 months in more than half of the patients suggests that the risk of malignancy may be overlooked in the early stages when Paget's disease presents with dermatological symptoms. In cases where mammography and ultrasonography are limited, the detection of malignancy-suggestive findings 60% of patients who underwent MRI supports the added value of MRI in selected cases within the diagnostic algorithm. The low rate of pure Paget's disease and the high prevalence of associated DCIS and invasive cancer are consistent with the literature, reinforcing the concept that Paget's disease often represents a manifestation of underlying breast malignancy. Overall, this study contributes to the literature by quantitatively demonstrating diagnostic delay and providing a comprehensive real-world evaluation of imaging and pathological spectra. Early biopsy, appropriate imaging strategies, and a multidisciplinary approach are critical for optimal management.

Keywords: Breast cancer, ductal carcinoma *in situ*, magnetic resonance imaging, multimodal imaging, Paget's disease

Bizim Çalışmamız ile Güncel Literatür Karşılaştırması

Çalışma	Tasarım / Merkez	n	Yaş	Saf Paget (%)	DCIS / non-invaziv (%)	İnvaziv (%)	Cerrahi dağılımı	SLNB / Aksilla	Lokal nüks (%)	Takip
Bizim çalışmamız (2026, Türkiye)	Retrospektif tek merkez	**21**	Medyan **60** (50–71)	**19.0**	**66.7**	**47.6**	**Mastektomi 71.4%**, MKC 28.6%	**SLNB 76.2%**, LN+ 28.6%	**14.3**	Medyan **15 ay** (5–24)
Scardina ve ark., 2022	Retrospektif tek merkez (20 yıl deneyim)	115	Medyan 60 (32–88)	9.0	40.0 (non-invaziv)	51.0	**BCS 60.0%**, mastektomi 40.0%	(Kılavuz uyumlu SLNB vurgusu)	7.8	Medyan **82 ay**
Baysal ve ark., 2023	Retrospektif tek merkez (klinik + görüntüleme odaklı)	49	Ortalama 67.1±14.4	(Tabloda "Paget" alt grup)	"Extensive DCIS" 10.2	**İnvaziv DK 65.3**	**Mastektomi 73.5%**, NAC eksizyon 16.3%, BCS 10.2%	SLN(+) + AD 6.1%, Direkt AD 42.9%	14.3	Ortalama DFS 115 ay, OS 119 ay
Lin ve ark., 2022 (SR/MA)	Sistematik derleme + meta-analiz (gerçek yaşam verisi)	—	—	—	—	—	BCS vs mastektomi sonuçları karşılaştırmalı	**SLNB pozitifliği ~%17**	Lokal nüks: invazivde daha yüksek (≈%6.7 vs %4.5)	—

Figure 1. Literature comparison.

Table 1. Demographic, clinical, and imaging characteristics of the patients (n=21)

Parameter	Value
Age, years	60 (50-71)
Sex	Female 21 (100%)
Symptom duration, months	12 (3-18)
Symptom-to-biopsy interval, months	12 (2-18)
Presenting symptom	Eczema — 6 (28.6%) Nipple discharge — 5 (23.8%) Ulceration — 5 (23.8%) Pain — 5 (23.8%)
History of dermatological treatment	No — 20 (95.2%) Yes — 1 (4.8%)
History of topical treatment	No — 20 (95.2%) Yes — 1 (4.8%)
Palpable mass	Absent — 13 (61.9%) Present — 8 (38.1%)
Laterality	Unilateral — 18 (85.7%) Bilateral — 3 (14.3%)
Initial diagnostic consultation	Dermatology — 9 (42.9%) Surgery — 10 (47.6%) Other — 2 (9.5%)
Diagnostic delay	<6 months — 10 (47.6%) ≥6 months — 11 (52.4%)
Delay group	Early — 10 (47.6%) Delayed — 11 (52.4%)
Mammography	Normal — 5 (23.8%) Suspicious — 12 (57.1%) Malignant — 4 (19.0%)
Ultrasonography	Normal — 7 (33.3%) Suspicious — 8 (38.1%) Malignant — 6 (28.6%)
MRI performed	No — 11 (52.4%) Yes — 10 (47.6%)
Malignant findings on MRI*	Absent — 4 (40.0%) Present — 6 (60.0%)

Table 2. Pathological characteristics, treatment, and clinical outcomes (n=21)

Parameter	Value
Tumor size, mm	13 (8-21)
Ki-67, %	15 (10-20)
Follow-up duration, months	15 (5-24)
Pure Paget's disease	No — 17 (81.0%) Yes — 4 (19.0%)
Associated DCIS	Absent — 7 (33.3%) Present — 14 (66.7%)
Associated invasive cancer	Absent — 11 (52.4%) Present — 10 (47.6%)
Tumor type	Invasive ductal carcinoma — 19 (90.5%) Invasive lobular carcinoma — 1 (4.8%) Other — 1 (4.8%)
Histological grade	G1 — 7 (33.3%) G2 — 3 (14.3%) G3 — 11 (52.4%)
Estrogen receptor (ER)	Negative — 9 (42.9%) Positive — 12 (57.1%)
Progesterone receptor (PR)	Negative — 12 (57.1%) Positive — 9 (42.9%)
HER2 status	Negative — 10 (47.6%) Positive — 11 (52.4%)
Type of surgery	Breast-conserving surgery (BCS) — 6 (28.6%) Mastectomy — 15 (71.4%)
Sentinel lymph node biopsy	No — 5 (23.8%) Yes — 16 (76.2%)
Axillary involvement	Absent — 14 (66.7%) Present — 7 (33.3%)
Lymph node metastasis	Absent — 15 (71.4%) Present — 6 (28.6%)
Surgical margin	Negative — 18 (85.7%) Positive — 3 (14.3%)
Chemotherapy	No — 11 (52.4%) Yes — 10 (47.6%)
Radiotherapy	No — 13 (61.9%) Yes — 8 (38.1%)
Hormone therapy	No — 12 (57.1%) Yes — 9 (42.9%)
Recurrence	Absent — 18 (85.7%) Present — 3 (14.3%)

[P-563]

Surgical and oncologic outcomes in patients with ductal carcinoma *in situ* undergoing breast-conserving surgery: A single-center experience

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Objective: Ductal carcinoma *in situ* (DCIS) has been increasingly diagnosed with the widespread implementation of screening programs. Breast-conserving surgery (BCS) combined with adjuvant radiotherapy provides excellent long-term local control. However, the optimal surgical margin width, the need for re-excision, and particularly the indication for axillary staging remain controversial. This study aimed to evaluate the clinicopathologic characteristics and surgical and oncologic outcomes of patients with DCIS treated with BCS at our center.

Material and Methods: A total of 50 patients who underwent BCS with a diagnosis of DCIS between January 2018 and December 2023 were retrospectively analyzed. Preoperative radiologic findings, clinical characteristics, operative details, pathological results, and oncologic outcomes were reviewed.

Results: The median age was 55.5 years. Preoperative imaging included mammography (96%), ultrasonography (100%), and magnetic resonance imaging (MRI) (76%). Microcalcifications were detected in 58% of patients on mammography. Pathologic findings were identified in 74% of patients on ultrasonography and in 92% on MRI, making MRI the most sensitive imaging modality. Radiologic localization was performed in 35 patients (70%); 29 underwent wire-guided excision and 6 underwent excision based on skin projection marking. Intraoperative assessment was utilized in 15 patients (30%), and 21 patients (42%) underwent re-excision during the same surgical session. Specimen radiography or ultrasonography was performed in 26 patients (52%). Final pathology revealed pure DCIS in 37 patients (74%) and invasive carcinoma in 13 patients (26%), including 3 cases of microinvasive disease. Sentinel lymph node biopsy (SLNB) was performed in 23 patients (46%). Among these, 13 patients (56%) had high-grade, 7 (30%) had intermediate-grade, and 3 (6%) had low-grade DCIS. Estrogen receptor positivity was observed in 33 patients (66%). Despite a relatively high upstaging rate, all SLNB results were negative. Margin involvement was identified in 13 patients: 4 patients (8%) had positive margins and 9 patients (18%) had margins less than 2 mm. Six patients (12%) required a second surgery (4 mastectomies and 2 re-excisions). Adjuvant radiotherapy was administered to 44 patients (88%), endocrine therapy to 33 patients (66%), and chemotherapy to 5 patients (10%). After a median follow-up of 54 months (range: 23-96), ipsilateral local recurrence occurred in one patient (2%). Two patients (4%) died due to causes unrelated to breast cancer.

Conclusion: Breast-conserving surgery for DCIS, when planned with appropriate radiologic and clinical evaluation, achieves low reoperation rates and excellent local control. Considering the low likelihood of nodal involvement, axillary intervention should not be routine but rather tailored based on individual patient risk assessment.

Keywords: DCIS, breast conserving surgery

[P-566]

High success rate in sentinel lymph node identification using the nipple traction technique

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Objective: Breast cancer is the most common malignancy among women, and axillary lymph node status plays a critical role in staging and treatment planning. Sentinel lymph node biopsy (SLNB) is currently the standard method for staging clinically node-negative breast cancer, as it provides reliable staging with lower morbidity compared to axillary dissection. However, the sentinel lymph node identification rate using blue dye alone has been reported to range between 85% and 95% in the literature. This study aimed to evaluate the contribution of the nipple traction/massage technique to the identification rate of stained lymph nodes in SLNB performed using blue dye.

Material and Methods: Following anesthesia induction and standard surgical preparation, isosulfan blue or 1% methylene blue solution diluted with saline at a ratio of 4:2 was injected into the subareolar region. After injection, routine circular breast massage was applied for approximately 6 minutes. During this period, the nipple was repeatedly pulled upward and anteriorly and released by the surgeon to create tension (nipple traction). This maneuver was intended to increase tension in the subareolar tissue and facilitate more effective participation of the dye in lymphatic flow. The maneuver did not prolong operative time and was safely applied in all cases.

Results: Over the last three years, SLNB was performed in a total of 247 patients. The nipple traction maneuver was applied in all patients, and the sentinel lymph node was identified with a high success rate. The mean number of identified stained lymph nodes was 2 (range, 1-5). One patient developed skin necrosis related to methylene blue, and one patient experienced a non-severe allergic reaction. These findings suggest that this simple maneuver may contribute positively to increasing sentinel lymph node identification rates.

Conclusion: In the literature, the sentinel lymph node identification rate using blue dye alone has been reported as 85-95%, while the dual method (blue dye + radioisotope) achieves rates of 95-99%. In our series, using blue dye alone combined with the nipple traction technique, a success rate exceeding 98% was achieved in identifying stained sentinel lymph nodes. The technique is presumed to facilitate dye transport to the axilla by stretching the subareolar plexus. As a simple, easily learned, and safe method, the nipple traction technique may represent a valuable alternative, particularly in centers with limited access to radioisotopes. Nevertheless, as this study is retrospective in nature, the results should be confirmed by larger prospective and comparative studies.

Keywords: Blue dye, breast cancer, breast massage, nipple traction technique, sentinel lymph node biopsy

[P-568]

Outpatient management of perianal fistulas with elastic seton: Clinical experience and outcomes

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Objective: Perianal fistulas are challenging perianal pathologies that can develop following the drainage of anal abscesses. The aim of fistula treatment is to minimise recurrence while preserving continence. Alongside surgical interventions, elastic seton placement is one of the preferred methods due to its low morbidity and high success rates. In this study, the effectiveness of elastic seton placement in outpatient settings and its effects on patient comfort were evaluated.

Material and Methods: Patients who underwent elastic seton placement in an outpatient setting for intersphincteric anal fistula at the general surgery clinic between 1 January 2021 and 31 December 2024 were prospectively evaluated. Patients diagnosed with Crohn's disease and ulcerative colitis were excluded from the study. The diagnosis of anal fistula was made based on physical examination and magnetic resonance imaging (MRI). The procedure was performed in the prone position under local anaesthesia in sterile conditions. Patients who underwent tight seton placement were recalled at 2-week intervals for seton re-tightening. Patients were provided with post-operative analgesia and hygiene recommendations. During the follow-up period, pain scores visual analogue scale (VAS), fistula closure time, and post-operative complications such as infection, bleeding, and incontinence were evaluated.

Results: Forty-one patients were included in the study. Their ages ranged from 35 to 43. The average procedure duration was 9 minutes. Post-procedure pain was assessed using the VAS and averaged 3-4. The time for the seton to separate from the tissue ranged from 1 to 6 weeks. Patients were followed up regularly at outpatient clinic appointments at 3-month intervals over a period of 3-18 months. No complications such as infection, bleeding, or incontinence were observed in any of the patients who underwent the procedure.

Conclusion: The application of elastic setons in outpatient settings is a safe, effective method for treating anal fistula that maintains a high level of patient comfort. Patients experience minimal pain and can quickly return to their daily lives, with a low-risk of serious complications. It offers a suitable treatment option, particularly for high-risk patients and those wishing to avoid surgical intervention.

Keywords: Elastic bandage, minimally invasive anorectal procedure, outpatient surgery, perianal fistula, Sphincter-preserving treatment

[P-569]

Use of wound dressing products in University of Health Sciences Türkiye, Antalya City Hospital Burn Center: A retrospective clinical study

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Objective: We aimed to demonstrate the relationship between the types of wound dressing products used and the length of hospital stay (LOS) in patients hospitalized and treated at the newly established University of Health Sciences Türkiye, Antalya City Hospital, Burn Center.

Material and Methods: In this retrospective clinical study, patients hospitalized and treated at the University of Health Sciences Türkiye, Antalya City Hospital, Burn Center between March 1, 2024, and February 3, 2026, were evaluated. The types of products used, number of patients, gender distribution, mean ages, and mean LOS were recorded for patients who underwent wound dressing applications.

Results: Wound dressing products were applied to a total of 263 hospitalized patients. It was observed that multiple wound dressing products were used in some cases. •Epidermal equivalents: applied to 107 patients (72% male, 28% female). The mean age was 19.1±19.2 years, and the mean LOS was 11.9±37.2 days. •Collagen dressings: used in 16 patients; mean age was 16.9 ± 21.3 years, and mean LOS was 21.8±20.7 days. •Single-layer dermal scaffolds (polyurethane): applied to 9 patients; mean age was 42.0±14.7 years, and mean LOS was 20.8±22.6 days. •Hydrocolloid dressings: used in 10 patients; mean age was 38.9±22.9 years, and mean LOS was 15.8±13.0 days. •Double-layer dermal scaffolds (dermal matrix): Applied to 18 patients; the mean age was 41.1±23.8 years, and the mean LOS was 51.7±33.4 days, which was significantly longer compared to other product groups. •Silver-impregnated hydrofiber dressings: Used in 103 patients; mean age was 29.7±21.8 years, and mean LOS was 19.7±17.2 days. When all wound dressing products were evaluated collectively, the mean age for the 263 patients was 26.2±22.0 years, and the mean LOS was 18.3±29.7 days.

Conclusion: Wound dressing products are widely utilized in our Burn Center, and a significantly longer LOS was observed particularly in patients treated with dermal matrices. While patients were initially managed with frequent dressings using only topical creams, advancements in technology and the development of modern wound dressings have reduced the frequency of dressing changes and surgical interventions. This progress shortens treatment periods while enhancing patient comfort and aesthetic outcomes. Although these technologies may currently impact healthcare budgets in terms of cost-effectiveness, we believe that more cost-effective forms of wound dressings will improve the welfare of both patients and physicians in the future.

Keywords: Wound dressıng products, burn, retrospective study

[P-573]

The experience of a surgical team new to robotic surgery: Analysis of the first year of cases

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Objective: Robotic surgery gained an important role among minimally invasive surgical techniques inrecent years. Advanced 3D imaging systems, increased instrument articulation and technicalfeatures improving surgeon ergonomics have led to its widespread adoption across surgicaldisciplines. Previous studies demonstrated that robotic surgery provides precise dissection,especially in anatomically complex regions, reduces blood loss and improves surgeon comfort. However, robotic surgical procedures require a specific level oforganization, time management and coordination between surgical and anesthesiateams. During the learning process, progressive improvement in operative workflow and teamcoordination is expected, and this experience is reported to positively influence clinical outcomes. The aim of this study was to evaluate surgical and anesthetic process-related parameters, early clinical outcomes and temporal changes in robotic surgery cases performed in our clinic.

Material and Methods: Robotic surgery cases performed in our clinic were retrospectively reviewed. The total numberof cases and types of surgical procedures were recorded. Concordance between preoperativeand postoperative diagnoses was evaluated. Conversion to laparoscopic or open surgery wasanalyzed. Intraoperative blood loss and the need for blood transfusion wererecorded. Anesthesia-related processes were evaluated in detail, including anesthesia inductiontime, time to surgical handover, interval between completion of surgery and extubation, andtotal operative duration. Postoperative drain output and urine volume during the first twopostoperative days were recorded. Early postoperative complications, embolic events andmortality were assessed.

Results: A significant improvement in surgical and anesthetic timing parameters was observed overtime in robotic surgery cases. Operative durations were found to decrease in later cases,andperioperative processes were managed more efficiently. In accordance with theliterature, operative workflow became more stable as team experience increased. Conversionrates to laparoscopic or open surgery were low. Postoperative complication rates werelimited, and anastomotic leakage and embolic events were rarely observed. Mortality rateswere low in the early postoperative period.

Conclusion: The literature emphasizes that robotic surgery is a safe and effective technique, and highlights the critical role of surgical and anesthesia team experience in determining clinicaloutcomes. Our findings are consistent with previous reports, demonstrating that increasingteam experience over time contributes to shorter operative durations and improvedperioperative management. Robotic surgery was found to be a safe and feasible approach inour clinic in terms of early clinical outcomes and operational processes. It is concluded thatrobotic surgery can be effectively implemented with appropriate patient selection andexperienced multidisciplinary teams.

Keywords: Minimally invasive surgery, robotic surgery

[P-574]

The initial liver transplantation experience of a surgical team: An evaluation of seven cases performed over a seven-month period

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Objective: Liver transplantation is the cornerstone treatment for end-stage liver disease and acute liver failure, significantly reducing mortality. This study aimed to evaluate the patient characteristics, transplantation indications, and early clinical outcomes of liver transplantations performed at our center over a seven-month period.

Material and Methods: A total of seven patients who underwent liver transplantation at our center within a seven-month period were included in the study. Demographic data, transplantation indications, urgency status (elective vs. emergency), and length of hospital stay were retrospectively analyzed.

Results: Among the patients included in the study, 43% were male (n=3) and 57% were female (n=4), with a mean age of 44 years. The mean duration of hospitalization was 30 days. Of the liver transplantations performed, 71% (n=5) were carried out electively, whereas 29% (n=2) were performed under emergency conditions. The indications for elective liver transplantation were identified as hepatocellular carcinoma arising in the context of hepatitis C–related chronic liver disease (n=1), primary sclerosing cholangitis complicated by recurrent episodes of cholangitis (n=1), liver cirrhosis secondary to hepatitis B infection (n=1), hepatocellular carcinoma developing on the background of hepatitis B infection (n=1), and hepatopulmonary syndrome (n=1). Of the patients who underwent emergency liver transplantation, one received a cadaveric graft for acute liver failure secondary to drug-induced liver injury associated with hepatitis B infection, while the other underwent cadaveric liver transplantation for acute liver failure resulting from toxic hepatitis. One of the patients who underwent surgery in an intubated state due to acute hepatic encephalopathy died of multiorgan failure during postoperative intensive care unit follow-up after transplantation, despite satisfactory graft function and the lack of recovery of cerebral function.

Conclusion: The liver transplantations performed by our newly established liver transplantation unit over a limited time period for different etiological indications demonstrate that liver transplantation is an effective and feasible treatment modality for both chronic liver diseases and acute liver failure.

Keywords: Liver, transplantation, urgent, elective

Table 1. Liver transplantation

Diagnosis	1 HCC on the background of HCV 1 PSC 1 Liver cirrhosis on the background of HBV 1 HCC on the background of HBV 1 HP syndrome	1 Polypharmacy, toxic hepatitis, acute liver failure 1 Acute liver failure due to polypharmacy on the background of hepatitis B infection
Gender	3 Male 2 Female	2 Female
Median age	50	27
LOS	30	30

[P-577]

Retrospective analysis of 347 patients: Effectiveness of a synchronized model in preoperative evaluation with joint surgeon and anesthesiologist visit

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Objective: Preoperative preparation is a significant determinant of surgical outcomes. Separate evaluations by the surgeon and anesthesiologist can lead to communication gaps and oversight of uncontrolled comorbidities. In this study, we aimed to assess the impact of a synchronized preoperative visit mode conducted jointly by the surgeon and anesthesiologist on surgery cancellation/postponement rates, detection and optimization of uncontrolled comorbidities, time efficiency, and stakeholder satisfaction.

Material and Methods: This retrospective study included 347 patients scheduled for elective general surgery between December 1, 2025, and January 5, 2026. The patients were divided into two groups: The Joint Visit Group (n=150) and the traditional Separate Visit Group (n=197). Patients in the Joint Visit Group were evaluated simultaneously by both specialists during designated afternoon hours on three days per week. The two groups were compared regarding demographic characteristics, surgery cancellation/postponement rates and reasons, detected uncontrolled comorbidities [hypertension (HT), diabetes mellitus (DM)], visit durations, and satisfaction scores of patients, surgeons, and anesthesiologists measured on a 5-point Likert scale.

Results: No significant difference existed between the groups in terms of age and gender distribution. In the Joint Visit Group, a total of 21 patients (14%) experienced cancellation/postponement in the preoperative period (11 mutual decision, 5 patient refusal, 3 upper respiratory tract infection, 2 uncontrolled HT/DM). In the Separate Visit Group, this number was 41 patients (20.8%) (19 anesthesiology deferral, 7 patient refusal, 5 no-show, 10 intraoperative postponement). The most significant finding was the difference in the management of uncontrolled comorbidities. In the Joint Visit Group, uncontrolled HT/DM was detected in 33 patients (22%), allowing for complete preoperative optimization. In the Separate Visit Group, despite a similar prevalence of comorbidities, uncontrolled disease was present in 26 patients (13.2%). Optimization was incomplete in a significant portion of these patients, which was observed as the primary reason for intraoperative postponements (24.4%) in this group.The joint visit model saved 5-6 minutes per patient. All satisfaction scores were significantly higher in the Joint Visit Group (4.4, 4.3, 4.6 vs. 3.9, 4.1, 4.0, respectively).

Conclusion: The joint surgeon-anesthesiologist visit model stands out due to its capacity to proactively screen for the control status of these conditions and optimize them in the preoperative period within a population with a similar comorbidity burden. This approach has the potential to reduce intraoperative surprises and postponements, increases time efficiency, and enhances satisfaction among all stakeholders. This model presents a viable multidisciplinary strategy for improving the safety and quality of elective surgical programs.

Keywords: Multidisciplinary team, patient satisfaction, preoperative evaluation, surgery cancellation

İPTAL/ERTELEME ORANLARININ KARŞILAŞTIRILMASI

İptal/Erteleme Türü	Ortak Vizit(150 Hasta)	Ayrı Vizit (197 Hasta)
Toplam İptal/Erteleme	21(%14)	41(%20.8)
İntraoperatif İptal/Erteleme	0(%0)	10(%5.1)

Özet tablo

Özellik	Ortak Vizit Grubu (150 Hasta)	Ayrı Vizit Grubu(197 Hasta)
Toplam İptal/Erteleme	21 Hasta (%14	41 Hasta(%20.8)
İntraop Erteleme	0 hasta(%0)	10 Hasta(5.1)
Kontrolsüz HT/DM Tespiti	33 Hasta(%22)	26 Hasta(%13.2)
Kontrolsüz HT/DM Optimizasyonu	TAMAMI	Kısmi/Eksik
Ort Vizit Süresi	7 dk	12-13 dk
Hasta Memnuniyeti	4.4	3.9
Cerrah memnuniyeti	4.3	4.1
Anestezi memnuniyeti	4.6	4.0

[P-579]

Co-occurrence of acute appendicitis and urinary tract infection: Prevalence and clinical characteristics

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Objective: This study aimed to evaluate urinary system findings in patients with acute appendicitis, particularly their association with perforation, diabetes mellitus (DM), age, and gender.

Material and Methods: A retrospective analysis was performed on 100 patients who underwent appendectomy with a diagnosis of acute appendicitis. Demographic data, comorbidities [(especially DM), laboratory tests white blood cell (WBC), C-reactive protein (CRP)], urinalysis parameters (urine WBC, red blood cell, squamous epithelium), and intraoperative perforation status were recorded. Patients were divided into perforated and non-perforated groups. Mann-Whitney U and chi-square tests were used for statistical analysis, and $p<0.05$ was considered significant.

Results: A total of 100 patients diagnosed with acute appendicitis were included in the study. The mean age of the cohort was 37.8±14.6 years, and 47.2% of the patients were female. Perforation was detected in 18 patients (18.0%), while DM was present in 13 patients (13.0%). Comparison of laboratory parameters between perforated and non-perforated cases revealed significant differences. The mean WBC count was 16.1±4.3 $\times 10^3/\mu L$ in the perforated group compared with 12.6±3.4 $\times 10^3/\mu L$ in the non-perforated group ($p<0.05$). Similarly, mean CRP levels were markedly higher among patients with perforated appendicitis (73.1±56.3 mg/L) compared with those without perforation (21.0±21.3 mg/L, $p<0.05$). Urinary abnormalities were also evaluated according to DM status. Hematuria was more frequently observed in patients with DM (69.2%) compared to non-diabetic patients (41.4%); however, this difference did not reach statistical significance ($p=0.113$). The prevalence of leukocyturia was similar between DM-positive (30.8%) and DM-negative (27.6%) groups ($p>0.05$). Female patients demonstrated a higher prevalence of hematuria (56.9%) than male patients, who exhibited lower rates. Leukocyturia was also more common in women (31.4%). Age-stratified analysis showed that patients younger than 40 years presented with urinary abnormalities more frequently compared to those aged 40 years or older.

Conclusion: Urinary abnormalities such as hematuria and leukocyturia are common in acute appendicitis and can mimic urinary tract infections. These findings are significantly more pronounced in perforated cases. The presence of DM further increases both perforation risk and hematuria frequency. Clinicians should therefore consider appendicitis in patients presenting with acute abdomen and urinary abnormalities.

Keywords: Appendicitis, urinary tract, hematuria

Table 1. Akut apandisitli hastalarda demografik, laboratuvar ve üriner bulgular

Değişken	Perfore (n=18)	Perfore olmayan (n=82)	p-değeri	DM (+)	DM (-)
İdrar WBC (ortalama)	12.6±4.3	2.7±1.1	<0.05	4.46±2.1	4.45±1.9
İdrar RBC (ortalama)	13.2±5.2	2.7±1.0	<0.05	8.77±3.4	3.93±1.8
Kan WBC (x10³/µL)	15.8±4.2	12.3±3.7	<0.05	14.9±3.9	13.2±3.6
CRP (mg/L)	115±35	48±20	<0.05	102±28	65±24
Perforasyon oranı (%)	100%	0%	—	30.8%	16.1%
Yaş (ortalama, yıl)	31.9±12.2	33.9±11.8	>0.05	—	—
Cinsiyet (% perfore)	20.4% (E)	15.7% (K)	<0.05	—	—
Hastanede kalış (gün)	6.2 ± 2.1	2.4 ± 1.2	<0.05	5.1 ± 1.7	3.2 ± 1.4

WBC: White blood cell, RBC: Red blood cell, CRP: C-reactive protein, E: erkek, K: kadın.

[P-580]

To do or not to do: Primary anastomosis in emergency colorectal tumors

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Objective: Colorectal cancer is a common disease that can be found in emergency and daily clinics. They can be admitted with obstruction, perforation or bleeding. They can undergo emergency surgery. In emergency surgeries major challenges are less evaluation time, lack of bowel preparation and intestinal distention due to obstruction. Because of these factors surgeons may be tentative to perform primary anastomosis. Anastomosis leakage is a major problem especially with patients which have age greater than 70 and American Society of Anesthesiologists physical status score–Grade III to V, cardiorespiratory comorbidities, poor nutritional status. In our study, we evaluate emergency colorectal surgeries with primary anastomosis in our clinic within selected time period.

Material and Methods: This retrospective study has 37 patients who underwent colorectal surgery and primary anastomosis at University of Health Sciences Türkiye, Ankara Etlik City Hospital between August, 2024 and December, 2025. Demographically, there are 23 (62.2%) male and 14 (37.8%) female patients and their mean age is 67.1 (min-max, 39-89). When we evaluate them according to tumor localisation 22 left colon tumors and 15 right colon tumors present. All of them are T3 or T4 locally-extensive tumors. After following suitable oncological resection, primary anastomosis has been performed via circular/lineer stapler or manuel. Leakage status, distribution and management have been evaluated.

Results: Anastomosis leak has been seen in 10 (27%) patients. Six of them are clinically stable, have Clavien-Dindo Class I-II leakage and resulted in successful closure without any additional complication. Four of these 10 leak patients need additional surgery for diverting stoma but they have no further complications and successfully discharged. There is no statistical difference between anastomosis with circular stapler, linear stapler or manual anastomosis according to leak status. Tumor localisation is statistically significant, left colon tumors have higher risk for leak ($p=0.016$; $p<0.05$). Proximal intestinal dilation in diameter is also analysed for leak but there is no statistical difference according to diameter of intestine. Length of hospitalisation is longer and statistically significant in leak patients. (Without leak min-max: 5-23; leak min-max: 12-52; $p=0.006$; $p<0.01$) There was one mortality among patients without leak due to comorbidities.

Conclusion: Colorectal tumoral obstructions can be challenged in emergency surgeries but as in elective procedures, patients have a chance of primary anastomosis without additional morbidity or mortality. In experienced centers, patient follow-up has a key role in leak management. Our study shows, primary anastomosis in emergency colorectal tumors can be preferable in suitable patients and should not be a taboo.

Keywords: Anastomosis, colorectal, emergency surgery

[P-581]

Laser surgery in recurrent proctological cases: Early results and clinical experience

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Objective: Recurrent proctologic diseases constitute a challenging patient population due to fibrosis and distorted anatomy resulting from previous surgical interventions. Conventional surgical approaches in these cases often require wider dissection and may increase the risk of sphincter injury, particularly in anal fistula patients. In recent years, laser surgery has gained increasing attention in proctologic practice because of its minimally invasive and sphincter-preserving characteristics. The aim of this study was to evaluate the early clinical outcomes and feasibility of laser surgery in patients with recurrent hemorrhoidal disease, anal fistula, and pilonidal sinus.

Material and Methods: This retrospective, single-center pilot study included patients who underwent laser surgery for recurrent proctologic disease. A total of 20 patients with recurrent hemorrhoids, recurrent anal fistula, or recurrent pilonidal sinus were analyzed. Early outcomes were assessed within the first two months of follow-up. Demographic characteristics, previous surgical history, laser technique applied, operative time, length of hospital stay, postoperative complications, early clinical improvement, and early recurrence were evaluated using descriptive statistics.

Results: Among the included patients, 10 had recurrent pilonidal sinus, 4 had recurrent hemorrhoidal disease, and 4 had recurrent anal fistula. The mean operative time was approximately 16 minutes, and 90% of patients were discharged on the same day or within 24 hours. No major postoperative complications were observed, while minor complications occurred in 20% of patients. The overall early clinical improvement rate was 80%. In the recurrent pilonidal sinus group, the healing rate was 80% with an early recurrence rate of 10%. In the hemorrhoid group, early recurrence was observed only in a patient with Grade IV disease. In the anal fistula group, complete healing was achieved in 50% of patients. One patient underwent a staged approach with loose seton placement followed by laser ablation during a second session, resulting in marked symptom relief. No permanent continence impairment was observed during the early follow-up period.

Conclusion: Laser surgery appears to be a safe and feasible treatment option for recurrent proctologic diseases, offering low morbidity, short hospital stay, and acceptable early recurrence rates. Particularly in recurrent anal fistula, laser treatment may serve as a valuable component of a sphincter-preserving, stepwise treatment strategy. However, careful patient selection remains essential, especially in advanced hemorrhoidal disease and complex recurrent cases. Larger studies with long-term follow-up are required to define the durable efficacy of laser surgery in recurrent proctologic disorders.

Keywords: Recurrent proctologic diseases, laser surgery, sphincter-preserving treatment

Table 1. Disease-based early clinical outcomes

Disease group	Number of patients (n)	Early recovery	Early recurrence	Minor complication	Reoperation
Recurrent hemorrhoids	4	100%	25% (grade IV)	25%	0
Recurrent anal fistula	4	50%*	50%	25%	0
Recurrent pilonidal cyst	10	80%	10%	20%	10%
Total	20	80%	20%	20%	5%

*In one patient in the anal fistula group, laser treatment was applied during the second session after a loose seton application. Although complete anatomical closure was not achieved, a significant reduction in symptoms was observed. No loss of continence was observed in any patient during the early period.

[P-582]

The overlooked etiology behind renal stone disease: Delayed diagnosis of parathyroid adenoma in a young adult

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Objective: Parathyroid adenoma is a benign endocrine tumor and represents the most common cause of primary hyperparathyroidism, accounting for approximately 80-85% of cases. Although many patients are currently diagnosed through incidental detection of asymptomatic hypercalcemia, some present with end-organ complications such as nephrolithiasis. In young adults, recurrent renal stone disease without comprehensive metabolic evaluation may lead to delayed recognition of the underlying endocrine etiology. In this case, we wanted to present our case both to ensure that patients receive early treatment with accurate diagnosis, and to facilitate the functioning of the healthcare system in our country without burdening different branches and resources.

Material and Methods: This study presents a retrospective evaluation of a young patient who was managed symptomatically for recurrent nephrolithiasis and was subsequently diagnosed with parathyroid adenoma. Clinical records, laboratory findings, imaging studies, surgical details, and postoperative outcomes were reviewed. Biochemical assessment included measurement of serum calcium and parathyroid hormone (PTH) levels. Lesion localization was performed using cervical ultrasonography. Surgical treatment consisted of focused parathyroidectomy. Postoperative biochemical response and follow-up outcomes were analyzed.

Results: A 28-year-old male with no known comorbidities was evaluated in multiple urology clinics over a two-year period due to recurrent nephrolithiasis and received medical treatment. During this time, no comprehensive metabolic investigation was performed, and management focused solely on urinary tract pathology. Upon referral to our center, laboratory analysis revealed persistent hypercalcemia and markedly elevated PTH levels. Neck ultrasonography demonstrated a hypoechoic lesion located posterior to the inferior pole of the thyroid gland, consistent with parathyroid adenoma. Following localization studies, the patient underwent focused parathyroidectomy. Histopathological examination confirmed the diagnosis. In the early postoperative period, serum calcium and PTH levels returned to normal ranges. No recurrence of nephrolithiasis was observed during follow-up.

Conclusion: Hypercalcemia secondary to parathyroid adenoma promotes increased bone resorption and renal calcium excretion, predisposing patients to nephrolithiasis. In young patients, exclusive focus on symptomatic urinary management may obscure the underlying endocrine etiology. Diagnostic delay can result in prolonged morbidity, repeated hospital visits, and unnecessary interventions. Surgical excision remains the definitive and curative treatment. Early diagnosis and timely surgical intervention not only normalize biochemical parameters but also significantly reduce the risk of recurrent renal stone formation. Recurrent nephrolithiasis in young adults should prompt evaluation for parathyroid adenoma as a potential underlying cause. Simple biochemical screening may prevent delayed diagnosis and avoidable morbidity. Early multidisciplinary assessment and definitive surgical management are essential for optimal clinical outcomes.

Keywords: Parathyroid adenoma, nephrolithiasis, endocrine surgery

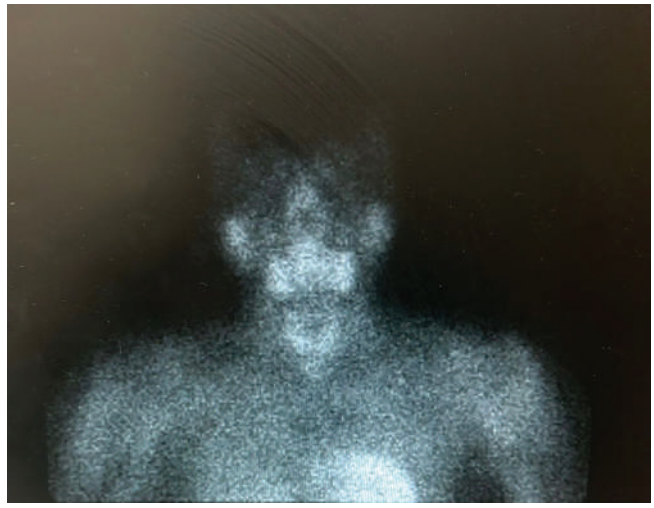


Figure 1. Thyroid scintigraphy. Parathyroid adenoma demonstrating increased radiotracer uptake in the upper paratracheal region.



Figure 2. Parathyroid adenoma specimen. Enlarged, nodular parathyroid adenoma specimen.

[P-583]

Early clinical, metabolic, and nutritional outcomes following mini gastric bypass: A single-center early experience

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Objective: Mini-gastric bypass (MGB) is an effective surgical treatment for morbid obesity, providing significant weight loss and metabolic improvement; however, it requires careful postoperative follow-up because of potential complications and nutritional consequences. This study aimed to evaluate the demographic, clinical, operative, and postoperative outcomes of patients who underwent MGB for obesity and to assess early safety and nutritional results.

Material and Methods: In this retrospective observational study, data from six patients who underwent MGB for obesity were analyzed. Demographic characteristics, preoperative clinical status, comorbidities, operative and perioperative data, as well as early and late postoperative complications were evaluated. Metabolic and nutritional outcomes during follow-up were also assessed. Continuous variables were presented as median (IQR) and minimum–maximum values, and categorical variables as numbers and percentages.

Results: All patients were female, with a median age of 48.5 years (33-55). The median preoperative body mass index was 43.8 kg/m² (26.7-49.4), and most patients were in the class III obesity group. Type 2 diabetes was present in 33.3% of patients, with a median disease duration of 10 years. MGB was successfully completed in all cases. No major perioperative complications, blood transfusions, or intensive care requirements were observed. The median length of hospital stay was 3 days. During postoperative follow-up, one patient developed a marginal ulcer and one developed dumping syndrome, while no reactive hypoglycemia was observed. Cholelithiasis was detected in two patients during follow-up, and cholecystectomy was performed in these cases. No anastomotic leaks, reoperations, or mortality occurred. Evaluation of the lowest albumin levels during follow-up showed that no patient developed severe hypoalbuminemia. Metabolic remission was achieved in all patients with type 2 diabetes.

Conclusion: This small series demonstrates that MGB is a safe and effective option for obesity treatment in the early period. The absence of major perioperative complications, intensive care need, reoperation, or mortality indicates a high safety profile in appropriately selected patients. Marginal ulcer and dumping syndrome were rare, and no severe nutritional deficiency was observed. All patients with type 2 diabetes achieved metabolic remission, supporting the metabolic benefits of the procedure. Despite the limited sample size, these findings suggest that MGB provides favorable clinical and nutritional outcomes, which should be confirmed in larger studies with long-term follow-up.

Keywords: Bariatric surgery, mini gastric bypass, morbid obesity, obesity surgery, postoperative complications

Tablo 1. Demografik ve Preoperatif Klinik Özellikler (n=6)

Parametre	Değer
Yaş (yıl)	48.5 (44.2–52.8) [33–55]
Cinsiyet	Kadın: 6 (100.0%)
Preop BMI (kg/m²)	43.8 (36.8–46.6) [26.7–49.4]
Obezite sınıfı	Sınıf II (35–39.9): 1 (16.7%) · Sınıf III (≥40): 5 (83.3%)
Sigara	Var: 1 (16.7%) · Yok: 5 (83.3%)
Alkol	Var: 0 (0.0%) · Yok: 6 (100.0%)
ASA	ASA II: 2 (33.3%) · ASA III: 4 (66.7%)
Önceki abdominal cerrahi	Var: 0 (0.0%) · Yok: 6 (100.0%)
Önceki bariatrik cerrahi	Var: 0 (0.0%) · Yok: 6 (100.0%)
DM2	Var: 2 (33.3%) · Yok: 4 (66.7%)
DM süresi (yıl) *(yalnız DM2 olanlarda, n=2)*	10 (5.5–14.5) [1–19]
Hipertansiyon	Var: 2 (33.3%) · Yok: 4 (66.7%)
Dislipidemi	Var: 1 (16.7%) · Yok: 5 (83.3%)
OSAS	Var: 0 (0.0%) · Yok: 6 (100.0%)
GERD (preop)	Var: 1 (16.7%) · Yok: 5 (83.3%)

Tablo 2. Operatif ve Perioperatif Özellikler (n=6)

Parametre	Değer
Cerrahi yaklaşım	Mini Gastrik Bypass: 6 (100.0%)
Ameliyat süresi (dk)	120 (105–135) [90–150]
Peroperatif komplikasyon	Var: 0 (0.0%) · Yok: 6 (100.0%)
Kan transfüzyonu	Var: 0 (0.0%) · Yok: 6 (100.0%)
Dren kullanımı	Var: 6 (100.0%)
Yoğun bakım ihtiyacı	Var: 0 (0.0%) · Yok: 6 (100.0%)
Hastanede yatış süresi (gün)	3 (3–4) [2–5]

Tablo 3. Postoperatif Erken ve Geç Komplikasyonlar (n=6)

Komplikasyon	n (%)
Marjinal ülser	1 (16.7%)
Dumping sendromu	1 (16.7%)
Reaktif hipoglisemi	0 (0.0%)
Kolelitiazis (takipte)	2 (33.3%)
Postop kolesistektomi	2 (33.3%)
Anastomoz kaçağı	0 (0.0%)
Kanama	0 (0.0%)
Yeniden operasyon	0 (0.0%)
Mortalite	0 (0.0%)

Tablo 4. Takip ve Nütrisyonel / Metabolik Sonuçlar (n=6)

Parametre	Değer
Takip süresi (ay)	**12 (9–15) [6–18]**
Albümin – takipte en düşük (g/dL)	**42.0 (37.0–46.0) [34.7–48.3]**
Ciddi hipoalbuminemi (<3.0 g/dL)	**0 (0.0%)**
Nütrisyonel destek ihtiyacı	**0 (0.0%)**
DM2 remisyonu *(DM2 olanlarda, n=2)*	**2 (100.0%)**

Tablo 5. Mini Gastrik Bypass Literatürü ile Bizim Serimizin Karşılaştırması

Çalışma	Tasarım / Kapsam	Örneklem / Takip	Literatürde öne çıkan sonuçlar	Bizim seriyle kıyas (n=6)
Mitra 2025 (Obesity Surgery)	**Sistematik derleme + meta-analiz** (≥5 yıl takip)	**32 çalışma, 19.125 hasta**, ort. takip **6,7 yıl**	5+ yılda: **T2DM düzelme ~%80, bile reflü ~%4, marjinal ülser ~%2, malnütrisyon ~%1**	Bizde: **MU %16,7 (1/6), ciddi malnütrisyon/hipoalbuminemi yok, T2DM remisyonu %100 (2/2).** MU oranımız küçük n nedeniyle şişebilir; ama **ciddi komplikasyon yokluğu** güçlü.
Musella 2025 (PMC)	Sistematik derleme/meta-analiz (primer OAGB endikasyon/sonuçlar, 5+ yıl)	Çoklu çalışma	Uzun dönemde en çok tartışılan/çekinilenler: **GERD/bile reflü, malnütrisyon, marjinal ülser**; reflü semptomlarında düzelme/kötüleşme aralıkları raporlanıyor	Bizim veri setimiz reflü/bile reflü başlığını içermiyorsa, **takip formuna eklenebilir**; nütrisyonel güvenlik (albümin) bizde iyi.
Lee 2023 (PubMed) – MU meta-analizi	**Sistematik derleme + meta-analiz** (OAGB sonrası marjinal ülser)	Çoklu çalışma	**MU "uncommon"**; çoğu olgu **PPI ile konservatif** yönetiliyor	Bizde MU **1 olgu**; pilot seride **PPI/NSAİİ/sigara** gibi risk faktörleriyle ilişkilendirilecek şekilde tartışma güçlenir.
Abu-Abeid 2024 (J Clin Med)	Tek merkez kohort (MU perforasyonu nedeniyle revizyon)	Merkez verisi: **MU perforasyon oranı %0,98 (15/1522)**; 22 revizyon olgusu	MU perforasyonu nadir ama ciddi; risk faktörleri arasında **sigara/NSAII** vurgulanıyor	Bizde **perforasyon yok, kaçak yok, mortalite yok** → erken dönem güvenlik mesajını güçlendirir.
Son 2023 (PMC) –	Derleme (bariatrik cerrahi	Çoklu çalışma	Bariatrik cerrahi sonrası safra taşı **%10–38**;	Bizde **kolelitiazis %33,3 (2/6)** ve **kolesistektomi %33,3 (2/6)** → oran
Safra taşı/UDCA derlemesi	sonrası safra taşı, UDCA)		UDCA'nın (ilk 3–6 ay) safra taşı/KK riskini azaltabildiği bildiriliyor	literatür aralığıyla uyumlu; ancak kolesistektomi oranı küçük n nedeniyle yüksek görünebilir. UDCA profilaksisi verildiyse/verilmediyse tartışmada kritik.
Bizim çalışma	Tek merkez retrospektif tanımlayıcı seri	**n=6**, takip değişkenlerine göre	**Majör periop komplikasyon yok, kaçak/yeniden operasyon/mortalite yok.** Komplikasyonlar: **MU %16,7, dumping %16,7, reaktif hipoglisemi %0, kolelitiazis %33,3, postop kolesistektomi %33,3. Ciddi hipoalbuminemi yok. T2DM remisyonu %100 (2/2)**	Literatüre katkı: "erken deneyim/pilot" çerçevesinde **güvenlik + nütrisyon + metabolik sonuçların birlikte raporlanması.** En güçlü taraf: **majör morbidite ve nütrisyonel ağır sorun olmaması**; sınırlılık: **küçük örneklem.**

[P-584]

Discriminatory performance of systemic inflammatory indices in identifying tumor stage in gastric cancer: A retrospective study

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Objective: Systemic inflammatory biomarkers have emerged as accessible indicators of tumor biology in gastric cancer. However, their ability to reliably discriminate tumor stage remains incompletely elucidated. This study aimed to evaluate the discriminatory performance of commonly used systemic inflammatory indices for identifying advanced-stage gastric cancer using both group-based and classification-oriented analytical approaches.

Material and Methods: This retrospective observational study included 151 patients with histologically confirmed gastric cancer, categorized into early-stage and advanced-stage disease according to pathological staging criteria. The neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR), lymphocyte-to-monocyte ratio, mean platelet volume, systemic immune-inflammation index (SII), and systemic inflammation response index (SIRI) were calculated from pre-treatment complete blood count data.

Results: Group-level comparisons revealed no statistically significant differences in median values of any inflammatory indices between early- and advanced-stage disease (all $p>0.05$). However, classification-oriented analyses demonstrated preserved discriminatory performance for selected markers. Receiver operating characteristic analysis showed good discrimination for both NLR and PLR, with areas under the curve exceeding 0.85, whereas composite indices including SII and SIRI exhibited limited discriminatory ability. In multivariable logistic regression analysis, both NLR and PLR remained independently associated with advanced-stage disease after mutual adjustment, confirming their preserved discriminatory value despite overlapping group distributions.

Conclusion: Despite the absence of statistically significant group-level differences, NLR and PLR demonstrated preserved discriminatory capacity and independent associations with advanced-stage gastric cancer when evaluated using classification-oriented analytical approaches. These findings support the role of systemic inflammatory indices as accessible adjunctive biomarkers when interpreted within multimodal staging and risk stratification frameworks rather than as standalone staging tools.

Keywords: Gastric cancer, systemic inflammation, neutrophil-to-lymphocyte ratio

[P-585]

The evolution of HALP score literature: A global bibliometric perspective

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Objective: The hemoglobin, albumin, lymphocyte, and platelet (HALP) score is an emerging immune-nutritional biomarker that integrates systemic inflammation, nutritional status, and immune competence. While clinical studies have associated low HALP scores with poor survival outcomes in multiple malignancies, the global research landscape of HALP remains unmapped.

Material and Methods: A comprehensive literature search was conducted in the Web of Science Core Collection without language or time restrictions. Eligible publications explicitly mentioning HALP were analyzed using the Bibliometrix R package and Biblioshiny interface. Descriptive indicators, citation metrics, and source-level analyses were reported in line with BIBLIO guidelines. Co-authorship networks, keyword co-occurrence, thematic maps, and trend analyses were employed to examine the intellectual structure and evolution of the field.

Results: A total of HALP-related publications showed a sharp rise after 2020, reaching their highest output in 2025. China dominated in publication volume, while the United States led in citation impact. Institutional productivity was concentrated in a limited group of centers, particularly the University of Health Sciences and Qingdao University (Figure 1). Co-citation and keyword network analyses revealed three major thematic clusters, anchored by a foundational core of early studies and a rapidly expanding new research wave. The conceptual structure of the field consistently revolved around inflammation, nutrition, and oncologic outcomes (Figure 2). Despite rapid growth, international collaboration remained limited and methodological heterogeneity was pronounced.

Conclusion: HALP research is expanding quickly but remains in an early developmental stage, characterized by uneven global distribution, inconsistent cut-off values, and fragmented methodological approaches. This bibliometric analysis clarifies the current landscape, identifies research gaps, and highlights the need for standardized methods and broader collaborative networks. Strengthening multicenter studies and harmonizing analytical frameworks will be essential for advancing the clinical utility and global adoption of the HALP score.

Keywords: Biomarkers, prognosis, cancer, inflammation, bibliometrics, HALP score

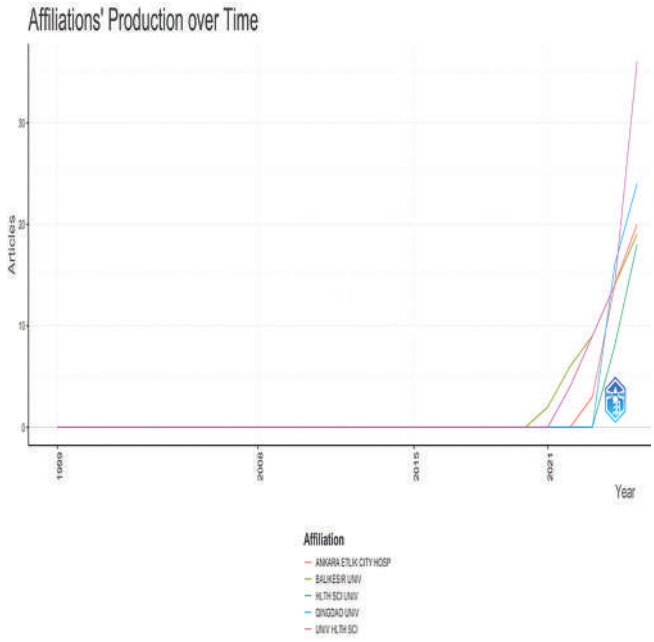


Figure 1.



Figure 2.

[P-586]

The value of computed tomography findings in predicting perforation and malignancy in acute appendicitis: A single-center retrospective cohort study

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Objective: Acute appendicitis is one of the most common indications for emergency surgical intervention. Accurate preoperative prediction of complications such as perforation and underlying malignancy is critical for clinical decision-making and surgical timing. Although computed tomography (CT) is widely used in the diagnostic evaluation of acute appendicitis, the diagnostic performance of standalone radiological interpretation remains limited, particularly in complicated cases. Moreover, the relative value of CT-based composite scoring systems compared with direct CT interpretation in predicting pathological outcomes has not been clearly established. This study aimed to evaluate the diagnostic performance of CT findings and composite CT scores in predicting perforation and malignancy in patients with acute appendicitis.

Material and Methods: Between January 1, 2024, and December 31, 2025, histopathological reports of 1,187 adult patients (≥18 years) who underwent appendectomy with a diagnosis of acute appendicitis established solely by CT were retrospectively reviewed. Among these, 212 patients with pathological findings consistent with complicated appendicitis and/or neoplastic or malignant lesions (Table 1) constituted the study cohort (Figure 1). Patients were analyzed in three cohorts based on pathological perforation (n=92), presence of neoplasia (n=37), and presence of malignancy (n=17). Because individual CT findings of complicated appendicitis demonstrate high specificity but limited sensitivity, composite scoring systems were developed to reduce false-negative results. A composite CT perforation score based on 8 imaging parameters and a composite CT neoplasia/malignancy score based on 5 parameters were constructed according to previously reported imaging features (Table 2). Demographic, clinical, laboratory, and CT findings were recorded. Standalone CT interpretations and composite scores were evaluated using pathology as the reference standard (Figure 4).

Results: The mean age of the patients was 45.9 years, and 49.5% were female. The mean symptom duration was 60.1 hours, and the mean Alvarado score was 7.71. Patients with intraoperative and pathological perforation had significantly higher age, symptom duration, Alvarado scores, white blood cell count, C-reactive protein levels, and length of hospital stay ($p<0.001$) (Figure 2). The perforation detection rate on CT was 25.5%, where as the pathological perforation rate was 43.4%. Wall defect, extraluminal air, periappendiceal fat stranding, free intraperitoneal fluid, and signs of peritonitis were significantly associated with perforation ($p<0.001$). Patients with pathological perforation had significantly larger appendiceal diameters and higher composite CT perforation scores ($p<0.001$) (Figure 3). While standalone CT interpretation of perforation showed a sensitivity of 41.3% and specificity of 86.7%, the composite perforation score (V≥2) increased sensitivity to 82.6%. In cases with neoplasia and malignancy, suspected mass, suspected mucocele, mural calcification, and periappendiceal lymphadenopathy were significant. The composite malignancy score (W≥1) demonstrated a sensitivity of 82.4% and a negative predictive value of 98.0.

Conclusion: Although standalone CT interpretation in acute appendicitis demonstrates high specificity, its sensitivity for predicting perforation and malignancy is limited. The composite CT scores developed in this study significantly reduce false-negative rates and provide a more balanced and clinically reliable risk stratification.

Keywords: Acute appendicitis, computed tomography, diagnostic scoring systems, malignancy, perforation

Patolojik tanı dağılımı (n = 212)		
Patolojik Tanı	**n**	**%**
Perfore apandisit	122	57,5
Periappendiküler apse / periappendisit	18	8,5
Supüratif / flegmonöz apandisit	10	4,7
Serrated lezyon / hiperplastik polip*	10	4,7
LAMN*	10	4,7
Gangrenöz apandisit	9	4,2
NET / Karsinoid**	9	4,2
Endometriozis	7	3,3
Appendiks divertikülü / divertikülit	5	2,4
Paraziter apandisit	3	1,4
HAMN**	3	1,4
Müsinöz adenokarsinom**	2	0,9
Plastron / flegmon	1	0,5
Lenfoid hiperplazi*	1	0,5
Goblet cell adenocarcinoma**	1	0,5
Adenokarsinom (kolonik tip)**	1	0,5
Toplam	**212**	**100**

Figure 1. Distribution of pathological diagnoses.

Tablo 1a. İntraoperatif Perforasyona Göre Hasta Özelliklerinin Karşılaştırılması

Değişken	Tüm hastalar (N=212)	Perforasyon (−) (n=99)	Perforasyon (+) (n=113)	p
Yaş (yıl)	45,9	41,8	49,5	**0,001**
Kadın, n (%)	105 (49,5)	56 (56,6)	49 (43,4)	0,08
Erkek, n (%)	107 (50,5)	43 (43,4)	64 (56,6)	—
Semptom süresi (saat)	60,1	44,2	74	**<0,001**
Alvarado skoru	7,71	7,3	8,1	**<0,001**
WBC (10^3/µL)	14,3	12,6	15,8	**<0,001**
CRP (mg/L)	134,5	86,4	176,8	**<0,001**
Yatış süresi (gün)	5,3	3,9	6,6	**<0,001**

Tablo 1b. Patolojik Perforasyona Göre Hasta Özelliklerinin Karşılaştırılması

Değişken	Tüm hastalar (N=212)	Patolojik perf (−) (n=120)	Patolojik perf (+) (n=92)	p
Yaş (yıl)	45,9	42,9	49,9	**0,003**
Kadın, n (%)	105 (49,5)	65 (54,2)	40 (43,5)	0,13
Erkek, n (%)	107 (50,5)	55 (45,8)	52 (56,5)	—
Semptom süresi (saat)	60,1	47,8	77,6	**<0,001**
Alvarado skoru	7,71 ± 0,90	7,4 ± 0,8	8,2 ± 0,9	**<0,001**
WBC (10^3/µL)	14,3	13	16,2	**<0,001**
CRP (mg/L)	134,5	98,7	186,3	**<0,001**
Yatış süresi (gün)	5,3	4,1	6,9	**<0,001**

Figure 2. Comparison of patient characteristics according to intraoperative and pathological perforation.

Tablo 2a. İntraoperatif Perforasyona Göre BT Bulgularının Karşılaştırılması

BT bulgusu	Tüm hastalar (N=212)	Perforasyon (−) (n=99)	Perforasyon (+) (n=113)	p
Duvar defekti, n (%)	46 (21,7)	6 (6,1)	40 (35,4)	**<0,001**
Ekstraluminal hava, n (%)	23 (10,8)	3 (3,0)	20 (17,7)	**<0,001**
Periappendiküler kirlenme, n (%)	180 (84,9)	73 (73,7)	107 (94,7)	**<0,001**
Serbest sıvı, n (%)	65 (30,7)	15 (15,2)	50 (44,2)	**<0,001**
Peritonit, n (%)	41 (19,3)	5 (5,1)	36 (31,9)	**<0,001**
Appendikolit, n (%)	54 (25,5)	20 (20,2)	34 (30,1)	0,1
Plastron / flegmon, n (%)	2 (0,9)	0 (0)	2 (1,8)	0,5
Appendiks çapı (mm)	12,4	10,9	13,7	**<0,001**
BT perforasyon skoru (V)	1,42	0,7	2,1	**<0,001**

Tablo 2b. Patolojik Perforasyona Göre BT Bulgularının Karşılaştırılması

BT bulgusu	Tüm hastalar (N=212)	Patolojik perf (−) (n=120)	Patolojik perf (+) (n=92)	p
Duvar defekti, n (%)	46 (21,7)	8 (6,7)	38 (41,3)	**<0,001**
Ekstraluminal hava, n (%)	23 (10,8)	4 (3,3)	19 (20,7)	**<0,001**
Periappendiküler yağlanma, n (%)	180 (84,9)	88 (73,3)	92 (100)	**<0,001**
Serbest sıvı, n (%)	65 (30,7)	19 (15,8)	46 (50,0)	**<0,001**
Peritonit, n (%)	41 (19,3)	7 (5,8)	34 (37,0)	**<0,001**
Appendikolit, n (%)	54 (25,5)	24 (20,0)	30 (32,6)	**0,06**
Plastron / flegmon, n (%)	2 (0,9)	0 (0)	2 (2,2)	**0,19**
Appendiks çapı (mm)	12,4	11,1	14	**<0,001**
BT perforasyon skoru (V)	1,42	0,8	2,3	**<0,001**

Figure 3. Comparison of CT findings according to intraoperative and pathological perforation.

CT: Computed tomography.

BT'nin perforasyon ve maligniteyi öngörme performansının patoloji referanslı karşılaştırması

Klinik sonuç	BT yöntemi	TP	FN	FP	TN	Duyarlılık (%)	Özgüllük (%)	PPV (%)	NPV (%)
Patolojik perforasyon	CT perforasyon yorumu	38	54	16	104	41,3	**86,7**	70,4	65,8
	CT kompozit skoru (V)	**76**	**16**	32	88	**82,6**	73,3	70,4	**84,6**
Patolojik malignite	CT malignite yorumu	7	10	**2**	**193**	41,2	**99**	**77,8**	95,1
	CT kompozit skoru (W)	**14**	**3**	46	149	**82,4**	76,4	23,3	**98**
Altın standart: Patoloji									
Cut-off'lar:									
V skoru (+): ≥ 2									
W skoru (+): ≥ 1									

Figure 4. Pathology-based comparison of CT performance in predicting perforation and malignancy using composite scores.

CT: Computed tomography.

Table 1.	
Neoplasia*	**Malignancy****
Mucocele (benign)	NET/carcinoid tumor
Serrated lesion/hyperplastic polyp	Goblet cell adenocarcinoma
Adenoma/dysplasia (without invasion)	Adenocarcinoma (colonic type)
NET/carcinoid tumor	Mucinous adenocarcinoma
Goblet cell adenocarcinoma	HAMN
Adenocarcinoma (colonic type)	MiNEN
Mucinous adenocarcinoma	Lymphoma/hematolymphoid malignancy
Low-grade appendiceal mucinous neoplasm (LAMN)	Metastasis (secondary)
High-grade appendiceal mucinous neoplasm (HAMN)	Other malignancies
Mixed neuroendocrine–non-neuroendocrine neoplasm (MiNEN)	
Lymphoma/hematolymphoid malignancy	
Metastasis (secondary)	
Other malignancies	

Table 2. Parameters of the composite scoring system	
CT composite perforation score	**CT composite malignancy score**
Wall defect	Suspected mass
Extraluminal air	Suspected mucocele
Periappendiceal abscess	Mural calcification
Free intraperitoneal fluid	Pathologic lymphadenopathy
Peritonitis	Implant/pseudomyxoma
Phlegmon/plastron	
Appendicolith	
Periappendiceal lymphadenopathy	

[P-587]

Predictors of recurrence in the management of breast abscesses

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Objective: Inflammatory breast pathologies represent a significant clinical challenge in general surgery, profoundly impacting patient morbidity and quality of life due to their high propensity for recurrence. Mastitis and breast abscesses constitute the majority of these cases. While the current therapeutic paradigm prioritizes conservative measures—specifically targeted antibiotherapy and ultrasound-guided needle aspiration—surgical intervention remains the definitive recourse for refractory cases. This study seeks to elucidate the clinicopathological predictors of recurrence in patients who transitioned to surgical drainage following the failure of primary conservative management.

Material and Methods: A retrospective cohort of 196 patients diagnosed with breast abscesses between 2021 and 2025 was reviewed. Analysis focused on 109 patients who exhibited clinical persistence despite initial intervention, subsequently requiring surgical drainage. Multiple variables, including anatomical localization, microbiological profiles, systemic inflammatory markers (WBC and CRP), smoking status, diabetes mellitus, and the presence of underlying granulomatous mastitis, were analyzed to determine their association with disease recurrence.

Results: The mean age of the cohort was 35.95 years (range: 21–52), with a predominant distribution of non-puerperal cases (n=107) over puerperal ones (n=2). Statistical modeling demonstrated that positive microbiological cultures and non-granulomatous etiologies were significantly associated with reduced recurrence rates ($p<0.05$). Conversely, granulomatous mastitis, active smoking, and diabetes mellitus emerged as potent independent predictors of recurrence ($p<0.05$). Notably, neither leukocytosis nor elevated CRP levels demonstrated sufficient sensitivity as predictors for recurrence ($p>0.05$).

Conclusion: Conservative management via needle aspiration and antibiotherapy remains the cornerstone of breast abscess treatment. However, when these measures prove insufficient, surgical drainage becomes mandatory. In such instances, routine microbiological and histopathological sampling is paramount to delineate the underlying etiology. A precise diagnosis facilitates a tailored therapeutic approach, which is critical for mitigating the risk of chronicity and minimizing the necessity for repeated surgical interventions. In summary while aspiration is our first line of defense, understanding the underlying pathology is what ultimately prevents the scalpel from being needed a second time.

Keywords: Mastitis, non-puerperal mastitis, granulomatous mastitis, breast abscess

[P-588]

Reducing incorrect home interventions and unregistered topical product use in burn treatment: A multilevel roadmap for evidence-based first aid and risk communication

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Objective: Common "home/alternative" remedies (oil, yogurt, toothpaste, ice, etc.) used in the community after thermal burns, and the recent increase in the availability of unregistered, unidentified topical preparations (so-called "burn creams") in some rural areas, can increase the risk of burn depth, wound infection, allergic/irritant reactions, delayed treatment, and ultimately sepsis, extensive scarring, and tissue loss. The aim of this report is to discuss the reasons for the continuation of these incorrect practices and to propose an awareness-behavioral change-access program that can be implemented, particularly in rural communities.

Material and Methods: Evidence-based burn first aid recommendations and application barriers are compiled within a "multi-level" intervention framework involving stakeholders such as primary care, emergency services (112), pharmacies, schools, local government, and the tourism sector. The text also discusses the risks of "unregistered products" based on anonymized field observations encountered in clinical practice.

Results: Many guidelines emphasize that the first approach in burns is to safely remove heat; cooling the burn with cool running tap water for 20 minutes, removing constricting jewelry/clothing, covering the burn with a clean dressing, and seeking medical attention. Applying ice and oily/creamy substances is not recommended; excessive/prolonged cooling may increase the risk of hypothermia. There is clinical data reporting that topical "traditional material" applications can increase infection and mortality in acute burns. Infection and subsequent sepsis in burn wounds are significant determinants of morbidity/mortality. Safety issues such as microbial contamination and heavy metal content have been reported in unregistered/community-produced topical products; additionally, herbal/topical preparations may cause allergic contact dermatitis.

Conclusion: One-off informational campaigns are insufficient to reduce harmful home care practices in burn treatment. An effective approach should include: (i) simple and repetitive messaging ("20 min water"), (ii) culturally appropriate communication with local opinion leaders, (iii) care pathways that facilitate access in rural areas, and (iv) risk communication and feedback loops targeting the use of unregistered products.

Keywords: Burn, unregistered topical product, traditional treatment, infection

[P-589]

Bibliometric analysis of general surgery, emergency surgery, and trauma surgery literature in the context of Gaza (2023–2026)

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Objective: Armed conflicts cause devastating health outcomes for civilians, and surgical care is vital in managing these crises. This study aims to analyze the scientific literature on general, emergency, and trauma surgery in the context of Gaza (2023-2026) using bibliometric methods to reveal publication trends, geographical contributions, and thematic evolution.

Material and Methods: A search was conducted in the PubMed database using keywords such as "Gaza", "Gaza Strip", "General Surgery", "Trauma", and "Armed Conflict". Studies published between 2024 and 2026 were included. Bibliometric analyses were performed via Bibliometrix/Biblioshiny software, evaluating annual production, author/institutional productivity, core journals (Bradford's Law), keyword co-occurrence, and thematic maps.

Results: Thirty publications indexed in PubMed across 12 journals were analyzed, involving 217 authors. The literature showed a highly collaborative structure (10.2 co-authors per document) with a 13.33% international co-authorship rate. Scientific production peaked in 2025 before a relative decline in 2026. While institutional contributions centered on Gaza-based entities, India, Pakistan, Türkiye, and the USA provided significant global contributions. Thematic analysis indicated that studies primarily focused on demographics, risk factors, and global disease burden. These emerged as "basic themes" with high centrality, whereas themes regarding specific surgical interventions and clinical outcomes remained limited.

Conclusion: This bibliometric analysis reveals that while literature concerning general surgery, emergency surgery, and trauma surgery in the context of Gaza has shown a quantitative increase in the post-2023 period, it remains largely descriptive and demographically focused in terms of content. It is noteworthy that systematic and high-level evidence regarding surgical clinical decision-making, intervention outcomes, and care strategies under conflict conditions is limited. The thematic findings demonstrate that the impacts of war on the civilian population are primarily addressed through the concepts of human and disease burden, while surgical practice is mostly reflected indirectly as a consequence of this humanitarian load. This situation highlights that the events in Gaza are not only a humanitarian crisis but also a surgical care problem that is insufficiently documented scientifically. In conclusion, although the existing literature makes the vital role of surgery in conflict environments quantitatively visible, it fails to sufficiently reflect the actual clinical needs and ethical responsibilities on the ground. By emphasizing that surgical care in wartime is not merely technical but a field of scientific responsibility centered on human dignity, this study provides an objective framework for future patient-centered and systematic research.

Keywords: Gaza, general surgery, humanitarian crisis

[P-601]

Fundoplication preferences and early outcomes in laparoscopic hiatal hernia repair: A single-center retrospective analysis

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Objective: The choice of fundoplication technique during laparoscopic hiatal hernia repair remains individualized, particularly in patients with esophageal motility disorders. This study aimed to evaluate the distribution of fundoplication types and assess early clinical outcomes in our center.

Material and Methods: A retrospective analysis was performed on 117 consecutive patients who underwent laparoscopic hiatal hernia repair in 2025. Demographic characteristics, surgical indications, type of fundoplication, concomitant procedures, and early postoperative outcomes were analyzed. The mean age was 46.7 years, with the majority of patients in the middle-aged group. A 360° Nissen fundoplication was the preferred technique in most cases. Posterior partial (Toupet) fundoplication was performed in patients with documented esophageal motility disorders or increased risk of postoperative dysphagia. In selected cases, additional procedures such as Heller myotomy, revisional surgery, or simultaneous cholecystectomy were performed. Patients were evaluated at 1-, 3-, and 6-month follow-up visits.

Results: Primary hiatal repair and fundoplication were successfully completed in all patients. Nissen fundoplication was the most commonly performed procedure, followed by Toupet fundoplication. Early postoperative morbidity was low, and the rate of major complications was minimal. Reoperation was rarely required. Concomitant procedures did not significantly increase complication rates. Symptomatic improvement was observed in the majority of patients during early follow-up.

Conclusion: Laparoscopic hiatal hernia repair is a safe and effective procedure in our center. The type of fundoplication should be individualized according to patient characteristics and esophageal motility findings. Long-term functional outcomes are required to better define the optimal fundoplication strategy.

Keywords: Hiatal hernia, laparoscopic surgery, fundoplication, Nissen, Toupet

[P-602]

Structured communication models in surgical intensive care units: The effect of SBAR and current protocols on team awareness

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Objective: Surgical intensive care units (SICUs) are high-risk areas where patient care is complex and continuous information flow is required among multidisciplinary team members. When the root causes of medical errors are examined in the literature, it is seen that communication deficiencies and errors rank first with a rate of over 60%, and approximately half of these errors occur during patient handovers. Traditional and unstructured communication paves the way for information loss. The aim of this study is; this study aims to evaluate the effects of current structured communication protocols, primarily Situation, Background, Assessment, Recommendation (SBAR), but also I-PASS and Introduction, Situation, Background, Assessment, and Recommendation (ISBAR), on team awareness and patient safety in the CYCU (SICU) in light of literature data.

Material and Methods: This study is a systematic review of national and international literature published between 2015 and 2024 examining the use of structured communication models in surgical and intensive care settings. Studies using SBAR, ISBAR, and related checklists were included by searching PubMed, CINAHL, Medline, and National Databases. Data were analyzed in terms of communication clarity, omission rates, team collaboration, and adverse event frequency parameters.

Results: In the studies reviewed, it was found that the use of standard protocols such as SBAR increased the accuracy of the information conveyed. In the study by Wang et al., it was determined that the use of SBAR-based checklists reduced the rate of "missing information" in patient handover in SICUs from 7.26% to 2.02%. A recent study in Türkiye reported that 66.7% of nurses stated that the SBAR model positively contributed to the handover process. Furthermore, it was observed that the SBAR model reduced hierarchical barriers among team members and increased nurses' confidence in offering "suggestions." Looking at clinical outcomes, it was found that unexpected deaths decreased after the use of structured communication, and communication-related incident reporting decreased from 31% to 11%.

Conclusion: The use of SBAR and similar structured communication protocols in SICUs not only standardizes information transfer but also improves team awareness and patient safety culture. It is recommended that institutions adapt these protocols to their own dynamics, support them with simulation training, and integrate them into electronic health records.

Keywords: SBAR, surgical intensive care, communication, patient safety

[P-605]

The importance of clinical decision-making processes in resident education: The necrotizing course of mild-onset biliary pancreatitis

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Objective: In the surgical training process, decision-making competence in patient management is shaped not only by theoretical knowledge but also by clinical intuition, multifaceted assessment, and repetitive observation skills. Diseases such as acute pancreatitis, which initially present mildly but can rapidly worsen, are of high educational value in surgical assistant training. In this presentation, the dynamic structure and educational importance of the "safe discharge" decision in assistant training will be discussed using the example of a patient who was initially diagnosed with mild biliary pancreatitis but quickly developed a necrotizing course, resulting in the need for intensive care.

Material and Methods: A 57-year-old man presented with right upper quadrant pain and nausea. Laboratory tests showed amylase levels more than three times the normal limit, and imaging findings were consistent with biliary pancreatitis. He was admitted with mild acute pancreatitis and treated with intravenous fluids and empirical broad-spectrum antibiotics. Although initially stable and evaluated for discharge on day four after tolerating oral intake, the patient developed fever, tachycardia, hypoxia, and leukocytosis on day five. Contrast-enhanced CT revealed necrotizing pancreatitis, and the patient was transferred to the intensive care unit due to sepsis. Two percutaneous drainage catheters were placed under interventional radiology guidance on separate days, and antibiotic therapy was adjusted according to culture results. The patient gradually improved and was discharged on day 46.

Results: This case highlights three key concepts in surgical assistant training: 1. The relativity of clinical stability: the patient showed signs of improvement on the 4th day but experienced a significant deterioration on the 5th day, illustrating how sensitive an assessment is required for the concept of "early discharge." 2. Multidisciplinary patient management: the coordinated approach of the surgical, intensive care, infectious diseases, and interventional radiology units provides an ideal example for residents to develop their clinical leadership and communication skills in such patients. Clinical intuition and continuous observation: the fluctuating course observed in this case emphasizes the need to teach residents not only clinical algorithms but also decision-making based on individualized observation.

Conclusion: Even in cases of mild biliary pancreatitis, residents must be cautious when making early discharge decisions due to the dynamic clinical course and must develop the habit of performing multidimensional patient assessments, not just laboratory and imaging tests. This case highlights the educational value of incorporating patient monitoring processes into surgical training curricula not only based on complications but also on decision-making processes.

Keywords: Surgical education, clinical decision-making, biliary pancreatitis, resident training, multidisciplinary patient management

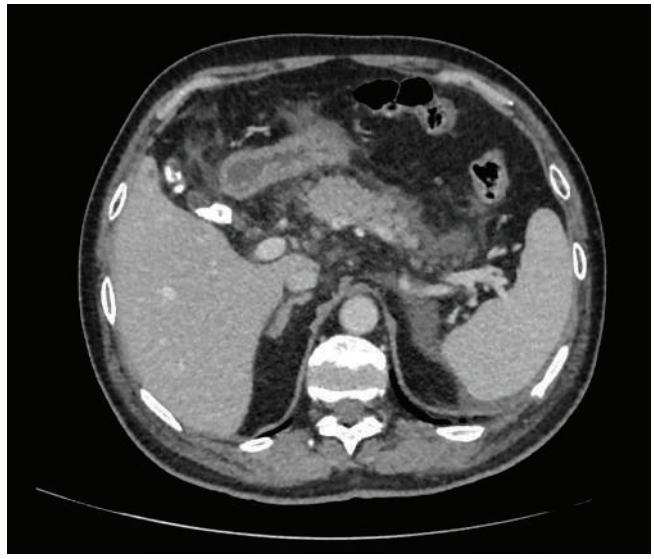


Figure 1.



Figure 2.



Figure 3.



Figure 4.

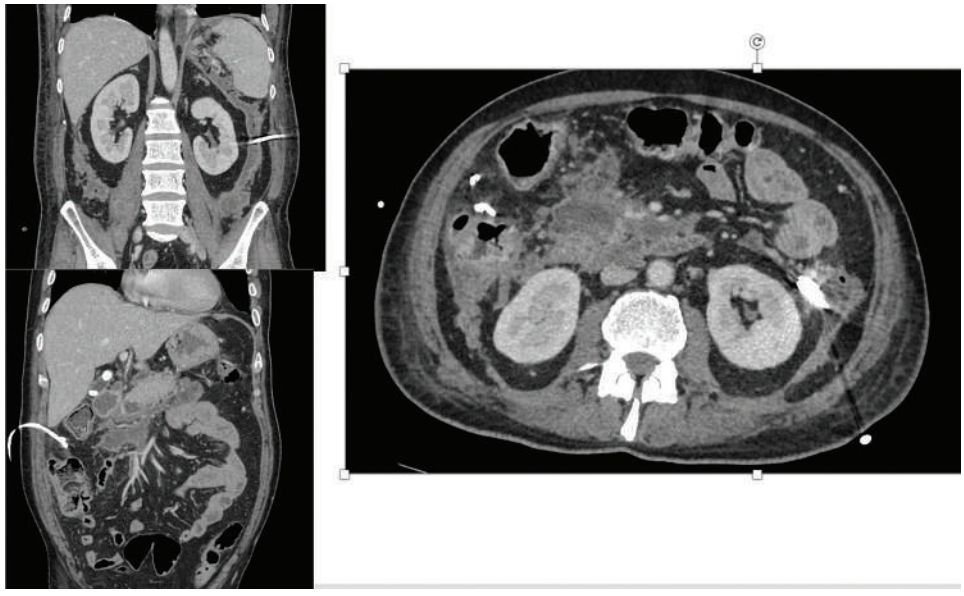


Figure 5.

[P-606]

Health care quality literacy scale

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Objective: With the launch of the Health Transformation Program by the Ministry of Health in 2003, a healthcare delivery model emphasizing efficiency, effectiveness, patient safety, and patient satisfaction was adopted, and performance- and quality-based evaluation mechanisms were systematically developed. Currently, quality practices in Türkiye are conducted on the basis of patient safety, clinical quality indicators, accreditation processes, and continuous quality improvement cycles, aiming to institutionalize a sustainable and measurable culture of quality within healthcare services. Nevertheless, the failure to fully internalize and embed a quality culture at the hospital level remains a significant challenge. In this study, we aim to evaluate the level of quality culture implementation in healthcare institutions and to highlight existing gaps, thereby contributing to the growing body of literature on healthcare quality management.

Material and Methods: This study was conducted to assess the quality literacy levels of residents working in the General Surgery Clinic of University of Health Sciences Türkiye, Ankara Etlik City Hospital in the context of healthcare service delivery. A standardized questionnaire was administered for this purpose. In addition, five supplementary questions were incorporated into the introductory section of the survey to evaluate physicians' perspectives on quality (Tables 1 and 2). Quality literacy scores were calculated on a scale ranging from 0 to 100 based on participants' responses to the questionnaire. Furthermore, the distribution and proportions of responses to the questions assessing attitudes toward quality were analyzed.

Results: Analysis of the first five items showed that 88.1% (n=52) of residents answered "yes" and 11.9% (n=7) "no" to the question "Are quality practices necessary in healthcare?" To "Have you received training on quality practices?", 57.6% (n=34) responded "yes" and 42.4% (n=25) "no." Regarding their perspective, 69.5% (n=41) reported a positive view and 30.5% (n=18) a negative view. To "How do you define quality practices?", 59.3% (n=35) described them as a "loss of workforce," while 40.7% (n=24) considered them "necessary." Concerning primary responsibility, 45.8% (n=27) indicated physicians and 54.2% (n=32) nurses. Descriptive statistics showed a mean score of 63.09±22.71. According to the evaluation criteria, this value falls within the 50–75 range, indicating a good level on the scale.

Conclusion: Although the residents achieved high scores in quality literacy, their perception of quality practices as a source of workforce burden and as primarily a nursing responsibility may indicate that a fully institutionalized culture of quality has not yet been established.

Keywords: Health, quality

Table 1. Physicians' perspectives on quality practices

Age:	**Year of residency:**	
Are quality practices necessary in healthcare?	Yes	No
Have you received training on quality practices?	Yes	No
What is your perspective on quality practices?	Positive	Negative
How do you define quality practices?	Loss of workforce	Necessary
Who do you think holds primary responsibility for quality practices?	Physician	Nurse

Table 2. Health quality literacy scale

	Please indicate your level of agreement with the following statements by selecting the appropriate box on the right.	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	I can define the concept of quality.	☐	☐	☐	☐	☐
2	I am familiar with the philosophy of quality management.	☐	☐	☐	☐	☐
3	I have basic knowledge of the historical development of quality management.	☐	☐	☐	☐	☐
4	I can list the objectives of quality management.	☐	☐	☐	☐	☐
5	I can explain the concept of quality culture.	☐	☐	☐	☐	☐
6	Quality is necessary in all fields, including health, safety, production, and education.	☐	☐	☐	☐	☐
7	Quality management is necessary for employee job satisfaction.	☐	☐	☐	☐	☐
8	Quality management is necessary for service user satisfaction.	☐	☐	☐	☐	☐
9	Quality management is necessary to ensure efficiency.	☐	☐	☐	☐	☐
10	Quality management is necessary to remain competitive.	☐	☐	☐	☐	☐
11	Quality management is necessary to achieve organizational goals.	☐	☐	☐	☐	☐
12	Physical and technological resources should be considered in the design of healthcare delivery.	☐	☐	☐	☐	☐
13	Principles, rules, and procedures regarding authority and responsibility should be defined in healthcare delivery.	☐	☐	☐	☐	☐
14	The outputs of healthcare delivery should align with the institution's mission and be functional.	☐	☐	☐	☐	☐
15	A measurement and evaluation system for patient and staff satisfaction should be defined by principles and rules.	☐	☐	☐	☐	☐
16	Continuous improvement policies should be adopted in healthcare delivery.	☐	☐	☐	☐	☐
17	Healthcare professionals' participation in research processes should be supported.	☐	☐	☐	☐	☐
18	Access to healthcare administrators should be easy.	☐	☐	☐	☐	☐
19	Healthcare professionals should be adequately equipped in terms of knowledge and skills.	☐	☐	☐	☐	☐
20	Resources (physical, financial, informational, equipment, etc.) should be sufficient in quality and quantity in healthcare delivery.	☐	☐	☐	☐	☐
21	Access to healthcare services for disadvantaged individuals should be facilitated.	☐	☐	☐	☐	☐
22	Institutional facilities and infrastructure should be adequate in quality and quantity.	☐	☐	☐	☐	☐
23	I can take part in communication activities within quality management.	☐	☐	☐	☐	☐
24	I am inclined toward teamwork.	☐	☐	☐	☐	☐
25	I can associate quality culture with organizational culture.	☐	☐	☐	☐	☐
26	I can design the technological infrastructure of a quality management system.	☐	☐	☐	☐	☐
27	I believe I can contribute effectively to managerial activities.	☐	☐	☐	☐	☐
28	I can participate in international quality management activities.	☐	☐	☐	☐	☐
29	I can develop strategies and policies to compete with other institutions.	☐	☐	☐	☐	☐
30	I can develop new perspectives on quality management.	☐	☐	☐	☐	☐

[P-607]

The role of preoperative laboratory parameters in predicting complicated acute appendicitis: A single-center experience

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Objective: Acute appendicitis is one of the most common causes of acute abdomen requiring emergency surgical intervention. Delayed diagnosis may lead to the development of complicated forms such as gangrenous or perforated appendicitis, resulting in increased morbidity. Early prediction of complicated acute appendicitis is therefore essential for determining appropriate surgical timing and optimizing perioperative management. Although computed tomography has high diagnostic accuracy, its use may be limited by radiation exposure and accessibility. Recently, simple and readily available preoperative laboratory parameters have been suggested as useful tools for predicting disease severity and complicated appendicitis. This study aimed to evaluate the role of preoperative laboratory parameters in predicting complicated acute appendicitis.

Material and Methods: This single-center retrospective study included patients who underwent surgery for acute appendicitis between September 16, 2025, and January 8, 2026. Demographic characteristics, preoperative laboratory parameters, and pathological findings were reviewed retrospectively. Patients with incomplete data were excluded from the statistical analysis. Based on pathological evaluation, patients were classified as having complicated appendicitis (gangrenous, perforated, or plastron appendicitis) or uncomplicated appendicitis. Preoperative white blood cell count (WBC), C-reactive protein (CRP), albumin levels, and neutrophil-to-lymphocyte ratio (NLR) were compared between the groups. Statistical analyses were performed using appropriate tests according to data distribution. A p-value of <0.05 was considered statistically significant.

Results: A total of 99 patients were included in the final analysis. Preoperative WBC and CRP levels were significantly higher in the complicated appendicitis group compared with the uncomplicated group ($p=0.024$ and $p=0.035$, respectively). No statistically significant differences were observed between the groups in terms of albumin levels or NLR ($p>0.05$).

Conclusion: Preoperative laboratory parameters, particularly WBC count and CRP levels, may be useful in predicting complicated disease in patients with acute appendicitis. The integration of these readily available markers with clinical assessment may contribute to improved risk stratification and optimization of surgical decision-making.

Keywords: Acute appendicitis, complicated appendicitis, inflammatory markers

[P-608]

Laser ablation for pilonidal sinus: Initial experience from a single center

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Objective: Pilonidal sinus disease (PSD) is a chronic condition involving hair ingrowth and infection in the sacrococcygeal region, primarily affecting young adults. It significantly impacts quality of life due to pain, discomfort, and recurrent infections. Traditional surgical methods often require extensive excisions and prolonged healing, whereas laser ablation has emerged as a minimally invasive alternative. Laser ablation destroys sinus tract inner surfaces using laser energy, offering less tissue damage, shorter recovery, and reduced postoperative pain. Initial success rates range from 73–94%, but long-term (≥60 months) recurrence rates may reach 14-36%, potentially higher than excision techniques like the Karydakis flap. This study evaluates laser ablation effectiveness and spinal anesthesia advantages in a single-center experience. Spinal anesthesia enhances muscle relaxation, improves operative field control, aids postoperative pain management, and increases patient comfort. It also offers fewer complications and shorter hospital stays compared to general anesthesia. This study focuses on the role of spinal anesthesia in laser ablation procedures.

Material and Methods: In this single-center retrospective study, outcomes of 42 patients undergoing laser ablation for PSD between January 2023 and October 2024 were analyzed. All procedures used spinal anesthesia. Demographic data, clinical characteristics, operative details, complication rates, recurrence rates, and pain scores were recorded.

Results: The mean patient age was 28.5±7.2 years (range: 18-45). Of the patients, 33 (78.6%) were male, and 9 (21.4%) were female. Mean operative time was 25±8.5 minutes. Complications included abscess (2 patients), hematoma (1 patient), and seroma (8 patients). Two seroma cases required debridement and open surgery, while spontaneous resolution occurred in approximately 28 days for others. No recurrences were observed. Mean hospital stay was 1 day, return to daily activities was 3 days, and mean satisfaction level (VAS scale) was 8.5. Postoperative pain scores (VAS) were significantly lower than preoperative scores.

Conclusion: Laser ablation is a minimally invasive, effective, and safe treatment for PSD. Further research is needed on long-term recurrence rates and factors such as obesity and multiple sinus tracts.

Keywords: Laser ablation, minimally invasive surgery, pilonidal sinus

Table 1.

Parameter	Results
Mean age	28.5±7.2 years (18-45)
Gender distribution	33 male (78.6%), 9 female (21.4%)
Sinus types	Type 1: 18 patients, type 2: 24 patients
Mean operative time	25±8.5 minutes
Complications	2 abscesses, 1 hematoma, 8 seromas (2 requiring debridement and open pilonidal sinus surgery)
Recurrence rate	0
Mean hospital stay duration	1 day
Mean return to daily activities duration	3 days
Mean satisfaction level (VAS)	8.5
Postoperative mean pain score (mean ± SD)	2.1±1.5 (0-5)

SD: Standard deviation, VAS: Visual analog scale.



Figure 1. Laser application in pilonidal sinus.



Figure 2. Mechanical brushing to eliminate debris after laser treatment.

[P-609]

A rare condition after parathyroid cancer surgery: Persistent hypocalcemia following hypercalcemia

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Objective: Parathyroid cancer accounts for less than 1% of primary hyperparathyroidism cases. It is a rare endocrine pathology. Most patients present with markedly elevated serum calcium (Ca) and parathyroid hormone (PTH). Surgery is the gold standard treatment. Definitive diagnosis is by histopathology. Although Ca and PTH generally normalize after surgery, persistent or recurrent hypercalcemia—or persistent hypocalcemia—may develop. We aimed to draw attention to this rare entity by presenting our patient who developed persistent hypocalcemia following parathyroid cancer surgery.

Material and Methods: An 89-year-old male patient presenting to the neurology department with forgetfulness and dizziness was referred to the endocrinology outpatient clinic after labs revealed serum Ca 11.3 mg/dL. The patient was diagnosed with primary hyperparathyroidism and referred to our department for surgical management. During the operation, multiple nodules were observed in both thyroid lobes, as well as a soft tissue mass at the mid-upper level of the left thyroid lobe, whose borders could not be clearly distinguished from the thyroid (invasion) (Figure 1). An incisional biopsy specimen was obtained from this area and evaluated by frozen section, which reported oncocytic cells invading the thyroid. Thereupon, a bilateral total thyroidectomy with right central lymph node dissection was performed en bloc, including the aforementioned soft tissue mass.

Results: The patient's preoperative serum Ca was 12.3 mg/dL and PTH was 263 pg/mL. Neck ultrasonography showed bilateral isoechoic solid nodules (largest 2 cm in the left lobe) and a 18×14 mm irregular nodular lesion in the posterior mid-portion of the left lobe (parathyroid lesion). Parathyroid scintigraphy demonstrated focal uptake in the upper pole of the left thyroid lobe, consistent with hyperfunctioning parathyroid tissue. En bloc left superior parathyroidectomy and bilateral total thyroidectomy were performed. Postoperative Ca and PTH levels on day 1, month 1, and month 6 were 7.3 mg/dL and <1 pg/mL; 8 mg/dL and 23 pg/mL; and 8.1 mg/dL and 22 pg/mL, respectively. The patient was discharged on postoperative day 4 with oral Ca and vitamin D (1000 mg/880 IU) three times daily. Pathology revealed "parathyroid carcinoma infiltrating the thyroid" (Figure 2). He remains under close endocrinology follow-up, and the Ca dose was reduced to twice daily at month 6.

Conclusion: Parathyroid carcinoma is a rare endocrine malignancy diagnosed definitively by histopathology. Imaging findings and markedly elevated serum Ca and PTH levels may raise suspicion. Although these levels usually normalize postoperatively, hungry bone syndrome and persistent hypocalcemia may rarely occur. Close multidisciplinary follow-up is recommended.

Keywords: Carcinoma, hypercalcemia, parathyroid

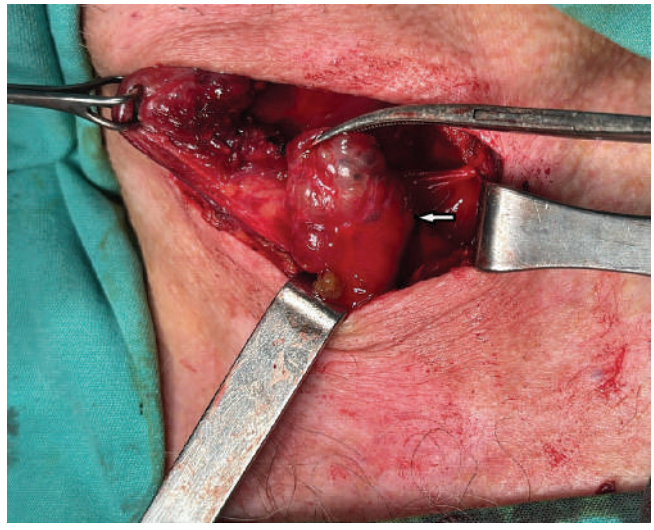


Figure 1. The lesion (marked with the white arrow) cannot be clearly distinguished from the left lobe of the thyroid.

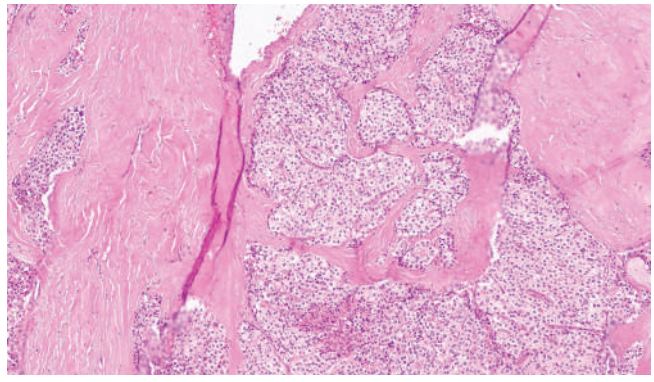


Figure 2. H&E ×100; A rare condition following parathyroid cancer surgery; from hypercalcemia to persistent hypocalcemia.vv

[P-615]

Inflammatory breast cancer: A single-center experience

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Objective: This retrospective study included a total of 24 patients diagnosed with inflammatory breast cancer (IBC) between 2023 and 2025 who underwent surgical treatment following neoadjuvant chemotherapy (NAC). The patients' demographic characteristics, tumor biology, response to neoadjuvant therapy, type of surgical intervention, axillary surgical approach, and pathological response rates were examined. Pathological complete response (pCR) was defined as the absence of invasive tumor in both the primary tumor site and the axilla. Disease course and survival data were evaluated retrospectively.

Material and Methods: Patients diagnosed with IBC between 2023 and 2025 were included in this retrospective study. Demographic data, clinical and pathological features, treatments administered, disease progression, recurrence, metastasis status, and survival data were retrieved from patient medical records. Overall survival and progression-free survival were analyzed using the Kaplan-Meier method. Data were evaluated using descriptive statistics.

Results: All patients received trimodality therapy consisting of surgery and adjuvant radiotherapy after NAC. pCR was achieved in 6 patients (25%). In the axillary evaluation, node negativity was detected in 62.5% of the patients. Among the 16 patients who underwent Sentinel Lymph Node Biopsy (SLNB), 8 (50%) were found to be axilla-negative. It was observed that axillary involvement rates were lower in patients who achieved pCR. Local recurrence in the axilla was observed in one patient, and brain metastasis was detected in another patient during the first postoperative year.

Conclusion: Trimodality therapy provides significant pathological response rates in patients with IBC. The 25% pCR rate obtained in our series is consistent with the literature and supports the efficacy of neoadjuvant therapy. The high rates of axillary node negativity support current discussions in the literature suggesting that axillary surgery may be limited in selected patients. The axillary approach in IBC may be re-evaluated, subject to confirmation by larger series.

Keyword: Inflammatory breast cancer

Table 1. Clinical outcomes and pathological responses

Characteristic/finding	n	Percentage (%)
Pathological complete response (pCR)	6	25.0%
Axillary status		
Overall node negativity	15	62.5%
Sentinel lymph node biopsy (SLNB) performed	16	66.7%
Negative SLNB (among SLNB group)	8	50.0%
Recurrence and metastasis		
Local axillary recurrence	1	4.2%
Brain metastasis (1st year)	1	4.2%

n=24.

[P-616]

Fournier gangrene in a tertiary surgical center: Patterns of microbiology, antibiotic resistance, and risk stratification

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Objective: Fournier gangrene represents one of the most fulminant soft-tissue infections, originating in the perineal and genital regions and spreading rapidly along fascial planes. Identifying causative microorganisms and their antimicrobial susceptibility is essential to guide empirical therapy and improve outcomes.

Material and Methods: This retrospective study was conducted at University of Health Sciences Türkiye, Ankara Etlik City Hospital, General Surgery Clinic between October 2022 and May 2025. Of 59 operated patients, 30 with complete clinical and microbiological data and available wound cultures were included. Demographic features, microbiological profiles, antibiotic susceptibility, and fournier's gangrene severity index (FGSI) scores were analyzed.

Results: The mean age was 59.2 years (range: 45-84), with male predominance (56.7%). Nearly half of the patients were aged 50-59 years (46.7%). Wound cultures demonstrated monomicrobial growth in 50.0%, polymicrobial in 26.7%, and no growth in 23.3% (Figure 1). *Escherichia coli* was the most common pathogen (52.9%), followed by *Klebsiella pneumoniae* (8.8%), while anaerobes were rarely isolated. Resistance rates reached 41.4% in Gram-positive and 38.3% in Gram-negative organisms. Amikacin (100%) and carbapenems (>80%) exhibited the highest susceptibility, whereas fluoroquinolones and aminopenicillins showed resistance above 40% (Figure 2). Based on FGSI, 93.3% of patients were classified as low risk (FGSI <9) and 6.7% as high risk (FGSI ≥9).

Conclusion: *E. coli* was the predominant pathogen in Fournier gangrene, accompanied by considerable resistance to widely used antibiotics. Aminoglycosides and carbapenems remain the most reliable empirical options. Although most patients presented with low FGSI scores, the presence of resistant isolates emphasizes the need for region-specific antibiotic stewardship and comprehensive multidisciplinary management.

Keywords: Fournier gangrene, necrotizing fasciitis, microbiology, antibiotic resistance, empirical therapy

CATEGORY	MICROORGANISM	N	%
GENERAL CLASSIFICATION	Monomicrobial	15	50.0
	Polymicrobial	8	26.7
	No growth	7	23.3
AEROBIC / FACULTATIVE ANAEROBIC	**Gram-positive**		
	Staphylococcus aureus	1	2.9
	Streptococcus pneumoniae	2	5.9
	Streptococcus anginosus	2	5.9
	Streptococcus constellatus	1	2.9
	Enterococcus faecium	2	5.9
	Corynebacterium amycolatum	1	2.9
	Gram-negative		
	Escherichia coli	18	52.9
	Klebsiella pneumoniae	3	8.8
	Proteus mirabilis	1	2.9
	Pseudomonas aeruginosa	1	2.9
ANAEROBIC (OBLIGATE / PREDOMINANT)	**Gram-positive**		
	Actinomyces naeslundii	1	2.9
	Schaalia turicensis	1	2.9
	Gram-negative	—	0.0

Figure 1.

Antibiotic	*Tested (n)*	*Susceptible (n, %)*	*Resistant (n, %)*
Amikacin	12	12 (100.0)	0 (0.0)
Teicoplanin	1	1 (100.0)	0 (0.0)
Penicillin G	1	1 (100.0)	0 (0.0)
Clindamycin	1	1 (100.0)	0 (0.0)
Gentamicin	19	16 (84.2)	2 (10.5)
Imipenem	12	10 (83.3)	2 (16.7)
Meropenem	10	8 (80.0)	2 (20.0)
Ceftazidime	17	13 (76.5)	4 (23.5)
Ertapenem	7	5 (71.4)	2 (28.6)
Trimethoprim–Sulfamethoxazole	15	10 (66.7)	5 (33.3)
Piperacillin–Tazobactam	15	10 (66.7)	5 (33.3)
Ceftolozane–Tazobactam	3	2 (66.7)	1 (33.3)
Tigecycline	3	2 (66.7)	1 (33.3)
Cefuroxime	19	11 (57.9)	8 (42.1)
Levofloxacin	14	8 (57.1)	6 (42.9)
Ceftriaxone	18	10 (55.6)	8 (44.4)
Cefepime	13	7 (53.8)	6 (46.2)
Ciprofloxacin	16	8 (50.0)	8 (50.0)
Amoxicillin–Clavulanate	14	7 (50.0)	7 (50.0)
Vancomycin	2	1 (50.0)	1 (50.0)
Colistin	2	1 (50.0)	1 (50.0)
Cefazolin	18	8 (44.4)	10 (55.6)
Ampicillin–Sulbactam	15	6 (40.0)	9 (60.0)
Ceftazidime–Avibactam	3	1 (33.3)	2 (66.7)
Ampicillin	19	6 (31.6)	13 (68.4)
Tetracycline	0	0 (0.0)	0 (0.0)
Erythromycin	0	0 (0.0)	0 (0.0)
Oxacillin	1	0 (0.0)	1 (100.0)

Figure 2.

[P-619]

An overlooked risk factor for anastomotic leakage in colorectal surgery: Vascular calcifications and mesenteric artery stenosis

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Objective: Anastomotic leakage (AL) is one of the most serious complications following colorectal surgery, significantly increasing postoperative morbidity and mortality. Although adequate tissue perfusion is essential for anastomotic healing, reliable and easily accessible preoperative risk predictors remain limited. Mesenteric artery stenosis and vascular calcifications detectable on routine preoperative computed tomography (CT) imaging are potential factors that may impair anastomotic perfusion but are often overlooked in clinical practice. The aim of this systematic review and meta-analysis was to evaluate the association between vascular pathologies assessed on preoperative CT and the risk of clinically relevant anastomotic leakage.

Material and Methods: This study was conducted as a systematic review and meta-analysis in accordance with PRISMA guidelines. Observational studies evaluating mesenteric artery stenosis (inferior and/or superior mesenteric artery) and abdominal aortic or aortoiliac calcification on preoperative CT imaging, and reporting anastomotic leakage after colorectal surgery, were included. Only clinically relevant anastomotic leaks classified as Grade B or C according to the International Study Group of Rectal Cancer (ISREC) were analyzed. Effect estimates were extracted as odds ratios (ORs) with 95% confidence intervals, and pooled using a random-effects model due to inter-study heterogeneity. Methodological quality was assessed using the Newcastle-Ottawa scale. PRISMA flow diagram illustrating the identification, screening, eligibility assessment, and inclusion of studies evaluating vascular calcification and anastomotic leakage following colorectal surgery.

Results: Seven observational studies involving more than 3.000 patients were included in the analysis. Mesenteric artery stenosis was significantly associated with an increased risk of anastomotic leakage. Inferior mesenteric artery stenosis was associated with more than a twofold increase in the risk of anastomotic leakage. Although superior mesenteric artery stenosis was evaluated in a smaller number of studies, the available data indicated a strong association with increased leakage risk. The presence of abdominal aortic and aortoiliac calcification was also significantly associated with a higher risk of anastomotic leakage. In studies using the Aortic Calcification Index, increased calcification burden was identified as an independent risk factor for anastomotic leakage. Despite methodological heterogeneity, the direction of effect was consistent across studies.

Conclusion: Mesenteric artery stenosis and vascular calcifications detected on preoperative CT imaging are associated with an increased risk of clinically relevant anastomotic leakage following colorectal surgery. Systematic evaluation of vascular structures on routine preoperative imaging may enhance risk stratification and support surgical decision-making. This approach may facilitate individualized surgical strategies, particularly in patients at high risk for anastomotic leakage.

Keywords: Anastomotic leak, arterial occlusive diseases, colorectal surgery, mesenteric arteries, vascular calcification

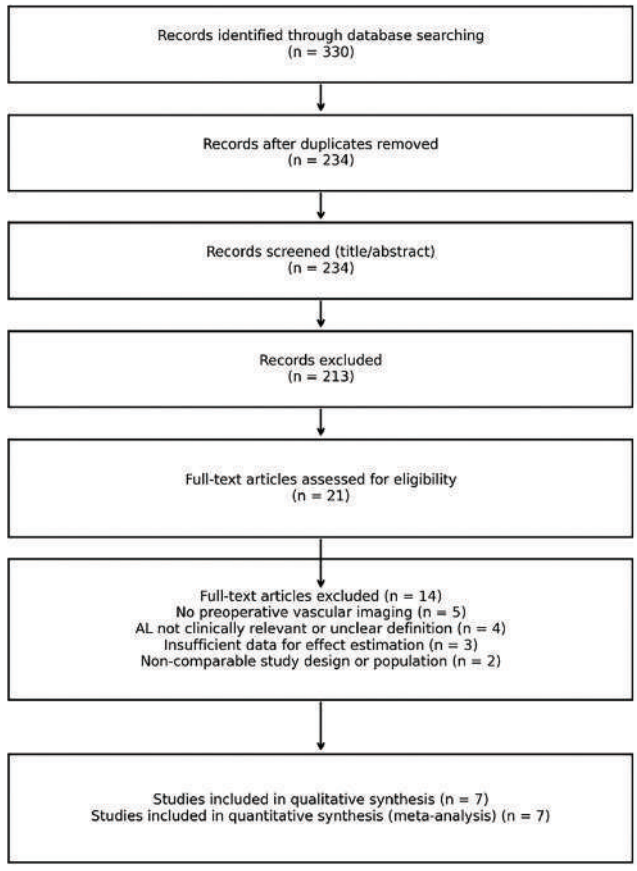


Figure 1. PRISMA flow diagram.

AL: Anastomotic leakage.

Table 1. Characteristics of studies included in the meta-analysis

First author (year)	Country	Study design	Sample size (AL / total)	Type of surgery	Anastomotic location	Vascular assessment (CT)	Exposure definition	AL definition	Effect estimate
Komen (2011)	Netherlands	Retrospective cohort	11/122	Colorectal resection	Colon/rectum	Aortoiliac calcium scoring	Aortoiliac calcium score	Clinical AL	OR 1.23 (95% CI 1.01-1.49)
Eveno (2016)	France	Prospective cohort	6/60	Left-sided colorectal surgery	Colon/rectum	Abdominal aortic calcification score	Aortic calcification score	Clinical AL	OR 1.31 (95% CI 1.08-1.59)
Shen (2019)	China	Retrospective cohort	33/423	Anterior resection for rectal cancer	Rectum	Aortic Calcification Index (ACI)	ACI (continuous)	ISREC Grade B-C	OR 2.39 (95% CI 1.05-5.44)
Morita (2021)	Japan	Retrospective cohort	16/98	Laparoscopic colorectal surgery	Colon/rectum	Aortic calcification volume	Calcification volume (%)	Clinical AL	OR 1.09 per 1% increase
Arron (2022)	Netherlands	Retrospective cohort	76/1273	Left-sided colon and rectal cancer surgery	Colon/rectum	Mesenteric artery evaluation	IMA stenosis ≥70%	Clinical AL	Narratively reported significant association (no extractable OR)
Harmankaya (2024)	Netherlands	Case–control	130/757	Colorectal resection	Colon/rectum	Mesenteric artery stenosis	IMA ≥50%, SMA ≥50%	ISREC Grade B-C	IMA: OR 2.11 (1.11-3.63); SMA: OR 5.91 (2.78-12.60)
Turhan (2025)	Türkiye	Retrospective cohort	9/151	Colorectal cancer surgery	Colon/rectum	Abdominal aortic calcification	Aortic calcification >50%	Clinical AL	OR 10.38 (95% CI 1.24-92.12)

AL: Anastomotic leakage, CT: Computed tomography, IMA: Inferior mesenteric artery, SMA: Superior mesenteric artery, ISREC: International Study Group of Rectal Cancer, OR: Odds ratio, CI: Confidence interval.

[P-621]

A rare pathology in patients operated with a pre-diagnosis of acute appendicitis: Analysis of our cases of appendiceal endometriosis

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Objective: Appendiceal endometriosis is a rare pathology, particularly observed in women of reproductive age, which frequently mimics the clinical presentation of acute appendicitis. Preoperative diagnosis is often not feasible, and the definitive diagnosis is established through histopathological examination. In this study, we aimed to evaluate the clinical, radiological, and histopathological characteristics of cases operated with a preliminary diagnosis of acute appendicitis and subsequently diagnosed with appendiceal endometriosis based on pathology results.

Material and Methods: Ten female patients who underwent surgery with a preliminary diagnosis of acute appendicitis and were histopathologically diagnosed with appendiceal endometriosis at our clinic between October 2022 and October 2025 were retrospectively reviewed. Demographic data, presenting complaints, imaging findings, intraoperative observations, and histopathological results were analyzed.

Results: The mean age of the patients was 37.1 years (range: 21-57). All cases presented with right lower quadrant pain; anorexia and nausea were recorded as the most common associated symptoms. In imaging studies, findings consistent with acute appendicitis were observed in the majority of cases, while pelvic inflammatory disease or cystic lesions were additionally detected in two cases. Histopathological examination identified endometriosis foci in all cases, and ER, PR, and CD10 positivity was determined immunohistochemically. In the majority of cases, significant inflammatory changes accompanying acute appendicitis and edema in the periappendiceal adipose tissue were observed.

Conclusion: Appendiceal endometriosis, although rare, is a significant pathology that can clinically mimic acute appendicitis in women of reproductive age and is often indistinguishable during the preoperative period. Especially in the presence of accompanying pelvic inflammatory findings or suspected gynecological pathology, keeping it in mind for the differential diagnosis of acute appendicitis may reduce unnecessary diagnostic delays and potential recurrent admissions. Careful histopathological evaluation of the appendectomy specimen, and confirmation with immunohistochemical markers such as ER, PR, and CD10 when necessary, is of critical importance for a definitive diagnosis and for guiding the management of the potential associated endometriosis burden. Therefore, adopting a standardized assessment approach between surgical and pathology teams will strengthen clinical management.

Keywords: Endometriosis, acute appendicitis, abdominal pain, histopathology, appendiceal endometriosis, immunohistochemistry

Table 1. Common characteristics of appendiceal endometriosis cases

Özellik	Bulgular
Toplam olgu sayısı	10
Yaş aralığı (yıl)	21–57 (ort. 37,1)
Cinsiyet	Haliyle kadın
Başvuru şikâyeti	En sık sağ alt kadran ağrısı; eşlik eden bulantı/iştahsızlık yaygın
Görüntüleme	Çoğunda akut apandisit lehine bulgular; 2 olguda ek pelvik inflamasyon/kistik lezyon
Operasyon tipi	6 laparoskopik, 4 açık apendektomi (1'i ek salpenjektomi)
Histopatoloji	Tümünde endometriozis odağı, çoğunda eşlik eden inflamatuvar değişiklikler
İmmünohistokimya	ER(+), PR(+) ve CD10(+) pozitifliği yaygın
Ortak klinik mesaj	Akut apandisit ön tanısıyla opere edilen reprodüktif çağ kadınlarda, jinekolojik bulgular eşlik ediyorsa endometriozis akılda tutulmalı

Table 2. Comparison of appendiceal endometriosis cases with the current literature

Çalışma	Yıl	Olgu Sayısı (n)	Ortalama Yaş	Klinik Sunum	Preop Tanı	Histopatoloji	İmmünohistokimya	Öne Çıkan Mesaj
Uohara ve ark.	2018	7	35	Akut apandisit benzeri karın ağrısı	Çoğunlukla akut apandisit	Appendiks duvarında endometriozis	ER(+), PR(+), CD10(+)	Appendiks endometriozisi akut apandisiti klinik olarak taklit eder
Slesser ve ark.	2013	9	34	Sağ alt kadran ağrısı, bulantı	Preop tanı zor	Endometriozis + inflamasyon	Belirtilmemiş	Reprodüktif çağ kadınlarda ayırıcı tanıda mutlaka düşünülmeli
Gunes ve ark.	2016	5	38	Akut batın	Yanlışlıkla akut apandisit	Submukozal endometriozis	ER(+), PR(+)	Kesin tanı yalnızca histopatoloji ile konur
Emre ve ark.	2013	6	36	Apandisit kliniği	Preop tanı yok	Endometriozis odağı	CD10(+)	Jinekolojik eşlik eden patolojiler uyarıcı olabilir
Machado ve ark. (derleme)	2020	140+	30–40	%70 akut apandisit benzeri	Çok nadiren preop	Çoğu serozal/submukozal	ER/PR/CD10 yaygın	Nadir ama klinik önemi yüksek bir patoloji
Bizim Çalışmamız	**2025**	**10**	**37,1**	**Tüm olgular da sağ alt kadran ağrısı**	**Tamamı akut apandisit ön tanısı**	**Tümünde endometriozis + inflamasyon**	**ER(+), PR(+), CD10(+)**	**Pelvik/jinekolojik bulgular tanı ihtimalini artırabilir; histopatoloji kritiktir**

[P-622]

EUS-guided RFA treatment may be an alternative for small liver metastasis: A case report

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Objective: The liver is the most frequent site for colorectal cancer metastasis, and various management options exist for these patients. While surgical resection is the curative standard for resectable metastases, ablation techniques have emerged as a significant alternative in selected cases. Guidelines recommend ablation for small lesions (<3 cm). In this way, ablation serves as an alternative approach that may protect the patient from major surgery and its associated risks. Radiofrequency ablation (RFA) is a widely utilized method among these techniques. Although RFA is commonly performed percutaneously, EUS-guided application for pancreatic, adrenal, and liver lesions is considered as a safe alternative. This method can be considered an effective treatment option for metastatic liver lesions, as well as primary hepatobiliary malignancies. Here we share our experience with EUS-guided RFA for a metastatic liver focus that showed regression after systemic therapy.

Material and Methods: A 65-year-old-male presented with abdominal pain and difficulty in defecation. Examinations revealed 28 cm rectosigmoid lesion circumferentially narrowing the lumen. Biopsy confirmed adenocarcinoma. Contrast-enhanced CT detected wall thickening in the rectosigmoid region, suspicious pericolic lymph nodes, and 21x17mm metastatic lesion in liver segments 8 and 4a (cT3N2bM1a) (Figure 1). No pulmonary metastases were observed. Systemic therapy was initiated. After 6 cycles of FOLFIRINOX + bevacizumab, imaging showed near-complete regression in the liver and partial regression in the primary mass. The multidisciplinary tumor board planned primary tumor resection and RFA for the liver lesion.

Results: In the patient scheduled for laparoscopic low anterior resection (LAR) and intraoperative RFA, the liver lesion—undetected on preoperative USG—was localized with difficulty using intraoperative laparoscopic USG. However, since the posterior right lobe lesion was technically unsuitable for percutaneous or laparoscopic intervention, ablation was postponed to the postoperative period. The LAR procedure was completed without complications. Postoperative pathology reported adenocarcinoma, ypT3N1bMx, Grade 2. On the 6th postoperative day, the patient underwent ablation with RFA at 50W for 10 seconds on an 11x10 mm hypoechoic lesion observed in liver segment 8 via transgastric EUS guidance (Figure 2). The patient was discharged on day 7 without complications. After completing a total of 12 cycles of adjuvant FOLFIRINOX treatment, capecitabine + bevacizumab was initiated as maintenance therapy.

Conclusion: EUS-assisted RFA is a valuable alternative for liver metastases that could not be reached intraoperatively due to anatomical locations. As in this case, when percutaneous or intraoperative ablation is unfeasible, postoperative EUS-RFA may be a viable treatment option.

Keywords: Colorectal cancer, colorectal cancer liver metastasis, endoscopic ultrasound (EUS), radiofrequency ablation (RFA)

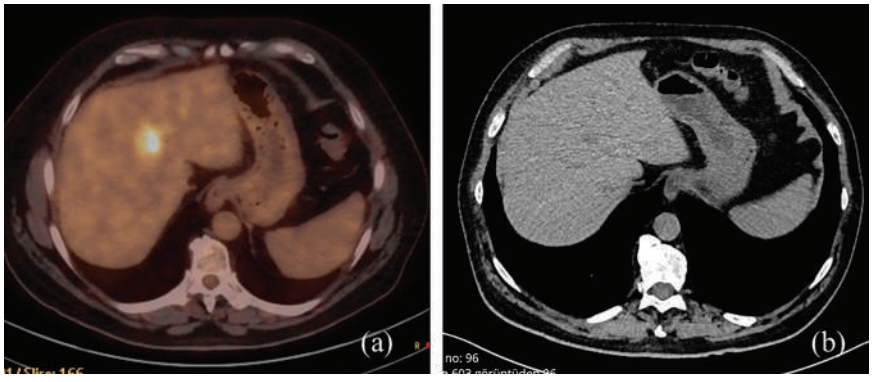


Figure 1. Liver metastasis observed in the mid-treatment PET-CT scan (a) and the lesion that is difficult to distinguish in the post-treatment sectional imaging (b).

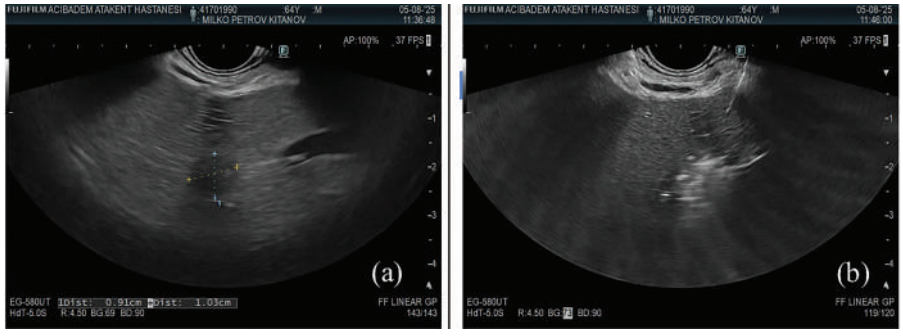


Figure 2. Anatomical localization of the lesion via EUS (a) and the RF ablation procedure performed through a transgastric approach (b).

[P-623]

Bibliometric analysis of the Turkish publications on the inflammatory bowel disease surgery

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Objective: Inflammatory bowel disease (IBD), which includes ulcerative colitis and Crohn's disease, frequently requires surgical intervention due to complications or the ineffectiveness of medical therapy during disease course. Recently, Türkiye has become a notable contributor to the global literature on IBD surgery; however, a comprehensive analysis of the characteristics and impact of these publications is lacking. This study aims to systematically explore the publication trends, research focus, and institutional contributions of Turkish authors in the field of IBD surgery.

Material and Methods: A bibliometric analysis was conducted using data extracted from the Scopus database, specifically targeting publications related to IBD surgery with at least one author affiliated with a Turkish institution. The dataset comprised detailed metadata, including author names, full affiliations, article titles, publication years, document types, keywords, citation counts and journal information. Data cleaning and preprocessing were performed in Python, involving the normalization of author and institution names and the extraction of pertinent keywords.

Results: The analysis revealed that the majority of Turkish-authored publications on IBD surgery were original research articles, with "inflammatory bowel disease," "ulcerative colitis," and "Crohn's disease" being the most common keywords. The annual publication output has steadily increased, indicating growing research activity. The most productive authors were affiliated with major academic centers in Türkiye, particularly İstanbul and Ankara. Institutional analysis indicated that Turkish universities and departments of gastroenterology and general surgery were the primary contributors to this research. Collaboration networks demonstrated both strong intra-national and notable international partnerships, especially with the United Kingdom and Italy. Research topics have extended beyond surgical techniques to encompass management, pregnancy, colonoscopy, and comorbid conditions such as familial Mediterranean fever.

Conclusion: This bibliometric study provides a detailed characterization of Turkish contributions to the literature on IBD surgery. The findings underscore Türkiye's prominent and expanding role in this field, the diversity of research topics, and the significance of national and international collaboration. These insights can inform future research strategies and foster advancements in IBD surgery.

Keywords: Crohns disease, inflammatory bowel disease, Turkish, ulcerative colitis

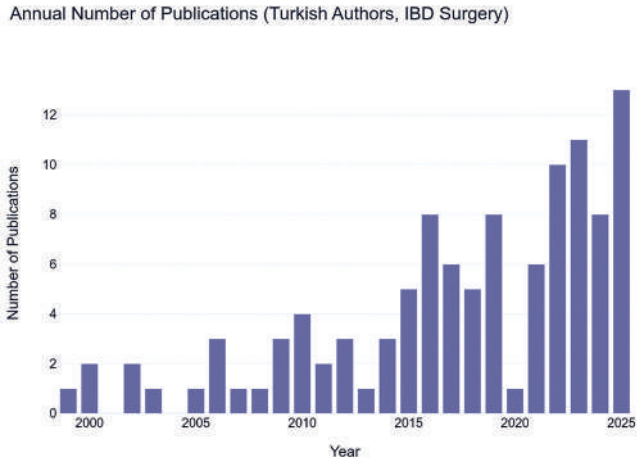


Figure 1. Annual number of publications.

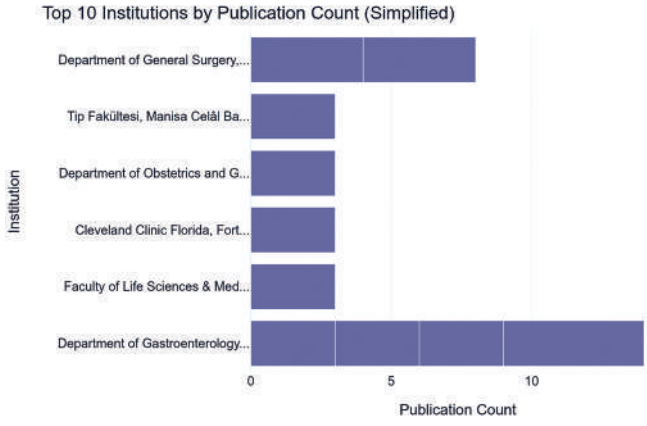


Figure 2. Top institutions.

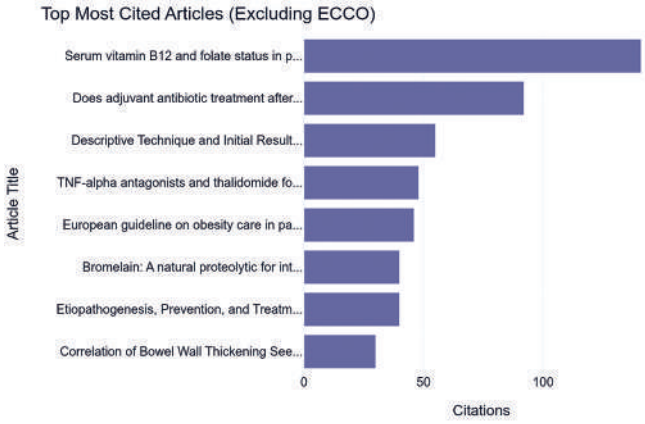


Figure 3. Most cited articles.

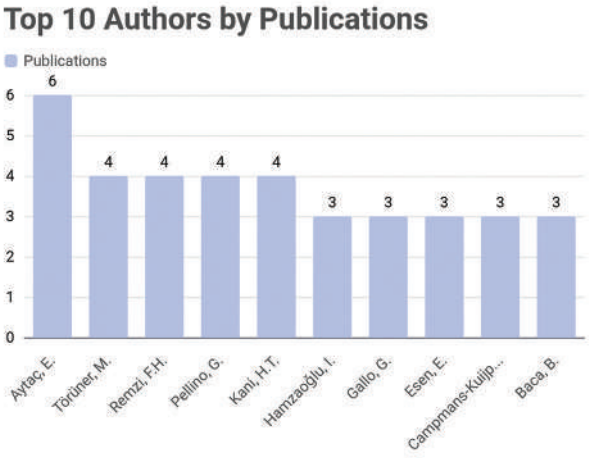


Figure 4. Top authors in the field.

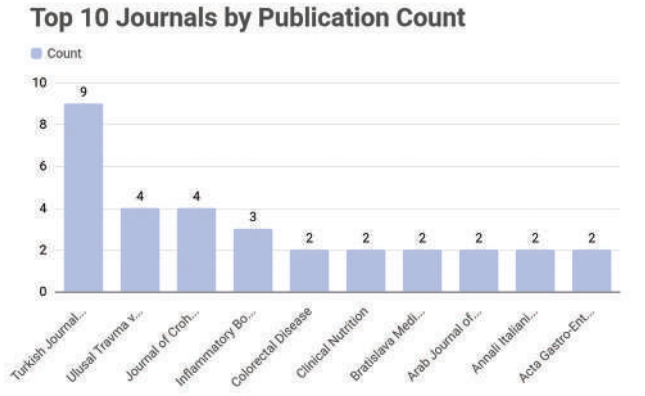


Figure 5. Top journals in the field.

[P-624]

The relationship between clinical, radiological, and laboratory findings and clinical course in Ogilvie syndrome: A single-center case series

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Objective: Acute colonic pseudo-obstruction (ogilvie syndrome) is a clinical condition that often developes under advanced age, severe comorbidities, and systemic stress. In cases of delayed diagnosis and treatment, it can lead to significant morbidity and mortality. This study aimed to evaluate the demographic characteristics, triggering factors, clinical-radiological findings, laboratory parameters, treatment approaches, and short-term clinical outcomes of patients diagnosed with ogilvie syndrome.

Material and Methods: A total of 5 patients diagnosed with ogilvie syndrome who were followed up in the general surgery clinic of etlik city hospital were included in this retrospective observational study. Demographic data, ASA score, Charlson comorbidity index categories, possible triggering factors, and medication use were recorded. Clinical presentation findings, cecum diameter measurements in radiological evaluation, and imaging findings for excluding mechanical obstruction were examined. Laboratory parameters, including serum electrolyte levels, albumin, and lactate values, were used to assess metabolic status. Treatment approaches (conservative monitoring, neostigmine administration, colonoscopic decompression, and surgical intervention), recurrence rates, and 30-day mortality were analyzed. The data were presented using descriptive statistics.

Results: A total of 5 patients with ogilvie syndrome were included. Median age was 88 (46-93), 60% male. All had high-risk profiles (ASA ≥3: 100%), distributed asa 3 (40%) and ASA 4 (60%). Charlson comorbidity index: 0 (1 patient), 4 (2 patients), 5 (2 patients). ICU/immobilization was a trigger in 20% of cases; others were in "other" category (80%). All had abdominal distention, pain, and constipation, with vomiting in 80%. Laboratory results: median WBC 10.2/mm^3, CRP 85 mg/L, lactate 2.04 mmol/L, albumin 38.6. No electrolyte disturbances. Radiological exam: median cecum diameter 10.0 cm, transverse colon 7.5 cm; mechanical obstruction excluded. Conservative treatment in 40%, decompression tubes in 80%, colonoscopic decompression in 20%, surgery in 20%. 60% responded in 24 hours. No recurrence at 72 hours or 7 days. 30-day mortality 60%.

Conclusion: This study confirms that ogilvie syndrome occurs in elderly patients with high comorbidity, but can also present with severe clinical course without classic triggering factors like electrolyte imbalances. Systematic exclusion of mechanical obstruction, careful evaluation of cecum diameter, and interpretation with clinical presentation were decisive in diagnosis and treatment. Laboratory parameters such as albumin and lactate reflected disease severity and systemic stress. Treatment approaches were individualized, and while no recurrence was found, the high mortality rate was more related to the heavy comorbidity burden than ogilvie syndrome itself. These findings support the importance of early diagnosis, close monitoring, and a comprehensive approach with clinical, radiological, and laboratory data.

Keywords: Acute colonic pseudo-obstruction, cecal diameter, colonoscopic decompression, comorbidity, Ogilvie syndrome

Table 1. Clinical characteristics and presenting findings

TABL O1. DEMOGRAFİK VE KLİNİK RİSK ÖZELLİKLERİ (N = 5)

PARAMETRE	DEĞER
YAŞ, YIL – MEDYAN(MİN–MAKS)	88 (46-93)
ERKEK, N (%)	3 (60)
KADIN, N (%)	2 (40)
ASA 3, N (%)	2 (40)
ASA 4, N (%)	3 (60)
ASA ≥3, N (%)	5 (100)
CHARLSON KOMORBİDİTE İNDEKSİ (SINIF), N (%)	
0	1 (20)
4	2 (40)
5	2 (40)

TABL O2. TETİKLEYİCİ FAKTÖRLER, İLAÇ KULLANIMI VE KLİNİK BAŞVURU BULGULARI

A. TETİKLEYİCİ FAKTÖRLER

FAKTÖR	N (%)
POSTOPERATİF	0
TRAVMA	0
SEPSİS / ENTEKSİYON	0
DOĞUM / SEZARYEN	0
ICU / İMMOBİLİZASYON	1 (20)
DİĞER	4 (80)

B. İLAÇ KULLANIMI

İLAÇ	N (%)
OPİOİD	0
ANTİKOLİNERJİK	0
SEDATİF / ANTİPSİKOTİK	2 (40)

C. KLİNİK BAŞVURU BULGULARI

BULGU	N (%)
ABDOMİNAL DİSTANSİYON	5 (100)
ABDOMİNAL AĞRI	5 (100)
BULANTI	5 (100)
KUSMA	5 (100)
DEFEKASYON YOKLUĞU	5 (100)
GAZ ÇIKARAMAMA	5 (100)

TABL O3. RADYOLOJİK BULGULAR VE ELEKTROLİT DURUMU

A. RADYOLOJİK DEĞERLENDİRME

PARAMETRE	N (%)
ÇEKUM ÇAPI <10 CM	2 (40)
ÇEKUM ÇAPI 10–12 CM	2 (40)
ÇEKUM ÇAPI >12 CM	1 (20)
BT'DE MEKANİK OBSTRÜKSİYON DIŞLANDI	5 (100)
KOLONOSKOPİDE MEKANİK OBSTRÜKSİYON DIŞLANDI	5 (100)

B. ELEKTROLİT VE METABOLİK DURUM

PARAMETRE	N (%)
HİPOKALEMİ	0
HİPOMAGNEZEMİ	0
ELEKTROLİT REPLASMAN TEDAVİSİ	5 (100)
24 SAAT İÇİNDE ELEKTROLİT NORMALİZASYONU	4 (80)

TABL O4. TEDAVİ YAKLAŞIMI, NÜKS VE KLİNİK SONLANIMLAR

PARAMETRE	N (%)
KONSERVATİF TEDAVİ	2 (40)
NEOSTİGMİN TEDAVİSİ	3 (60)
KOLONOSKOPİK DEKOMPRESYON	2 (40)
CERRAHİ MÜDAHALE	1 (20)
72 SAAT İÇİNDE NÜKS	0
7 GÜN İÇİNDE NÜKS	0
30 GÜNLÜK MORTALİTE	3 (60)

Table 2. Literature comparison

TABLO 5. GÜNCEL VE GÜVENİLİR LİTERATÜR İLE BİZİM ÇALIŞMAMIZIN KARŞILAŞTIRMASI

BAŞLIK	GÜNCEL/OTORİTE LİTERATÜR (ÖZET)	BİZİM OLGU SERİSİ (N=5)	BİZİM KATKIMIZ / YORUM (ÖLÇÜLÜ)
HASTA PROFİLİ VE RİSK ZEMİNİ	ACPO (OGİLVİE) ÇOĞUNLUKLA **YAŞLI, KOMORBİD,** POSTOPERATİF/İMMOBİLİZE/YOĞUN BAKIM HASTALARINDA GÖRÜLÜR; TEMEL YAKLAŞIM "YÜKSEK RİSKLİ HASTADA ERKEN TANI".	MEDYAN YAŞ **88**; ASA 2-3 **%100**; CHARLSON **4-5** SINIFI **%80**	SERİ, LİTERATÜRDEKİ **"FRAJİL, YÜKSEK KOMORBİDİTE"** PROFİLİNİ NET DOĞRULUYOR
TANI YAKLAŞIMI: MEKANİK OBSTRÜKSİYONU DIŞLAMA	YÖNETİM ALGORİTMALARI KLİNİK + GÖRÜNTÜLEME İLE **MEKANİK TIKANIKLIĞIN DIŞLANMASINI** TEMEL ŞART KABUL EDER.	**BT İLE DIŞLAMA %100**; KOLONOSKOPİYLE DIŞLAMA BU SERİDE **İŞARETLİ DEĞİL**	"BT İLE SİSTEMATİK DIŞLAMA" GÜÇLÜ; ENDOSKOPİ HER OLGUDA ŞART DEĞİLDİR
ÇEKUM ÇAPI VE PERFORASYON RİSKİ	PERFORASYON/İSKEMİ RİSKİ, ÖZELLİKLE **ÇEKUM ÇAPI ≥10–12 CM** VE/VEYA DİSTANSİYON SÜRESİ UZADIKÇA ARTAR; EŞİKLERDE DAHA AGRESİF YAKLAŞIM ÖNERİLİR.	ÇEKUM ÇAPI **10,0 (9,3–13,0) CM**; >12 CM **EN AZ 1 OLGU**	BİZİM VERİ **"KRİTİK EŞİKLERE YAKLAŞAN/ÜZERİNE ÇIKAN"** OLGULARIN OLDUĞUNU GÖSTERİYOR
İLK BASAMAK TEDAVİ	REHBERLERDE İLK BASAMAK: **KONSERVATİF** (MOBİLİZASYON, NPO, NG/REKTAL TÜP, ELEKTROLİT DÜZELTME VB.). YANIT YOKSA FARMAKOLOJİK (NEOSTİGMİN) VEYA ENDOSKOPİK DEKOMPRESYON.	KONSERVATİF **%40**; **DEKOMPRESYON TÜPÜ %80**	SERİDE **"TÜP DEKOMPRESYON"**UN YÜKSEK ORANDA KULLANILMASI, PRATİKTE KONSERVATİF PAKETİN ANA BİLEŞENİ OLARAK UYGULANMIŞ OLABİLECEĞİNİ DÜŞÜNDÜRÜYOR.
NEOSTİGMİN VS KOLONOSKOPİK DEKOMPRESYON	ASGE KILAVUZU VE YENİ DERLEMELER, KONSERVATİFE YANITSIZ OLGUDA **KOLONOSKOPİK DEKOMPRESYONUN** EN AZ NEOSTİGMİN KADAR (BAZI ÇALIŞMALARDA DAHA) ETKİLİ OLABİLECEĞİNİ; ANCAK KANIT DÜZEYİNİN SINIRLI OLDUĞUNU VURGULAR.	NEOSTİGMİN: **%0**; KOLONOSKOPİK DEKOMPRESYON: **%20**	BU, "HER MERKEZDE HER ZAMAN NEOSTİGMİN UYGULANMIYOR" GERÇEĞİNİ YANSITIR.
KOMPLİKASYONLAR (PNÖMATOZİS/SERBEST HAVA/PERFORASYON/İSKEMİ)	KOMPLİKASYON GELİŞİMİ KÖTÜ PROGNOZLA İLİŞKİLİDİR; RİSK ARTIŞI ÇEKUM ÇAPI VE KLİNİK KÖTÜLEŞME İLE PARALELDİR.	PNÖMATOZİS/SERBEST HAVA/PERFORASYON/İSKEMİ: **0**	KÜÇÜK SERİDE "MAJÖR KOMPLİKASYON YOK" BULGUSU, MORTALİTENİN **OGİLVİE DIŞI SİSTEMİK HASTA YÜKÜ** İLE İLİŞKİLİ OLABİLECEĞİ ARGÜMANINI DESTEKLER
LABORATUVAR PARAMETRELERİ (ALBUMİN, LAKTAT VB.)	KILAVUZLAR DAHA ÇOK KLİNİK-GÖRÜNTÜLEME TEMELLİDİR; ANCAK KLİNİKTE **LAKTAT ARTIŞI** DOKU HİPOPERFÜZYONU/ŞİDDET GÖSTERGESİ OLARAK DEĞERLENDİRİLİR; DÜŞÜK ALBUMİN GENEL FRAJİLİTE/İNFLAMASYON YÜKÜNÜ YANSITABİLİR.	LAKTAT MEDYAN **2,04** (MAKS **10,93**); ALBUMİN MEDYAN **38,6** (MİN **24,3**)	BİZİM SERİNİN GÜÇLÜ TARAFI: ÇEKUM ÇAPI İLE BİRLİKTE **ALBUMİN-LAKTAT GİBİ "ŞİDDET/FRAJİLİTE" GÖSTERGELERİNİ** AYNI TABLODA KAYITLAYIP KLİNİK SEYİRLE BİRLİKTE SUNMASI
YANIT, NÜKS VE MORTALİTE	NÜKS, ÖZELLİKLE ENDOSKOPİK DEKOMPRESYON SONRASI GÖRÜLEBİLİR; CİDDİ KOMORBİDİTESİ OLAN HASTALARDA MORTALİTE YÜKSEK OLABİLİR	24/5 YANIT **%60**; NÜKS **0**; 30G MORTALİTE **%60**	"NÜKS YOK AMA MORTALİTE YÜKSEK" PATERNİ OGİLVİE'NİN KENDİSİNDEN ÇOK **HASTA YÜKÜ VE SİSTEMİK KIRILGANLIK** VURGUSUNU GÜÇLENDİRİR.

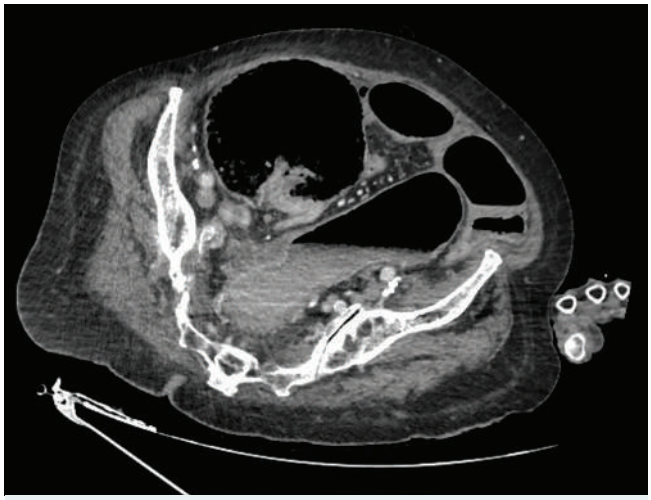


Figure 1. CT images.



Figure 2. CT images.

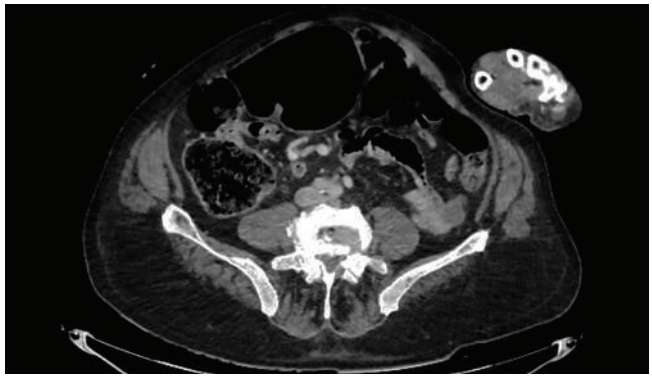


Figure 3. CT images.

[P-625]

FISSURE-CD (FISSUre in cRohn's disEase): International prospective multicentre observational study on the management and outcomes of anal fissure in Crohn's disease

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Objective: Perianal Crohn's disease research has predominantly focused on anal fistulas. However, in clinical practice, the first perianal manifestation is frequently an anal fissure. Current management strategies for Crohn's-related fissures are largely extrapolated from idiopathic fissure algorithms, despite fundamental differences in inflammatory pathobiology, tissue healing dynamics, and disease course. Existing guidelines provide safety frameworks for idiopathic fissures but offer no phenotype-driven strategy for Crohn's-associated fissures. This study aims to develop the first biology-centred, phenotype-based treatment selection model, shifting decision-making from procedure-orientated paradigms toward disease-specific stratification.

Material and Methods: This international prospective multicentre observational cohort study includes adult Crohn's disease patients diagnosed with anal fissures between June 2026 and June 2027 who meet the inclusion criteria. Patients will be followed for at least 6 months (optionally 12 months). Continuous variables will be summarised as mean ± SD or median (IQR); categorical variables as absolute and relative frequencies. Multilevel mixed-effects logistic regression and Cox frailty models will identify independent predictors, accounting for center clustering. Confounding will be addressed through prespecified adjustment and IPTW sensitivity analyses. Sample size was planned to provide ~80% power to detect a clinically meaningful difference in healing at α=0.05.

Results: The primary endpoint is clinical fissure healing rate and time following index fissure-directed treatment. Clinical healing is defined ASA documented macroscopic epithelialisation or absence of visible fissure on examination, with patient-reported pain ≤ 2/10 on the visual analogue scale (VAS) without analgesic use for ≥7 days. Resolution or minimal pain (VAS ≤ 2/10 or equivalent clinical documentation), c) No requirement for escalation within 12 weeks for medical therapy. The secondary endpoint is to evaluate symptom improvement, time to healing, treatment escalation, recurrence, and complications, HR-QoL change (IBDQ-short or EQ-5D-5L), and continence (Vaizey/Wexner score), as well as identify clinical and disease-related predictors of treatment success or failure.

Conclusion: This study aims to identify independent determinants of clinical improvement and the need for treatment escalation in anal fissures associated with Crohn's disease. Based on the findings, the goal is to develop a risk-based and phenotype-focused management algorithm for CD-related anal fissures. This will reveal the biological and clinical differences between this clinical presentation and idiopathic anal fissures; treatment strategies for patients with concomitant CD and anal fissures can be restructured according to disease activity and involvement characteristics.

Keywords: Anal fissure, clinical healing, Crohn's disease, Crohn's disease, anal fissure, idiopathic anal fissure

[P-626]

Organ transplant nursing operating room preparations

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Objective: Organ nakil ameliyatlarının en önemli özelliklerinden biri ameliyathane ortamının hazırlanması ve profesyonel bir ekip çalışmasının olmasıdır.

Material and Methods: Bu aşamada hemşirelik sanatının icra edilmesi, steril sahanın korunması önem arz etmektedir.

Results: Cerrahi sürenin etkili bir şekilde devam ettirilmesi için hemşirelik deneyimi oldukça önemlidir.

Conclusion: Bu çalışmada organ nakil ameliyathane hazırlıklarının hemşirelik bazın daki deneyimlerinden bahsedilecektir.

Keywords: Organ nakil, ameliyathane, hemşirelik

[P-627]

Can the surgery-to-resident ratio be used to determine the ideal number of residents in a general surgery training clinic? Single-center experience

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Objective: General surgery training requires significant clinical exposure for residents to acquire essential skills, knowledge, and experience. Successfully navigating the surgical learning curve and preparing for independent practice strongly depend on the volume of procedures residents actively perform. In our country, resident numbers are determined centrally; however, evaluating a clinic's educational carrying capacity objectively is crucial. Although adding residents can distribute workloads, it risks diluting the surgical cases available per resident if clinical capacity remains unchanged, ultimately compromising education quality. This study aims to examine the impact of resident numbers on surgical training quality and evaluate the surgery-to-resident ratio (SRR) as a systematic metric to determine the optimal number of residents.

Material and Methods: A retrospective analysis was conducted at the General Surgery Department of Gazi University Faculty of Medicine between 2012 and 2023. Data were evaluated across 48 three-month quarterly periods. The analysis included total surgeries under general anesthesia, appendectomies, upper endoscopies, and colonoscopies. Procedures under local anesthesia and residents serving less than three months were strictly excluded. The surgery-to-resident ratio (SRR) was calculated by dividing the total number of surgical procedures by the total number of active residents. To prevent statistical bias from the suspension of elective procedures, periods heavily affected by the COVID-19 pandemic were entirely excluded from the ideal number calculations

Results: Over the 48 periods, the resident count fluctuated between 12 and 26, averaging 18.69. As the number of residents increased, a steady, significant decline in total surgical cases per resident was observed. During the COVID-19 pandemic, total surgeries decreased significantly due to the restriction of elective cases (p=0.038). After excluding the pandemic periods, the SRR and resident totals were overlaid on a 3-axis chart. Statistical comparisons revealed that the SRR decreased significantly when the resident count exceeded 18 (p=0.032). This drop became even more pronounced when the resident count reached 21 (p=0.036). Based on these statistical intersection points and the current surgical volume, the ideal number of residents for our clinic was accurately determined to be 18.

Conclusion: Expanding the surgical resident workforce without concurrent enhancements to clinical resources—such as hospital beds and operating rooms—inevitably leads to educational inefficiencies. The SRR method provides an objective, evidence-based approach to determine the optimal number of residents, ensuring adequate case exposure. While 18 is unique to our specific institutional data, the SRR methodology can be readily adapted by other surgical training centers to maintain rigorous, high-quality surgical education standards globally.

Keywords: Surgery education, surgery-to-resident ratio, resident case exposure

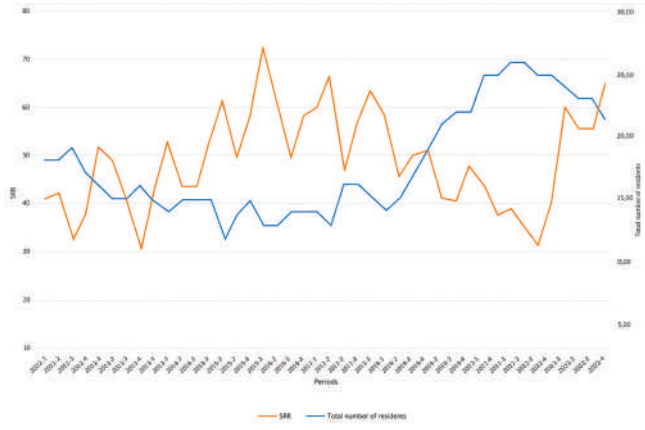


Figure 1.