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ORAL PRESENTATIONS

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SS-01

Laparoscopic preperitoneal repair of incisional hernia

Mehmet Ali Gök, Mehmet Tolga Kafadar

Department of General Surgery, Mehmet Akif İnan Training and Research Hospital, Health Sciences University, Şanlıurfa, Turkey

Objective: Laparoscopic repair of incisional hernia has come into prominence in recent years and it is performed as an easier technique even in difficult cases compared to open surgery at present. In this case report, it was aimed to present our experience on laparoscopic preperitoneal repair of incisional hernia.

Methods: Incisional hernia was detected in 5 patients who were admitted to the Department of General Surgery at Health Sciences University Mehmet Akif İnan Training and Research Hospital due tothe complaint of abdominal distension. Of these patients, 3 were female and 2 were male. Their mean age was 53 (45-62) years. The surgery was performed with three trocar side on abdominal wall (two 3 mm and one 5 mm) under general anesthesia. Incision was performed from the point 3 cm away from the defect. The peritoneum was dissected. The hernia sac was reduced and a mesh was placed into the preperitoneal space. The mesh was fixed with an absorbable suture. Then, the peritoneum was closed with barbed suture without backward slipping (Stratafix).

Conclusion: According to our opinion, the biggest problem related to laparoscopic incisional hernia repair is the association of mesh with visceral organs. The lack of this problem makes this technique an effective method that can be safely applied.

Keywords: Laparascopy, preperitoneal, incisional hernia

SS-02

Examination of prophylactic and therapeutic effect of sildenafil on radiation rectitis

Erkan Yavuz[1], Osman Bilgin Gülçiçek[1], Onur Olgaç Karagülle[1], Gülçin Ercan[1], Büşra Yaprak Bayrak[2], Ramazan Kuşaslan[1], Berk Gökçek[3], Atilla Çelik[1]

[1]Department of General Surgery, Health Sciences University, Bağcılar Training and Research Hospital, İstanbul, Turkey

[2]Department of Pathology, Kocaeli Derince Training and Research Hospital, Kocaeli, Turkey

[3]Department of General Surgery, Okmeydanı Training and Research Hospital, İstanbul, Turkey

Acute radiation rectitis is an undesired complication of radiotherapy. After pelvic radiotherapy, some pathological changes such as inflammation in the rectum mucosa, mucosal edema, epithelial degeneration, ulceration, distortion in the crypts, and abscesses are detected. On the other hand, it was reported in the previous experimental studies that sildenafil decreased oxidative damage in inflammatory events and prevented the occurrence of increased fibrosis. In this study, prophylactic and therapeutic effect of sildenafil on the development of acute radiation rectitis was examined in an experimental animal model by using light microscopy and primary antibody kits for inflammation markers of TNF-α, HIF-1α, and IL-1β, fibrosis growth factor of FGF-2, and angiogenesis marker of VEGF

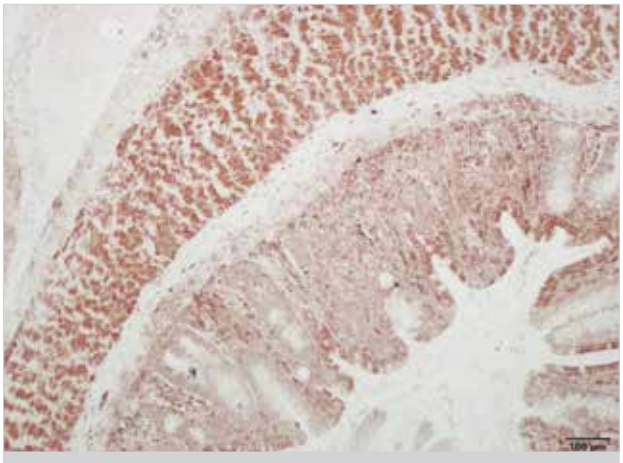

Figure 1. In 10Xfgf2 immunoreactivity, semi-quantitative increase in the stroma, epithelium, and crypts

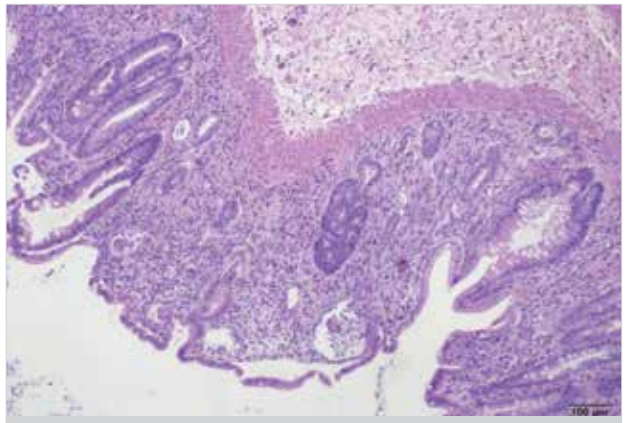

Figure 2. The group not given treatment by giving radiation. Hemotoxylin-eosine staining 10X. Irregularity in the crypts and stroma, cryptitis and cellular infiltration

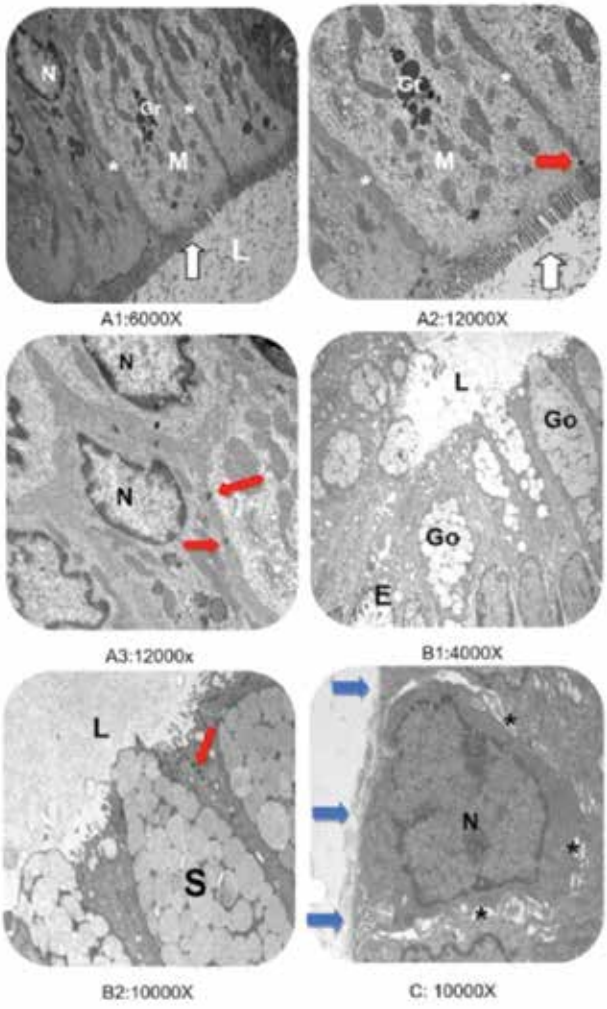

Figure 3. Normal ultrastructural rectum structure (L) lumen (M) mitochondria (N) nucleus, white arrow=normal cilia structure. (S) secretory granuls. (Go) goblet cells. (red arrow) Tight links. (blue arrows) basal membrane.

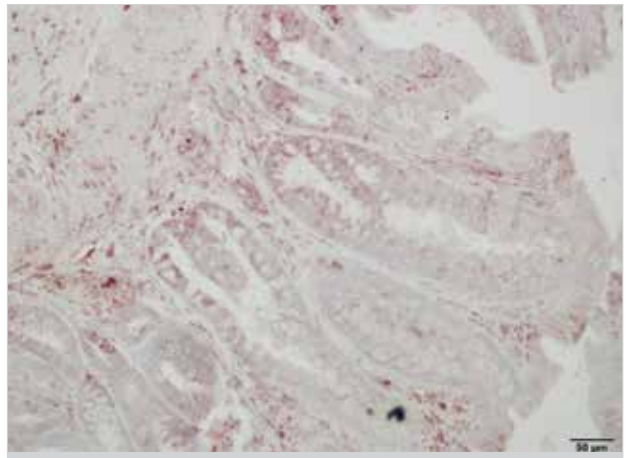

Figure 4. Prophylaxis fgf2 10X:poor immunoreactivity in the epithelium, stroma, and crypt compared to the control group

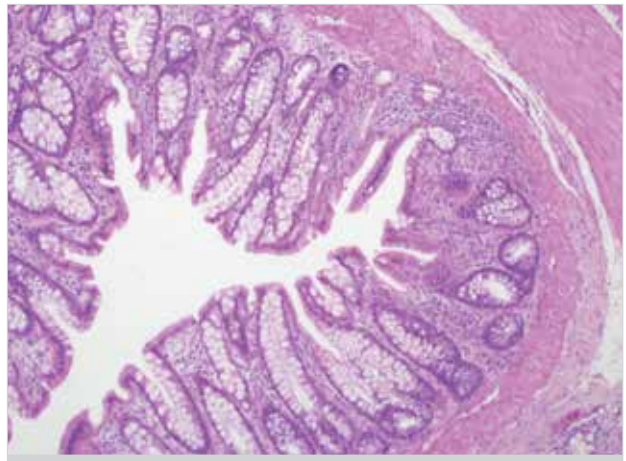

Figure 5. Prophylaxis Group=Radiation application after Sildenafil therapy, hemotoxylin-eosin staining 10X. Regular crypts. Cellular infiltration is subjectively less than in the control group. The structure of the stroma is mainly preserved.

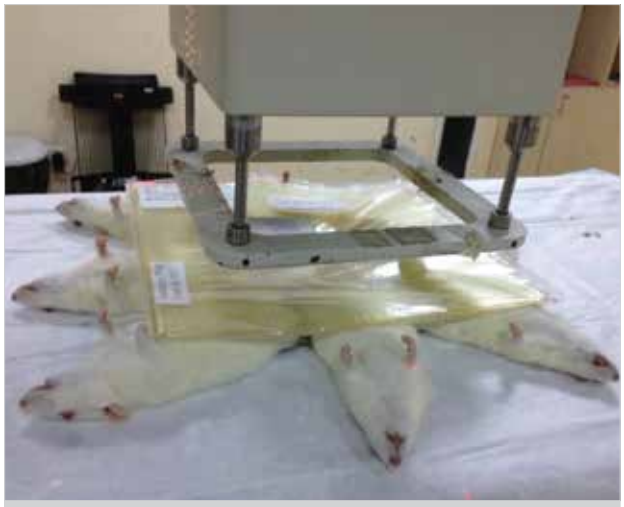

Figure 6. Radiation administration

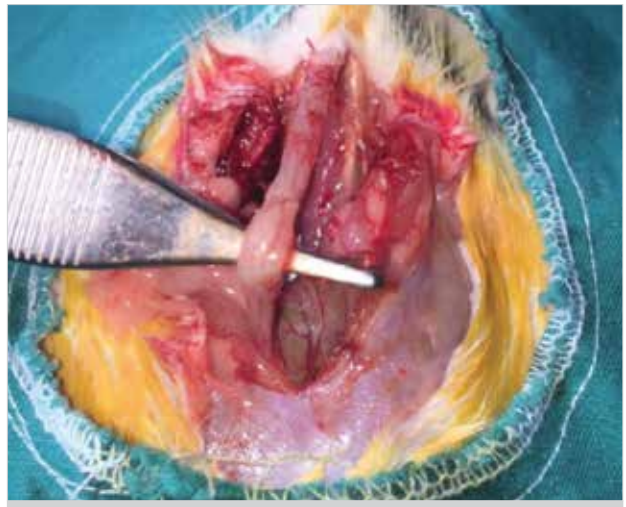

Figure 7. Removal of rectum

proteins. It was also ultrastructurally investigated by using a transmission electron microscopy. Acute radiation rectitis was examined in this experiment study, in which the sacrification day and radiation dose were designed in the framework of an internationally accepted model which was developed by Dr. Nill Hovendak as a result of experiments in consistency with literature. The study was approved by the ethical committee. Forty female Sprague rats were randomly divided into 5 equal groups as:

Group-1 (8) Sham group

Group-2 (8) Control group (15th day Radiotherapy(RT)+Equal-volume isotonic)

Group-3 (8) Prophylaxis group (10 mg/kg/day sildenafil -7 days and 15th day RT+15 days equal-volume isotonic)

Group-4 (8) Treatment group (RT+10 mg/kg/day sildenafil-15 days)

Group-5 (8) High-dose treatment group (RT+50mg/kg/day sildenafil-15 days)

Sacrification was performed with the help of a pathologist and the rectum was removed. The groups were histopathologically compared in terms of crypt distortion, cryptitis epithelial cell reactive atypia, and mucosa thickness. In the immunohistochemical examination, immunoreactivities were semi-quantitatively evaluated (H scoring) with TNF-α, HIF-1α, IL-1β FGF-2, and VEGF kits in three different regions of the rectum, epithelial stroma, and crypts. Differences among the groups were revealed with the magnification up to 20000X in an electron microscope. In this experimental model, sildenafil was found to be effective as a histopathological and immunohistochemical agent in the prophylaxis and treatment of acute radiation rectitis and the data were detected to be statistically significant. These data were supported by light and electron microscopes

Keywords: Experimental study, immunohistochemistry, radiation rectitis, sildenafil, transmission electron microscopy

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SS-03

Selection of optimal operations based adaptability of the organism

Hidayet Bilaloğlu İsayev

Surgical Science Center named after M.A. Topcubasov, Baku, Azerbaijan

Objective: Generally recognized risk assessment scales postoperative complications local and general, has not yet been developed. The aim of the study is to assessment of adaptic opportunities of an organism on the indicator of activity of regulatory systems (IARS).

Methods: The cases of the treatment of 107 patients with postoperative hernias MW3-4R0-2) operated with the installation of a polypropylene mesh prosthesis in position "sublay" preperitonea. The study was conducted using a computer for ECG study of heart rate variability "VNS-Micro". The patients were divided as follows: Group number 1 (n=54) indicator IARS- 8-10, indicating maladjustment. Group number 2 (n=53) - patients recover after preoperative IARS from 8-10 to 5-7 points (satisfactory adaptation) due to the preoperative preparation for 2-5 months. Training was to: conduct breathing exercises; constant wear a bandage with the training of the abdominal wall by changing the compression force to the abdominal wall; 1 multivitamin once a day; cardio - daily walking 1000 m at a speed of 5-7 km per hour under the control of heart rate (140 beats per minute). Recording HRV group №2 performed 1 time per week for 2-5 months. Assessed the course of postoperative period thermometry, pain on lice verbal descriptive scale of pain assessment, the control of blood leukocytes, heart rate and quality of life on the scale 36 to SF operation on the third and the 7th day.

Results: Results of the study. In the group of patients №2, pain was reduced by 49.4%, indicators of leukocytes and heart rate by 39.5%, the number of local complications by 8.2%, worsening comorbidity to 67.2%. Terms of hospital treatment by 64.4% compared with group 1.

Conclusion: The risk of postoperative complications increases in direct proportion to the value of IARS.

Keywords: Postoperative, complication

SS-04

Can postoperative stimulated thyroglobulin level be a marker for the prediction of disease course in patients having papillary thyroid cancer with lateral cervical lymph node metastasis?

Ulvi Murat Yüksel[1], Sevim Turanlı[1], Kazım Çağlar Özçelik[2], Emine Kurt[1]

[1]Department of General Surgery, Health Sciences University, Dr. Abdurrahman Yurtaslan Ankara Oncology Training and Research Hospital, Ankara, Turkey

[2]Department of General Surgery, Yıldırım Beyazıt University, Yenimahalle Training and Research Hospital, Ankara, Turkey

Objective: The effect of serum thyroglobulin measurements on the prognosis of disease is discussed in the studies conducted on heterogeneous patient groups. We wanted to participate in these discussions with a study that we performed on a homogenous patient

group. Measurement of serum thyroglobulin level provides data on residual, recurrent, or metastatic disease in differentiated thyroid cancers. In this study, the effectiveness of stimulated thyroglobulin in the prediction of disease course was investigated as well as the use of thyroglobulin as a follow-up marker.

Methods: In this study, 109 patients who were performed total thyroidectomy and cervical lymph node dissection due to the diagnosis of N1b well-differentiated papillary thyroid cancer and who were then given radioactive iodine therapy between of 1977 and 2012 were evaluated retrospectively. The patients with positive anti-thyroglobulin and persistent diseases were excluded and 92 patients were included in the study. Distant organ metastasis was not found in any patient. The measurement of stimulated Tg was postoperatively performed by chemiluminescence technique in the Siemens Centaur XP immunoassay device before radioiodine ablation therapy when patients had hypothyroidism. The patients were followed up regularly and the development of recurrence was defined according to the ATA guideline. The values of stimulated Tg that were measured in the groups having and not having recurrence were compared by using Mann-Whitney U test. Stimulated Tg cut-off value, which could be used for the prediction of recurrence, was calculated with the Receiver Operating Characteristic (ROC) analysis.

Results: Of the patients, 62% were female and 58,7% were younger than 45 years old. The median age was 41,7 years (18-74 years). According to the histopathological distribution, 78 patients had papillary cancer, 1 patient had microcarcinoma, 12 patients had follicular variant, and 1 patient had columnar variant. The median duration of follow-up was 106 months (16-471 months). The recurrence of disease developed in 22 (23.9%) of 92 patients. In 17 of them, only locoregional recurrence developed. Four had both local and systemic recurrence and one had only systemic recurrence. Neck dissection was repeated in 18 patients. Two patients died due to the disease. The mean stimulated Tg levels in the groups developing and not developing recurrence were 56.6 ng/mL and 43.31 ng/mL, respectively (p=0.04). In the ROC analysis, stimulated Tg cut-off level was found to be 8.65 ng/mL. the sensitivity and specificity values were 63.6% and 55.7%, respectively. While sensitivity increased in parallel with Tg levels, specificity decreased.

Conclusion: Stimulated Tg level can be a marker for the prediction of recurrence.

Keywords: Marker, clinical outcome, papillary thyroid cancer, thyroglobulin

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SS-05

Reduction of complications that develop while removing out the sac in laparoscopic cholecystectomy

Osman Toktaş[1], Nurettin Yüzkat[3], Çağhan Pekşen[1], Sadi Elasan[2], Öztekin Çıkman[1]

[1]Department of General Surgery, Yüzüncü Yıl University School of Medicine, Van, Turkey

[2]Department of Biostatistics, Yüzüncü Yıl University School of Medicine, Van, Turkey

[3]Department of Anesthesia and Reanimation, Yüzüncü Yıl University School of Medicine, Van, Turkey

Objective: In the cases undergoing laparoscopic cholecystectomy (LC) due to cholelithiasis, complications such as enlarged port site, gallbladder perforation, postoperative pain in the port site, and time losses during the removal of the gallbladder can be encountered. In this study, it was aimed to reduce these complications by using 15 mm port instead of 10 mm one while removing out the gallbladder.

Methods: Sixty cases that underwent LC in our clinic between January 2017 and May 2017 were divided into two groups as the Group 1 (control group; n=30) and Group 2 (case group; n=30). Both groups included patients with milimetric multiple calculi according to preoperative hepatobiliary ultrasonography and cholecystectomy was routinely performed with 3-port technique (a 10 mm port for camera in the supraumbilical region, a 10 mm port for tool under the xiphoid, and a 5 mm port for tool in the right pararectal line at the umbilicus level). Moreover, 5 patients with acute calculous cholecystitis and 3 patients with 2 cm stones were included in Group 2. For removing the gallbladder out, a 10 mm port was used for Group 1 and a 15 mm port was used for Group 2 under the xiphoid. Two groups were compared in terms of the time spent for removing out the gallbladder, port site-related complications, length of hospitalization, and incision scar in the port site. The pain in the port site on the postoperative 1st day was evaluated by using a numerical scale from 0 to 10 (0: no pain, 10: excruciating pain).

Results: The time spent for removing out the gallbladder was 125.8 seconds in Group 1 and 12.5 seconds in Group 2 (p=0.01). Complication developed in 66.7% (20 cases) of Group 1 and in 13.3% (4 cases) of Group 2 (p=0.01). The pain felt in port site on the postoperative 1st day was 5,4 (2-9) in Group 1 and 4.3 (1-7) in Group 2 (p=0.11). There was no significant difference between both groups in terms of length of hospitalization and postoperative scarring.

Conclusion: We think that the use of a 15 mm port while removing out the gallbladder in LC cases will shorten the duration of surgery and decrease possible complications and postoperative pain in port site. We think it will be beneficial particularly for cases with higher number of calculi and size and with acute cholecystitis.

Keywords: Cholelithiasis, laparoscopic cholecystectomy, 15 mm port, port site complications

SS-06

The use of composite synthetic mesh in the presence of intra-abdominal infection: An experimental applicability study

Ahmet Burak Çiftci[1], Rıza Haldun Gündoğdu[2], Bahadır Osman Bozkırlı[3], Mustafa Ömer Yazıcıoğlu[2], Berrak Gümüşkaya Öcal[4], Birsen Özdem[5]

[1]Department of General Surgery, Bingöl State Hospital, Bingöl, Turkey

[2]Department of General Surgery, Ankara Atatürk Training and Research Hospital, Ankara, Turkey

[3]Department of General Surgery, Ankara Training and Research Hospital, Ankara, Turkey

[4]Department of Pathology, Ankara Atatürk Training and Research Hospital, Ankara, Turkey

[5]Department of Microbiology, Ankara Atatürk Training and Research Hospital, Ankara, Turkey

Objective: There are different views on the use of synthetic mesh in contaminated areas. In this study, it was aimed to investigate the usability of one of commercially accessible composite synthetic meshes for the repair of abdominal defect in the presence of intra-abdominal infection.

Methods: Totally 20 Wistar-Albino rats were used in the study. Twenty four hours after the formation of experimental peritonitis with cecal ligation and perforation model (CLP), the subjects were randomized into two groups, each including 10 subjects. Following abdominal cleaning through a second laparotomy in all subjects, the abdomen was primarily closed by using continuous sutures in the control group and by using acomposite mesh in the experimental group. Then, the rats were followed up with regard to sepsis signs, sepsis-induced death, and wound site infection. On the 28th day, the rats were sacrificed and they were evaluated in terms of intra-abdominal infection and intra-abdominal adhesions. Moreover, mesh and tissue samples were also evaluated with regard to culture growths.

Results: In the control and mesh groups, mortality rates were 0% and 30% (p=0,21) and wound site infection rates were 20% and 57,1%, respectively (p=0,162). In the mesh group, adhesions were observed to be significantly more intense (p=0,018) and the growth of microorganism was significantly higher in the tissue cultures (p=0,003).

Conclusion: The higher intensity of intra-abdominal adhesions, higher bacterial growth, and tendency to increase in the rates of mortality and wound site infection in the mesh group suggest that this composite mesh cannot be safely used for the repair of abdominal defects in the presence of intra-abdominal infection.

Keywords: Composite synthetic mesh, contaminated area, peritonitis, intra-abdominal adherence, mesh infection

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SS-07

A rare case: Isolated intestinal tuberculosis with the appearance of cecal ulcer

Serkan Ademoğlu, Mümtaz Erakın, Murat Akıcı

Department of General Surgery, Afyon Kocatepe University School of Medicine, Afyonkarahisar, Turkey

Introduction: Although tuberculosis is still endemic in some regions in our country, intestinal disease picture is quite rare. It is generally associated with pulmonary tuberculosis, but it can present with many different clinical features. It can often mimic inflammatory bowel disease or malignancy. In this case report, it was aimed to present a patient who was admitted due to abdominal pain and had isolated intestinal tuberculosis.

Case: A 55-year-old female patient consulted to the outpatient clinic due to the complaint of constipation that lasted approximately for one week andalso had sometimes repeated in previous years. No occlusive lesion or free fluid was observed in the direct abdominal radiography and double-contrast abdominal tomography of the patient, whose laboratory examination results were normal. Minimal sensitivity was found in the abdominal examination and stool was detected in rectal examination. Colonoscopy revealed an approximately 4 cm ulceration in the cecum. The result of her histopathological examination was consistent with granulomatous inflammation. She was operated because of the absence of a response to symptomatic treatment,increased pain, and vomiting in her follow-ups. Diffuse adhesions were found between the omentum and all small intestines in intra-abdominal exploration. There were nodular lesions in the right colon serosa. The operation was ended after right hemicolectomy and bridectomy. The patient was begun empirical anti-tuberculosis therapy by the Department of Infectious Diseases. In the pathological evaluation, necrotizing granulomatous inflammation and EZN-positive bacilli were detected. Because no problem was encountered in her clinical follow-ups, she was discharged on the postoperative 8th day with anti-tuberculosis therapy.

Conclusion: It should always be remembered that extrapulmonary tuberculosis can frequently be encountered in the regions where the incidence of tuberculosis is high, such as in our country, and clinical, radiological, histopathological, and bacteriological examina-

tions should be evaluated together. Because there is no available radiological technique or laboratory analysis that will definitely demonstrate intestinal involvement or raise a strong suspicion, intestinal tuberculosis cases that do not have mass formation in the examinations and that have non-specific complaints should absolutely be kept in mind.

Keywords: Intestinal tuberculosis, cecal ulcer, abdominal pain

Figure 1. Colonoscopic view of cecal ulcer

SS-08

Gastric remnant carcinoma developing 25 years after gastroenterostomy

Serkan Ademoğlu, Mümtaz Erakın, Sezgin Yılmaz

Department of General Surgery, Afyon Kocatepe University School of Medicine, Afyonkarahisar, Turkey

Introduction: Gastric remnant cancer is a rarely seen clinical picture. In this study, it was aimed to present a patient who had been performed subtotal gastrectomy and gastroenterostomy for benign reasons 25 years ago and whose biopsy taken from the anastomotic region in gastroscopy that was performed for the complaint of abdominal pain revealed signet-ring cell carcinoma.

Case: A 55-year-old female patient consulted to our department because of blunt pain developing in the right upper quadrant abdomen in addition to dyspeptic complaints. She also had nausea and vomiting. It was learned from her anamnesis that she had been operated for perforated gastric ulcer 25 years ago. Gastroscopy revealed edema and ulcers with intense exudate in the mucosa in the anastomotic line and multiple biopsies were taken. The pathological result of biopsies was reported as signet-ring cell carcinoma. In the multiphasic computed tomography, diffuse wall thickness reaching to 1.5 cm was observed in the lateral gastric corpus. There were multiple lymph nodes in the perigastric and celiac region. The laparotomy revealed that the patient had been performed antrectomy+ gastroentorostomy previously. Thereupon, total gastrectomy+D2 resection+Splenectomy+Distal pancreatectomy was performed due to the diagnosis of gastric stump cancer. The result of postoperative histopathological examination was reported as signet-ring cell carcinoma.

Figure 1. Pathological view of gastric remnant carcinoma

Conclusion: The risk for the development of gastric remnant cancer after gastric resection for peptic ulcer is ≤10% for lifetime. It is thought that residual gastric mucosa after distal gastric resection causes malignant transformation. The median latency period after primary operation has been reported as 30 years. In our case, the latency period was 25 years. The pathology was reported as signet-ring cell carcinoma, which is rarely seen. We suggest that annual follow-ups should be endoscopically performed particularly in patients undergoing gastric surgery for benign reasons. At present, the treatment method for gastric stump cancers is primary surgery including total gastrectomy and D-II lymph node dissection.

Keywords: Gastric remnant carcinoma, signet-ring cell carcinoma, surgery

SS-09

Evaluation of patient satisfaction and quality of life after laparoscopic Nissen fundoplication

Serkan Ademoğlu, Mümtaz Erakın, Murat Akıcı

Department of General Surgery, Afyon Kocatepe University School of Medicine, Afyonkarahisar, Turkey

Objective: In this study, it was aimed to evaluate the results of laparoscopic Nissen fundoplication surgeries performed for gastroesophageal reflux disease in terms of patient satisfaction and quality of life.

Methods: This study included a total of 50 patients who were performed laparoscopic Nissen fundoplication. No variation was detected between 28 female patients and 22 male patients who participated in the study. The mean age was found to be 49 years. All patients were given medical treatment for at least 2 months before the surgery. Endoscopy and esophageal biopsy were preoperatively performed to all patients. The operations were performed under general anesthesia by using 4 ports. In order to evaluate postoperative patient satisfaction, the Gastroesophageal Reflux Disease Health-Related Quality of Life (GERD-HRQL) questionnaire was employed.

Results: The most frequent complaints of the patients were abdominal distension, vomiting, and early satiety. The mean time from the onset of the complaints to operation was 11 months (3 months-7 years). Distal esophagitis was observed in all patients. Five patients had Barrett's esophagus and 26 patients had positive helicobacter pylori. The operation was not switched to laparotomy in any patient and no graft was needed in any case. The mean duration of surgery was 63 minutes (40-120 min) and the median duration of hospitalization was 2 days (1-7 days). The median length of follow-up was determined as 12 months (6-38 months). Functional results were evaluated as excellent in 78% of the patients, good in 12%, and moderate in 10%. In terms of satisfaction level, 41 patients were found to be very satisfied, 8 patients were satisfied, and 1 patient was poorly satisfied.

Conclusion: Compared to preoperative period in all patients, a significant improvement was observed in quality of life beginning from early postoperative period. Permanent swallowing difficulty and recurrence were not seen in any of followed patients. Laparoscopic Nissen fundoplication can be preferred as an effective surgical intervention that can be applied with low morbidity and mortality in the treatment of gastroesophageal reflux disease.

Keywords: Laparoscopic Nissen fundoplication, patient satisfaction, gastroesophageal reflux disease

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SS-10

The effects of intraoperative neuromonitorization (IONM) on postoperative recurrent laryngeal nerve (RLN) injury, hypocalcemia, and hypoparathyroidism in cases undergoing total thyroidectomy

Zehra Zeynep Keklikkıran, Muzaffer Akıncı, Fazilet Erözgen, Hüda Ümit Gür, Ahmet Kocakuşak, Ezgi Tatlısu, Gamze Çıtlak

Department of General Surgery, Health Sciences University, Haseki Training and Research Hospital, İstanbul, Turkey

Objective: In this study, it was aimed to investigate the effects of intraoperative neuromonitorization (IONM) on postoperative recurrent laryngeal nerve injury, hypocalcemia, and hypoparathyroidism in cases undergoing total thyroidectomy.

Methods: This prospective study included 40 successive patients who were diagnosed with the indication for total thyroidectomy in the Department of General Surgery in Health Sciences University Haseki Education and Research Hospital between February 2016 and June 2017 and who did not have exclusion criteria. All patients were performed total thyroidectomy by using IONM. In the postoperative period, they were evaluated with regard to the development of recurrent laryngeal nerve injury, hypocalcemia, and hypoparathyroidism. Moreover, the effect of IONM on postoperative complications of experienced and inexperienced surgeons was examined. Statistical analyses were performed by using SPSS 15,0 for Windows software.

Results: Of 40 patients included in the study, 38 (95%) were female. Their mean age was 45.5 years. The most common indication for surgery was found to be the presence of a nodule larger than 3 cm in 18 (45%) patients. The mean duration of operation was detected to be 103.4 minute. In our series, permanent unilateral vocal cord paralysis developed in one patient (2.6%) and permanent hypocalcemia developed in another patient (2.6%). On the other hand, hypoparathyroidism and bilateral vocal cord paralysis were not observed in any patient. The most common complication was temporary hypocalcemia in 26 (65%) patients and early unilateral vocal cord paralysis in 7 (17.5%) patients. The patients were put into two groups according to the experiences of surgeons (experienced and inexperienced surgeons). These two groups were similar in terms of general features. On the postoperative 1st day, the levels of calcium were found to be significantly higher in the patients operated by experienced surgeons

Table 1. General features of the study group

Age M±SD (min-max)		45.5±10.5 (24-72)
Gender n (%)	Female	38 (95)
	Male	2 (5)
Region of residence n (%)	Marmara	34 (85)
	Black Sea	3 (7.5)
	Eastern Anatolia	2 (5)
	Mediterranean	1 (2.5)
Preoperative ASA n (%)	1	33 (82.5)
	2	7 (17.5)
Indication n (%)	Nodule larger than 3 cm	18 (45.0)
	Patient's preference	12 (30.0)
	Bethesda 3 and above that was performed twice/ clinical course	6 (15.0)
	Bethesda 4	4 (10.0)
Preoperative D vitamin level (ng/mL)		17.4±13.7 (1.9-66)
Size of the largest nodule		30.1±8.7 (7-50)
Duration of operation (min)		103.4±15.9 (70-150)
Duration of postoperative hospitalization (day)		2.6±1.4 (2-7)

Table 2. Complication rates for experienced and inexperienced surgeons

		Surgeon		
		Experienced n (%)	Inexperienced n (%)	p
Hypocalcemia	Early	13 (54.4)	13 (81.36)	0.079
	Permanent	0 (0.0)	1 (6.7)	0.385
Unilateral paralysis,	Early	5 (20.8)	2 (12.5)	0.681
	Permanent	0 (0.0)	1 (6.3)	0.410
Complication		14 (58.3)	13 (81.3)	0.130

No statistically significant difference was detected in the complication rates of patients operated by experienced and inexperienced surgeons.
Because 6 patients did not complete their 6th months in postoperative follow-ups, no comment was performed on the persistency or temporariness of their complications and statistical analyses were performed for those who completed the 6th month in their follow-ups.

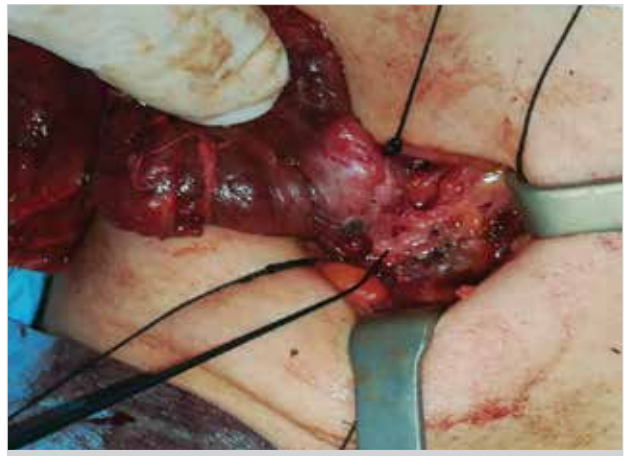

Figure 1. Demonstration of RLN during total thyroidectomy and its control with stimulation probe

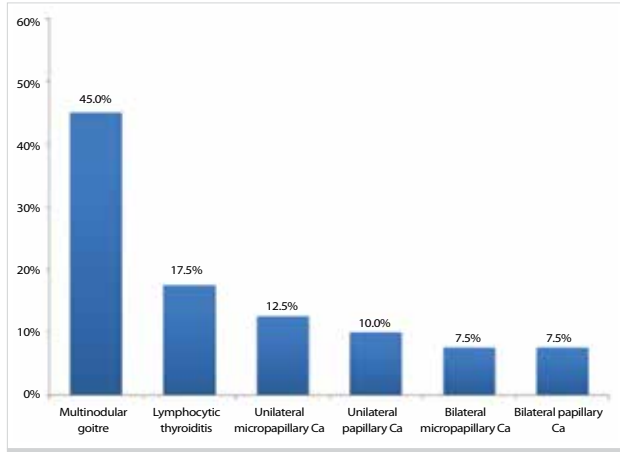

Figure 2. Postoperative pathological diagnoses as in the figure

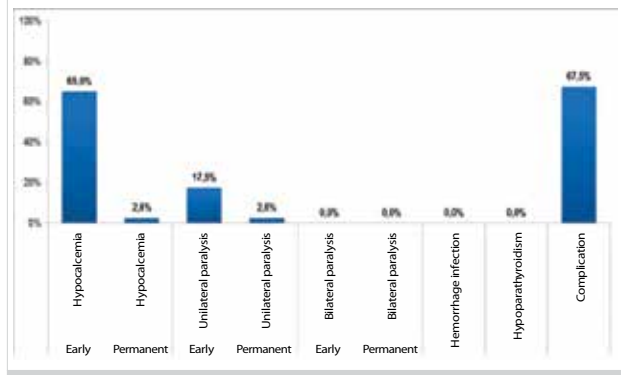

Figure 3. Postoperative complications and their rates
*In the postoperative 6th month of a patient evaluated as permanent hypocalcemia, calcium level was 8.3 mg/dL, which was near the lower limit, and PTH level was 32.8 pg/mL, which was at normal interval. No hypocalcemia symptoms developed in the follow-ups of this patient.
**There was one patient developing unilateral permanent vocal cord paralysis and hoarseness did not develop in the follow-ups.

than those operated by inexperienced surgeons (p=0.024). No statistically significant difference was detected between two groups in terms of postoperative complications.

Conclusion: The use of IONM does not replace the protection of the nerve by seeing, but it facilitates the identification of the nerve's location and decreases dissections performed for finding the nerves. It has been demonstrated in our study that dissections performed around the parathyroid glands, particularly traumas occurring while isolating RLN, can be reduced with the application of IONM and thus it can contribute to the prevention of hypoparathyroidism. There was no difference between experienced and inexperienced surgeons in terms of complication rates. It is suggested that IONM can be effective in decreasing complications of inexperienced surgeons.

Keywords: Hypoparathyroidism, hypocalcemia, intraoperative neuromonitorization, recurrent laryngeal nerve injury, RLN, thyroid surgery

SS-11

The effect of platelet-lymphocyte ratio on the prediction of lymph node involvement in patients with breast cancer

Şahin Kahramanca[1], Turgut Anuk[2], Ali Cihat Yıldırım[1], Mahmut Can Yağmurdur[2]

[1]Department of General Surgery, Kars Harakani State Hospital, Kars, Turkey

[2]Department of General Surgery, Kafkas University School of Medicine, Kars, Turkey

Objective: Breast cancer (BC) is the most common cancer type among women and its incidence increases by 0,5% annually. Curative treatment for BC is surgery. Its prognosis is directly associated with lymph node (LN) involvement. Lymph node involvement is also the main determinant for postoperative adjuvant therapy. In our study, it was aimed to reveal the relationship between preoperative platelet-lymphocyte ratio (PLR) and LN involvement by scanning the files of patients operated in our department due to the diagnosis of BC.

Methods: The records files of patients that were followed up due to the diagnosis of breast cancer and operated in the general surgery departments of Kars State Hospital and Kafkas University Faculty of Medicine between June 2013 and September 2016 were examined. Their ages, genders, familial histories, preoperative platelet-lymphocyte ratios, the procedures that they were performed, and histopathological reports were recorded. The patients were put into two groups as those with axillary involvement (Group 1) and those without axillary lymph node involvement (Group 2). Twenty-five patients having CAD, CVE, comorbid malignancy, and hematological diseases and being given blood transfusion one week before surgery were excluded from the study.

Results: Of 166 patients, the median age was 52 (20-88) years. Twelve patients (7,2%) had a familial history of BC. Right and left breast cancers were detected in 92 and 74 patients, respectively. Lymph node involvement was observed in 86 (51,8%) patients. No statistically significant relationship was found between familial history and age and LN involvement (p=0.095 and p=0.521). In histopathological evaluation, infiltrating ductal carcinoma was more common (57.8%). The median PLR value of 166.8 (72.8-458.3) in the LN involvement positive patient group was significantly higher than that of 120.9 (50.9-278.0) in the group without LN involvement (p<0.001). Based on the cut off value of 139.0 according to the ROC analysis performed for PLR value between the groups, PLR was found to have 70.9% sensitivity and 71.3% specificity for the prediction of LN metastasis.

Conclusion: The prognosis of breast cancer, axillary LN involvement directly affects the spread of the disease and treatment process. We suggest that preoperative PLR value can be considered as a predictive marker in clinical practice for the prediction of lymph node involvement in breast cancer.

Keywords: Breast cancer, platelet-lymphocyte ratio, lymph node metastasis

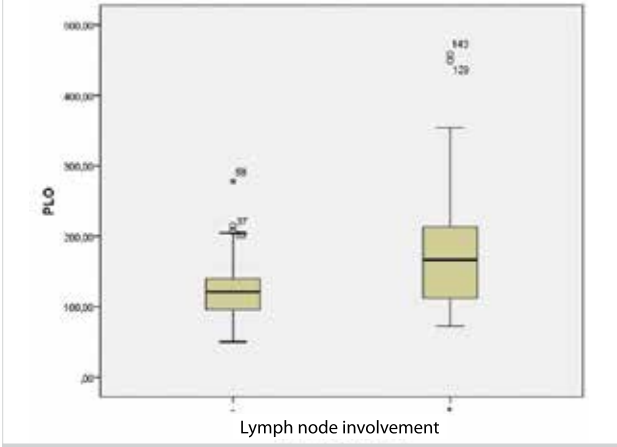

Figure 1. Inter-group distribution graph of PLR

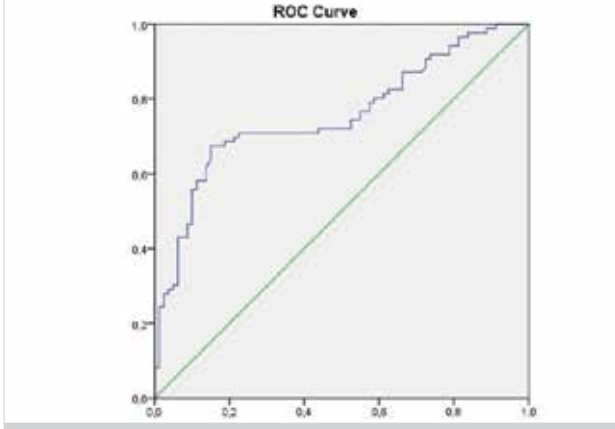

Figure 2. Inter-group ROC analysis of PLR
Area under the curve: 0.755 (0.681-0.830 95% CI) p<0.001

SS-12

Protective effect of pentoxifylline on the small intestines after ischemia and reperfusion

Seracettin Eğin[1], Mehmet İlhan[2], Süleyman Bademler[2], Semih Hot[1], Berk Gökçek[1], Hakan Ekmekçi[3], Özlem Balcı Ekmekçi[3], Gülçin Kamalı[4], Gamze Tanrıverdi[5], Fatma Kaya Dağıstanlı[6], Recep Güloğlu[2]

[1]Department of General Surgery, Health Sciences University, Okmeydanı Training and Research Hospital, İstanbul, Turkey
[2]Department of General Surgery, İstanbul University İstanbul School of Medicine, İstanbul, Turkey
[3]Department of Biochemistry, İstanbul University Cerrahpaşa School of Medicine, İstanbul, Turkey
[4]Pathology Laboratory, Health Sciences University, Okmeydanı Training and Research Hospital, İstanbul, Turkey
[5]Department of Histology and Embryology, İstanbul University Cerrahpaşa School of Medicine, İstanbul, Turkey
[6]Department of Medical Biology, İstanbul University Cerrahpaşa School of Medicine, İstanbul, Turkey

Objective: Ischemia and reperfusion (I/R) is a pathological event that causes damage in organs. Molecular markers have been differentiated as a cue that contributes to I/R. In this study, it was aimed to determine healing effect of pentoxifylline (PTX) by pathologically demonstrating protection and molecular response in the small intestine I/R model.

Methods: The study was conducted in Istanbul University Experimental Medical Research Institution with the 2015/80 numbered approval of İstanbul University Local Ethics Committee for Animal Experiments. A total of 36 Wistar-Albino rats (6 rats in each group) were used. Superior mesenteric artery (SMA) was clamped for 120 minutes. After clamp was removed, reperfusion was performed for 60 minutes.

Groups:

K_1: 0,4 cm^3 physiological saline solution (PS) intraperitoneal (IP) 60 minutes before intestinal ischemia.

K_2: 0,4 cm^3 PS IP in reperfusion.

P_1: 0,4cm^3 PS and 1mg/kg PTX IP 60 minutes before intestinal ischemia.

P_2: 0,4 cm^3 PS and 1 mg/kg PTX IP in reperfusion.

P_3: 0,4 cm^3 PS and 10mg/kg PTX IP 60 minutes before intestinal ischemia.

P_4: 0,4 cm^3 PS and 10mg/kg PTX IP in reperfusion.

In all subjects, 6 cc blood from cardiac cavity and tissue samples from the small intestine were taken at the end of reperfusion. The samples were evaluated by two different blinded researchers. In serum and tissue, malondialdehyde (MDA), myeloperoxidase (MPO), tumor necrosis factor alpha (TNF-α), interleukin-1 beta (IL-1β), and interleukin-6 (IL-6) were measured by the ELISA technique. Lactic acid dehydrogenase (LDH) in serum was measured with an automatic analyser. For histopathological evaluations, 4 micrometer sections were taken and stained with hematoxylin-eosin. Intestinal ischemia damage was graded by the 6-layered Chiu/Park scale. Immunohistochemical staining density was evaluated semiquantitatively by using 5 categories under X400 magnification. Statistical analyses were performed by using Kolmogorov-Smirnov test for normal distribution and K-sample Kruskal-Wallis, Chi-Square, and ANOVA tests for comparisons.

Results: Significant differences were found between P1 and P3 groups that were applied PTX before ischemia and their control group (K1) in terms of decreased molecular responses in serum and tissues (Table 1). Moreover, significant differences were observed also between P2 and P4 groups that were applied PTX in reperfursion and their control group (K2) in terms of decreased molecular responses in serum and tissues (Table 1). Significant recovery of ischemic damage in the groups applied PTX was demonstrated with histological staging and immunohistochemistry score (Table 2) (Table 3).

Table 1. Significant improvement in molecular markers between the control and pentoxifylline groups.

K1 P1 P3	TNF-alfa (pg/mL) serum	IL-6 (pg/mL) serum	IL-1 beta (pg/mL) serum	MPO (ng/mL) serum	MDA (nmoL/mL) serum	LDH (IU/L) serum
p	0.003	0.002	0.001	0.011	0.003	0.003
K2 P2 P4	TNF-alfa (pg/mL) serum	IL-6 (pg/mL) serum	IL-1 beta (pg/mL) serum	MPO (ng/mL) serum	MDA (nmoL/mL) serum	LDH (IU/L) serum
p	0.003	0.001	0.001	0.003	0.030	0.003
K1 P1 P3	TNF alfa (pg/gr tissue)	IL-6 (pg/gr tissue)	IL-1 beta (pg/gr tissue)	MPO (ng/gr tissue)	MDA (nmoL/gr tissue)	
p	0.006	0.003	0.004	0.010	0.006	
K2 P2 P4	TNF-alfa (pg/gr tissue)	IL-6 (pg/gr tissue)	IL-1 beta (pg/gr tissue)	MPO (ng/gr tissue)	MDA (nmoL/gr tissue)	
p	0.002	0.001	0.003	0.003	0.001	

LDH: lactic acid dehydrogenase; MDA: malondialdehyde; MPO: myeloperoxidase

Conclusion: In the experimental model, healing effect of PTX was histopathologically confirmed through molecular responses..

Keywords: Ischemia, pentoxifylline, reperfusion

Table 2. Significant improvement in ischemic damage between the control and pentoxifylline groups.

K1-P1-P3	Chiu score	K2-P2-P4	Chiu score
Chi-square	11.007	Chi-square	12.745
p	0.004	p	0.002

Table 3. Significant decrease in the immunohistochemistry score between the control and pentoxifylline groups.

K1-P1-P3	Immunohistochemistry score (IL-1 beta)	Immunohistochemistry score (IL-6)	Immunohistochemistry score (MPO)	Immunohistochemistry score (TNF-alpha)
p	0.004	0.002	0.296	0.008
K2-P2-P4	**Immunohistochemistry score (IL-1 beta)**	**Immunohistochemistry score (IL-6)**	**Immunohistochemistry score (MPO)**	**Immunohistochemistry score (TNF-alpha)**
p	0.008	0.006	0.009	0.006

MPO: myeloperoxidase

SS-13

Evaluation of liver volume and anatomic structures in donor candidates before living donor liver transplantation through 3-dimensional printer model obtained by benefiting from data of computed tomography

Belma Nalbant[1], Tufan Egeli[2], Tarkan Ünek[2], Canan Altay[3], Alper Selver[4], Emre Kavur[4], Funda Obuz[3], İbrahim Astarcıoğlu[2]

[1]Department of Translational Medicine, Dokuz Eylül University, Institute of Health Sciences, İzmir, Turkey

[2]Department of General Surgery, Dokuz Eylül University School of Medicine, İzmir, Turkey

[3]Department of Radiology, Dokuz Eylül University School of Medicine, İzmir, Turkey

[4]Department of Electrical and Electronic Engineering, Faculty of Engineering, Dokuz Eylül University, İzmir, Turkey

The liver is a unique organ in the human body because of its roles in the regulation of protein synthesis, glucose, and fat metabolism, detoxification, and regulation of the immune system, its superior ability of regeneration, and its functions in many other metabolic processes. At present, the only treatment choice both for acute and chronic liver failure is liver transplantation. For this procedure, graft is supplied from cadaver provided that organ donation is done or from volunteer living donors. However, the number of patients needing liver transplantation is increasing across the world and this need cannot be met with available organ donations. Therefore, in our country and in the world, the rate of living donor liver transplantation (LDLT) has increased in recent years. The safety of donor candidate is very important at every stage in LDLT. First of all, in the stage of choosing donor candidate, whether residual liver volume will be sufficient for him/her after liver transplantation and whether vascular structures are appropriate for transplantation should be clearly revealed. For this purpose, angiography with computed tomography and volumetric calculation method are used at present. In this way, total and residual liver volumes of donor can be measured and anatomic features of vascular structures can be determined. Evaluation of these data on a 3-dimensional model by the transplantation team, particularly by surgeons, will be beneficial because surgeons will be able to assess better and accommodate themselves with the help of a 3-dimensional model of the material that they will operate. For this aim, we obtained liver models of donor candidates for LDLT by using a 3-dimensional printer. Transparent structure of its surface provides anatomic structures of the vessels to be understood better. According to current studies, 3-dimensional printer model will be an important clinical instrument for planning liver transplantation and complex liver surgeries. This model, which is the first in Turkey, is considered to be superior to conventional 2-dimensional imaging techniques. Moreover, it will be able to be used for education in medical faculties as well as navigation for critical regions in surgical operations as a physical model.

Keywords: 3-dimensional printer, liver transplantation, translational medicine

SS-14

The use of miniVAC as a new isolation technique in enteroatmospheric fistulas

Ozan Utku Öztürk[1], Erol Kılıç[1], Mustafa Uğur[1], Metin Temel[2], Ali Yeniocak[3]

[1]Department of General Surgery, Tayfur Ata Sökmen Medical Faculty, Hatay Mustafa Kemal University, Hatay, Turkey
[2]Private Antakya Yaşam Surgical Medical Center, Department of Plastic Surgery, Hatay, Turkey
[3]Department of Plastic Surgery, Tayfur Ata Sökmen Medical Faculty, Hatay Mustafa Kemal University, Hatay, Turkey

Objective: Enteroatmospheric fistula (EAF) is one of the difficult complications of open abdomen management with its high morbidity and mortality. The most important stage of EAF management is to control the content of fistula that causes contamination, chemical irritation, and inflammation in the wound because of pancreatic, biliary, and intestinal secretions. For this purpose, the techniques of biological meshes, fibrin glues or floating stoma, tube vacuum, pacifier vacuum, fistula vacuum, and penrose drain suturization in the wound edges are reported to be used in literature. However, isolation of the fistula content from the wound still poses a serious problem because of leakage. In this study, it is aimed to present a technique in which a miniVAC device that was not defined in literature before is used and which successfully isolates the content of EAF from the wound and negative-pressure closure set.

Methods: The sponge of vacuum was cut for inserting miniVAC into the fistula site. The mouth of fistula was enclosed with stoma paste. The base of miniVAC device was cut in the way that it could comprehend the mouth of fistula and it was inserted into the sponge from the point that was cut before. The miniVAC with cut base was sutured on the mouth of fistula with 3,0 vicryl by using the simple technique (Figure 1). The sponge outside miniVAC was closed with a drape and the system was run at the pressure of 80 mm Hg. The system was changed every two days. A total of 5 sessions were applied. Split-thickness skin graft was used for the patient developing granulation in the wound site and the patient was discharged after inserting a stoma bag in the mouth of fistula (Figure 2,3).

Results: Incisional hernia repair with dual mesh was performed to a 58-year-old male patient, who had been performed small intestine resection and anastomosis due to gunshot injury 6 months ago. Mesh infection developed in his follow-ups. While applying negative-pressure closure set to the abdomen, high-output EAF and Björk type- 4 open abdomen occurred in association with iatrogenic small intestine injury.

Figure 1. The miniVAC with cut base was sutured on the openning mouth of fistula with 3,0 vicryl by using the simple technique

Figure 2. Split-thickness skin graft was applied to the patient

Figure 3. The view of the patient in the postoperative 3rd month.

Conclusion: The primary aim of EAF, which is a complication of open abdomen, is the control of sepsis. EAF can be successfully isolated with the miniVAC technique, which can easily be carried out in every clinic. Thus, complications such as delayed wound healing and contaminated wound or skin graft can be prevented.

Keywords: Enteroatmospheric fistula, miniVAC, negative pressure closure system

SS-15

A new marker for the diagnosis of acute appendicitis: Pentraxin-3

Ayetullah Temiz[1], Yavuz Albayrak[1], Konca Altınkaynak[2], Ayşe Albayrak[3], Gülsen Atasoy[1], Adem Aslan[1], Sevilay Akalp Özmen[4], Yılmaz Özdemir[5]

[1]Department of General Surgery, Erzurum District Training and Research Hospital, Erzurum, Turkey

[2]Department of Biochemistry, Erzurum District Training and Research Hospital, Erzurum, Turkey

[3]Department of Infectious Diseases, Atatürk University School of Medicine, Erzurum, Turkey

[4]Department of Pathology, Erzurum District Training and Research Hospital, Erzurum, Turkey

[5]Department of Gastroenterological Surgery, Erzurum District Training and Research Hospital, Erzurum, Turkey

Objective: In recent years, pentraxin 3 has been shown to rise in systemic inflammatory events. In this study, we aimed to demonstrate the diagnostic value of Pentraxin 3 in patients having acute appendicitis.

Methods: In this study, the diagnostic value of Pentraxin 3 was investigated in acute appendicitis patients by comparing 56 patients and the control group of 28 people who were operated with the diagnosis of an acute appendicitis in the General Surgery Department of Erzurum Regional Training and Research Hospital between March 2015 and December 2016.

Results: While the mean level of pentraxin 3 in the control group was 3.08±1.49 ng/mL, it was 7.96±4.29 ng/mL in the patient group and the difference between the groups was significant ($p<0.0001$). The level of pentraxin 3 showed a significant difference between the control group and acute suppurative appendicitis group, and between the control group and the perforated appendicitis group ($p<0.0001$). However, there was no significant difference in the levels of pentraxin 3 between acute suppurative appendicitis group and perforated appendicitis group ($p>0.05$). In the ROC curve, the area under the curve (AUC) value of pentraxin 3 was found to be 0.883 in acute appendicitis.

Conclusion: This is the first study to investigate the level of pentraxin 3 in patients with acute appendicitis and pentraxin 3 may be a new marker for the diagnosis of acute appendicitis.

Keywords: Acute appendicitis, pentraxin-3, inflammation

SS-16

Results of papillary thyroid microcarcinomas in patients performed thyroidectomy on the basis of multinodular goiter

Semih Yaman, Mehmet Hayri Erkol, Bahri Özer, Mustafa Şit, Muhammed Fatih Keyif, Ferdi Bolat, Selçuk Köksal, Elif Yalçın

Department of General Surgery, Abant İzzet Baysal University School of Medicine, Bolu, Turkey

Today, the number of patients who are followed up and treated in the field of thyroid diseases is increasing day by day owing to the general awareness against all diseases in the society and developed technology. In many studies, cancer can be detected in post-operative pathology results at high rates in multinodular goiter patients undergoing operations due to a benign disease. Papillary Thyroid Carcinoma (PTC) smaller than 10 mm is called Papillary Thyroid Microcarsinoma (PTMC), and its incidence in autopsy studies ranges from 4.7% to 9.9% (3,4). In this study, we aimed to discuss the results of micropapillary carcinomas in patients with multinodular goitre disease that was clinically and radiologically detected to be benign, and especially the cases with nodules in the opposite thyroid lobe other than in the dominant nodule. We retrospectively reviewed 1300 patients who underwent thyroidectomy in the General Surgery Department of Abant Izzet Baysal University Faculty of Medicine between January 2010 and December 2016. Clinical and radiological records of all patients were evaluated. The results of preoperative thyroid ultrasound (USG), laboratory analyses, and fine needle aspiration biopsies (FNAB) were examined in all patients. Patients who had a single nodule in the preoperative USG and whose FNAB results were reported as malignant and suspicious were excluded from the study. As a result, 1197 patients who had multinodular goitre disease, whose FNAB results were benign, and whose preoperative and postoperative records and follow-ups could be reached were included in the study. The patients were divided into two groups. Group 1 consisted of patients whose postoperative pathology results were benign (n=1134) and Group 2 consisted of patients whose postoperative pathology results were proven to be Papillary Thyroid Microcarsinoma (PTMC) (n=63). Studies have shown that the rate of multicentricity in PTMC varies between 9.5% and 24.9% (10, 11). In our study, PTMC was detected in 5.3% of the patients who were operated with the diagnosis of benign multinodular goiter (MNG) disease and 16% of this group showed tumor multicentricity. The most important result was that 38% of the PTMC cases developed not in the thyroid lobe, where the dominant nodule was located, but in the opposite lobe.

Keywords: Multinodular goiter, papillary carcinoma, thyroid

SS-17

The relationship between thyroid cancer and TSH level; Is hyperthyroidism really protective?

Cemil Binarbaşı[1], Kazım Çağlar Özçelik[1], Ulvi Murat Yüksel[2], İsmail Zihni[3], Oktay Karaköse[4], Hüseyin Pülat[5]

[1]Department of General Surgery, Yıldırım Beyazıt University, Yenimahalle Training and Research Hospital, Ankara, Turkey

[2]Department of General Surgery, Ankara Oncology Training and Research Hospital, Ankara, Turkey

[3]Department of General Surgery, Van Training and Research Hospital, Van, Turkey

[4]Department of General Surgery, Samsun Training and Research Hospital, Samsun, Turkey

[5]Department of General Surgery, Mersin State Hospital, Mersin, Turkey

Objective: In our study, it was aimed to investigate the relationship between thyroid stimulating hormone (TSH) levels and cancer development in patients that were performed thyroidectomy and found to have thyroid cancer according to pathological examination and to examine the effect of TSH on tumor size.

Methods: In this study, 239 patients whose pathology reports revealed thyroid cancer after thyroidectomy were retrospectively evaluated. Of the cases, 157 patients with normal or high preoperative TSH value were included in the 1st patient subgroup and 82 patients with low TSH value were put into the 2nd patient subgroup.

Results: Of thyroid cancer patients, 84.9% were female and 15.1% were male. Their mean age was 46.62±13.65 years (16-80 years). No statistically significant relationship was observed between papillary carcinoma and other carcinomas and TSH levels ($p>0.05$). On the other hand, micropapillary carcinoma was found to be significantly higher in the cases with low TSH values ($p=0.003$). There was a statistically significant difference in the comparisons between tumor diameters and TSH levels ($p=0.019$) ($p<0.05$). While tumor diameter was smaller in the group with low TSH levels, it was larger in the group with normal and high TSH levels.

Conclusion: In the past, compared to euthyroid individuals, the theory of that hyperthyroidism would result in lower thyroid cancer incidence was accepted. However, recent studies report the results showing that low TSH level is not protective in thyroid cancer. This is emphasized in the study conducted by Negro et al. (1). In our study, TSH level was found to be low in 34.3% and

normal or high in 65.7% of the patients diagnosed with thyroid cancer. In consistency with literature, hyperthyroidism was not demonstrated to be an assurance for thyroid cancer. Furthermore, the rate of microcancer was 30.6% in patients with normal or high TSH levels, but 50% in patients with low TSH level ($p<0.05$). Statistically higher rate of microcancer and smaller tumor diameter in patients with low TSH value suggest that TSH does not really have a mitogenic effect, but it is effective in the growth of cancer focus that has already occurred.

Keywords: Hyperthyroidism, cancer, thyroid, thyroid stimulating hormonen

Table 1. Evaluation of pathology results according to TSH levels

Pathology result	TSH <0.27 µIU/mL (n=82)	TSH ≥0.27 µIU/mL (n=157)	p
Papillary carcinoma	38 (46,3)	92 (58.6)	0.822
Micropapillary carcinoma	41 (50)	48 (30.6)	0.003***
Other thyroid carcinomas	3 (3,7)	17 (10.8)	0.057

Chi-square test **p<0.01

Table 2. Evaluation of tumor diameters according to TSH levels

		Tumor diameter		
TSH	n	M±SD	Median	p
<0.27 µIU/mL	82	13.54±10.91	9.5	0.019***
≥0.27 µIU/mL	157	17.82±14.31	14	

Mann-Whitney U test *p<0.05

SS-18

Determination of the predictive value of early postoperative parathormone level for permanent hypoparathyroidism in patients undergoing thyroid surgery and investigation of the factors affecting the development of hypoparathyroidism

Süleyman Deniz Kahraman, Zafer Kılbaş, Mustafa Öner Menteş

Department of General Surgery, Gülhane Training and Research Hospital, Ankara, Turkey

The aim of this study was to determine the predictive value of parathormone (PTH) level measured in early postoperative period for permanent hypoparathyroidism in patients undergoing thyroid surgery and to investigate the factors affecting the development of hypoparathyroidism. The population of the study consisted of 904 patients who were performedtotal thyroidectomy in the Department of General Surgery in Gülhane Education and Research Hospital between January 2011 and June 2016. The sampling of the study included 200 patients that developed hypoparathyroidism within the first 24 hours after surgery and the data of this sampling group were retrospectively evaluated. The development of permanent hypoparathyroidism was observed in 15% of the patients with permanent and temporary hypoparathyroidism and in 3% of all patients who were performed thyroidectomy. The threshold value of PTH measured in early postoperative period was found to be 2.45 ng/mL for the prediction of permanent hypoparathyroidism. The PTH value was 2.5 ng/mL and below in 70% of the patients developing permanent hypoparathyroidism. The threshold value of Ca was detected to be 8.1 mg/dL and it was evaluated to be significant in terms of the prediction of permanent hypoparathyroidism ($p<0.05$). Moreover, a statistically significant difference was found in terms of the development of temporary and permanent hypoparathyroidism according to the number of nodules, thyroidism development, and central lymph node dissection ($p<0.05$). Based on these results, it is recommended that patients who have thyroidism and many nodules and who are performed central lymph node dissection in total thyroidectomy should be followed up for the development of hypoparathyroidism and Ca value should be considered while planning treatment.

Keywords: Thyroidectomy, postoperative hypoparathyroidism, permanent hypoparathyroidism, parathormone, calcium

SS-19

The comparison of the protective effects of intraperitoneal administration of calendula officinalis extract and hyaluronic acid anti-adhesion barrier in the prevention of postoperative intestinal adhesion in rats

Arif Emre[1], Mehmet Sertkaya[2], Ali İşler[1], Abdulkadir Yasir Bahar[3], Ahmet Necati Şanlı[1], Ali Özkömeç[1], Muhammed Ali Işık[1], İlhami Taner Kale[1]

[1]Department of General Surgery, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[2]Department of General Surgery, Viranşehir State Hospital, Şanlıurfa, Turkey
[3]Department of Pathology, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey

Objective: Intraabdominal adhesions that may develop after abdominal surgical interventions are still a cause of serious morbidity and mortality. In this study, we aimed to investigate and to compare the anti-adhesive effect of the hyaluronic acid adhesion barrier (HAAB) and the Calendula officinalis extract (COE) in rats in which we created experimental adhesion model.

Methods: Laparatomy performed laparotomy in 30 rats and induced postoperative intraabdominal adhesion by scraping the caecum of these rats. We divided the animals randomly into three equal groups, each consisting of 10 rats. Group 1 was the control group, and we created cecal abrasion and did not administer any substance. We performed HAAB in Group 2 following the cecal abrasion, and we performed COE intraperitoneally in Group 3 following the cecal abrasion. Approval for this study was received from Kahramanmaraş Sütçü İmam University Animal Experiments Local Ethics Committee.

Results: There was no statistically significant difference between the groups in terms of macroscopic adhesion scoring. When microscopic adhesion scores were compared according to the results of histopathological examination, the statistical difference between Group 1 and 2 was p=0.044 and significant. The value of p was 0.010 when Group 1 and group 3 were compared, and it was statistically significant. When the Groups 2 and 3 were compared, the value of p was 1 and statistically insignificant. Group 1 showed the highest score of adhesion between abdominal wall and intraabdominal organs.

Conclusion: This study has shown that COE and HAAB significantly reduce the incidence of intraabdominal peritoneal adhesions in cecal abrasion model rats. Although the mechanism is not clear, intraperitoneally administered COE prevented the development of adhesions. There was no statistically significant difference in the prevention of adhesion between COE and HAAB. However, even though COE is more advantageous than imported HAAB in terms of cost, toxicology studies must be performed before it is applied on humans.

Keywords: Calendula officinalis, hyaluronic acid, postoperative intra-abdominal adhesion

Table 1. Demographic distribution of macroscopic adhesion evaluation scores among the groups

Macroscopy	Calendula officinalis group	Adhesion barrier (hyaluroni acid) group	Control group
0. No adhesion	2 (20%)	3 (30%)	-
1. Thin or narrow, easily separable adhesion	3 (30%)	3 (30%)	4 (40%)
2. Thick adhesion limited in an area	3 (30%)	1 (10%)	2 (20%)
3. Thick adhesion that spreaded to a wide area	2 (20%)	3 (30%)	1 (10%)
4. Thick and large adhesions, adhesions in the anterior parts of the organs and/or posterior part of the abdomen	-	3 (30%)	-
Total	10 (100%)	10 (100%)	10 (100%)

Table 2. Demographic distribution of microscopic adhesion evaluation scores among the groups

Microscopy	Calendula officinalis group	Adhesion barrier (hyaluroni acid) group	Control group
0 No inflammation	-	-	5
1 Large cells, rare and scattered lymphocyte and plasma cells	4	6	4
2 Lymphocytes, neutrophile, eosinophile, and plasma cells that increased with large cells	6	3	1
3 Multiple mixed inflammation cells, presence of microabscess	-	1	-
Total	10	10	10

SS-20

Rare masses in the inguinal region

Şahin Kahramanca[1], **Turgut Anuk**[2]

[1]*Department of General Surgery, Kars State Hospital, Kars, Turkey*

[2]*Department of General Surgery, Kafkas University School of Medicine, Kars, Turkey*

Introduction: Inguinal region diseases include disorders from benign masses such as hernia, Amyand's hernia (AH), and cyst to malignant masses such as sarcoma and metastasis and it is treated surgically. In this study, we will present 10 different masses apart from hernia.

Case 1: A 47-year-old male patient with the complaint of pain+swelling in the right groin was operated due to the diagnosis of hernia. Non-enflamed Amyand's hernia was detected in the hernia sac and appendectomy+mesh herniorrhaphy was performed.

Case 2: A 37-year-old male patient having pain and swelling in the right groin was planned to be performed herniorrhaphy. Intraoperatively excised conglomerate lymphadenopathy was reported as dermatopathic LAP.

Case 3: In a 43-year old female patient who had been diagnosed with right inguinal hernia in an external center 6 years ago, a soft mass was palpated and she was operated. A 14x10cm cm cystic lesion attached to the round ligament was excised.

Case 4: A cystic mass was detected in a 87-year-old male patient who had not been recommended to undergo operation due to the diagnosis of right inguinal hernia and he was operated. The 7x5 cm cystic lesion was excised.

Case 5: A 10x8x3.5 cm cyst originating from the round ligament was excised in a 22-year-old female patient operated due to a painless swelling in her right groin. Her pathological evaluation was reported as epidermoid cyst, which is the 3rd case in the literature.

Case 6: In a 34-year-old male patient who applied with the complaint of pain and swelling in the right groin, a 6x5 cm mass was excised and his pathology was evaluated as Non-Hodgkin's lymphoma.

Case 7: In a 81-year-old male patient who had a swelling in the right groin for 3 years and had not been recommended to undergo surgery because of his advanced age, a 3x4 cm solid mass was excised. The result of pathology was reported as sarcoma.

Case 8: In a 44-year-old patient applying with the complaint of swelling in the right groin, a 10x8x5 and 4x2x2 cm conglomerate lymphadenopathy was detected in the inguinal exploration and it was excised. Pathological result was reported as Kikuchi-Fujimoto disease.

Case 9: In the ultrasonography of a patient, who had undergone cesarean section 3 years ago, had menstrual bleeding for 4 months, and had the complaints of increasing pain and swelling in the right groin, a 35 mm lesion was revealed. The lesion was operated and the pathological report was reported as endometriosis.

Case 10: A 11x7 cm cystic structure was observed in the operation of a 41-year-old female patient consulting with the complaint of swelling in the right groin.

Conclusion: In patients who are admitted due to the complaint of inguinal mass, many diseases apart from hernia should be kept in mind in the differential diagnosis and surgery should be planned after doing detailed preliminary examination.

Keywords: Inguinal region, Amyand's hernia, non- Hodgkin's lymphoma, Kikuchi-Fujimoto disease, sarcoma, endometriosis

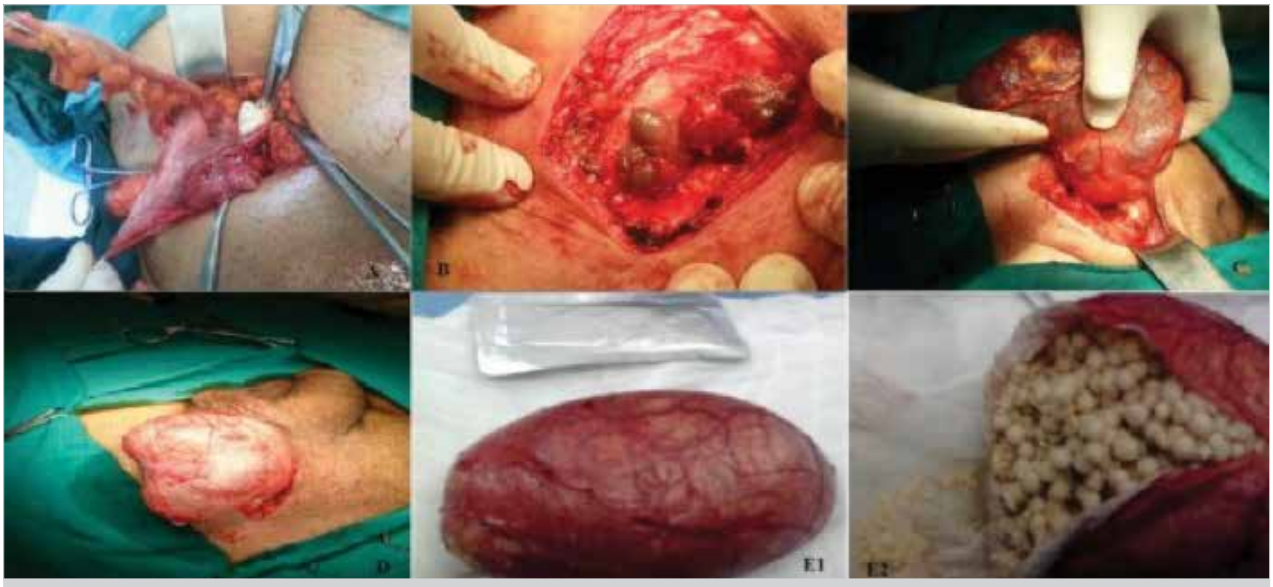

Figure 1. (a) Amyand's hernia, (b) dermatopathic LAP, (c) inguinal giant cyst (female), (d) inguinal giant cyst (male), (e) epidermoid cyst originating from the round ligament

Figure 2. (f) Non-Hodgkin's lymphoma, (g) soft tissue sarcoma, (h) Kikuchi-Fujimoto disease, (ı) endometriosis, (j) cystic lesion

SS-21

Protective effects of estrogen and estrogen receptors in testicular injury induced by torsion/detorsion in rats

Sevil Arabacı Tamer[1], Şule Arabacı[2], Selin Çiftçi[2], Sena Akın[2], Elif Sarı[2], M. Kutay Köroğlu[3], Feriha Ercan[3], Meral Yüksel[4], Alper Yıldırım[1], Özge Dağdeviren Çevik[5], Berrak Ç. Yeğen[1]

[1]Department of Physiology, Marmara University School of Medicine, İstanbul, Turkey
[2]Student at School of Medicine, Marmara University, İstanbul, Turkey
[3]Department of Histology and Embryology, Marmara University School of Medicine, İstanbul, Turkey
[4]Vocational School of Health Services, Marmara University, İstanbul, Turkey
[5]Department of Biochemistry, Cumhuriyet University School of Pharmacy, Sivas, Turkey

Objective: Testicular torsion which occurs due to the rotation of spermatic cord around itself spontaneously or as a result of trauma requires immediate surgical treatment. Ischemia/reperfusion injury caused by testis torsion/detorsion (T/D) adversely affects fertility. Estrogen and estrogen receptor (ER) agonists with antioxidant and anti-inflammatory effects have been shown to play an important role in the regulation of testis development and function. In our study, it was aimed to investigate the protective effects of estrogen and ER agonists in ischemia/reperfusion injury and testicular dysfunction that develop in the testis as a result of torsion.

Methods: Torsion (T/D; n=32) or only scrotal incision (control; n=8) was performed in Sprague-Dawley male rats under anesthesia for two hours. Blood flow was measured with laser Doppler in basal condition and after torsion and detorsion. Following the detorsion, 17ß-estradiol (E2), ERα (propylpyrazol-triol/PPT) or ERß (Diarylpropionitrile/DPN) agonist or carrier injections were subcutaneously administered (1 mg/kg/day) in rats for 3 days. At the end of the third day, intracardiac blood was taken and the rats were sacrificed. The level of testosterone was measured in serum by ELISA. Testosterone-activated androgen receptor (AR) and the expression levels of apoptosis markers caspase-3, caspase-3 activity and cleaved (clv) caspase-3 were evaluated in testis tissues by using western blotting. The statistical analysis was performed with ANOVA and Student's t-test.

Results: On the 3rd day following the torsion, it was observed that the decreased testicular blood flow increased in T/D groups receiving E2 and DPN treatment ($p<0,05$). When compared with the control group, the decrease in serum testosterone levels of all T/D groups reached a statistical significance only in patients receiving PPT and E2 therapy ($p<0.01$-0.001). While AR expression in testicular tissue decreased with torsion, all treatment applications increased the AR expression in comparison to T/D group ($p<0.001$) ($p<0.05$). The expressions of caspase-3, caspase-3 and clv-caspase-3, which are apoptotic markers in the tissue, were found to be increased in the T/D group receiving carrier therapy when compared to the control group ($p<0.001$); however, all treatment regimens were observed to suppress these expressions ($p<0.001$).

Conclusion: Our findings suggest that testosterone level and the expression of androgen receptor decrease after 3 days of reperfusion of ischemic testis caused by the torsion, and the estrogen and ER receptor agonists applied in detorsion period may have beneficial effects in protecting fertility by inhibiting apoptosis.

Keywords: Testicular torsion, estrogen, DPN, PPT, inflammation, apoptosis

SS-22

Treatment management of a late-onset passage problem in a patient treated for gastric cancer with laparoscopic method

Emre Günay, Hasan Abuoğlu, Tolga Müftüoğlu

Health Sciences University, Haydarpaşa Numune Training and Research Hospital, İstanbul, Turkey

A 45-year-old male patient was admitted to the Department of General Surgery due to the complaints of pain in the epigastric region and weakness. Esophagogastroduodenoscopy was planned for the patient who was found to have iron deficiency anemia in the examinations. An ulcer that was 1 cm in diameter and at the same level with the mucosa on the incisura angularis was seen during the procedure. There was a hyperemic appearance around it and its center was covered with fibrin exudate. The patient, who was diagnosed with "poorly cohesive" (signet-ring cell and non-signet ring cell) carcinoma in the histopathologic examination of the multiple biopsies taken from the ulcer margin and in whom no additional pathology was detected in the abdomen in cross-sectional radiological examinations, was taken to surgery after the preoperative preparations, and laparoscopic subtotal gastrectomy and Roux-NY gastrojejunostomy were performed. Perioperative esophagogastroduodenoscopy was performed to pinpoint the tumor site. Histopathological examination of the resection material revealed that the tumor was invading into the muscularis propria (pT2) and carcinoma metastasis (N3a) was detected in 11 of 20 lymph nodes that were removed. The patient was referred to the Department of Oncology for adjuvant treatment. In the esophagogastroduodenoscopy of the patient, in whom nausea and vomiting complaints started approximately 6 months after the beginning of oral food intake, it was ob-

Figure 1. Endoscopic view

Figure 2. Endoscopic view

Figure 3. Endoscopic view

Figure 4. Esophagus-stomach-duodenum graph

served that the gastrojejunostomy anastomosis was decentralized and it hardly allowed the passage of the endoscopy. However, there was no tumoral formation or no pathology that could lead to obstruction in the remnant stomach and anastomosis line. In the passage radiography of the upper bariatric gastrointestinal system, it was seen that the contrast material was puddling in the remnant stomach and there was no passage to the jejunum. The patient was scheduled for surgery again. Laparoscopic exploration revealed that the remnant stomach adhered to the anterior wall of the abdomen at the level of the gastrojejunostomy anastomosis. The adhesions were released and the remnant stomach was separated from the abdomen wall. There was no other pathology that could lead to obstruction in the abdomen. Millimetric multiple suspicious implant foci were seen in peritoneal surfaces. Biopsy specimen was taken for the frozen section examination. Carcinoma metastasis was reported in the result of the histopathological examination. It was observed that the patient tolerated oral food intake in the postoperative period and the patient was referred to the Department of Oncology for the continuation of adjuvant therapy.

Keywords: Endoscopy, laparoscopy, stomach, "poorly cohesive" carcinoma

Figure 5. Esophagus-stomach-duodenum graph

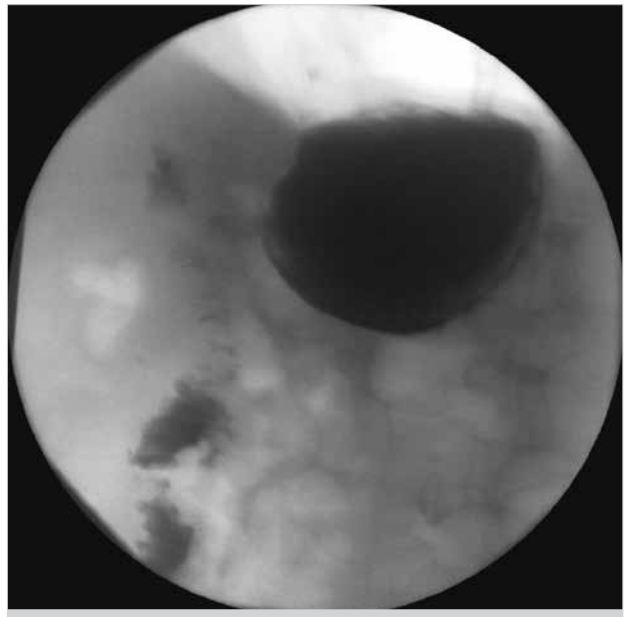

Figure 6. Esophagus-stomach-duodenum graph

SS-23

Histopathological results of BI-RADS 4 lesions of the breast

Selçuk Köksal, Mehmet Hayri Erkol, Bahri Özer, Mustafa Şit, Semih Yaman, Muhammet Fatih Keyif, Ferdi Bolat, Elif Yalçın

Department of General Surgery, Abant İzzet Baysal University School of Medicine, Bolu, Turkey

Breast cancer is encountered in one of every four women across the world and it is the most common cause of death among women. Early diagnosis is very important for survival and increasing quality of life of patient. For the establishment of diagnosis, radiological techniques are routinely used after anamnesis and physical examination. The most frequently used diagnostic techniques include mammography, ultrasonography, and sometimes magnetic resonance imaging. For global standardization, the BI-RADS system has been developed for evaluating a mass in the breast. According to this classification, BI-RADS 1 and 2 lesions require annual follow-ups and BI-RADS 3 lesions require 6-month follow-ups and the decision of biopsy is left to the clinician. On the other hand, biopsy is recommended for BI-RADS 4 and 5 lesions. This study aimed to compare histopathological and radiological results of patients who consulted with the complaint of mass in the breast and radiologically had BI-RADS 4a, 4b, and 4c lesions. In the study, 331 patients who were admitted to the Department of General Surgery in Abant İzzet Baysal University Medical Faculty due to mass in the breast between 2010 and 2016 and whose breast ultrasonographies revealed BI-RADS 4a, 4b, and 4c lesions were evaluated retrospectively. Radiological and histopathological results of all patients were compared. The patients were put into 3 groups as Group 1 (patients with BI-RADS 4a; n=208), Group 2 (patients with BI-RADS 4b; n=42), and Group 3 (BI-RADS 4c; n=81). Benign and malignant histopathological results of these patients were compared. In Group 1, 77.8% of the patients were benign and 22.2% were malignant. In Group 2, 45.2% were benign and 54.8% were malignant. In Group 3, 23.5% were benign and 76.5% were malignant. In this study, it was observed that malignancy potential highly increased from BI-RADS 4a to BI-RADS 4c.

Keywords: BI-RADS, histopathology, breast cancer

S-24

Inguinal pain not regressing after laparoscopic inguinal hernia repair: A series of 124 patients

Amil Hüseynov, Muhittin Yaprak, Ali Avanaz, Alim Akbarov
Department of General Surgery, Akdeniz University Hospital, Antalya, Turkey

Objective: Laparoscopic inguinal hernia repair is preferred more often than open techniques because of shortened postoperative hospitalization, its efficiency, and less postoperative chronic inguinal pain. Besides that, postoperative non-regressing inguinal pain develops in association with probable nerve entrapment in some patients.

Methods: Postoperative chronic pain symptoms and intraoperative data of the patients were collected through a standard assessment form. Long-term effectiveness was detected by using pain scores, patient satisfaction, and quality of life questionnaire. The Wilcoxon Signed-Rank test was employed for determining significant differences between preoperative and postoperative pain scores.

Results: This study included 124 patients who were performed laparoscopic inguinal hernia repair between March 2015 and May 2017 (121 male, the mean age: 51 years). The median duration of surgery was 86 minutes. Switch to open surgery was required in one patient. No complication except the development of subcutaneous hematoma was observed in one patient in the postoperative period. In 3 patients, postoperative pain scores not regressing in the postoperative first two months (median) decreased from 8 to 4 after mesh excision, removal of tucker, and reoperation ($p<0.01$). Satisfaction level was good and/or excellent in 2 patients.

Conclusion: In the patients undergoing laparoscopic inguinal hernia repair in our study, shorter length of hospitalization and earlier return to social life were the most important advantages of this technique compared to open surgery. On the other hand, despite lower postoperative pain symptoms in patients, non-regressing severe inguinal pain can occur in early postoperative period in association with tucker injury or inguinal nerve entrapment in some patients. In these patients, laparoscopic removal of mesh and reoperation by an experienced surgeon is an applicable, safe, and effective choice.

Keywords: Laparoscopic inguinal hernia repair, inguinal pain, TAPP repair

SS-25

The relationship of angiogenic factors with cancer and obesity

Sertaç Ata Güler[1], Muhittin Yürekli[2], Gökhan Pösteki[1], Atilla Mert Yürekli[1], Turgay Şimşek[1], Nuh Zafer Cantürk[1]
[1]*Department of General Surgery, Kocaeli University School of Medicine, Kocaeli, Turkey*
[2]*Department of Biology, İnönü University School of Medicine, Malatya, Turkey*

Obesity is one of the factors that cause the formation of tumor. Oxygen and nutritional support are needed for the development of tumor. When these are supplied, tumor cells induce the formations of new vessels through various chemical signals and growth signals. In this study, preoperative and postoperative changes in some angiogenic factors depending on cancer and obesity were compared. Serum samples were taken from the patients preoperatively and at the postoperative 48th hour and adrenomedullin, vascular endothelial growth factor, hypoxia-inducible factor 1-alpha, and matrix metalloproteinase-2 levels were investigated in the patients with and without the diagnosis of cancer. The ELISA method was used for analyzing angiogenic factors. It was found that the levels of angiogenic factors were higher in obese and cancer patients compared to non-obese and non-cancerous patients. It seems that high angiogenic factor levels in obese and cancer patients were also found to be higher in non-cancerous but obese individuals. To highlight anti-angiogenic factors in cancer treatment and to use them as an epigenetic phenomenon should seriously be considered. Instead of methods, such as some medical treatments and radiation therapy, with severe side-effects, anti-angiogenic therapy should be used in difficult surgeries.

Keywords: Angiogenic factors, obesity, cancer

SS-26

Analysis of factors affecting the pregnancy outcomes in pregnant women complicated with hydatid cyst disease: Algorithm proposal for the approach and treatment

Sebahattin Çelik[1], Ozan Okyay[1], Erbil Kahraman[2], Numan Çim[2], Özlem Zeliha Sert[3], Tuba Yangılar Okyay[2]

[1]Department of General Surgery, Yüzüncü Yıl University School of Medicine, Van, Turkey

[2]Department of Gynecology and Obstetrics, Yüzüncü Yıl University School of Medicine, Van, Turkey

[3]Department of General Surgery, Erciş State Hospital, Van, Turkey

Objective: The coexistence of pregnancy and cyst hydatid disease is still a serious problem in developing countries. While there are separate approaches and treatment standards for these two conditions (pregnancy and hydatid cysts), it is not clear how to approach these two conditions when they coexist. It was aimed to determine the factors affecting the pregnancy outcomes and to develop an approach-treatment algorithm in the cases of pregnants with cyst hydatid.

Methods: This study was planned as a prospective observational-two-centered study. Pregnant women with hydatid cyst disease were included in the study between 2015 and 2017. Patient age, gestational week, type of delivery, time of delivery (term & preterm), anatomic location of the cyst, cyst type and diameter according to the classification that was made through ultrasonography, amount of growth observed in cyst, and the treatment applications during pregnancy were investigated as independent factors. Pregnancy and postnatal outcomes of the mother and fetus were taken as dependent variables. The results were analyzed by using the nonlinear principal components analysis and Chi-Square test.

Results: Twenty-seven cases with hydatid cyst during pregnancy were detected out of 12926 pregnancies during 2-year observation and follow-up (hospital incidence: 0.2%). When the diagnosis of cyst hydatid disease was made, the mean age was 28.4±6.4 and the mean gestational week was 10.5±5.5. There was at least one problem in 13 cases (48.1%) regarding the fetus. Cyst-associated empyema was observed only in one mother. In the first trimester, abortus was observed in 4 cases due to the use of Albendazole. Eighteen of the cases had active cysts (Gharbi type; 1, 2, 3). In cases with active cyst, the mean growth of 22.63±16.4 mm was observed in the cyst diameter during pregnancy, and preterm delivery was observed in 3 cases. Surgery was performed in 5 cases and PAIR was performed in 3 cases during pregnancy. Active cyst, rapid growth, and the use of Albendazole were found to be associated with the outcomes.

Conclusion: The coexistence of cyst hydatid with pregnancy poses a problem mostly for the fetus. The use of Albendazole in the first trimester seems to be associated with abortus. While close observation is sufficient in most cases, PAIR or surgical intervention seems to be safe between the 20th and 24th weeks in cysts that are active and over 10 cm in diameter and in rapidly growing or symptomatic cases.

Keywords: Pregnancy, hydatid cyst, treatment algorithm

SS-27

Comparison of cardiotoxic effects of the standard treatment and Deguelin in an experimental in vivo metastatic lung cancer model

Hakan Cengiz[1], Güner Gamze Beyoğlu[1], Mehmet Ali Koçdor[1,2], Seda Özbal[3], Nilgün Yener[4], Zeliha Kılıç[1], Meral Karaman[5,6], Duygu Gürel[7], Emine Çağnur Ulukuş[7], Tarık Salman[1,8], Hilal Koçdor[2,9]

[1]Department of Molecular Medicine, Institute of Health Sciences, Dokuz Eylül University, İzmir, Turkey

[2]Department of General Surgery, Dokuz Eylül University School of Medicine, İzmir, Turkey

[3]Department of Histology and Embrylogy, Dokuz Eylül University School of Medicine, İzmir, Turkey

[4]Department of Medical Biochemistry, Dokuz Eylül University School of Medicine, İzmir, Turkey

[5]Department of Medical Microbiology, Dokuz Eylül University School of Medicine, İzmir, Turkey

[6]Department of Laboratory Animal Science, Institute of Health Sciences, Dokuz Eylül University, İzmir, Turkey

[7]Department of Pathology, Dokuz Eylül University School of Medicine, İzmir, Turkey

[8]Department of Medical Oncology, Katip Çelebi University School of Medicine, Atatürk Training and Research Hospital, İzmir, Turkey

[9]Department of Basic Oncology, Dokuz Eylül University Oncology Institute, İzmir, Turkey

Objective: The aim of this study was to investigate the cardiotoxic effects of Docetaxel that is used in standard treatment and Deguelin, which is a chemotherapeutic candidate molecule, in experimental in vivo metastatic lung cancer model.

Methods: The experimental design consisted of the groups of Control, Cancer, Cancer+DMSO, Cancer+Deguelin, Cancer+Docetaxel, and Cancer+Combination. A metastatic lung cancer model was established with Lewis Lung Carcinoma cell line in 42 adult C57BL/6 female mice. Seven days after the injection of cancer cell lines, the doses that were determined previously were applied every other day for 6 times in the cell lines. Sacrification procedure was performed on the 21st day. Heart tissues were taken in Eppendorf tubes (PBS pH: 7.4) and homogenized. Oxidative stress index (OSI) (RelAssay TAS & TOS Kit) and superoxide dismutase enzyme activity (Sigma SOD Assay Kit) analyzes were performed to determine the cardiotoxic effects. Heart tissue sections of all groups were stained with hematoxylin & eosin and examined in terms of ischemia and necrosis. The significance among the groups was determined by one-way ANOVA and the pairwise comparisons were performed using Holme-Sidak analysis. Statistical significance was accepted as $p<0.05$.

Results: Tumor development was statistically significantly lower in the treatment group with Deguelin than in the other groups. There was no macroscopically abnormal appearance in the heart tissues of all the subjects. In the docetaxel group, slowing and weakness were observed in the movements due to the treatment. There was no statistically significant difference between the groups in the Oxidative Stress Index (OSI) and superoxide dismutase (SOD) enzyme activity analyses that were performed on tissue homogenates ($p> 0.05$). Histochemical analysis showed no ischemia or necrosis in any group.

Conclusion: In our experimental model in which docetaxel, which was applied in the standard treatment of lung cancer, and Deguelin, which was a chemotherapeutic candidate molecule, were administered at the doses determined for experimental animals, it was observed that the agents used considering their histochemical and oxidative stress markers were not superior to each other in terms of cardiotoxic effects. We think that Deguelin, which we observed to have no additional cardiotoxic burden when used alone in vivo or in combination, would be a promising agent to be used in lung cancer.

Keywords: Deguelin, docetaxel, cardiotoxic effect, experimental lung cancer model, C57BL, lewis lung carcinoma

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SS-28

Investigation of anti-tumor activity of the momordica charantia extract on breast cancer cell lines

Enes Emre Akman[1], Güneş Özen[2], Esin Aktaş[3], Günnur Deniz[3], Dürdane Serap Kuruca[4], Neslihan Cabıoğlu[5]

[1]Department of Chemistry, Yıldız Technical University School of Arts and Science, İstanbul, Turkey

[2]Department of Molecular Medicine, İstanbul University, Aziz Sancar Experimental Medicine and Research Institute, İstanbul, Turkey

[3]Department of Immunology, İstanbul University, Aziz Sancar Experimental Medicine and Research Institute, İstanbul, Turkey

[4]Department of Physiology, İstanbul University Istanbul School of Medicine, İstanbul, Turkey

[5]Department of General Surgery, İstanbul University Istanbul School of Medicine, İstanbul, Turkey

Objective: Momordica charantia extract (MCE) is an anti-cancer agent whose anti-tumor effects have recently been discovered. In this study, anti-tumor effects of the Momordica charantia extract on estrogen receptor (ER)-positive MCF-7 and ER-negative MDA-MB-231 human breast cancer cell lines were investigated.

Methods: Immature, green momordica charantia fruit was cold pressed and the extract was obtained through centrifugation method. The prepared momordica charantia extract was administered at different doses on cell lines at different times such as 24th, 48th and 72nd hours. Cytotoxic activity was determined by MTT (3-(4.5-Dimethylthiazole-2-yl) -2.5-diphenyltetrazolium bromide) method. In addition, the apoptosis and necrosis ratios of breast cancer cell lines to which momordica charantia extract was applied were examined using the Annexin V Apoptosis Detection Kit with PI (Biolegend 640914, USA) and a flow cell cytometry (fluorescence activated cell sorter FACS; BD Pharmingen, USA).

Results: It has been observed that momordica charantia extract markedly inhibited cell proliferation of the breast cancer cell lines and induced apoptosis in the MTT and Annexin V & PI experiments that were performed. In the MCF-7 and MDA-MB-231 cell series, the IC50 value of the momordica charantia extract was found to be 1%. In flow cytometry analyses, a significant increase was observed in apoptotic fractions depending on dose increase in each 2 cell series treated for 48 hours with the momordica charantia extract.

Conclusion: Our first findings suggest that momordica charantia extract is an effective and promising anticancer agent on estrogen receptor positive and negative breast cancer cell lines. For this reason, momordica charantia can be an appropriate dietary supplement in patients with breast cancer.

Keywords: Anti-cancer effect, momordica charantia, breast cancer

Table 1. Cytotoxic activity of momordica charantia extract in MCF-7 and MDA-MB-231 cell series according to MTT experiment

MCF-7	0.5%	1%	2%	5%
24 hours	49.15±18.74	46.80±21.71	30.0±13.5	8.81±4.63
48 hours	65.35±20.12	46.46±1.7	21.0±10.41	10.44±3.78
72 hours	73.10±33.44	50.68±20.4	24.6±18.19	6.35±0.86
MDA-MB-231				
24 hours	53.28±19.46	52.56±16.91	31.31±5.82	7.91±2.89
48 hours	52.58±8.12	43.13±4.87	23.75±4.30	7.94±1.77
72 hours	67.81±12.31	46.95±5.69	32.20±10.57	2.78±0.74

Table 2. Anti-apoptotic effect of momordica charantia extract in MCF-7 and MDA-MB-231 cell series according to annexin V&PI apoptosis detection assay and flow cytometry analysis

MCF-7	Control	0.5%	1%	2%	5%
% Vitality	69.81	60.45	61.6	42.32	11.23
% Apoptosis	24.72	36.6	25.21	52.32	56.19
% Necrosis	5.47	2.95	13.19	5.36	32.58
MDA-MB-231					
% Vitality	93.12	72.38	67.75	53.8	20.3
% Apoptosis	4.42	25.9	30.43	34.51	49.11
% Necrosis	2.46	1.72	1.82	11.69	30.58

SS-29

Does specification affect the results of thyroid surgery?

Mustafa Girgin[1], Burhan Hakan Kanat[2], Ferhat Çay[3], Yavuz Selim İlhan[1]

[1]Department of General Surgery, Fırat University School of Medicine, Elazığ, Turkey

[2]Department of General Surgery, Elazığ Training and Research Hospital, Elazığ, Turkey

[3]Department of General Surgery, Midyat State Hospital, Mardin, Turkey

Objective: In this study, it was aimed to analyze surgical procedures performed by the same team dealing with thyroid surgery retrospectively and to present the result with literature.

Methods: In the study, 580 patients who were performed thyroid surgery by the same team in our clinic between February 2010 and September 2017 were evaluated retrospectively. Ages, genders, and preoperative analyses of the patients were examined. The surgeries that were performed, intraoperative and postoperative complications, and histopathological results of thyroid specimen were evaluated.

Results: Of the patients, 402 were female and 159 were male. The mean age was 50.1 years. The most common complaints for consulting to hospital were swelling in the neck at the rate of 86% and swallowing difficulty/feeling of a lump in the throat at the rate of 28%. Of 480 patients were performed total thyroidectomy (85%), 59 were performed hemithyroidectomy (11%), and 22 were performed completion thyroidectomy (4%). Benign and malignant pathologies were detected in 425 (76%) and 136 (24%) patients, respectively. In the distribution of malignant pathologies, papillary thyroid carcinoma was reported in 106 (19%) patients, Hurthle cell thyroid carcinoma in 20 (3.5%) patients, medullary thyroid carcinoma in 5 (0.8%) patients, follicular thyroid carcinoma in 4 (0.6%) patients, and non-Hodgkin lymphoma in 1 (0.2%) patient. Temporary hypocalcaemia developed in 82 (15%) patients. Permanent hypocalcaemia developed in 3 (0.5%) patients, seroma in 10 (2%) patients, temporary recurrent laryngeal nerve paralysis in 15 (3%) patients, and bleeding in 12 (2%) patients. In one of patients undergoing completion thyroidectomy, permanent nerve damage occurred.

Conclusion: As in all surgical procedures, results consistent with the literature can be obtained by more experienced teams working more specifically.

Keywords: Total thyroidectomy, thyroidectomy complications, histopathology

SS-30

Investigation of leptin and glucagon-like peptide levels in the stomaches of pre-menopausal and post-menopausal rats undergoing sleeve gastrectomy

M. Ümit Uğurlu[1], Hayyam Babayev[1], Sevil Arabacı Tamer[2], Alper Yıldırım[2], Damla Kayalı[3], Feriha Ercan[3], Cumhur Yeğen[1], Berrak Yeğen[2]

[1]Department of General Surgery, Marmara University School of Medicine, İstanbul, Turkey

[2]Department of Physiology, Marmara University School of Medicine, İstanbul, Turkey

[3]Department of Histology and Embryology, Marmara University School of Medicine, İstanbul, Turkey

Objective: Most of patients who are performed sleeve gastrectomy (SGx) are women, more than half of whom are in the postmenopausal period. Leptin, which is released by cells in adipose tissue, and glucagon-like peptide-1 (GLP-1), which is secreted in the small intestine, are effective in appetite and the consumption of energy. Similarly, estrogen, which is a strong anorectic hormone, affects the regulation of appetite and distribution of adipose tissue like leptin. Various studies demonstrated that serum leptin levels decreased but GLP-1 levels increased after SGx. In this study, it was aimed to investigate the effects of (1) the absence of oestrogen due to overiectomy, (2) the application of SGx, and (3) treatment with estrogen or estrogen agonists (ER) on the levels of leptin and GLP-1 in the stomach of the rats.

Methods: Non-obese Sprague-Dawley rats (n=128) were divided into two groups and performed bilateral ovariectomy (OVx) or fake (F)-OVx with laparotomy. After 8 weeks, SGx (removing 70% of the stomach with stapler) or F-SGx (laparotomy) was performed in the rats in both groups. The groups were re-divided into 4 subgroups as OVx+SGx, F-OVx+SGx, OVx+F-SGx, and F-OVx+F-SGx and they were treated with 17-β estradiol benzoate (E2) or ERα (PPT, propyl pyrazole triol) or ERβ (DPN, diarylpropionitrile) agonist (1mg/kg/day) or carrier for 3 weeks. The ELISA test was used for measuring oestradiol levels in serums and leptin and GLP-1 levels in the stomachs of the rats that were decapitated at the end of the third week. Statistical analyses were performed by using ANOVA and Student's t-tests.

Results: Oestradiol levels were found to be lower in all OVx groups compared to F-OVx groups, which confirms the development of menopause ($p<0.01$-0.001). Leptin and GLP-1 levels in the stomach were found to be increased in OVx groups undergoing F-SGx compared to all F-OVx groups ($p<0.001$), but this increase was less in OVx+F-SGx group undergoing oestrogen replacement with E2. On the other hand, leptin and GLP-1 levels in the stomach were significantly lower in the OVx rats whose stomach tissue was decreased with SGx ($p<0.001$).

Conclusion: The results of the study revealed that GLP-1 and leptin levels increased in the absence of oestradiol and SGx, which reduces the stomach tissue, decreased this endocrine response of the stomach. This opposite relationship between serum oestradiol and expressions of appetite regulating hormones in the stomach should be investigated in further studies and its clinical importance in post-menopausal obese patients should be revealed.

Keywords: Sleeve gastrectomy, glucagon-like peptide-1 (GLP-1), leptin, estrogen

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SS-31

Effectiveness of imipenem and curcumin on carbapenem-resistant Escherichia coli-induced peritonitis model in rats

İlhan Bali[1], Mehmet Aziret[2], Ufuk Coşkunkan[1]

[1]Deparment of General Surgery, Namık Kemal University School of Medicine, Tekirdağ, Turkey

[2]Deparment of General Surgery, Sakarya University Training and Research Hospital, Sakarya, Turkey

Objective: Curcumin is characterized by anti-bacterial, anti-inflammatory and antioxidant properties. The purpose of the study is to investigate the effects of curcumin and imipenem on carbapenem-resistant Escherichia coli-induced peritonitis in rats.

Methods: Thirty two Wistar-Albino male rats with a weight of 250 to 300 g were used in the study. They were randomly divided into four groups (n=8 for each group): sham operated group (group I), rats infected with carbapenem resistant E.coli (control group) (group 2), imipenem group (rats infected with E.coli that received intraperitoneal injection of imipenem) (group 3), and the imipenem + curcumin group (rats infected with E coli that received intraperitoneal injection of imipenem and were fed on curcumin) (group 4). The rats were sacrified, and peritoneal tissues samples were harvested for biochemical analyses and histopathologic examination. Total oxidant status (TOS), total antioxidant status (TAS), tumor necrosis factor-a (TNF-a), and interleukin-6 (IL6) were measured.

Results: The most common inflammation in peritoneum was detected in control group than other groups. The level of TNF-a significantly decreased in imipenem-curcumin group compared with control group and imipenem group ($p<0.05$). The level of IL-6 significantly decreased in imipenem-curcumin group compared with control group and imipenem groups ($p<0.05$). The imipenem+curcumin combination significantly decreased TOS and OSI ($p<0.001$ and $p<0.001$, respectively) and increased TAS ($p=0.014$).

Conclusion: Our findings indicate that combined of curcumin and imipenem is effective treatment option in an animal model of carbapenem-resistant Escherichia coli-induced peritonitis.

Keywords: Carbapanem-resistant E. coli, curcumin, imipenem, peritonitis

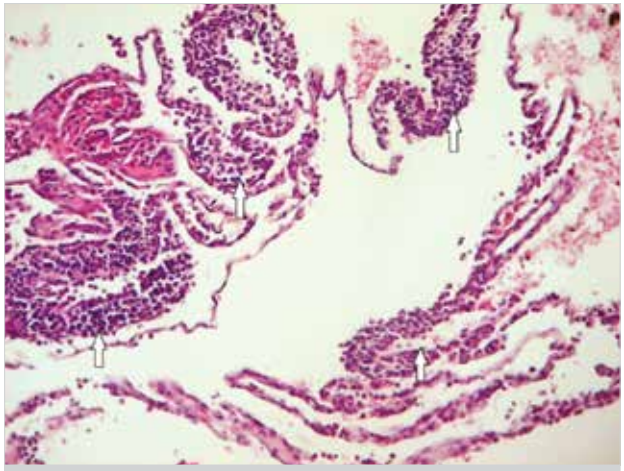

Figure 1. The severe inflammation in control group (arrows)

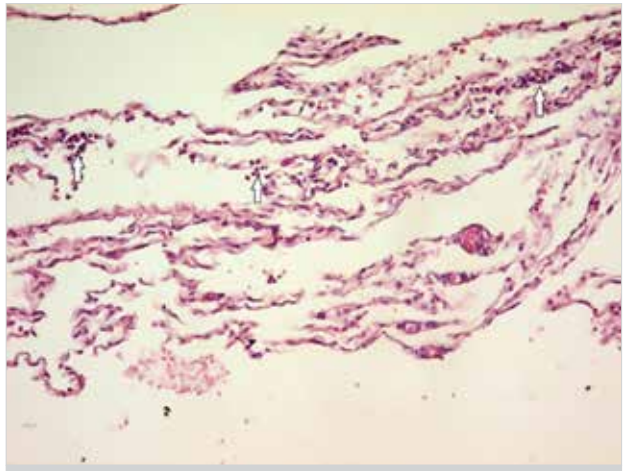

Figure 2. The mild inflammation in imipenem and curcumin group (H&Ex200) (arrows)

SS-32

The effect of Chitin material on the prophylaxis of adhesions associated with the use of intraperitoneal polypropylene mesh

Arif Hakan Demirel[1], Kazım Çağlar Özçelik[2], Sevil Vural[3], Ulvi Murat Yüksel[4]

[1]Department of General Surgery, Health Sciences University, Ankara Training and Research Hospital, Ankara, Turkey
[2]Department of Pathology, Yıldırım Beyazıt University, Yenimahalle Training and Research Hospital, Ankara, Turkey
[3]Ankara University School of Veterinary Medicine, Ankara, Turkey
[4]Department of General Surgery, Ankara Oncology Hospital, Ankara, Turkey

Objective: The most frequently used material for the repair of abdominal wall defects is polypropylene mesh. In this study, it was aimed to evaluate polypropylene mesh covered by chitin material, which is an anti-adhesive mucopolysaccharide, and the effect of fluid chitin on the occurrence of adhesion induced by polypropylene mesh.

Methods: Thirty male Wistar Albino rats were randomized into 3 groups. Group 1 included those whose adbominal defects were closed only with polypropylene mesh; Group 2 consisted of those that were applied fluid chitin with polypropylene mesh; and Group 3 included those for which a film chintin was applied as a barrier into the inner surface of polypropylene mesh that contacted the abdomen. In the groups, polypropylene mesh separating from the fascia and changing its location and shape, foreign body granulomas between the material and abdominal structures, rupture pressures of the material, and other morbidities were observed and evaluated.

Results: The number and thickness of adhesions were observed to be significantly higher in Groups B and C than in Group A ($p<0.005$). However, there was no statistically significant difference between Groups B and C in terms of adhesion development and mean diameters of adhesions. Although no statistically significant difference was found with regard to the intraabdominal organ involvements of adhesions, pancreas and large intestine adhesions in Group C drew attention. Moreover, there was no statistical difference among the groups in terms of mesh rupture pressure.

Conclusion: Contrary to expectations, no positive effect of chitin material, which is an anti-adhesive substance applied with polypropylene mesh for the closure of abdominal defects, on the prevention of adhesion development was detected in our study.

Keywords: Adhesion, chitin, mesh, polypropylene

Table 1. Grading histopathological findings that were found according to the groups

	Histopathological findings							
Groups	Presence of granuloma	Degeneration /necrosis in the muscle tissue	Fibrosis in the muscle tissue	Inflammatory cell infiltration in the muscle tissue	Inflammatory cell infiltration in the adiposis tissue	Vascularization	Bleeding	Adhesion into the internal organs A
++	++/+++	++/+++	++/+++	++/+++	+/++	+	-	
B	++	+++	+++	++/+++	++/+++	+/++	+	-
c	++	++/+++	+/++	++/+++	++/+++	+	-	++

SS-33

Experimental acute and chronic pancreatitis model formed by biliopancreatic ductal injection of ethanol

Özgül Düzgün, Sema Yüksekdağ, Hakan Çakıt, Süleyman Atalay, Metin Yücel, Ethem Ünal

Department of General Surgery, Health Sciences University, Ümraniye Training and Research Hospital, İstanbul, Turkey

Objective: This study aimed to establish an optimal experimental animal model that would reflect the clinical severity of the disease in the evaluation of acute and chronic pancreatitis. The etiophysiopathogenesis of acute and chronic pancreatitis is still controversial. Similar experimental models need to be developed so that target-based treatments can be performed and grading of the disease could be made for treatment response. In our study, we present an experimental pancreatitis model formed by the injection of ethyl alcohol through biliopancreatic duct, which we developed as a cheap and easily repeatable method.

Methods: Seventy Wistar Albino rats were divided equally into 7 different groups as sham group, control group (Group I), acute pancreatitis groups formed by the injection of 20%, 48% and 80% ethanol, respectively, using insulin injector (1 cm^3) through the main biliary duct that was suspended (Groups II, III and IV), and chronic pancreatitis groups formed by 20%, 48% and 80% ethanol injection (Group V, VI and VII). Acute pancreatitis groups were sacrificed on the postoperative 3rd day, and the control group and chronic pancreatitis groups were sacrificed on the 7th day. Paraffin sections were stained with HE and histopathological evaluation was performed. In statistical analysis performed with Mann-Whitney U and Tukey tests, the value of $p<0.05$ was considered significant.

Results: Mortality and morbidity were not observed in the Groups I-VI. Group VII had a mortality rate of 30% and multifocal necrosis was detected due to long duration of high doses during the autopsy. Acute pancreatitis was not detected in Group I. Normal pancreas was observed at a rate of 80% and acute pancreatitis at a rate of 20% in Group II. Neutrophil infiltration, interstitial edema and acute pancreatitis characterized by focal necrotic areas developed in all rats in Group III (100%). While 70% acute and 30% chronic pancreatitis developed in group IV, 20% normal pancreas, 50% acute and 30% chronic pancreatitis were found in Group V. Chronic pancreatitis, which is characterized by interstitial fibrosis, lymphocytic infiltration, ductal dilatation, acinar atrophy and periductal hyperplasia, was observed in all rats in Group VI (100%). The most successful rates were achieved in Groups III and VI with 48% ethyl alcohol ($p<0.05$).

Conclusion: We think that the experimental acute and chronic pancreatitis model that we formed by intrabiliopancreatic injection of 48% ethanol can be used as a successful method.

Keywords: Ethyl alcohol, acute pancreatitis, chronic pancreatitis

Table 1. The rates of pancreatitis development in all groups

All groups (n=70)	Group I (n=10)	Group II (n=10)	Group III (n=10)	Group IV (n=10)	Group V (n=10)	Group VI (n=10)	Group VII (n=10)
Normal pancreas	10* (100%)	8* (80%)	0	0	2 (20%)	0	0
Acute pancreatitis	0	2 (20%)	10* (100%)	7* (70%)	5* (100%)	0	0
Chronic pancreatitis	0	0	0	3 (30%)	3 (30%)	10* (100%)	7* (70%)

Mortality (n=3), only in Group VIII, *p<0.05

SS-34

Four-year long-term metabolic effects and results of laparoscopic sleeve gastrectemy for obesity

Onur Kılıç, Onur Birsen

Department of General Surgery, Pamukkale University School of Medicine, Denizli, Turkey

Objective: Laparoscopic Sleeve Gastrectomy (LSG) has been begun to be performed quite frequently as a single and final treatment for morbid obesity. There are studies including positive short-term outcomes, but the number of articles reporting long-term outcomes and the relationship between ghrelin and LSG is still insufficient. This study investigated medium-term and long-term effects of LSG, comparison of preoperative and postoperative long-term (4 years) ghrelin levels, the changes in comorbidities accompanying to obesity, and the patients' weight gain in long-term period after LSG.

Methods: After receiving approval from the Institutional Ethics Committee, 34 patients who were selected for surgery due to the diagnosis of morbid obesity and whose ghrelin levels were evaluated before the procedure were performed LSG for the treatment of obesity between January 2009 and December 2011. In the postoperative period, 1st month, 3rd month, 6th month, 12th month, and then annual control examinations were performed in all patients. Finally, in the 4th postoperative year, the patients were contacted and requested to visit hospital for their last controls and analyses. Continuous variables were presented in mean standard±deviation and categorical variables in numbers and percentages. For comparing independent group differences, the Significance Test on the Difference between Two Means was used. Repeated Measures Analysis of Variance and McNemar Test were employed for dependent group comparisons.

Results: While the mean preoperative weight of 34 patients in the study was 132.93±19.25 kg, it was 83±13.90 kg in the 4th postoperative year. The mean BMI was 49.8±7.3 kg/m^2 during surgery. At the end of the 4th year after LSG surgery, BMI was found to be 29.18±5.6 kg/m^2. While the mean preoperative ghrelin value was 672±143 pg/mL in the patients included in the study, the mean ghrelin value in the 4th postoperative year was 164±43 pg/mL. The difference between the preoperative value and postoperative 4th year value was statistically significant.

Conclusion: Ghrelin level after LSG is decreased due to the resection of the fundus and body of the stomach and it reduces the consumption of carbohydrate and fat. The treatment of obesity with LSG has a direct positive effect on the health conditions of patients by decreasing the symptoms of comorbidities such as Type 2 DM and HT. According to the data that were obtained in our study, LSG is a safe and effective method in the treatment of morbid obesity. It has long-term positive metabolic effects. It is also a procedure that improves quality of life and comfort.

Keywords: LSG, ghrelin, bariatric surgery

SS-35

Evaluation of systemic response to trauma by using cytokines in patients at different menstrual phases who were performed modified radical mastectomy

Hayal Uzelli Şimşek[1], Turgay Şimşek[2], Deniz Şahin[3], Sertaç Ata Güler[2], Nuh Zafer Cantürk[2], Nihat Zafer Utkan[2]

[1]Department of Gynecology and Obstetrics, Kocaeli University School of Medicine, Kocaeli, Turkey

[2]Department General Surgery, Kocaeli University School of Medicine, Kocaeli, Turkey

[3]Department of Physiology, Kocaeli University School of Medicine, Kocaeli, Turkey

Objective: In this study, it was aimed to investigate the effect of performing surgical procedure at different menstrual cycle phases on systemic response to trauma. It aimed to evaluate timing of surgical treatment according to menstrual cycle phases and the pathophysiology of systemic response to trauma considering systemic Il-1 and IL-6 levels of patients.

Methods: The study included premenopausal and postmenopausal successive 89 women who were performed modified radical mastectomy due to the diagnosis of breast cancer. For demonstrating the effect of breast surgery timing on response to trauma in premenopausal and postmenopausal female patients according to menstrual cycle phases, IL-1β and IL-6 levels that were associated with the severity of inflammation were measured on the day before the operation and on the day after the operation from serum samples taken from the patients and they were statistically evaluated.

Results: No statistically significant difference was found between the premenopausal and postmenopausal groups in terms of serum IL-1β and IL-6 levels in the pre-trauma (preoperative) period. However, IL-1β and IL-6 levels were significantly higher in the postmenopausal patient group in the post-trauma (postoperative) period ($p<0.05$). The increase in serum IL-6 levels in the premenopausal group in the postoperative period was found to be statistically significant compared to the preoperative period ($p<0.0001$). In the postmenopausal group, there was a statistically significant increase in both IL-1β and IL-6 levels in the postoperative period

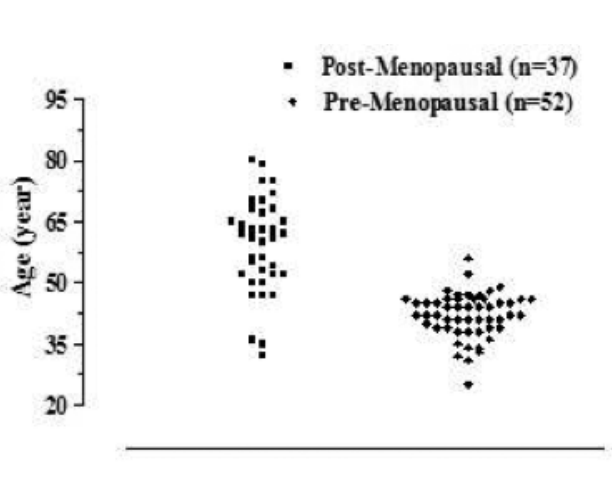

Figure 1. The mean ages and numbers (n) of the patients in the study groups formed according to their last menstrual dates and serum gonadotropin levels (***p<0.0001)

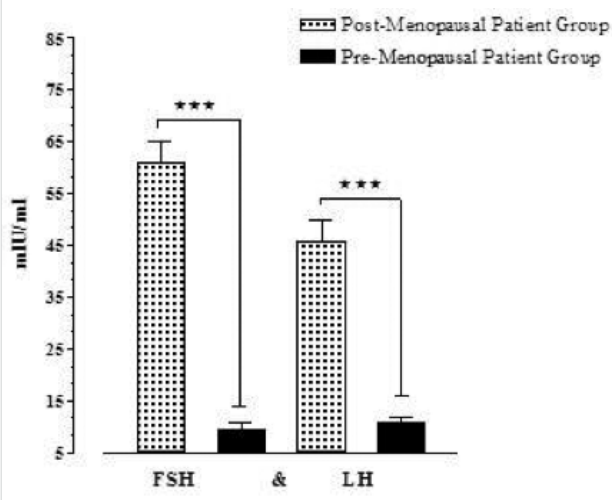

Figure 2. Serum FSH and LH levels of the premenopausal and postmenopausal patients in the preoperative period (***p<0.001)

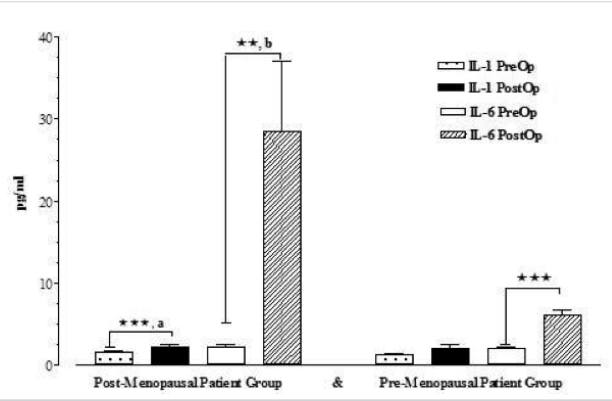

Figure 3. Serum IL-1β and IL-6 levels measured in the pre and postoperative periods in the premenopausal and postmenopausal patients (*p<0.05, ***p<0.001, aPostOp IL-1 between two groups p<0.05; bPostOp IL-6 between two groups p<0.01)

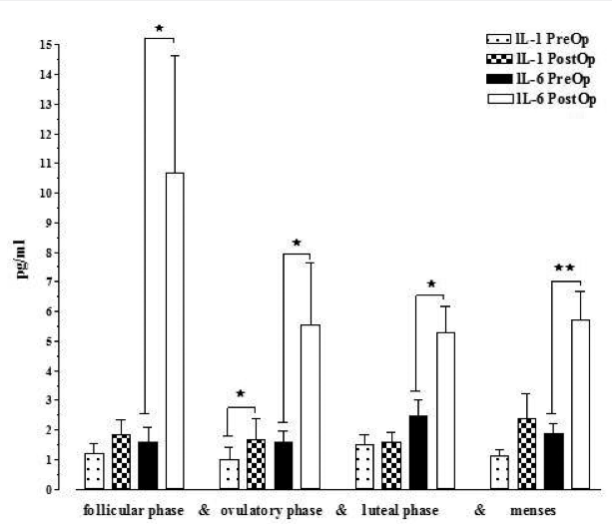

Figure 4. Serum IL-1β and IL-6 levels measured in the pre and postoperative periods after categorizing menstrual cycle phases of the premenopausal patients according to their last menstrual dates and gonadotropin levels (*p<0.05, **p<0.01, ***p<0.001)

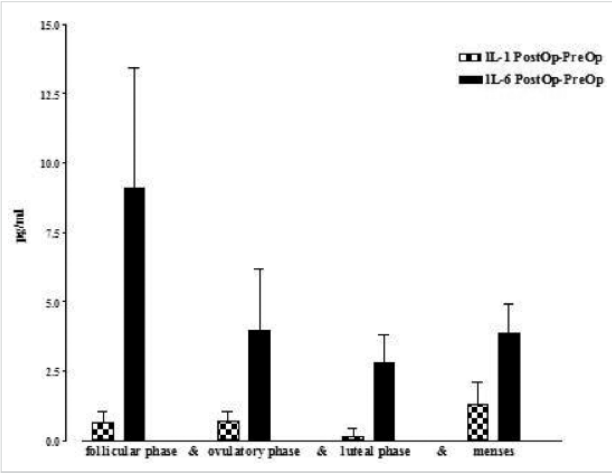

Figure 5. Among menstrual cycle phases, the highest increase in IL-6 level is observed in the follicular phase and the lowest increase in IL-1β and IL-6 levels is observed in the luteal phase.

compared to the preoperative period (p<0.0001). When the premenopausal group was evaluated according to menstrual cycle phases in the postoperative period, a statistically significant increase was found in IL-6 levels in four phases (p<0.05), but there was a significant increase in IL-1β level only in the ovulatory phase (p<0.05). It was detected that the highest IL-6 level was in the follicular phase and the highest increase was observed in the post-trauma period compared to the pre-trauma period. On the other hand, the lowest increase in IL-1β and IL-6 levels was seen in the luteal phase (Figure 1-5).

Conclusion: It was revealed that timing of surgical treatment affected systemic inflammatory responses to trauma in the premenopausal period. While the follicular and ovulatory phases were found to be the most disadvantageous phases in terms of response to trauma, the luteal phase was evaluated to be the most advantageous phase. Therefore, doing surgical planning according to menstrual cycle phases in the luteal phase is more advantageous in terms of the determination of response to trauma and treatment strategies.

Keywords: Menstrual cycle, breast cancer, response to trauma

SS-36

Treatment management in complicated perianal fistulas and factors affecting the recurrence

Turgut Anuk[1], Şahin Kahramanca[2], Neşet Köksal[3]

[1]Department of General Surgery, Kafkas University School of Medicine, Kars, Turkey

[2]Department of General Surgery, Kars State Hospital, Kars, Turkey

[3]Department of General Surgery, Ümraniye Training and Research Hospital, İstanbul, Turkey

Objective: The abnormal connection between the anal canal and perineal skin is called perianal fistula. It is a rare but serious cause of morbidity. It is twice as more common in men than in women. The treatment method used for perianal fistula is usually surgery, but the recurrence rate is quite high. Although many methods have been tried in the treatment, the gold standard treatment procedure is still controversial. In our study, we will try to introduce our treatment methods in patients with recurrent perianal fistulas and the role of our treatment methods in preventing recurrence.

Methods: Recordings of the patients who were admitted to the General Surgery Department of Kafkas University School of Medicine between June 2012 and September 2015 with the complaints of rectal discharge diagnosed with perianal fistula were scanned retrospectively. Age, gender, the number and techniques of previous operations, latest operation technique, colonoscopic findings in preoperative period, external orifice number and status according to Goodsall rule were recorded from the files of the patients.

Results: The median age of 19 patients that were included in this study was 39 (20-57) years and the male/female ratio was 18. While no internal orifice was detected in the colonoscopy of 8 patients in the preoperative period, 1 internal fistula orifice was found in 5 patients and more than one internal fistula orifices were found in 6 patients. According to the Goodsall classification in lithotomy position, external fistula orifice was found only in the posterior region in 13 patients, only in the anterior region in 4 patients, and in both posterior and anterior regions in 2 patients. Fistulotomy was performed in 11 patients, set-on procedure was performed in 2 patients, and fistullectomy was performed in 6 patients, and it was determined that operation techniques were effective in recurrence development (p=0.040). We performed set-on procedure in 12 patients, fistulotomy in 1 patient and fistulectomy in 6 patients. The patients performed fistulectomy were also observed to have undergone 4 fistulotomies and 2 fistulectomies in the past. When the number of operations that the patients had in the past was examined, it was observed that the median value was 2 (1-6). When the common effects of the age, gender, Goodsall classification and the past operation technique on the number of operations that the patients had were examined, it was observed that the location of external orifice affected the number of operations independently of the other 3 factors (p=0.003).

Conclusion: Although high numbers of patients are needed, we think that the risk of recurrence in perianal fistulas with external orifices both in anterior and posterior regions is high.

Keywords: Perianal fistula, recurrence, Goodsall rule

SS-37

The "total medicine" approach to the survival of the specialized units of the state universities in İstanbul: A preliminary report

Ilgin Özden

Unit of Hepatopancreatobiliary Surgery, Department of General Surgery, İstanbul University School of Medicine, İstanbul, Turkey

Objective: The gap between the incomes of physicians working in state universities and in specialized units of private institutions in Istanbul has led to an unsustainable brain drain. There is also a relatively small but distinctive difference for nurses working in state university hospitals and for those working in state hospitals. This situation severely weakens the state university hospitals and their specialized units, which form the backbone of the system in the treatment of complicated patients. The aim of this study is to examine the preliminary results of the "total medicine" approach which is applied as a survival method in the Department of Liver-Biliary Tract-Pancreas Surgery in Istanbul University School of Medicine.

Methods: The "total medicine" approach was developed by getting inspired by the "total football" approach, which was first introduced by Jack Reynolds and matured in Hungary, the United Kingdom and the Netherlands. It is based on the approach that every football player can be substituted by another football player when necessary during the match. In the center of the system, there is a small group of academic members whose primary goals are not material concerns but the survival of the unit. Other important personnel are general surgeons who come for advanced Training (They come on a temporary basis for a period ranging from 6

months to 3 years and their financial concerns are on the second plan as long as they receive adequate further training), nurses (their academic lives are supported with research scholarships, and the widest possible clinical roles are given, on condition that it is allowed by the legislation), secretaries (their participation in self-improvement projects is encouraged, they are financially supported, and they work as data preprocessing staff and public relations officials, but not as a typer) and cleaning staff (some are asked to work with discipline in a service with colonization/infection with multiple resistant microorganisms and some are asked to work in services with patients having immunosuppression; financial support is given for their additional efforts).

Results: This approach provided the survival of the first Liver-Biliary Tract-Pancreas Surgery Unit of our country.

Conclusion: The major changes in the field of health in our country necessitate the use of extraordinary methods for the survival of specialized units in state universities.

Keywords: Total medicine, total football, specialized unit, health system

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SS-38

A rare etiology of the mechanical obstruction clinic: Gallstones

Mehmet Köstek, Zeynep Gül Demircioğlu, Gültekin Hoş, Mehmet Mihmanlı

Department of General Surgery, Health Sciences University, İstanbul Şişli Hamidiye Etfal Training and Research Hospital, İstanbul, Turkey

Objective: Frequently missing out the gallstones in the differential diagnosis of clinical conditions that are encountered following the mechanical obstruction of the gastrointestinal tract. Although gallstone ileus is not encountered frequently in emergency departments, it is a problem that should be considered in the differential diagnosis and it is a life-threatening condition faced especially by the patients who have undergone hepatobiliary system surgery or who have a fistula from the gallbladder to the gastrointestinal system.

Methods: An 89-year-old female patient with ileus clinic who was admitted to the emergency department of Hamidiye Etfal Training and Research Hospital in Şişli İstanbul was examined and treated.

Results: An 89-year-old female patient was admitted to the emergency service with the complaints of abdominal pain, nausea and vomiting, which began 2 days ago. The patient who had spontaneous gas and stool discharge on the day of the admission had a history of rheumatoid arthritis and asthma. The patient who did not undergo any abdominal surgery previously was using antirheumatic drug. Physical examination of the patient revealed hypoactive intestinal sounds, tenderness in the right upper quadrant with palpation; there was no defense and rebound, and a slight distension was noticeable in the abdomen. Laboratory results showed WBC as 12280, CRP as 70 and lactate as 2.4. In the patient who had multiple air-fluid levels in the direct abdominal radiograph, fistulas were seen between the bile and duodenum of the patient through oral + IV contrast abdominal CT, and oral contrast filling from this fistula to the bile was observed. A 2.5 cm nodular lesion which was considered to be compatible with bile stone and which had hypodense central and a hypodense periphery was observed in the ileal loops. There were air-fluid levels and distended appearance consistent with ileus in the ileal and jejunal loops in the proximal of the described lesion. The findings were evaluated as compatible with gallstone ileus. Because the patient's bile stone was 2.5 cm in size and there was the sign of mechanical obstruction, the patient was taken to surgery urgently. Enterotomy was performed to the patient and a 3 cm-sized

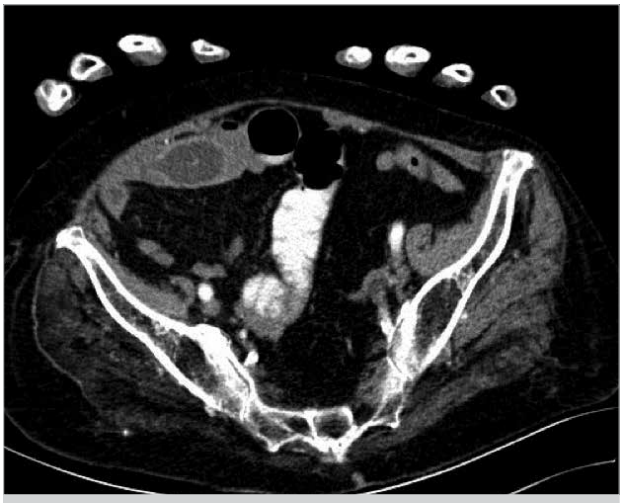

Figure 1. View of gallstone in the distal ileum

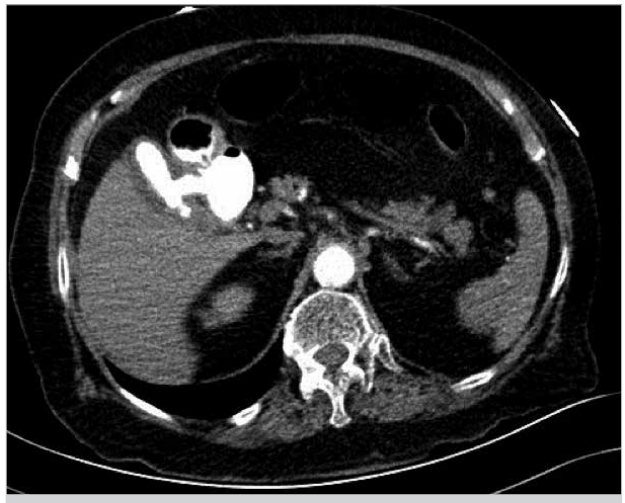

Figure 2. Cholecystoduodenal fistula

stone was extracted. When a recovery was observed in her clinical condition during the follow-ups, she was discharged with full recovery on the 5th postoperative day.

Conclusion: Obstructions due to gallstones should be considered while evaluating mechanical obstruction cases which we frequently encounter in our daily clinical practice. This case is a good example for the rarely seen gallstone ileus.

Keywords: Bile, stone, ileus, mechanical, obstruction, fistula

Figure 3. Ileum segment in which peroperative gallstone is viewed

Figure 4. Gallstone that was extracted

SS-39

Retrospective Comparison of intestinal metaplasia and helicobacter pylori score in patients undergoing endoscopy of the upper gastrointestinal system

Uğur Kesici

Department of General Surgery, Beykent University School of Medicine, İstanbul, Turkey

Objective: According to the data of the World Health Organization, gastric cancer is the fourth most common cancer type among men and the fifth most common cancer type among women. Intestinal metaplasia is accepted as a precancerous lesion in the development of gastric cancer. In this study, it was aimed to reveal the relationship between helicobacter pylori and intestinal metaplasia in patients undergoing endoscopy of the upper gastrointestinal system due to dyspeptic complaints.

Methods: In this study, the patients undergoing upper gastrointestinal system endoscopy in Private Okmeydanı Hospital between January 1 and July 15 2017 were retrospectively evaluated. The study included patients between the ages of 15 and 84 years. They were divided into two groups as those between the ages of 15 and 49 years (Group A) and those above 50 years (Group B). The presence of a statistically significant difference between the groups in terms of intestinal metaplasia score and helicobacter pylori score was investigated.

Results: This study included 200 patients between the ages of 15 and 84 years. No statistically significant difference was found between Group A and Group B with regard to helicobacter pylori score. The incidence of intestinal metaplasia was significantly higher in the patients in Group B. Independent of the severity, there was no statistically significant difference between the groups in terms of helicobacter pylori positivity. Intestinal metaplasia positivity was significantly higher in Group B than in Group A. On the other hand, in the patients with negative helicobacter pylori, the rate of intestinal metaplasia was significantly higher in Group B than in Group A. In the male patients in Group B, the low and moderate helicobacter pylori frequencies were significantly higher.

Conclusion: Although it is stated that the most important risk factor for the development of intestinal metaplasia is helicobacter pylori, discussions about the effects of helicobacter pylori positivity on the development of intestinal metaplasia still continue. Despite the presence of studies demonstrating a significant relationship between helicobacter pylori positivity and intestinal metaplasia development in the literature, there are also other studies reporting no significant relationship between them, which is consistent with our study. In our study, it was concluded that the most important risk factors for the development of intestinal metaplasia were the age above 50 years and male gender.

Keywords: Endoscopy, gastrointestinal system, intestinal metaplasia, helicobacter pylori

SS-40

Comparison of the use of gastroscopy probe, use of orogastric bougie, and no use of any probe for determining gastric resection line in the technique of laparoscopic vertical sleeve gastrectomy in bariatric surgery

Mehmet Kadir Bartın[1], Muzaffer Önder Öner[1], Müge Bartın[2]

[1]Department of General Surgery, Health Sciences University, Van Training and Research Hospital, Van, Turkey

[2]Department of Internal Medicine, Health Sciences University, Van Training and Research Hospital, Van, Turkey

Objective: The aim of this study is to compare the use of gastroscopy probe, use of orogastric bougie, or no use of a probe in terms of safety and effectiveness in vertical sleeve gastrectomy (LSG).

Methods: The patients undergoing LSG in our center between February 2014 and April 2017 were divided into three groups as: Group 1 for whom gastroscopy probe was used, Group 2 for whom orogastric bougie was used, and Group 3 for whom no probe was used. Gastroscopy could be used only when an endoscopist was available in the operating room.

Results: In the stated period, 45 patients (42 female) were operated and distributed into two groups. Their mean age was 46.1 years. Before the surgery, the mean body mass index was 40.3 kg/m^2. Bleeding was observed in 3 patients for whom no probe was used and in 1 patient for whom orogastric probe was used. Bleeding was stopped with titanium clips. No bleeding was seen in the group for whom gastroscopy was used. The results of methylene blue and air-fluid leak tests were negative in all patients. While the early postoperative complication of nausea-vomiting was not generally observed in the patients for whom probe was used, nausea, which responded to medical treatment, occurred in almost all patients for whom no probe was used.

Conclusion: No significant difference was found between the use of gastroscope and orogastric bougie in terms of peroperative and postoperative complications. However, it was detected that the use of these probes provided safer and more comfortable surgical environment compared to non-use of a probe.

Keywords: Sleeve, gastrectomy, bougie, orogastric

SS-41

Factors affecting morbidity and mortality after cytoreductive surgery and hyperthermic intraperitoneal chemotherapy: 5-year outcomes

Sezai Demirbaş[1], Mehmet İnce[2], Tahir Özer[3], Nail Ersöz[2], Semra Doğan[1], Gökhan Tulunay[4]

[1]Department of General Surgery, TOBB ETÜ Hospital School of Medicine, Ankara, Turkey

[2]Private Hospital, Ankara, Turkey

[3]Gülhane Military Medical School, İstanbul, Turkey

[4]Department of Gynecology and Obstetrics, TOBB ETÜ Hospital School of Medicine, Ankara, Turkey

Objective: Peritoneal carcinomatosis (PC), which develops in association with various intraabdominal tumors, used to be considered as a terminal condition that was impossible to cure until the last 2-3 decades. Its treatment has become possible with the application of cytoreductive surgery (CRS) and hyperthermic intraperitoneal chemotherapy (HIPEC) in selected patients. However, early morbidity and mortality can develop secondary to long surgery and following chemotherapy. In this study, it is aimed to examine complications associated with CRS+HIPEC, which we have been used for 5 years in our clinic, and the factors affecting mortality.

Methods: A total of 38 patients were performed CRS+HIPEC due to the diagnosis of PC between the years of 2011 and 2015. The peritoneal cancer index (PCI) was used for PC staging. The reasons for PC included ovarian cancer (n=14, 36.8%), colorectal cancer (n=11, 28.9%), gastric cancer (n=4, 10.5%), mesothelioma (n=4, 10.5%),Pseudomyxoma peritonei (n=2, 5.3%), and tumor of appendix (n=3, 7.9%). Cisplatin (in 14 patients), Oxaliplatin (in 6 patients), and Mitomycin (in 3 patients) were administered as chemotherapeutic agents at 42C0 for 60 minutes. The effects of factors influencing morbidity and mortality were evaluated.

Results: The mean age and BMI of the patients, 19 of whom were female, were 56.5±25.8 years and 25.8±1.8, respectively. Their

median ASA score was found to be II. While their median PCI score was preoperatively 6 (1-18) in computed tomography (CT), it was 9 (2-25) intraoperatively. The mean duration of surgery was 8.8±2.2 hours. Completeness score of the applied surgery was 0 in 36.4%, but 1 in 42.42%. Various complications (bleeding, anastomotic leak, pneumonia, acute renal failure, sepsis, etc) were observed in 54% of the patients. The mean duration of survival was 40.12 months. While 87% of them survived for one year after operation, 41% survived for 4 years and more. Early per-postoperative (PO) mortality occurred in 7 patients (18.4%). The factors belonging to the patients were evaluated to be ineffective in the development of PO complications. In this patient series, poor prognostic factors affecting mortality were found to be anastomotic leakage (p=0.013), high PCI in CT (p=0.015), postoperative complications (p=0.013), and completeness score of >/=2 (p=0.044).

Conclusion: Choosing PC patients who will be performed CRS+HIPEC by evaluating them considering preoperative PCI and removing all intraabdominal lesions will increase survival. However, further multicenter studies on more patients are needed for confirming this result.

Keywords: HIPEC, morbidity, mortality

SS-42

The effect of sleeve gastrectomy on helicobacter pylori infection in obese patients

Mehmet Kadir Bartın[1], Müge Bartın[2], Muzaffer Önder Öner[1], Yunus Çetin[2]

[1]Department of General Surgery, Health Sciences University, Van Training and Research Hospital, Van, Turkey

[2]Department of Internal Medicine, Health Sciences University, Van Training and Research Hospital, Van, Turkey

Objective: Helicobacter pylori is a gram-negative bacterium that is specified as a major pathogen in gastritis, gastric and duodenal ulcer, gastric adenocarcinoma, and lymphoma of mucosa-associated lymphoid tissue. According to studies, the frequency of this infection is higher in obese patients compared to normal individuals. Eradication of this infection is provided with antibiotherapy and a serious antibiotic resistance has begun to occur in recent years. In our study, it was aimed to investigate the effect of intervention on H. pylori infection in patients who were performed laparoscopic sleeve gastrectomy (LSG) due to obesity.

Methods: The presence of H. pylori was revealed through culture analyses performed on biopsy samples taken from the antrum via gastroscopy and urease breath test in 20 obese patients who were not given eradication treatment previously and who had dyspeptic complaints. These patients were asked to visit hospital for repeating urease breath test on the postoperative 100th day and the test was re-performed. In order to avoid false negative results, the patients were not applied proton pump inhibitors and antibiotherapy that was non-resistant to H. pylori.

Results: Of the patients, 16 (80%) were female and 4 (20%) were male. The number of patients with positive result of urease breath test performed on the 100th postoperative day was 8 (40%). That is to say the test result was negative in 12 (60%) patients.

Conclusion: As is seen in other studies in literature, H.pylori infection is more frequent in obese individuals than in normal population. In consistency with that, it was found in our study that the rate of H.pylori infection significantly decreased in patients who got rid of obesity by means of LSG.

Keywords: Obesity, H. pylori

SS-43

The comparison of sedation anesthesia and general anesthesia in the laparoscopic placement of peritoneal dialysis catheter

Emin Zümrütdal[1], Tuna Bilecik[2], Sibel Ada[3], Tevfik Tolga Şahin[2], Fatma Ülkü Adam[3], Nurten Genç[3], Yeşim Yağbasan[4], İhsan Güney[4], Murat Gündüz[5]

[1]Department of General Surgery, Private EPC Hospital, Turkey

[2]Department of General Surgery, Numune Training and Research Hospital, Adana, Turkey

[3]Department of Nephrology, Numune Training and Research Hospital Adana, Turkey

[4]Department of Anesthesia and Reanimation, Numune Training and Research Hospital, Adana, Turkey

[5]Department of Anesthesia and Reanimation, Çukurova University School of Medicine, Adana, Turkey

Objective: Continuous ambulatory peritoneal dialysis (CAPD) is one of the effective treatment modalities in patients with chronic renal failure (CRF). Several techniques have been described for placing the catheter into the abdominal cavity in CAPD. Although laparoscopic placement of CAPD catheter is one of the popular methods thanks to the development of laparoscopic techniques, this technique often requires general anesthesia (GA) and it increases the risk of surgery in CRF patients with accompanying diseases such as hypertension, diabetes mellitus and coronary artery disease, and this situation leads to a withdrawal from this practice. Local anesthesia (LA) with sedation anesthesia (SA) may be an alternative option in this operation. As far as we know, the use of SA + LA with CO_2 insufflation was not previously reported in laparoscopic placement of the CAPD catheter. In this study, 5 patients in whom laparoscopic CAPD catheter was placed and SA+LA was performed and 13 patients in whom GA was performed were retrospectively examined and compared. The results of our case series were discussed in this study.

Methods: CAPD catheter was placed laparoscopically in 18 patients (GA [n=13], SA + LA [n=5]) between January 2016 and February 2017. All patients who received GA (n=13) were intubated. A Veress needle was used for CO_2 insufflation, intraabdominal pressure was fixed at 14 mmHg, and 5-mm trocar was used. Dormicum was administered in patients in whom SA + LA (n=5) was performed in the preoperative patient room, and the procedure was continued with Fentanyl Sulfate in the operation room. Local anesthesia was administered in all identified incision points with prilocaine HCl and lidocaine HCl. Hasson technique was used to enter the abdomen and CO_2 insufflation was performed. A 10-mm trocar was used at the umbilical entrance point (Figure 1). Intraabdominal pressure was fixed to 7 mmHg in all patients. No requirement was detected to switch to GA in any patient. These patients were evaluated in terms of demographic data, perioperative parameters and postoperative complications.

Figure 1. Intraabdominal CO2 insufflation under SA+LA

Results: The mean age of the patients was 50.70 years; the female/male ratio was 12/6; and the mean BMI was 26.44 kg/m^2. Of the patients, 85.3% had accompanying systemic disease. The mean duration of anesthesia in the GA group was 33 (25-42) minutes and it was 32 (25-40) minutes in the SA + LA group. There was no significant difference between the groups in terms of demographic features and perioperative and postoperative complications ($p>0.05$). We think that the low pressure that we applied affected the tolerability to SA + LA in laparoscopic surgery.

Conclusion: We think that SA + LA can be preferred to GA in the surgery of laparoscopic placement of CAPD catheter in high risk CRF patients with systemic diseases.

Keywords: Laparoscopic placement of CAPD catheter, general anesthesia, sedation anesthesia, continuous ambulatory peritoneal dialysis, chronic renal failure

SS-44

The effect of peritoneal dialysis performed with alkaline dialysate on peritonitis carcinomatosis cases: An experimental study

Emin Zümrütdal[1], Tevfik Tolga Şahin[2], Özgür Külahçı[3], Özge Temiz[4], Süleyman Çetinkünar[2], Nevin Türüt[5], Kenan Dağlıoğlu[6], Yaser Canbolat[7]

[1]Department of General Surgery, Private EPC Hospital, Turkey
[2]Department of General Surgery, Numune Training and Research Hospital, Adana, Turkey
[3]Numune Training and Research Hospital, Pathology Laboratory, Adana, Turkey
[4]Department of Biology, Çukurova University, Adana, Turkey
[5]Department of Molecular Biology, Veterinary Research Institute, Adana, Turkey
[6]Çukurova University, Experimental Research Center, Adana, Turkey
[7]Department of Pharmacy, Numune Training and Research Hospital, Adana, Turkey

Objective: Studies have shown that pH progresses toward acidosis in cancer tissues and microenvironment, and the acidosis that occurs increases metastasis and progression of cancer. In this study, peritoneal dialysis (PD) was performed with alkaline dialysate in mice in which peritonitis carcinomatosa (PC) was created, and the pH changes in acid liquid, oxidative stress in the liver tissue, the histopathological changes in the liver and kidney tissues, and the life span were investigated in the subjects.

Methods: Dialysate which was consistent with the interstitial fluid and had a pH of 7.56 was prepared. The mice were divided into 4 groups. PC was created with Erlich Tumor cells in each subject. During the following 7 days, intraperitoneal dialysate (0.03

mL/kg) was administered to the 1st and 3rd groups. After the 7th day, following the acid formation, intraperitoneal dialysate was given to the same groups once a day until the day of death as much as the amount of acid taken with paracentesis. No application was made to the 2nd and 4th groups. On the 9th day, after acid liquid samples were taken from the 1st and 2nd group subjects, euthanasia was performed, and the liver and kidney tissues were taken for examination. PD was performed to the 3rd group and it was followed together with the 4th group in order to determine their life span.

Results: In Group 1, which was performed PD, pH values of acidic fluid were higher than in Group 2 (p<0.001); liver TBARS levels were lower (p=0.007); and reductive glutathione (GSH) levels were higher (p=0.003). Connective tissue (p=0.042), granulation tissue (p=0.048), necrotic cells (p=0.031), mononuclear cells (p=0.079), and vascular congestion (p=0.041) were lower in liver tissue in Group 1 than in Group 2, and the accumulation of mesangial matrix in glomerulus (p=0.003), adhesions in the Bowman's capsule (p=0.014),tubular injury, and dilatation (p=0.12) were less in the kidney tissue (Figure 1) The mean life span was 10.4% (p<0.001) in Group 3 and it was 26.1% higher. In this study, it was shown that PD administration with alkaline dialysate in subjects with PC enabled the neutralization of acidification in peritoneal fluid, positively affected oxidative stress in the liver tissue in the body with intraabdominal cancer, prevented the damage of liver and kidney tissues, and prolonged average life span.

Conclusion: Because of the positive contributions to mortality and morbidity in resectable and nonresectable intraabdominal cancer surgery, the administration of PD with alkaline dialysate during or after surgery can be a new treatment strategy for gastrointestinal, gynecological, and urological carcinomas and especially for PC.

Keywords: Peritonitis carcinomatosa, alkaline dialysate, peritoneal dialysis, life span, oxidative stress

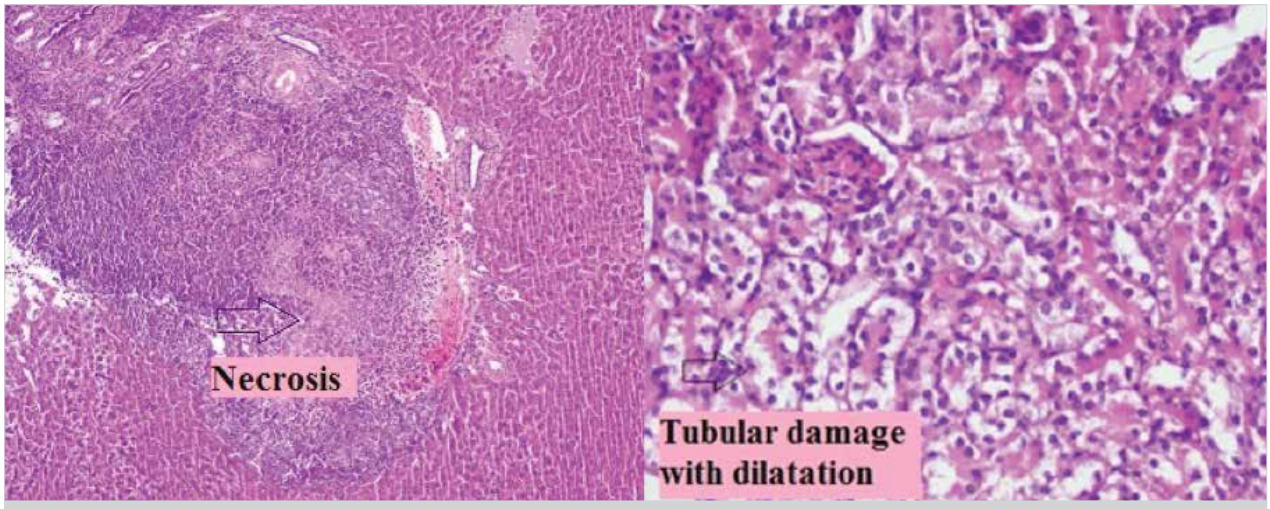

Figure 1. Changes in the liver and kidney tissues

SS-45

Can peroperative surgical margin positivity be predicted preoperatively in breast conserving surgery?

Demet Alay[1], Enver İlhan[1], Orhan Üreyen[1], Demet Kocatepe Çavdar[2], Hüseyin Fenercioğlu[1], Ayşe Yağcı[2]

[1]Department of General Surgery, Health Sciences University, İzmir Bozyaka Training and Research Hospital, İzmir, Turkey

[2]Department of Medical Pathology, Health Sciences University, İzmir Bozyaka Training and Research Hospital, İzmir, Turkey

Objective: Positive surgical margin after breast-conserving surgery has been shown to be associated with increased local and distant recurrence rates. It is also possible that re-resection on a positive surgical margin will significantly worsen the results. In this study, we aimed to investigate the factors related to the necessity of re-resection at the same or second session in patients undergoing breast conserving surgery.

Methods: The patients who were performed breast conserving surgery due to breast cancer in our department were retrospectively evaluated based on their electronic data records. The cases were divided into two groups as those with tumor-positive in the "frozen section" or in the final pathology report (Group I) at the surgical margin and as those in whom no tumor was found at the surgical margin (Group II).

Results: A total of 65 cases with an average age of 52.6 (23-83) years were included in the study. Mastectomy was performed in 47% (16) of the patients after the surgical margin was found positive in Group I. Surgery was performed in 11% (4) of the patients in Group I in the second session. Multifocality was observed in 23% (8) of the patients in Group I and in 12% (4) in Group II. When evaluated in terms of stage, 26% of the patients were stage I, 53% were stage II, and 20% were stage 3 in Group I. In Group II, these rates were

44%, 48%, and 7%, respectively. While there was axillary involvement in 53% of the patients in Group I, it was observed only in 16% of the patients in Group II. When evaluated according to the estrogen receptor status, it was positive in 68% of the patients in Group I and 82% in Group II. Considering in terms of the Ki-67 state, while 67% of Group I were 14 and over, 46% of Group II were 14 and over. According to C-erb-b2 status, while 43% of the cases were positive in Group I, only 14% of the cases were positive in Group II.

Conclusion: A secondary surgery can be avoided by applying frozen section in the breast conserving surgery. In our study, in the group in which the surgical margin was found tumor-positive peroperatively or postoperatively, we observed that the axillary involvement was higher, the estrogen receptor status was less positive, the c-erb-b2 was more negative, and the Ki-67 was 14 and over at a higher rate.

Keywords: Breast cancer, breast conserving surgery, surgical margin

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SS-46

Examination of pathologic response rates after neoadjuvant treatment in inflammatory breast cancer

Demet Alay[1], Orhan Üreyen[1], Enver İlhan[1], Hüseyin Fenercioğlu[1], Funda Taşlı[2], Olçun Ümit Ünal[3], Demet Kocatepe Çavdar[2]

[1]Department of General Surgery, Health Sciences University, İzmir Bozyaka Training and Research Hospital, İzmir, Turkey
[2]Department of Medical Pathology, Health Sciences University, İzmir Bozyaka Training and Research Hospital, İzmir, Turkey
[3]Department of Medical Oncology, Health Sciences University, İzmir Bozyaka Training and Research Hospital, İzmir, Turkey

Objective: Inflammatory breast cancer is one of the most aggressive types of breast cancer. It is assessed separately from non-inflammatory breast cancers due to the reasons such as being more aggressive and having worse prognostic factors. It is generally accepted that surgery and radiotherapy should be added after chemotherapy in the management of patients.

In our study, we aimed to evaluate the pathologic response rates of the patients who received neoadjuvant treatment because of inflammatory breast cancer and in whom we performed mastectomy later.

Methods: The patients who received treatment for inflammatory breast cancer in our clinic were retrospectively evaluated through electronic data records. In all cases, 4 cycles of epirubicin + cyclophosphamide and 4 cycles of taxane regimens were applied. Transtuzumab was added to the patients with HER2 positive. Surgery was performed 4-6 weeks after chemotherapy was finished. The type of surgery was modified radical mastectomy. The cases were evaluated in terms of the factors such as age, hormone receptor status, menopausal status, axillary lymph node involvement, and pathological response rates.

Results: Of 11 women with an average age of 53 (35-78) years were included in the study. Mastectomy specimens were evaluated as pathologic complete response in four (36.3%) cases, as partial response in six (54.5%) cases, and as poor response in one (9%) case. The mean number of lymph nodes dissected from axillary was 14.5 (6-26) and the mean Ki-67 was 15.7 (1-40). While cerb b2 was positive in 27% of the patients, it was negative in 73% of the patients. While the estrogen receptor was positive in 82% of the patients (9 patients), the progesterone receptor was positive only in 36.3% of the patients (4 patients). CEA and CA 15-3 were normal in all cases. When the residual tumor size of non-responsive cases was examined, the mean tumor size was found to be 8.5 (3-16) mm in cases with partial response. Pathological lymph nodes were detected in the axilla in 82% of the patients. Axillary involvement was not observed in 2 cases with complete pathologic response.

Conclusion: We observed that pathologic complete response could be received in a significant part of the patients and the primary tumor size was even smaller than 2 cm at a rate of 90% with neoadjuvant therapy. Despite the low number of patients, these results suggest whether or not mastectomy can be switched to breast-conserving surgery in the management of inflammatory breast cancer.

Keywords: Inflammatory breast cancer, pathological response, neoadjuvant treatment

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SS-47

Gastric gastrointestinal stromal tumor that is incidentally detected during laparoscopic sleeve gastrectomy

Mehmet Sertkaya[1], Arif Emre[2], Sami Akbulut[3], Ertan Bülbüloğlu[4]

[1]Department of General Surgery, Viranşehir State Hospital, Şanlıurfa, Turkey

[2]Department of General Surgery, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[3]Department of General Surgery, İnönü University, Turgut Özal School of Medicine, Malatya, Turkey
[4]Department of General Surgery, Gaziosmanpaşa University School of Medicine, Tokat, Turkey

Introduction: It is a rare situation to encounter unexpected lesions during laparoscopic bariatric procedures. It is even a rarer situation that the encountered lesion is a gastrointestinal stromal tumor (GIST). We aimed to present a GIST in a patient who were performed laparoscopic sleeve gastrectomy (LSG) due to morbid obesity.

Case: A 57-year-old female patient with a body mass index (BMI) of 44 kg/m^2 consulted to our outpatient clinic. She had a history of diabetes mellitus, hypertension, asthma, and coronary spasm symptoms. All the routine procedures and endoscopy that were required for the bariatric surgical procedure were performed. During the LSG operation, we encountered a 3-4 cm exophytic lesion that was located near the pylorus on the posterior side of the large curvature. In the same endoscopy, we also encountered only minimal mucosal erosion on the inside of the area where the lesion was located. The appearance of the lesion made us think that it could be a GIST. Since it did not interfere with the LSG operation in terms of its localization and it allowed a complete surgical margin, the operation was completed and the specimen was taken out. Pathological examination confirmed that this was a GIST with a size of 5.7 x 6 x 2.5 cm. Oral contrast-enhanced tomography (CT) taken on the postoperative 6th day demonstrated

Figure 1. View of the stomach and tumor removed in operation

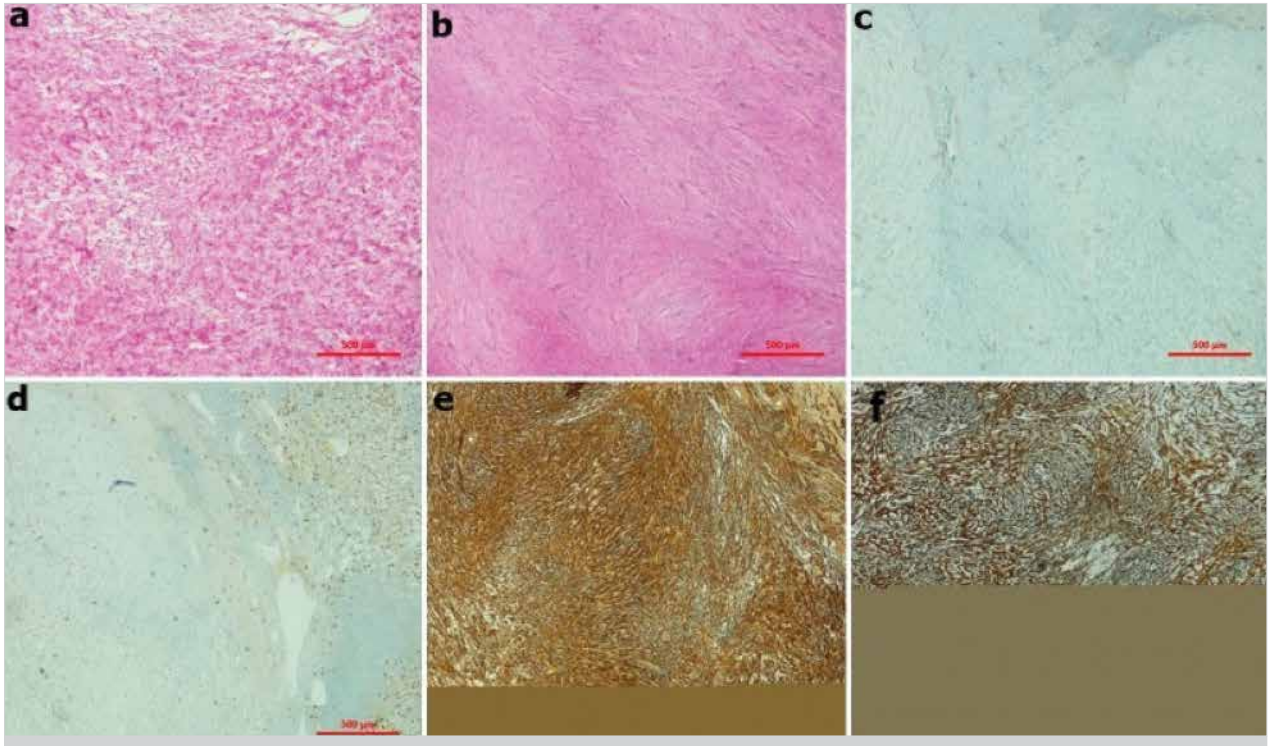

Figure 2. a-f. Histopathological images; (a) frozen section, (b) normal section (c) CD34 staining (-), (d) CD117 staining (-), (e) S100 staining (+), (f) vimentin staining (+)

that there was no anastomosis leakage and the patient was discharged without any problems. In the control examination after 2 months, it was seen that the patient did not have any complaint. There was no recurrence in CT that was taken 6 months later and in the follow-up 1 year later.

Discussion: GIST is a tumor originating from the Cajal cells in myenteric plexus. GIST is seen especially in the gastrointestinal tract and it can also be seen in the stomach at a rate of 60%, in the small intestines at a rate of 35% and in various gastrointestinal tracts such as esophagus, colon and rectum at a rate of 5%. While wedge resection or sleeve gastrectomy can be performed by providing clear surgical margins for small and medium sized tumors, larger sized tumors require larger resections such as distal gastrectomy or total gastrectomy. It is suggested that imatinib should be added to the treatment in cases with high recurrence risk and in the presence of metastasis.

Conclusion: The localization and size of the tumor are important in GIST cases that are incidentally encountered. Total surgical resection with negative surgical margins is the recommended treatment technique in localized cases.

Keywords: Gastrointestinal stromal tumor, incidental tumor, laparoscopic sleeve gastrectomy

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SS-48

How do complications after cytoreductive surgery and hyperthermic intraperitoneal chemotherapy affect the quality of life in patients with peritoneal carcinomatosis originating from the ovary and gastrointestinal system?

Mehmet İnce[1], **Sezai Demirbaş**[2]

[1]*Department of General Surgery, Private Hayat Surgical Medicine Center, Ankara, Turkey*

[2]*Department of General Surgery, TOBB ETU University, Ankara, Turkey*

Objective: Treatment with cytoreductive surgery (SRC) and hyperthermic intraperitoneal chemotherapy (HIPEC) is increasingly becoming more common in peritoneal carcinomatosis originating from the ovary and gastrointestinal system. Although SRC and HIPEC offer treatment expectancy for patients, this is a special operation which is known to cause significant morbidity. Due to complication-related symptoms and emotional and social stresses, the health-related quality of life of the patients (HRQOL) greatly decreases after the operation. Following SRC and HIPEC, we analyzed patients' HRQOL using functional assessment of cancer treatment (FACT) questionnaire.

Methods: This study included 36 patients (12 male and 24 female patients with the mean age of 56.5±25.8 years, median ASA II) in whom SRC and HIPEC were performed for peritoneal carcinomatosis induced by gastrointestinal and ovarian cancers between January 2012 and June 2016. The quality of life included four subscales: Six months after the surgical intervention, physical wellbeing (PWB), social/familial wellbeing (SWB), emotional wellbeing (EWB) and functional wellbeing (FWB) were evaluated by using FACT-C for gastrointestinal cancer and FACT-O for ovarian cancer. The quality of life of the patients with and without complications was compared.

Results: In this study, the morbidity rate was 54%. The questionnaire was answered by 28 patients (16 with complications). The mean values of FACT in patients with and without morbidity in the 6th month were as follows: PWB: 13±12.6 and 7±5.11; SWB: 5.75 + 3.82 and 2.98±1.64; EWB: 9±2.42 and 6.16±1.49; FWB: 15.25±1.52 and 17±2.25, respectively. PWB (p=0.001) and EWB (p=0.002) were statistically significant. The mean total scores of patients with and without morbidities (PWB value + SWB value + EWB value + FWB value + KKS value (OKS value for Ovarian cancer)) were 15 and 20±1.07 (p=0.004) for gastrointestinal cancers, respectively and 58.40±3.20 and 61.15±4.11 (p=0.83) for ovarian cancer, respectively.

Conclusion: This study showed that patients with morbidity had poorer quality of life after SRC and HIPEC treatment performed for gastrointestinal cancers in the 6th postoperative month.

Keywords: Cytoreductive surgery, HIPEC, quality of life index

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SS-49

Evaluation of the conventional and laparoscopic appendectomy operations in terms of their effects on serum IL 6 and CRP levels

Mehmet Kadir Bartın[1], Muzaffer Önder Öner[1], Müge Bartın[2]
[1]Department of General Surgery, Health Sciences University, Van Training and Research Hospital, Van, Turkey
[2]Department of Internal Diseases, Health Sciences University, Van Training and Research Hospital, Van, Turkey

Objective: Peroperative trauma, which causes significant complications in aggressive surgical treatment of acute appendicitis, is much less common in laparoscopic appendectomy than in open conventional surgery. Our aim in this study is to evaluate acute appendicitis patients who were performed laparoscopic and open appendectomy between December 2009 and December 2016 in terms of traumatic stress response to surgical intervention.

Methods: Two hundred consecutive male and female patients who were between the ages of 16 and 70 years and who were operated (100 laparoscopic appendectomy: Group 1, 100 conventional appendectomy: Group 2) with the prediagnosis of acute appendicitis were included in this study. IL-6 and C-reactive protein levels obtained from preoperative and postoperative serums of these patients were measured and compared.

Results: There was no difference between the patients of Group 2 and Group 1 in terms of both IL-6 and CRP levels in the preoperatively taken blood samples ($p>0.05$ for both parameters). In group 2, both IL-6 and CRP levels were found to be significantly different between preoperative and postoperative serums ($p<0.001$ for both parameters). The difference of IL 6 levels between preoperative and postoperative serums was found significantly higher in Group 1. However, the difference between serum CRP levels was not found significantly high.

Conclusion: According to the results we achieved in our study, in patients undergoing open appendectomy, the surgical stress and relatedly developing traumatic stress response, and the postoperative IL-6 and C-reactive protein serum levels, which are indicative of this response, were found to be significantly higher than those in the patients who were performed laparoscopic appendectomy. In the surgical treatment of acute appendicitis, we concluded that the surgical stress that developed in the laparoscopic appendectomy was much less severe than that in the conventional method.

Keywords: Appendectomy, laparoscopic, C reactive protein

SS-50

Comparison of the postoperative effects of laparoscopic Nissen fundoplication and Nissen-Rossetti operations on patients

Sibel Özkara, Oğuz Hançerlioğulları, Hüseyin Sinan, Murat Özkara, Orhan Kozak
Department of General Surgery, Health Sciences University, Gülhane Training and Research Hospital, Ankara, Turkey

Objective: In this retrospective study, the postoperative gastrointestinal complaints and their frequencies and degrees were assessed by a single objective observer in patients who were performed classical laparoscopic Nissen Fundoplication and Nissen-Rossetti surgery due to GERD in the General Surgery Department of HSU Gülhane Training and Research Hospital and it was aimed to reveal their relations among each other, their effects on postoperative satisfaction, length of hospitalization,, and cost analysis.

Methods: Ninety-three patients who were operated due to GERD through classical laparoscopic Nissen Fundoplication technique and Nissen-Rossetti technique between January 2011 and May 2016 were included in the study. Preoperative complaints, endoscopy results, and early and late stage postoperative complaints of the patients were determined through the GERD-health related quality of life questionnaire and they were included in the study.

Results: Laparoscopic fundoplication is accepted as the gold standard in surgical treatment of GERD with its mortality and complication rates less than 1%. As a result of the questionnaire applied in this study, a statistically significant difference was found between two groups in terms of early satiety in the postoperative 6th month. This difference was thought to be due to the tension of the antireflux spiral. However, none of the patients had weight loss and obstruction. There was no statistically significant peroperative and postoperative difference between two groups in terms of diarrhea. Although there was no statistically significant correlation between age and diarrhea before the operation ($p=0.235$) in the statistical analysis performed with Spearman Rho test, there was a statistically significant increase in the complaints both within the first 4 weeks ($p=0.044$) and at the end of the 6th month ($p<0.001$). No statistically significant difference was found between the groups of patients in terms of swallowing difficulty, early satiety (except for the 6th month), regurgitation pyrosis, bloating, need for burping, frequent diarrhea, abdominal pain, vomiting, and inability to discharge gas from the mouth.

Conclusion: When study data were analyzed in terms of probable postoperative risks, expected benefits and patient comments, two operation techniques were seen not to be superior to each other. The judgment that the surgeon will reach as a result of the patient evaluation and the current state of the tissue during the operation should be the determining factors for the choice of the technique in GERD.

Keywords: Laparoscopic nissen fundoplication, laparoscopic Nissen-Rossetti fundoplication

SS-51

Comparison of primary excision-closure and karydakis methods in the surgical treatment of pilonidal sinus

Murat Kendirci[1], Tezcan Akın[2], Merve Akın[2], Hüseyin Berkem[2], Süleyman Hengirmen[2], Bülent Cavit Yüksel[2]
[1]Department of General Surgery, Hitit University, Çorum Training and Research hospital, Çorum, Turkey
[2]Ankara Numune Training and Research Hospital, Ankara, Turkey

Objective: Pilonidal sinus disease is a case that is commonly seen in the society and disturbs surgeons with its recurrence rates.

Methods: In this study, 468 patients who were operated in the Department of General Surgery in Ankara Numune Training and Research Hospital due to sacrococcygeal pilonidal sinus disease were examined. Twenty-seven patients in whom D-flap was performed, 34 patients in whom V-Y flap was performed, and two patients in whom Limberg flap was performed were excluded from the study.

Results: Of 405 patients, 352 were male and 53 were female. The mean age of the patients was 24.0 years (13-59 years). The BMI values of the patients ranged from 19 to 32 (mean: 24.2). Patients were divided into two groups as those in whom Karydakis flap was performed (Group 1) and as those in whom primary suturing was carried out (Group 2). Karydakis operation was performed in 247 (60.9%) patients in the first group. Primary suturing was done following the total excision in 158 patients (39.1%) in the second group. The mean operation durations were 31.1±6.11 minutes in the Karydakis operation group and 25.9±4.64 minutes in the primary suturing group. Recurrence was detected in 5 patients who were inserted a drain; however, 18 patients had recurrence even though drain was not placed. Nevertheless, while there were drains in 5 patients who had recurrence, 18 patients did not have any drain. It was observed that the placement of drain did not have any effect on complications such as recurrence and wound infection and on sitting on toilet comfortably in the postoperative period, but it slightly restricted the mobilization of patients. The patients were followed for 6-126 months (mean: 56±31.5 months) after pilonidal sinus surgery. Recurrence was detected in 23 of 405 patients in the follow-up period. While recurrence was detected in 5 (2%) of the patients in the first group, it developed in 18 (11.4%) of the patients in the second group. When the patients with recurrence were examined, it was observed that no recurrence developed in any of 9 patients with wound infection. As a result of the examination of the patients who had recurrence, it was seen that gender, age, BMI, ASEPSIS scores, type of anesthesia, the presence of drains and follow-up durations did not affect recurrence. Only the type of operation was found to be statistically significant in terms of recurrence development.

Conclusion: We believe that karydakis flap technique is a type of surgery that can be preferred in appropriate cases for the surgical treatment of pilonidal sinus because it has lower complication and recurrence rates, it is easily applicable, and it provides better cosmetic results in comparison to the other methods.

Keywords: Pilonidal sinus, karydakis, primary suturing, recurrence

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SS-52

The effects of Erdosteine on experimental liver ischemia-reperfusion injury

Aziz Mutlu Barlas[1], Kevser Uzunoğlu[1], Kemal Kısmet[1], Serap Erel[1], Serdar Kuru[1], Nadir Turgut Çavuşoğlu[1], Mehmet Şeneş[2], Pınar Celepli[3]
[1]Department of General Surgery, Ankara Training and Research Hospital, Ankara, Turkey
[2]Department of Biochemistry, Ankara Training and Research Hospital, Ankara, Turkey
[3]Department of Pathology, Ankara Training and Research Hospital, Ankara, Turkey

Objective: Previous studies have shown that erdosteine, which is a mucolytic agent, has antioxidant and anti-inflammatory effects. There have also been studies showing that it has hepatoprotective effects on liver damages caused by acetaminophen, cyclosporine, cisplatin, doxorubicin and vancomycin and in experimental obstructive jaundice models. The aim of our study is to investigate whether or not erdosteine, which has antioxidant, anti-inflammatory and hepatoprotective effects, is effective in liver ischemia-reperfusion injury.

Methods: A total of four groups, each consisting of 10 rats, were created. In the sham group, only the liver pedicle was mobilized and no other intervention or treatment was performed. In the other groups; after ischemia was created by clamping the liver pedicle for 60 minutes, reperfusion was performed for 90 minutes and no treatment was given to the control group. In the perioperative treatment group, 100 mg/kg erdosteine was administered via orogastric catheter 2 hours before the ischemia induction, and 100 mg/kg/day erdosteine was given in the preoperative group for 10 days before the operation. At the end of the procedures, blood and liver samples were obtained for biochemical and histopathological assessment.

Results: While the highest liver function test values (AST, ALT, GGT and ALP) were detected in the control group, the preoperative and perioperative use of erdosteine significantly decreased these levels compared to the control group. When the oxidative

stress parameters were evaluated, the highest values of tissue malondialdehyde, total fluorescence oxidation products and total oxidative stress and the lowest total sulfhydryl values were detected in the control group. It was observed that the use of Erdosteine decreased the high values and increased the low values, and it was found that the differences with the control group were statistically significant. It was histopathologically seen that the integrity of hepatocyte cell cords was impaired and that there were findings of inflammatory infiltration, enlargements in sinusoids and diffuse congestion in the control group. Perioperative and preoperative erdosteine treatment significantly reduced histopathological abnormalities compared to the control group.

Conclusion: Although the use of erdosteine significantly improved the biochemical and histopathological findings and the results were better in the group to which treatment was given preoperatively for 10 days, there was no statistically significant difference between the preoperative and perioperative Erdosteine groups. This is the first study to show that erdosteine has positive effects on the harmful effects of experimental hepatic ischemia-reperfusion injury.

Keywords: Erdosteine, liver, ischemia - reperfusion

SS-53

Thoracotomy and gastric pull-up approach for esophageal perforation in a single case

Muzaffer Önder Öner, Mehmet Kadir Bartın, İlhan Taşdöven

Department of General Surgery, Health Sciences University, Van Training and Research Hospital, Van, Turkey

Objective: Esophagus is defined as a simple tube that anatomically allows the passage of nutrients from the oropharynx into the stomach. Because it extends along the three different anatomic regions including neck, thorax and abdomen and it has close proximity to vital organs, its diseases and their treatments are quite complicated. Esophageal perforation (EP) is a clinical picture which causes mediastinal or pleural inflammation and sepsis within a very short period of time as a result of the disruption in the integrity of the esophagus due to iatrogenic or non-iatrogenic trauma and which has a high morbidity and mortality (15-30%). It is quite difficult to determine the incidence of esophageal injuries. While spontaneous injuries were the most common cause in the past, iatrogenic injuries have become the first cause with the introduction of endoscopic applications for diagnosis and treatment in the field of medicine. Spontaneous injuries are defined as spontaneous esophageal perforation developing as a result of a strong retching and vomiting and they are a classic example for typical perforation. Because Boerhaave Syndrome is often seen in those taking alcohol along with excessive food, an excessive contamination occurs in mediastinal and pleural spaces. A 67-year-old male patient was admitted to the emergency department due to esophagus perforation that occurred as a result of spontaneous coughing. The pulse of the patient was 130/min, BP was 110/70 mmHg, respiratory rate was 45/min, and temperature was 38.5 degrees, and he had mediastinal findings in thoracic CT. An emergency operation was planned for the patient who had general condition disorder and sepsis.

Methods: The thorax of the patient was entered through the right thoracotomy. Full-thickness esophageal perforation was seen. After the perforation area was determined, the hiatal area was expanded and the stomach fundus was taken into the thorax. Then, a 16-fr nasogastric tube was inserted in such a way that it would pass to the distal side of the perforated area in the esophagus. Primary closure was performed in the perforated area with 3/0 prolene sutures. Then, the perforated area on the esophagus was wrapped 360 degrees to the fundus and the stomach was sutured on its own with 2/0 prolene sutures as in fundoplication. The inside of the thorax was washed with plenty of SF and after the chest tube was placed, the operation was terminated.

Conclusion: Septic findings of the patient regressed on the postoperative 12th day. Patient was extubated on the postoperative 14th day and externated on the 28th day.

Keywords: Esophageal perforation, thoracic approach, fundoplication

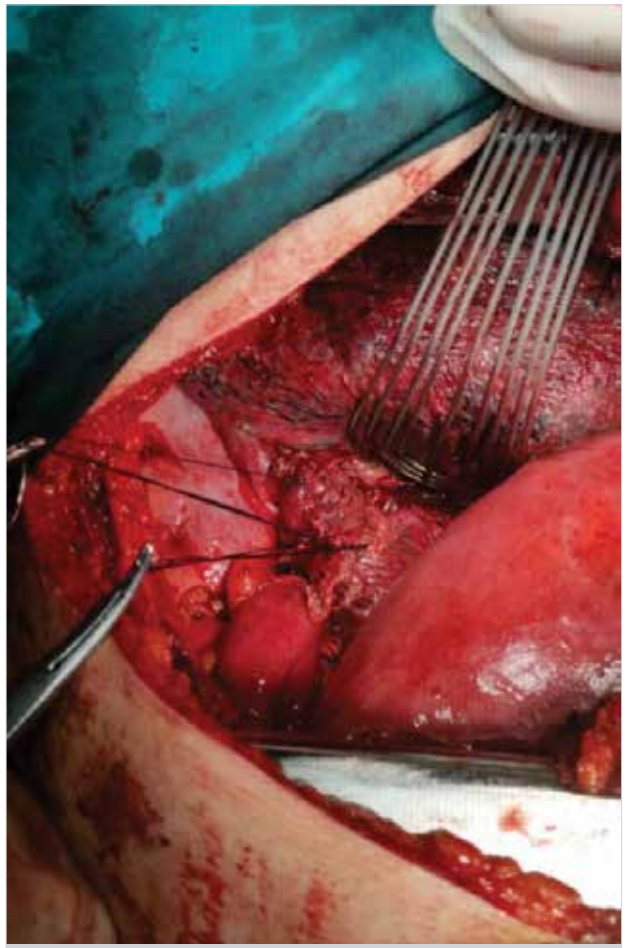

Figure 1. Repair of perforated esophagus

Figure 2. Perforated area in the esophagus

Figure 3. Perforated area in the esophagus

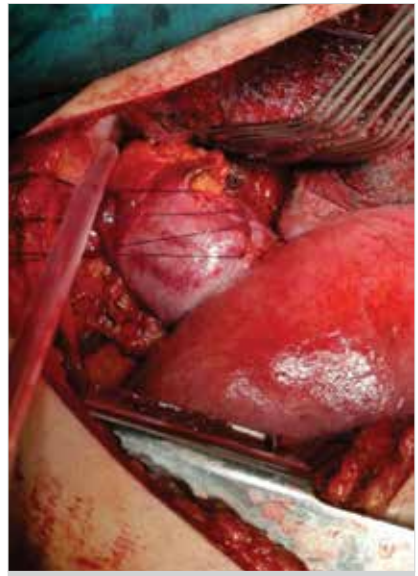

Figure 4. The final state of repaired perforated area in the esophagus

SS-54

The effect of using methylene blue on recurrence in pilonidal sinus surgery

Şahin Kahramanca[1], Turgut Anuk[2], Ali Cihat Yıldırım[1]
[1]Department of General Surgery, Kars State Hospital, Kars, Turkey
[2]Department of General Surgery, Kafkas University School of Medicine, Kars, Turkey

Objective: Pilonidal sinus (PS) disease, in which congenital hypotheses are believed to play a role in the pathogenesis and for which there are evidences suggesting that it is acquired, has an incidence of 0.7%. Simple application, low rates of infection, seroma and hematoma, no wound healing problem, and recurrence rates within acceptable limits are the parameters of an ideal PS operation. In order to decrease recurrence rates, surgical margins are determined by using methylene blue (MB) and various surgical techniques are performed. In our study, we aimed to reveal the effect of MB on reducing long-term recurrence rates in patients in whom limberg excision and rhomboid flap rotation (LE + RFR) were performed.

Methods: Patients who were performed LE + RFR with the diagnosis of PS between June 2012 and June 2014 were included in the study. The presence of preoperative infections in patients, recurrence status, early complications and the recurrence rates in the postoperative 30th month were recorded by reaching the patients via telephone. The patients were divided into two groups as the group in which MB was applied (Group 1) and as the group in which MB was not applied (Group 2). The postoperative recurrence results of the patients were compared.

Results: The ratio of male/female in 158 patients was 6.8. While 84.4% of the patients had pain and discharge complaints, 15.6% had no active complaints. Ten of the patients who were operated were recurrent cases (6.3%). The follow-up duration of the patients was 36 months. When the male/female ratio was evaluated, it was observed that the only patient with recurrence was a female patient over 50 years old ($p=0.009$). Although recurrence developed in the patient in whom MB was applied, it was observed that there was no difference between the groups in terms of recurrence development ($p=0.309$). The presence of recurrence in the patient who had preoperative recurrence indicated that the risk of recurrence was high despite the use of MB in the operations of recurrent cases ($p<0.001$). When the rates of infections that developed in the early postoperative period were compared, no significant difference was found ($p=0.601$). There was no difference between the groups in terms of BMI ($p=0.228$).

Conclusion: The treatment protocols which developed over the years showed radical changes in accordance with the hypotheses on the etiopathogenesis of the disease. Today, surgical interventions have become available rather for the removal of intergluteal sulcus. Despite the fact that there is no consensus on reducing recurrence rates, it was found that the use of methylene blue had no effect on recurrence rates in our study in which we used methylene blue, which is thought to be useful in marking the area to be excised.

Keywords: Pilonidal sinus disease, methylene blue, recurrence

SS-55

"Single Incision Laparoscopic Surgery" (SILS) port made of plastic bottle

Burhan Hakan Kanat[1], Abdullah Böyük[1], Mustafa Girgin[2], Ferhat Çay[3], Bekir Güneş[1], Yavuz Selim İlhan[2]

[1] Department of General Surgery, Elazığ Training and Research Hospital, Elazığ, Turkey

[2] Department of General Surgery, Fırat University School of Medicine, Elazığ, Turkey

[3] Department of General Surgery, Midyat State Hospital, Mardin, Turkey

Objective: "Single Incision Laparoscopic Surgery" (SILS) ports are expensive. In this study, it was aimed to introduce the use of "Single Incision Laparoscopic Surgery" (SILS) Port made of plastic bottle.

Methods: We aimed to present a single-port laparoscopic appendectomy which we performed with a plastic bottle mouth and gloves, and to present the availability of the port. After the patients were laid down in supine position and the prophylactic antibiotic was administered, an approximately 2 cm long skin incision was made by involving the umbilicus. Upon reaching the fascia, the abdomen was entered through a transverse incision about 2.5 cm in length and the tip of the plastic bottle, which had previously been cut and kept in solution, was placed in the abdomen (Figure 1, 2). A glove was placed on this port and one 10-mm and two 5-mm trocars were inserted through the fingers of the glove (Figure 3). The glove openings were tightly tied with a silk suture in order to ensure the continuity of the pneumoperitoneum. Subsequently, pneumoperitoneum was created by inflating the abdomen up to 13 mmHg pressure by giving CO2. A thirty-degree angle 10-mm telescope was inserted through the trocar and exploration was performed. In the appendectomy, meso-appendix dissection was performed with Ligasure® device. The appendix root was ligated with the suture that was prepared outside. When additional ports were needed, one 5-mm trocar was inserted according to the surgeon's preference. In patients in whom laparotomy was required, the incision site was again chosen according to the preference.

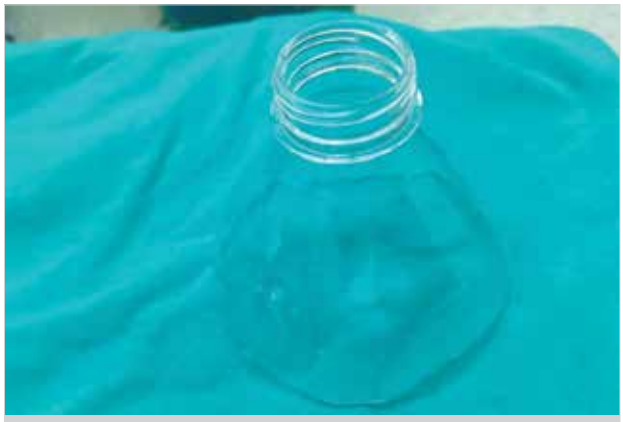

Figure 1.

Results: SILS appendectomy can be performed using this method. Although maintenance of continuity in pneumoperitoneum and manipulation of the equipment are sometimes difficult, this situation can be overcome by developing a similar system or port. We did not use it in many cases; however, the duration of surgery slightly increased in cases in which we used it.

Conclusion: This method can be used conveniently and safely when it is preferred to perform a surgical procedure with "Single Incision Laparoscopic Surgery" (SILS). Its cost is very low.

Keywords: Laparoscopy, single incision, single port

Figure 2.

Figure 3.

SS-56

The role of MPV (mean platelet volume) in the prediction of malignancy in thyroid gland diseases

Turgut Anuk

Department of General Surgery, Kafkas University School of Medicine , Kars, Turkey

Objective: In our study, we aimed to determine the effect of mean platelet volume (MPV), which was evaluated at admission in patients undergoing thyroid surgery due to nodular goiter, on the prediction of malignancy and possible differences in malignancies.

Methods: We retrospectively reviewed the records of 165 patients who consulted to our department between June 2012 and June 2017 with the complaints of pain and swelling in the neck, in whom thyroid nodule was incidentally detected during routine examinations, for whom thyroidectomy decision was made by a single surgeon as a result of the preliminary examinations, and in whom bilateral total thyroidectomy was performed by the same surgeon. Patients' age, gender, the presence of thyroiditis according to the results of preoperative fine needle aspiration biopsy, preoperative MPV at the time of admission to the hospital, and postoperative histopathological data were recorded from their files. Patients were divided into 2 groups as malignant/non-malignant patients. Eighteen patients having hematologic disease, active infection within the last week, and a history of blood transfusion were excluded from the study.

Results: The median value for age was 48 (20-89) years and the female/male ratio was 4.7 in the study. In the postoperative histopathological evaluation, malignancy was detected in 52 (35.4%) patients. Papillary carcinoma was observed in 48 of these patients and follicular thyroid carcinoma in 4 of them. When the groups were examined in terms of gender and the presence of preoperative thyroiditis, it was observed that both parameters were homogeneously distributed between the groups (p=0.929 and p=0.376). The mean age of the malignant group was found to be higher (p=0.041). In the comparison of MPV between the groups, the value of MPV was found to be significantly higher in the malignant group with a value of 8.6±0.7 fL than that of the group with benign pathology with a value of 8.2±0.8 fL (p=0.011). When the common effect of age, gender, and the presence of thyroiditis on predicting malignancy was investigated, MPV was found to be significantly higher in thyroid gland malignancies independently from all these three parameters which were examined (p=0.017). Considering 8.25 fL cutoff value of MPV, which was specified with the Roc-curve for the prediction of malignancy, it was found to have 65.4% sensitivity and 56.8% specificity. In addition, a positive correlation of + 0.208 was found between the increase in MPV and malignancy with a statistical value of p=0.011. There was no difference among the malignancy subtypes in 52 malignant patients in terms of MPV (p=0.535).

Conclusion: In the light of the results obtained in our study, we believe that the mean platelet volume that is examined preoperatively can be used to predict possible thyroid malignancy.

Keywords: Thyroid cancer, MPV, predictivity

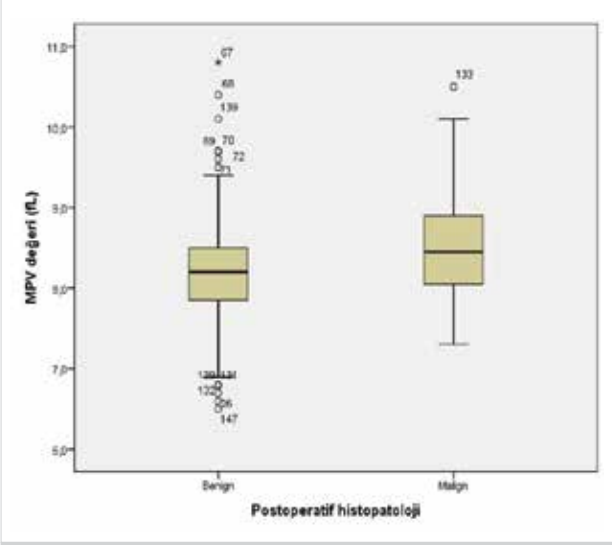

Figure 1. MPV distribution graph between the groups

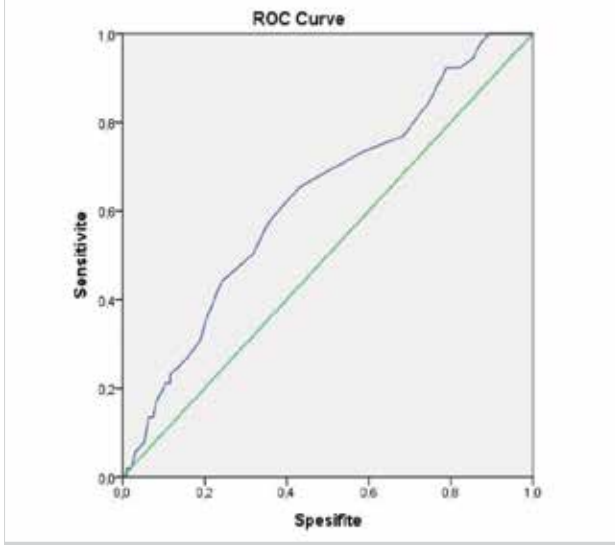

Figure 2. MPV distribution ROC between the groups

SS-57

Differences between geriatric and non-geriatric patient populations in gastric cancer patients

Şahin Kahramanca[1], Turgut Anuk[2]

[1]Department of General Surgery, Kars State Hospital, Kars, Turkey

[2]Department of General Surgery, Kafkas University School of Medicine, Kars, Turkey

Objective: In our study, we aimed to reveal the differences in the geriatric and nongeriatric patient groups by showing the demographic characteristics of the patients who were operated due to stomach cancer (SC) and who were under our follow-up.

Methods: The file records of 174 patients who were operated with the diagnosis of SC between January 2011 and June 2017 were retrospectively evaluated. Patients' ages, gender, localization of tumor, histopathologic examination of surgical material, the presence of macroscopic distant metastasis in intraoperative findings, and the mortality rates in postoperative one-month period were recorded. The patients were divided into two groups as Group 1 including patients who were 65 years old and over (geriatric patients) and as Group 2 including patients who were younger than 65 years old (nongeriatric patients). Eight cases with missing file records were excluded from the study.

Results: The study included 166 patients. The median age of the patients was found as 64 years (min: 24 max: 91). Of the patients, 110 (66.3%) were male. When the stomach segment with tumor was examined, stomach cancer that was localized in the 1/3 distal part was detected in 87 patients most frequently. According to the TNM staging, the number of patients with stage 4 tumor was higher (in 71 patients). Distant organ metastasis was detected in 71 patients (42.8%). Postoperative 30-day mortality occurred in 22 cases. Intergroup gender distribution, early mortality rates and the distributions of stomach segment with tumor were homogeneous (p=0.661, p=0.085 and p=0.754). In the geriatric group, the rates of stage 3 and further stages were significantly higher (p=0.024). No differences were observed between the groups in terms of their complaints at the time of admission and the duration of postoperative hospitalization (p=0.826 and p=0.281).

Conclusion: Despite the decrease in mortality rates in SC in parallel to the technological developments in diagnosis and treatment, morbidity and mortality rates are still high due to the fact that the disease is still diagnosed at advanced stages. The most important factor affecting long term survival in SC is the tumor's stage. As we have observed in our study, the incidence of SC that is detected at advanced stages in the non-geriatric patient population is higher than that in the geriatric patient population. For this reason, early diagnosis will be possible through early endoscopy and the rates of mortality will decrease in patients having a positive familial history and epigastric pain that is resistant to medical treatment, particularly in those having dysphagia and weight loss.

Keywords: Stomach cancer, geriatrics, TNM staging

SS-58

Is capsule endoscopy life-saving in patients who have gastrointestinal complaints but in whom traditional diagnostic methods are ineffective?

Süleyman Orman

Department of Gastroenterology Surgery, İstanbul Medeniyet University, Göztepe Training and Research Hospital, İstanbul, Turkey

Objective: Capsule endoscopy is a commonly used diagnostic method to investigate the cause of gastrointestinal complaints. Our aim was to determine the diagnostic success of the capsule endoscopy in a group of patients who had gastrointestinal complaints but in whom traditional diagnostic methods were ineffective.

Methods: The data of 91 patients who were performed capsule endoscopy for gastrointestinal complaints were retrospectively reviewed. Patients' demographic data, complaints, capsular endoscopic data, and the results of gastroscopy, colonoscopy and computed tomography were evaluated.

Results: Of the patients, 38.9% (n=37) were female and 61.1% (n=58) were male. Gastroscopy and colonoscopy were performed in all cases and computerized tomography was performed in 40.4% (n=38) of them. A total of 141 lesions were detected in the capsule endoscopy. The mean age of the cases was 56.98±18.95 (14-92) years. Forty-four lesions were detected in 21 cases with occult GIS bleeding, and 61.4% of them were in the jejunum. Fifty-six lesions were found in 32 cases with non-occult GIS bleeding, and 42.9% of them were in the jejunum. Sixteen lesions were found in 14 patients with diarrhea complaints, and 50% of them were located in the ileum. Twenty-five lesions were found in 24 cases with the complaint of abdominal pain and 56% of them were observed in the ileum. The most frequent lesion type and location was jejunal angiodysplasia in patients with non-occult and occult gastrointestinal bleeding complaints, and they were detected as 21/37 and 20/32, respectively. The most frequent lesion type and location in patients with diarrhea and abdominal pain was ileal Crohn's disease, and they were detected as 4/5 and 3/4, respectively. When the patients were evaluated according to the number of complaints, 41.1% (n=39) of the patients

were observed to have only one complaint. When the complaints were examined one by one, it was observed that patients most frequently consulted due to anemia (49/170). No lesions were found in 79.6% of the patients with anemia. In 97.4% of those in whom any lesion was detected, it was observed to be an explanatory lesion of the pathology. When the complaints were evaluated in a multiple consideration, the patients most frequently consulted with anemia + hematemesis (15/55) and any lesion was detected in 80% of them. It is seen as an explanatory lesion in all of those with any lesion.

Conclusion: Capsule endoscopy is a very effective diagnostic method when it is used with appropriate indications in cases for which conventional endoscopy is inadequate.

Keywords: Capsule endoscopy, gastrointestinal endoscopy, computed tomography, enteroscopy.

Table 1. Distribution of patients with gastrointestinal complaints according to the body regions of their complaints

	Number of patients	Number of lesions	Stomach	Duodenum	Jejunum	Ileum	Colon
Occult bleeding in GIS	21	44	2 (4.5)	1 (2.3)	27 (61.4)	13 (29.5)	1 (2.3)
Explicit bleeding in GIS	32	56	11 (19.6)	2 (3.6)	24 (42.9)	13 (23.2)	6 (10.7)
Diarrhea	14	16	1 (6.3)	2 (12.5)	2 (12.5)	8 (50)	3 (18.8)
Abdominal pain	24	25	6 (24)	2 (8)	1 (4)	14 (56)	2 (8)
Total	91	141	20 (14.2)	7 (5.0)	54 (38.3)	48 (34.0)	12 (8.5)

SS-59

Laparoscopic left paraduodenal hernia repair

Muhammed Selim Bodur, Reyyan Yıldırım, Mehmet Uluşahin, Vural Argın, Arif Burak Çekiç, Serdar Türkyılmaz, Ali Güner

Department of General Surgery, Karadeniz Technical University School of Medicine, Trabzon, Turkey

Introduction: Paraduodenal hernias are a frequent type of internal herniation and are often described as the herniation of the small intestines into the retroperitoneal region through a congenital opening located on the left side of the mesentery. Patients usually consult with the symptoms of acute mechanical intestinal obstruction. In this video presentation, it is aimed to present the left paraduodenal hernia diagnosis that was made through radiologic examination and the technique and method of performing laparoscopic hernia repair after a conservative follow-up in a 22-year-old male patient, who was admitted to the emergency department with vomiting and abdominal pain attacks that had repeated since childhood and who did not receive a specific diagnosis.

Figure 1. Coronal CT section of the abdomen

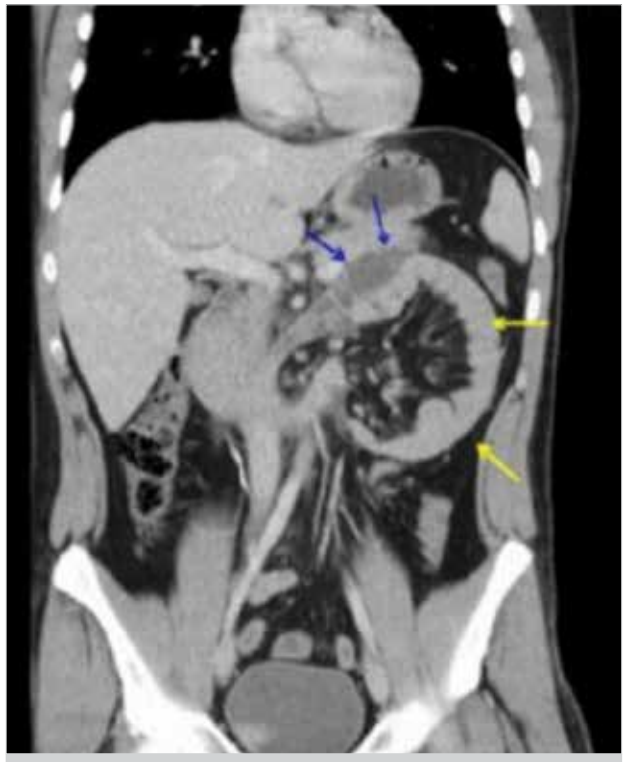

Figure 2. Axial section of the abdomen

Figure 3. View of paraduodenal hernia surgery

Case: The 22-year-old male patient was admitted to the emergency department with the complaints of abdominal pain, nausea and vomiting. The patient who had no history of comorbidities had consulted to the emergency unit from time to time with similar complaints since his childhood. The patient with stable vital findings had distention in the abdomen, but he had no defense or rebound. Acute phase reactant values were within normal limits. There was no air-liquid level in Standing Direct Abdominal Radiograph (SDAR). It was observed in the computed tomography of the abdomen that the small intestine loops herniated into the retroperitoneal region from a defect in the left paraduodenal region beginning from the duodenal-jejunal junction and they created conglomerate appearance. In addition, there were hypodense areas in the intestinal segments, which were consistent with congenital and ischemic findings. The findings were defined as incarcerated left paraduodenal hernia. After the patient underwent nasogastric decompression for 24 hours, laparoscopic surgical treatment was planned.

After the pneumoperitoneum was formed, one 10-mm and two 5-mm trocars were placed in addition to the camera port. Omentum and transverse colon were lifted and duodenal jejunal junction was seen. In the lateral side, mesenteric defect and small intestine loops embedded in the defect were seen. All small intestine loops and mesentery were pulled to the peritoneal region. The intestinal walls were edematous, but there was no ischemic finding. Primary closure was performed on the mesenteric defect with non-absorbable suture. The patient who did not have any problems in the postoperative follow-ups was discharged on the 3rd day. No pathology was detected in the control imaging after 1 year.

Conclusion: Laparoscopic surgery is a safe and effective treatment option in the treatment of left paraduodenal hernia.

Keywords: Intestinal obstruction, laparoscopy, paraduodenal hernia

SS-60

The effect of the bistoury, monopolar electrocautery, bipolar electrocautery and vascular sealing devices used in colon resection on the healing of anastomosis in the model of pancolitis created in rats

Faruk Pehlivanlı[1], Oktay Aydın[1], Gökhan Karaca[1], Gülçin Aydın[2], Tuba Devrim[3], Faruk Çomu[4], Huri Bulut[5], Çağatay Erden Daphan[1]

[1]Department of General Surgery, Kırıkkale University School of Medicine, Kırıkkale, Turkey
[2]Department of Anesthesia and Reanimation, Kırıkkale University School of Medicine, Kırıkkale, Turkey
[3]Department of Pathology, Kırıkkale University School of Medicine, Kırıkkale, Turkey
[4]Department of Physiology, Kırıkkale University School of Medicine, Kırıkkale, Turkey
[5]Department of Biochemistry, Bezmialem University School of Medicine, İstanbul, Turkey

Objective: Colitis cases are clinical problems that are frequently encountered in general surgery clinics and that increase morbidity and mortality. In this study, it was aimed to investigate the effects of scalpel, harmonic scalpel, monopolar and bipolar cautery used in anostomosis on anostomotic explosion pressure and wound healing in rats in which colitis was created clinically and anastomosis was performed.

Methods: A total of 100 Wistar Albino rats were used and they were divided into 5 groups as control group (Group 1), as scalpel group (Group 2), as cautery group (Group 3), as bipolar group (Group 4) and as harmonic group (Group 5). The control group underwent a surgical procedure in order to demonstrate the colitis formation. Formation of colitis in rats was provided by giving 7% DSS (Dextran sodium sulphate) as drinking water for 7 days. After the formation of colitis in the rats in groups 2, 3, 4, and 5, laparotomy

Table 1. Comparison of early period parameters among the groups

Variable	GROUP (I/J)	Z	p
Explosion pressure	Lancet-1/Harmonic-1	-2.469	0.014
Reepithelization	Lancet-1/Harmonic-1	-2.458	0.014
	Lancet-1/Harmonic-1	-2.503	0.012
Neovascularization	Lancet-1/Bipolar-1	-2.043	0.041
	Lancet-1/Harmonic-1	-3.465	0.001
	Cautery-1/Harmonic-1	-3.291	0.001
	Bipolar-1/Harmonic-1	-3.688	<0.001
PMNL	Lancet-1/Harmonic-1	-3.429	0.001
	Cautery-1/Harmonic-1	-3.286	0.001
	Bipolar-1/Harmonic-1	-3.604	<0.001
Lymphocyte	Lancet-1/Harmonic-1	-2.409	0.016
	Cautery-1/Harmonic-1	-2.309	0.021
	Bipolar-1/Harmonic-1	-2.204	0.028
Muscular layer continuity	Lancet-1/Bipolar-1	-3.391	0.001
	Lancet-1/Harmonic-1	-3.751	<0.001
	Cautery-1/Bipolar-1	-2.814	0.005
	Cautery-1/Harmonic-1	-3.074	0.002

Mann-Whitney Test

Table 2. Comparison of late period parameters among the groups

Variable	GROUP (I/J)	Z	p
Neovascularization	Lancet-2/Harmonic-2	-2.105	0.035
	Cautery-2/Harmonic-2	-2.910	0.004
PMNL	Lancet-2/Harmonic-2	-2.705	0.007
	Cautery-2/Harmonic-2	-3.286	0.001
E-selectin	Lancet-2/Harmonic-2	-2.196	0.028
	Cautery-2/Harmonic-2	-2.754	0.006
P-selectin	Lancet-2/Harmonic-2	-2.196	0.028
	Cautery-2/Harmonic-2	-2.754	0.006

Mann-Whitney Test

and then the required surgical intervention were performed on the 8th day and later. The groups 2, 3, 4 and 5 were divided into two subgroups, as early period and late period. Early period groups were sacrificed on the 5th day after anastomosis and late period groups were sacrificed on the 14th day after anastomosis. After laparotomy, the anastomosis line was resected to contain 2 cm intact colon tissue in the distal and proximal side and the explosion pressure was measured. Biochemically E-selectin, P-selectin and Hydroxyproline (OH-P) values were measured. Histopathological evaluation which included reepithelialization (RE), neovascularization (NV), PMNL, lymphocyte density (LD), and muscular layer continuity (MLC) was performed.

Results: According to the early-stage findings, there was a significant difference among the groups in terms of explosion pressure (p=0.035). It was observed in the histopathological evaluation that there were significant differences among the groups in terms of reepithelization (p=0.020), neovascularization (p<0.001), PMNL density (p<0.001), lymphocyte density (p=0.002), and muscular layer continuity (p<0.001). According to the histopathological late-stage findings, there were significant differences among the groups in terms of neovascularization (p=0.003) and PMNL density (p=0.002). After biochemical evaluation, there was a significant difference among the groups in e-selectin (p=0.017) and p-selectin (p=0.017) levels. Intergroup comparison of early and late findings is presented in Tables 1 and 2.

Conclusion: We believe that colon resection using harmonic is more beneficial in terms of early anastomosis safety than the use of scalpel, monopolar cautery and bipolar cautery.

Keywords: Pancolitis, anastomosis, scalpel, electrocautery, vascular sealing

SS-61

Clues for laparoscopic approach to Morgagni hernia

Adil Başkıran, Kutay Sağlam, Abuzer Dirican

Institute of Liver Transplantation, İnönü University, Malatya, Turkey

Introduction: Congenital diaphragmatic hernia (CDH) was first defined by Lazarus Riverius in a postmortem examination in 1697 incidentally. Congenital diaphragmatic hernias are classified as Bochdalek (posterolateral), Morgagni (anterior-retrosternal), and septal transversum defect (Picture 1). Congenital diaphragmatic hernia is seen in one of every 2000-12.500 live births across the world (3). The frequency of Bochdalek hernia is 20 times higher than Morgagni hernia. Because symptoms, which are noticed late or in adulthood, are confused with nonspecific symptoms of respiratory and gastrointestinal diseases, they are generally late diagnosed. Only 3% of CDHs are Morgagni hernias. Patients with Morgagni hernia are asymptomatic after birth and they cannot be diagnosed until adulthood. Mild or moderate substernal pain and incarceration can develop in symptomatic patients. Or, severe pain can be seen in patients developing strangulation. Various approaches have been used in the surgical treatment of Morgagni hernias.

Case: A 40-year-old male patient was admitted to the emergency unit for the complaints of nausea, vomiting, and inability to defecate. While his laboratory analyses were normal, his chest radiography revealed diaphragmatic hernia. Further radiological

examination was ordered for the patient and he underwent computed tomography of the thorax. After the establishment of diagnosis as CDH (Morgagni), he was operated and his surgical treatment was completed with laparoscopic approach. There were omentum and transverse colon in the hernia sac. After the organs in the hernia sac were removed, a mesh was done with prolene suture in the herniated area and then dual mesh was fixed with the help of a spiral stapler (tacker). The operation was completed. The patient was discharged from the hospital on the postoperative 2nd day.

Conclusion: This case showed to us 1- Because hernia sac is attached to the pericardium in Morgagni hernias, it should not be tried to be removed. 2- While closing the neck of hernia sac, normal suture should be passed through the lower fold but suture should be made by progressing 3-4 cm in the hernia sac from the upper fold (the fold under the sternum). Otherwise, the closure of herniated area becomes more difficult. 3- After a mesh was done with prolene suture in the defected area, dual mesh can easily be fixed with the help of a spiral stapler (tacker). The follow-up examination of our patient in the postoperative 6th month was normal. Morgagni hernia should be kept in mind for patients consulting with substernal pain and subileus attacks. Laparoscopic surgical treatment is an approach that can be used for Morgagni hernia.

Keywords: Morgagni hernia, laparoscopic surgery, diaphragmatic hernia

SS-62

The effect of dexpanthenol, PRP (platelet rich plasma) and thymoquinone on liver regeneration after partial hepatectomy

Oktay Aydın[1], Faruk Pehlivanlı[1], Gökhan Karaca[1], Gülçin Aydın[2], Canan Altunkaya[3], Huri Bulut[4], Kuzey Aydınuraz[1]

[1]Department of General Surgery, Kırıkkale University School of Medicine, Kırıkkale, Turkey
[2]Department of Anesthesia and Reanimation, Kırıkkale University School of Medicine, Kırıkkale, Turkey
[3]Department of Pathology, Kırıkkale University School of Medicine, Kırıkkale, Turkey
[4]Department of Biochemistry, Bezmialem University School of Medicine, İstanbul, Turkey

Objective: Regenerative capacity of the liver after resection affects mortality and morbidity to a great extent. Although there are many studies on many agents that can affect liver regeneration in literature, no study on dexpanthenol, PRP, and thymoquinone is available. In this study, it was aimed to evaluate the effect of dexpanthenol, PRP, and thymoquinone on liver regeneration and oxidant-antioxidant parameters after 70% partial hepatectomy (PH).

Methods: This study was performed on 48 Wistar-Albino male rats. They were divided into four equal groups.

1. Group=Partial hepatectomy (PH) was performed in the control group.

2. Group=A single dose 50 mg/kg/day intraperitoneal dexpanthenol was given for 7 days after PH.

3. Group=A single dose 1mg/kg/day PRP was administered for 7 days after PH.

4. Group=A single dose 10 mg/kg/day thymoquinone was given for 7 days after PH.

The rats were sacrificed on the 7th day after partial hepatectomy. The samples taken from the rats were evaluated biochemically in terms of hydroxyproline (OHP), 8-isoprostan from oxidant-antioxidant parameters, the levels of 8-OHdG, MDA, GSH, and CAT and histopathologically in terms of ductus proliferation for liver regeneration, inflammatory cell intensity of the liver parenchyma, and inflammatory cell intensity of regeneration zone.

Results: When the control group and the PRP group were compared, a statistically significant highness was observed in favor of the control group with regard to all biochemical parameters ($p<0.005$) (Table 1-3). Considering the control group and Dexpanthenol group, there was a statistically significant difference in terms of ductus proliferation ($p=0.029$) and inflammatory cell intensity of the liver parenchyma ($p=0.004$) in favor of the Dexpanthenol group and in terms of inflammatory cell intensity of the regeneration zone in favor of the control group ($p=0.014$) (Table 1-3).

Table 1. Statistical analysis of biochemical data (F, df(DEGREES OF FREEDOM), p values)

Variable	F	df	p
OHP	3.90	3	0.018
ISO-8	3.89	3	0.018
OHDG-8	3.90	3	0.018
MDA	3.90	3	0.018
GSH	3.89	3	0.018
CAT	3.89	3	0.018

Table 2. Intergroup comparison values of biochemical data (MD (MEAN DEVIATION) and p values)

Variable	Group (I/J)	MD	p
OHP	Control/PRP	497.17	0.010
ISO-8	Control/PRP	4.97	0.010
OHDG-8	Control/PRP	55.24	0.010
MDA	Control/PRP	39.77	0.010
GSH	Control/PRP	13.81	0.010
CAT	Control/PRP	5.68	0.010

Conclusion: Compared to the control group, the biochemical levels of OHP, 8-isoprostan, OHDS, MDA, GSH, and CAT in the liver tissue were found to be significantly lower in the PRP group. It was observed that PRP had antioxidant effectiveness in liver regeneration after partial hepatectomy. Histopathologically, ductus proliferation, inflammatory cell intensity of the liver parenchyma, and inflammatory cell intensity of regeneration zone were evaluated.

Considering the control and Dexpanthenol groups, a significant difference was seen in favor of the Dexpanthenol group in terms of ductus proliferation, in favor of the Dexpanthenol group in terms of the inflammatory cell intensity of the liver parenchyma, and in favor of the control group in terms of the inflammatory cell intensity of regeneration zone. Positive effects of Dexpanthenol on liver regeneration after partial hepatectomy were observed.

Tablo 3. Patolojik verilerin gruplar arası değerlendirmesi (Z ve p değerleri)

Variable	GROUP (I/J)	Z	p
Ductus proliferation	Control/DXP	-2.504	0.012
Inflammatory cell of the liver parenchyma	Control/DXP	-2.912	0.004
Inflammatory cell of the regeneration zone	Control/DXP	-2.462	0.014

Keywords: Partial hepatectomy, dexpanthenol, PRP, thymoquinone, regeneration

SS-63

Results of structuring practical training in accordance with the core curriculum for the 4th term general surgery internship in Kocaeli University School of Medicine

Sertaç Ata Güler, Turgay Şimşek, Abdurrahim Fidan, Tansu Ömer, Nihat Zafer Utkan
Department of General Surgery, Kocaeli University School of Medicine, Kocaeli, Turkey

The Department of General Surgery in School of Medicine at Kocaeli University began to follow an internship program in the 4th term of medical faculty as of 1998-1999 academic year. Since then, the curriculum including theoretical and practical courses has been revised every year and tried to be maintained in parallel with modern medical Training. Until the 2015-2016 academic year, practical training on general surgery was performed as bedside visits of patients. Training on patient's condition at the time of practical training, which could change according to the approach of the instructor giving that course, was provided to students. In the 2015-2016 academic year, the curriculum was revised and re-structured for the 4th term general surgery practical Training in accordance with the National Core Curriculum (NCC) for Undergraduate Medical Training, which was revised in 2014. Practical training was revised by considering the lists of Basic Medical Practices and Core Diseases/Clinical Problems, which are included in NCC, and learning levels. Topics that must be learned were determined and curriculum for practical training was designed. In our study, the comparison of the curriculum for practical training, which was revised in accordance with NCC, and the previous curriculum including bedside patient visits was evaluated. Feedback responses of 245 students undergoing practical training curriculum that was structured according to NCC were compared to those of 129 students receiving practical training at bedside visits before restructuring. It was found that bedside practices and outpatient clinic practices after structuring the curriculum according to NCC were significantly different compared to the previous curriculum for the benefit of students. Similarly, the new curriculum was significantly different in terms of instructor's communication with students and the use of technological materials in courses. On the other hand, no statistically significant difference was found in terms of effective use of course time and the practices in the operating room and endoscopy unit. In conclusion, compared to classical practical Training including bedside visits, the practical Training curriculum that was revised in accordance with NCC and structured according to learning levels and that had pre-determined subject topics was found to be more beneficial in the 4th term internship on general surgery in medical faculty.

Keywords: National Core Curriculum (NCC) for Undergraduate Medical Training, general surgery internship, practical training

SS-64

Our experiences on transperitoneal laparoscopic adrenalectomy

Mustafa Girgin[1], Ferhat Çay[2]
[1]*Department of General Surgery, Fırat University School of Medicine, Elazığ, Turkey*
[2]*Clinic of General Surgery, Midyat State Hospital, Mardin, Turkey*

Objective: The aim of this study is to evaluate the results of transperitoneal laparoscopic adrenalectomy cases in our department.

Methods: Transperitoneal laparoscopic adrenalectomy was performed in 51 patients between January 2010 and September 2017.

Results: The mean age of 51 patients was 53.81±14.006 (31-76) years. Of them, 18 (35%) were male and 33 (65%) were female. Right and left adrenelectomy surgeries were performed in 30 cases (59%) and 21 cases (41%), respectively. All patients were operated with the transperitoneal laparoscopic approach. In 4 patients, peroperative bleeding developed and hemostasis was provided. Open surgery was not performed in any patient. No bleeding requiring postoperative transfusion or no another major complication developed. The mean duration of operation was 102.8±21.6 (50-170) minutes. Based on the pathology specimen, the mean tumor size was 3.8±2.6 (2-12) cm. The mean length of hospitalization was 2.61±0.8 (2-6) days. The pathological results of the patients were reported as surrenal adenoma in 17 patients, adrenal cortical adenoma in 12 patients, phaeochromocytoma in 8 patients, adrenal cortical neoplasm in 4 patients, adrenal pseudocyst in 4 patients, adrenal nodular hyperplasia in 3 patients, myelolipoma in 1 patient, malignant oncocytoma in 1 patient, and adrenal cortical neoplasm including myelolipomatous metastatic focuses in 1 patient.

Conclusion: We suggest that transperitoneal laparoscopic adrenalectomy is a safe and effective technique for the treatment of the adrenal masses if there is adequate technical equipment, experience, and knowledge.

Keywords: Masses of the adrenal gland, adrenalectomy, laparoscopy, transperitoneal

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SS-65

Correlation of FNAB results with histopathological results in thyroid nodules

Turgut Anuk

Department of General Surgery, Kafkas University School of Medicine, Kars, Turkey

Objective: Fine needle aspiration biopsy (FNAB) of the thyroid is considered as the most reliable diagnostic method in the differentiation of benign and malignant thyroid nodules. In our study, it was aimed to compare histopathological results of patients undergoing FNAB of the thyroid and thyroidectomy and to determine the effectiveness of FNAB in the evaluation of thyroid lesions.

Methods: The files of the patients that were indicated for operation after FNAB and then operated between June 2012 and June 2017 were evaluated retrospectively. The patients' ages, preoperative FNAB pathology results, and postoperative histopathological results were recorded. The patients were divided into two groups as those with malignancy and without malignancy and they were compared in terms of postoperative histopathological results.

Results: The median age of 119 patients included in our study was 46 (min: 20-max: 69) years. In the patients undergoing FNAB in the preoperative period, the most common pathology was benign pathology in 64 patients and then follicular neoplasia/suspected follicular pathology in 10 patients, suspected malignancy in 5 patients, and malignancy in 6 patients. Benign pathology was found in 86 patients in the postoperative period. In the patients undergoing FNAB, the rate of postoperative malignancy was 11.8% in 17 patients who were reported to have non-diagnostic or inadequate material, 23.4% in those who were reported as benign, 29.4% in those having atypia with unclear significance, 20.0% in those with follicular neoplasia or suspected follicular pathology, 80.0% in those with suspected malignancy, and 100% in those with malignancy. Although the median age was found to be higher in benign/malignant patients in whom malignancy was detected in the postoperative histopathological evaluation, the difference between the groups was not statistically significant. In the comparison of postoperative histopathological evaluation results of the patients that were found to have suspected neoplasm and malignancy at the end of FNAB, while malignancy was detected in 12 of 21 patients with suspected neoplasm and malignancy, malignancy was observed in 22 of 98 patients without suspected neoplasm and malignancy. In the comparison of postoperative histopathological evaluation results of the patients that were found to have malignancy in FNAB, while malignancy was detected in all of 6 patients for whom FNAB revealed malignancy, malignancy was observed in 28 of 113 patients for whom FNAB result demonstrated no malignancy.

Conclusion: Fine needle aspiration biopsy is used as the gold standard diagnostic method for evaluating thyroid nodules in the preoperative period. Malignancy was detected in 22 of 98 patients although the diagnosis of malignancy was not established through FNAB in our hospital (22.4%), the cause of which could not be explained.

Keywords: Thyroid nodule, fine needle aspiration biopsy, malignancy

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SS-66

The effects of Coenzyme Q10 and dexketoprofen trometamol administration in acute pancreatitis model created by cerulein in rats

Vural Sözen[1], Gökhan Karaca[1], Kuzey Aydınuraz[1], Yaşar Şahin[2], Oktay Aydın[1], Faruk Pehlivanlı[1], Çağatay Erden Daphan[1], Nermin Dindar[3], Tuba Devrim[4], Osman Güler[1]

[1]Department of General Surgery, Kırıkkale University School of Medicine, Kırıkkale, Turkey
[2]Kırıkkale University School of Veterinary, Kırıkkale, Turkey
[3]Department of Biochemistry, Kırıkkale University School of Medicine, Kırıkkale, Turkey
[4]Department of Pathology, Kırıkkale University School of Medicine, Kırıkkale, Turkey

Objective: Acute pancreatitis (AP) is the non-infectious inflammation of the pancreas. Although it is a disease that restricts itself, it can cause mortality and morbidity approximately in 20% patients. Taking the inflammation under control is important for the course of the disease. This study aimed to investigate the effects of anti-inflammatory and antioxidant Coenzyme Q10 (Q10) and non-steroid anti-inflammatory Dexketoprofen trometamol (Dx) on inflammation in the experimental acute pancreatitis model.

Methods: Experimental acute pancreatitis model was created by giving intraperitoneal Cerulein (50 microgram/kg, four times) to all rats (n=32). The Q10 group (n=8) was given 15 mg/kg/day intraperitoneal Q10 for 5 days and the Dx group (n=8) was given 25mg/kg/day Dx for 5 days. The Q10+Dx group (n=8) was administered 25 mg/kg/day Dx and 15 mg/kg/day Q10 for 5 days. No treatment was applied to the control group (n=8). The rats were sacrificed by giving high-dose anesthetic agent on the 7th day. The levels of CRP, ALT, AST, ALP, GGT, amylase, and lipase were evaluated in the blood samples. Moreover, edema, acinar necrosis, fat necrosis, and perivascular inflammation were histopathologically evaluated in the tissue samples. The results were statistically analyzed.

Results: The value of CRP was significantly higher in the Q10+Dx group than in the Q10 and Dx groups. The AST values of the Q10+Dx group were higher than those of the Q10 group and lower in the control group than in the Dx and Q10+Dx groups. The ALT values were found to be higher in the Q10+Dx group compared to other groups. The ALP and GGT values of the Dx and Q10+Dx groups were higher than in the Q10 and control groups. The value of amylase was found to be significantly higher in the Dx group than in the control group. The lipase values of the Dx+Q10 group were detected to be significantly higher than in other groups. In the histopathological evaluation, edema, acinar necrosis, fat necrosis, and perivascular inflammation were found to be significantly increased in the Dx and Q10+ Dx groups compared to the Q10 and control groups.

Conclusion: In the experimental AP model on rats, it was revealed that dexketoprofen trometamol increased inflammation biochemically and histopathologically, Coenzyme Q10 had no healing effect in AP, and the use of dexketoprofen trometamol and Coenzyme Q10 together increased inflammation in AP much more.

Keywords: Acute pancreatitis, cerulein, coenzyme Q10, dexketoprofen trometamol

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SS-67

Experience in primary hyperparathyroidism surgery

Mustafa Girgin[1], Ferhat Çay[2], Burhan Hakan Kanat[3]

[1]Department of General Surgery, Fırat University School of Medicine, Elazığ, Turkey
[2]Clinic of General Surgery, Midyat State Hospital, Mardin, Turkey
[3]Department of General Surgery, Health Sciences University, Elazığ Training and Research Hospital, Elazığ, Turkey

Objective: Primary hyperparathyroidism is one of rarely seen endocrine diseases and it is commonly encountered at advanced ages. It is the most common cause of hypercalcemia.

Methods: In our study, 113 patients who were operated due to hyperparathyroidism by the same surgeon in a 7-year period in the Department of General Surgery in Fırat University School of Medicine were evaluated retrospectively.

Results: This study included 113 patients (84 female and 29 male patients). The mean age was 52.4 years and the most common complaint was joint and bone pain. The mean duration of surgery was 81.74 minutes. The pathologies of the patients were reported as adenoma in 97 patients (86%) and hyperplasia in 16 patients (14%). The mean size of parathyroid adenomas was found to be 1.82 (0.8-5.1) cm. Eighty six patients were operated after confirming the presence of adenoma by considering the correlation between preoperative scintigraphy and ultrasonography results. In 22 patients, the presence of adenoma was confirmed with scintigraphy or ultrasonography in addition to laboratory analyses. In 5 patients, the diagnosis of primary hyperparathyroidism was established through laboratory analyses but not confirmed by radiological imaging and scintigraphy and the excision of adenoma was performed with neck exploration. The most common postoperative complication was temporary hypocalcemia, which responded to medical treatment.

Conclusion: Hyperparathyroidism is a disease that is actually more frequent than actually seen and that can be diagnosed simply when suspected. Because it is generally asymptomatic or develops with very different symptoms, it can easily be overlooked by clinicians.

Keywords: Primary hyperparathyroidism, parathyroid adenoma, hypercalcemia

SS-68

Surgical treatment of diffuse hidradenitis suppurativa in the perianal and gluteal regions: Experience of a single surgeon

Amil Hüseynov, Veli Vural, Ramazan Eryılmaz

Department of General Surgery, Akdeniz University Hospital, Antalya, Turkey

Objective: Hidradenitis suppurativa (HS) is a chronic, recurrent, inflammatory, and progressive disease of the apocrine glands, which affects the axilla, genitoinguinal regions, perineum, perianal regions, and intergluteal clefts. Effective medical treatment for HS cases is restricted. In this study, surgical outcomes of patients were evaluated.

Methods: Fifty-six HS patients were operated under local anesthesia within 5 years. Inguinogenital/gluteal disease was observed in most patients (96%, p<0.001). Involvement of the axillary and inguinogenital/gluteal regions was more apparent in male patients (p=0.014). In the study period, most of the patients (65.6%) had a disease lasting for more than 5 years.

Results: The mean duration of hospitalization was 2.55±1.0 days (range 1-4 days). Recurrence was observed in 5 patients (8.9%) in the follow up. 27% of the patients had postoperative complications, pain, and scar. Most of the patients (60.3%) were satisfied with cosmetic results.

Conclusion: Evidence-based management principles were formed for the treatment of this disease. Wide local excision improves quality of life in HS patients to a great extent. Recurrence of the disease is commonly encountered, but this does not show that the surgical treatment is unsuccessful. Instead, it should be considered as a characteristic of the disease that should be predicted and managed.

Keywords: Hidradenitis, suppurativa, surgical treatment

SS-69

Myofibroblastoma of the breast in male gender

Mehmet Taner Ünlü, Bülent Çitgez, Ozan Çalışkan, Mehmet Uludağ, Sıtkı Gürkan Yetkin, Mehmet Mihmanlı, Mustafa Fevzi Celayir

Department of General Surgery, Health Sciences University, Şişli Etfal Training and Research Hospital, İstanbul, Turkey

Introduction: Although breast mass is frequently encountered among women, it is rarer among men. Gynecomasty, which causes the growth of the breast tissue, is seen more frequently in male patients. On the other hand, breast masses in male patients can be malignant more often than in female patients. In this study, a patient who consulted to the outpatient clinic for the complaint of suddenly growing mass in the breast and then was found to have myofibroblastoma, which is a rare pathology, was presented.

Case: A 41-year-old male patient was admitted to the outpatient clinic with the complaint of a suddenly growing mass in the right breast. In his physical examination, a 4*2 cm well-circumscribed non-fixed mass was detected. His USG examination revealed a 41*16 mm well-circumscribed hypoechogenic mass lesion that was at the 12 o'clock position and had vascularization in it according to the color Doppler US. The result of the preoperative tru-cut biopsy demonstrated cellular spindle cell proliferation showing myxoid degeneration. Phyllodes tumor, cellular fibroadenoma or other mesenchymal lesions of the breast were considered for the differential diagnosis. Subcutaneous mastectomy was planned for the patient. After operation, spindle cell lesion was diagnosed histopathologically. In the immunohistochemical examination, staining with BCL2, CD68, CD99, CD10, and CD34 and focal staining with SMA and desmine were provided. No staining with MSA, HHV8, CATENIN, CK, S100, CD117, and CD31 was observed. Ki-67 proliferative index was found at the rate of 2%. No apparent atypia, mitotic activity, or necrosis was observed. The case was evaluated as myofibroblastoma. No complication and recurrence was encountered in the follow-ups of the patient after being discharged from the hospital.

Discussion: In male patients having a complaint of a mass in the breast, radiological imaging should be performed as in female patients and histopathological evaluation with biopsy should be done when necessary. The decision of operation should be made according to the results of biopsy.

Keywords: Male gender, fast-growing mass, breast, myofibroblastoma

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SS-70

Our experience in intralesional epidermal growth factor administration in patients with diabetic foot wound

Bayram Çolak, Serdar Yormaz, İlhan Ece, Halil Kirazlı, Hüsnü Alptekin, Hüseyin Yılmaz, Fahrettin *Acar, Mustafa Şahin*

Department of General Surgery, Selçuk University School of Medicine, Konya, Turkey

Objective: Diabetic foot wounds (DFW) constitute 40-60% of non-traumatic extremity amputations. The biggest difference between amputations due to DFW and amputations performed for other reasons is that amputations due to DFW can be prevented to a great extent. Foot ulcer, which is one of important complications of diabetes, can cause extremity loss and even mortality despite various treatments. Minor traumas or small wounds developing due to compression cannot be noticed in early period because of sensory neuropathy and they may convert into non-healing chronic wounds in advanced stage. In this study, patients with DFW, who were treated by applying intralesional EGF without performing major amputation, were presented.

Methods: The files of DFW patients that were followed up between February 2017 and October 2017 were evaluated retrospectively. This study included patients who had foot wound not healing for at least 4 weeks and type-2 diabetes, who were older than 18 years, and who were performed intralesional EGF. The patients were examined according to their demographic features, wound features, infection findings, treatment durations, EGF administration durations, and complications.

Results: Intralesional EGF was applied 15 patients. According to the Wagner-Meggit classification, the wounds of the patients were stage 2 in 12 patients (80%) and stage 3 in others. The number of EGF sessions applied to the patients was 15 (8-30) on average. The mean duration of treatment was 1.6 (1-3) months. A full response to the treatment was obtained in 12 (80%) of the patients. Wound healing in other patients was at the rate of 50%. During application, allergic reaction developed in 14 of the patients (93.3%). Major lower extremity amputation was not required in any patient. No secondary infection developed in any patient during EGF injection. Moreover, no recurrence was detected in any patient in the 5.1-month (3-7 months) mean duration of follow-up.

Figure 1. The state of wound one week after EGF

Figure 2. The state of wound after treatment

Conclusion: It was demonstrated that intralesional EGF increased the rate of wound healing particularly in ischemic diabetic foot wounds and decreased the duration of healing and amputation risk. It is suggested that the patients can be discharged with full recovery when EGF is used alone for a shorter time in more superficial wounds as in our patients or it can be used with minor amputation or combined treatments in larger and advanced-stage wounds to the best advantage of patients.

Keywords: Intralesional epidermal growth factor, diabetic foot, EGF

SS-71

Transoral endoscopic thyroidectomy with vestibular approach: First cases in Turkey

Özer Makay[1], İsmail Cem Sormaz[2], Murat Özdemir[1], Kamil Erözkan[1], Kinyas Kartal[3], Mehmet Taner Ünlü[3], Yasemin Giles Şenyürek[2], Atakan Sezer[4], Fatih Tunca[2], Mehmet Uludağ[3]

[1]Department of General Surgery, Ege University School of Medicine, İzmir, Turkey

[2]Department of General Surgery, İstanbul University, İstanbul School of Medicine, İstanbul, Turkey

[3]Department of General Surgery, Şişli Hamidiye Etfal Training and Research Hospital, İstanbul, Turkey

[4]Department of General Surgery, Trakya University School of Medicine, Edirne, Turkey

Objective: Many minimal invasive methods have been defined for preventing visible scar in the neck, but incisional scars are seen in various parts of the body in these methods. Transoral endoscopic thyroidectomy with vestibular approach (TOETVA) is a scar-free thyroidectomy technique that is almost new across the world and that is performed in a few institutions by using real natural orifices. In this multicentric study, it was aimed to evaluate the applicability of TOETVA and our early results.

Methods: Data of 19 patients undergoing lobectomy/total thyroidectomy with TOETVA in four centers between June and October 2017 were recorded. All patients were given oral care with chlorhexidine-including gargle before operation and they were taken into operation after applying prophylaxis. In all operations, one 10 mm and two 5 mm ports were used for camera from the oral vestibule. The CO2 insufflation pressure was adjusted as 6 mmHg. After creating the subplatysmal space from the oral vestibule to the sternal notch, endoscopic thyroidectomy was performed with the help of conventional laparoscopic instruments and ultrasonic energy instrument in company with nerve monitorization.

Results: All of operated patients were female and their mean age was 39.5 (20-57) years. Seven patients were performed total thyroidectomy and 12 patients were performed lobectomy (5 right and 7 left). The surgery was completed as endoscopic in 17 (89.5%) of 19 patients in the study. It was switched to conventional surgery in one patient because of unclear visualization of the nerve and inability to take signal and in another patient because of difficulty in dissection due to advanced fibrosis and endobag rupture while removing lobectomy piece. Mental nerve injury and infection were not observed in any patient. Temporary recurrent laryngeal nerve paralysis, which improved in the 1st week, was seen only in one patient. In one patient having idiopathic hypoparathyroidism before surgery, postoperative hypoparathyroidism persisted. The mean duration of surgery was found to be 147.4 minutes (70-210 min.) and the mean duration of hospitalization was 2.1 days (1-4 days).

Conclusion: Both lobectomy and total thyroidectomy can safely be performed with TOETVA, which is a scar-free and minimal surgical technique, in experienced centers.

Keywords: Endoscopic thyroidectomy, TOETVA, minimal invasive, transoral

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SS-72

Difficult open abdomen treatment in which a Bogota bag and negative pressure closure system are applied together

Bayram Çolak, Serdar Yormaz, İlhan Ece, Halil Kirazlı, Hüsnü Alptekin, Mehmet Ertuğrul Kafalı, Hüseyin Yılmaz, Mustafa Şahin

Department of General Surgery, Selçuk University School of Medicine, Konya, Turkey

Introduction: Negative-pressure closure system (VAC) is a technique that is commonly used in infected cases which should be followed as open abdomen. It is essential to prevent the contact of the intestines with the VAC system.

In this study, it was aimed to present the use of the VAC system in combination with bogota bag in a case with subcutaneous herniation and perforation of small intestine after a previous abdominal surgery and with hernia sac that was contaminated by the content of the small intestine.

Case: A 62-year-old male patient was operated due to small intestine perforation associated with strangulated hernia. When his general health condition deteriorated on the postoperative 5th day, it was found in the examination that fascia sutures in the median sac above-below umbilicus were completely opened and small intestine loops from this defect were perforated under the skin and they formed a necrotic and infected subcutaneous space in the anterior wall of the abdomen. The patient was re-operated. In the first investigation, it was found that the inside of the abdomen was completely clean and infection and necrosis were isolated on the fascia. Thus, it was decided to perform a wide resection for the perforated segment and to make anastomosis because the abdomen was clean. For preventing abdominal sepsis with infection on the fascia, Bogota bag was placed in the edges of the fascia after resection. Following debridement, the sponges of the VAC system were placed on the bogota bag by covering all infected area. In this way, the contact between VAC and the intestines was ended and intraabdominal infection during the absorption of infected materials with negative pressure was prevented. The subcutaneous region was completely cleaned in about four applications and no anastomosis leakage was observed. When it was ensured that infection was completely regressed, Bogota bag was removed and two sessions were performed by using an abdominal cover. The maturation of the granulation tissue on the intestines was provided. The abdomen of the patient was closed and he was discharged.

Conclusion: In the method that we applied in this study, the contact between the infected area and inside of the abdomen was ended by using a Bogota bag. Moreover, Bogota bag allowed to control anastomosis. Besides, with the VAC system used in combination with Bogota bag, open abdomen treatment can be performed with normal VAC system in cases having no abdominal contamination even without using an abdominal cover.

Keywords: Bogota bag, negative-pressure closure systems, VAC, perforation, acute abdomen

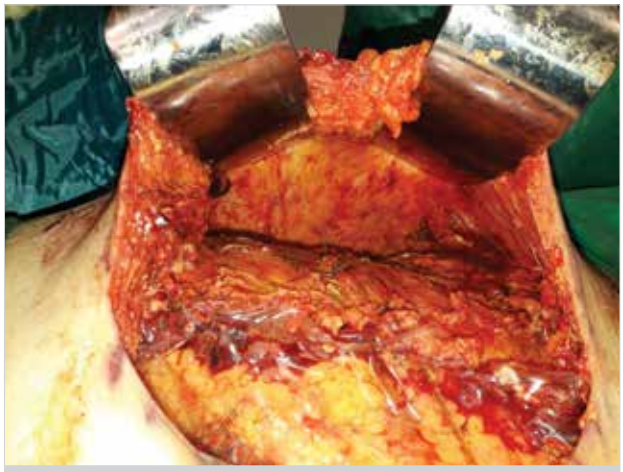

Figure 1. The use of Bogota bag for ending the contact between the perforated area and the abdomen

Figure 2. The VAC system used for the infected area on Bogota bag

SS-73

Case presentation on enteroatmospheric fistula

Bayram Çolak, Serdar Yormaz, İlhan Ece, Halil Kirazlı, Fahrettin Acar, Hüsnü Alptekin, Mehmet Ertuğrul Kafalı, Mustafa Şahin

Department of General Surgery, Selçuk University School of Medicine, Konya, Turkey

Introduction: One of the complications of open abdomen procedure is the development of enteroatmospheric fistula. In this study, it was aimed to present the management of two cases that were followed up as open abdomen and that developed enteroatmospheric fistula (grade 3).

Case 1: A 61-year-old female patient had been performed resection and anastomosis because of the development of colon perforation during the removal of RIA. Ileostomy had been opened due to postoperative anastomotic leakage. Because of postoperative wound site infection and abscess around ostomy, VAC (negative-pressure aspiration) had been applied to the patient, but then she was referred to us after enteroatmospheric fistula had developed. In our examination, there were multiple fistula focuses around ileostomy and abscess focuses throughout the incision line. For preventing the contamination of the small intestine content by wound, 20 f Foley catheter was inserted into two fistulae around ileostomy. For the application of VAC around the ostomy, the visceral layer was opened and the contact of the small intestine with sponges was ended. Then, sponge layers were placed and adaptor of ileostomy was inserted. In this way, both ileostomy was run and contamination of wound by the small intestine fistulae was prevented. After 2-week follow-up of the patient, her general health state improved and her ileostomy was closed. She was discharged with full recovery.

Case 2: In a 32-year-old female patient, the incisional line was opened because smelly discharge was observed from the abdomi-

Figure 1. Fistula areas around ileostomy

Figure 2. Management of fistula around ileostomy

Figure 3. Advanced fistula area

Figure 4. Management of advanced fistula

nal incision line after incisional hernia repair and it was detected that the subcutaneous area was infected by bile juice. A 1x1 cm fistula with high output was found in the small intestine in the exploration. The mouth of the fistula was fixed with a penrose drain all around and a ring formed with VAC sponges was placed around that. Thus, the link between enteroatmospheric fistula and sponges that would be applied vacuum was ended and infection of other areas by the intestinal content during vacuuming was prevented. Moreover, ostomy bag was inserted by elevating the mouth of fistula. The VAC system with visceral layer was placed around that. Enteroatmospheric fistula was used as ileostomy.

Conclusion: The patients with enteroatmospheric fistula generally have sepsis. In this stage, taking fistula under control for preventing the surrounding areas to be infected is important for treating sepsis and providing fluid-electrolyte balance. The VAC system will be lifesaving for these patients if it is used consciously.

Keywords: Enteroatmospheric fistula, sepsis, open abdomen, VAC

SS-74

A rare case presenting with perforation: Jejunal diverticulum

Serdar Yormaz, Bayram Çolak, İlhan Ece, Halil Kirazlı, Hüseyin Yılmaz, Fahrettin Acar, Mehmet Ertuğrul Kafalı, Mustafa Şahin

Department of General Surgery, Selçuk University School of Medicine, Konya, Turkey

Introduction: Jejunal diverticulum is a rarely seen condition and it is generally asymptomatic. It can sometimes present with abdominal pain, nausea, vomiting or acute abdomen. While perforation is the most common complication of diverticulum, it is rare in jejunal diverticula (2.3-6.4%). In this study, a patient who was admitted to the emergency unit with acute abdomen and found to have perforation associated with jejunal diverticulum in the operation was presented.

Case: A 55-year-old male patient was admitted to the emergency unit because of abdominal pain that had begun two days ago. His physical examination revealed diffuse defense and rebound. Because direct radiography and computed tomography revealed no perforation but suspected mesenteric ischemia, the patient was taken into operation urgently. In the exploration, it was observed that the abdomen was contami-

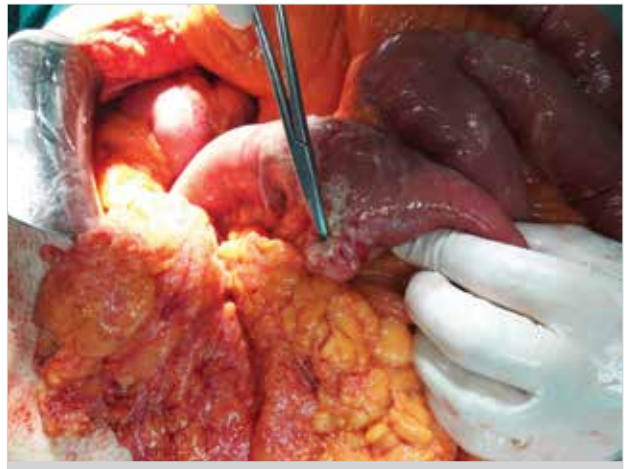

Figure 1. Perforated jejunal diverticulum

nated, but there was no finding in favor of ischemia. An approximately 4x3 cm jejunal diverticulum was found at a distance of 20 cm from the treitz ligament and an approximately 1x1 cm perforated area was detected on the tip of this diverticulum. Ostomy was not thought because perforation was near the treitz ligament. Moreover, anastomosis was also not thought because of the contaminated abdomen. He was treated with the resection of the diverticulum and discharged from hospital with full recovery.

Conclusion: Although jejunal diverticulum is seen rarely, it can sometimes present with the picture of acute abdomen. If it is not considered in imaging techniques because of its rarity, it becomes difficult to diagnose it and it can be diagnosed only in surgeries.

Keywords: Jejunal diverticulum, diverticulitis, perforation, acute abdomen

SS-75

EGF application in patients undergoing surgical intervention due to diabetic foot

Bayram Çolak, Serdar Yormaz, İlhan Ece, Halil Kirazlı, Mehmet Ertuğrul Kafalı, Fahrettin Acar, Hüsnü Alptekin, Mustafa Şahin

Department of General Surgery, Selçuk University School of Medicine, Konya, Turkey

Objective: Diabetic foot wounds are among frequent complications that affect quality of life in diabetic patients and they are one of the most important causes of hospitalization in these patients. Foot problems are encountered approximately in 20% of total diabetic population. In 5-10% of them, problems in wound healing develop in association with neurological and vascular complications and upper level amputations are performed. In this study, it was aimed to present patients that were treated with intralesional epidermal growth factor because they were performed amputation at various levels due to diabetic foot wound but faced with wound problem or they were tried to be treated with flap and grafts but it resulted in failure.

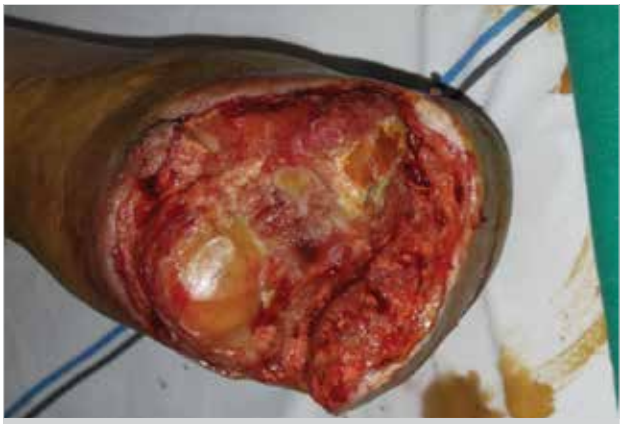

Figure 1. Open diabetic foot wound not healing after intertarsal (Chopart) amputation

Methods: There were 6 complicated patients who had been previously performed amputations at various levels, had been applied flap and graft, and had undergone minor surgical intervention. Intertarsal (Chopart) amputation was performed in one patient, ray amputation in one patient, fan flap in one patient, graft in one patient, and nail removal in one patient. Skin lesion was excised in the dorsum of the foot in one patient. In all patients, foot wound developed after the procedures. Firstly, infection was taken under control in all patients. Then, debridement was performed and minor amputations were done in some patients. Each patient was applied intralesional 75 µG epidermal growth factor for three times a week. EGF was administered for 4 weeks on average. With the formation of gran-

Figure 2. View of wound after 4-week EGF application

Figure 3. Grafting after EGF application

ulation tissue, the wound of one patient was grafted. Complete wound closure was provided in other patients.

Conclusion: The complications of diabetes are commonly seen in the societies with high incidence of diabetes. In most of these patients, extremity losses are encountered because of non-healing wounds due to compressions. The results of surgeries performed in diabetic patients are not so good. Therefore, diabetic patients and those with diabetic foot wound should be treated with minimal traumatic interventions. In our study, it has been demonstrated that patients with diabetic foot wound, who have undergone any surgical intervention previously, can be taken under control by applying intralesional epidermal growth factor.

Keywords: EGF, diabetic foot, amputation, intralesional epidermal growth factor

Figure 4. The final state in which open wound is completely closed after grafting

SS-76

A case with perforation associated with strangulated incisional hernia that presents with subclavicular and axillary crepitation

Bayram Çolak, Serdar Yormaz, İlhan Ece, Halil Kirazlı, Fahrettin Acar, Hüsnü Alptekin, Hüseyin Yılmaz, Mustafa Şahin

Department of General Surgery, Selçuk University School of Medicine, Konya, Turkey

Introduction: It was aimed to present a case that had no findings of acute abdomen and sepsis in the examination, but had small intestine perforation associated with strangulated incisional hernia that presented with only left subclavicular and axillary subcutaneous emphysema.

Case: A 72-year-old male patient having collagen tissue disease was admitted to the emergency unit with the complaints of nausea, abdominal pain, and malaise. His physical examination revealed subcutaneous emphysema beginning from the left subclavicular region, increasing in the left axilla, and extending towards the left inguinal canal. No defense and rebound was observed. He had a median incisional scar above/below the umbilicus secondary to the previous operation. Laboratory findings of the patient were normal. Based on the existing findings, pneumothorax was firstly considered due to crepitation on the thorax. Tomographies of the thorax and abdomen were taken. In the thoracic tomography, no finding, except subcutaneous emphysema in the left side, was observed. In the abdominal tomography, it was found that there was a hernia extending from the previous incisional line to the left side of the small intestine. It directed towards the axilla and squeezed between the fascia and the skin and it was perforated. The patient was urgently operated. The segment with small intestine perforation was resected and anastomosis was performed. He was discharged on the postoperative 6th day with full recovery.

Conclusion: It is a rare condition that perforation, which is one of important emergency situations in general surgery, occurs with only axillary and subclavicular crepitation. We suggest that the presence of collagen tissue disease caused the small intestine to progress between the subcutaneous tissues and to perforate in the left thoracal region unexpectedly, which is not predicted in a normal patient.

Keywords: Strangulated incisional hernia, perforation, subcutaneous emphysema, crepitation

Figure 1. Emphysema area in tomography

Figure 2. Emphysema area in tomography

SS-77

Evaluation of patient satisfaction levels in a generel surgery clinic

Sertaç Ata Güler, Gökhan Pösteki, Turgay Şimşek, Özlem Ömür, Hanife Dalğa, Merve Rukiye Serttaş, Rabia Uşma, Nuh Zafer Cantürk

Department of General Surgery, Kocaeli University School of Medicine, Kocaeli, Turkey

Objective: The aim of this study is to investigate the patients' satisfaction with being informed in preoperative, postoperative, and discharge periods, the physicians informing them about the procedures, and surgeons performing their operations in a general surgery clinic.

Methods: In the study, 121 patients who were performed elective or emergent surgery in Department of General Surgery in Kocaeli University School of Medicine were evaluated. All patients were operated for malignant (n: 42, 34.7%) or benign (n: 79, 65.3%) reasons.

Results: Considering the information provided to the patients preoperatively, 92 (87.6%) of the patients stated that they were satisfied with the information and 13 patients (12.4%) stated that they were unsatisfied. While 87 of the patients (84.5%) were satisfied with postoperative informing, 16 (15. 5%) were unsatisfied. It was found that 71 patients (77.2%) were given satisfying information during discharge, but 21 patients (22.8%) were not. While 113 of the patients (93. 4%) were satisfied with their surgeons in general, 8 patients (6.6%) were unsatisfied. Of the patients, 88 (72.7%) thought that their surgeons had adequate surgical and medical competency. However, 33 (27.3%) found their surgeons inadequate. Finally, 113 patients (93.4%) stated that the titles of their responsible surgeons were important for them, but 8 patients (6.6%) found their titles unimportant.

Conclusion: In studies on patient satisfaction, a cut-off value is not available and it is emphasized that the satisfaction rate of 70% and above shows satisfaction with service and adequate quality. According to our study, the satisfaction levels of the patients for preoperative, postoperative, and post-discharge informing, and the operations were generally over 70%. The rate of satisfaction for the provided information was found to be higher than that for surgeons or surgery. This result suggests that informing patients about surgical treatment makes them pleased and increases general satisfaction level.

Keywords: Patient satisfaction, general surgery clinic, satisfaction

SS-78

The role of positron-emission tomography in the detection of axillary metastasis of breast cancer

Gökhan Pösteki, Sertaç Ata Güler, Saffet Çınar, Turgay Şimşek, Gözde Görür, Nuh Zafer Cantürk
Department of General Surgery, Kocaeli University School of Medicine, Kocaeli, Turkey

Objective: In this study, the use of positron-emission tomography (PET) was evaluated as an alternative or supplementary method for sentinel lymph node biopsy, which is used for the detection of axillary metastasis of breast cancer.

Methods: The study included 88 patients who were diagnosed with breast cancer and planned to be performed surgery in the Department of General Surgery in Kocaeli University Research and Application Hospital. Preoperative PET was performed for all patients. The results of PET were compared with postoperative pathology results of the patients.

Results: At the end of the study, it was found that the PET SUVmax values were significantly higher in the patient group with positive axilla. Axillary PET SUVmax was evaluated with prognostic and predictive factors of breast cancer, including age, estrogen receptor, progesterone receptor, Ki67 value, HER2, the count of metastatic lymph nodes, mass diameter, pathological grade of tumor, lymphovascular and perineural invasion, and tumor type. Among these markers, there was a statistically significant relationship only between lymphovascular invasion and PET involvement.

Conclusion: The axilla is the most important stage in the treatment of breast cancer. Sentinel lymph node biopsy is the best technique used for the detection of axillary involvement. In our study, PET technique was evaluated as an alternative or supportive method for sentinel lymph node biopsy. It was found that preoperative PET SUVmax values were quite high in cases with positive axilla. It was suggested that preoperative PET evaluation could be a supportive method for sentinel lymph node biopsy. Moreover, no relationship was observed between preoperative PET evaluation of the axilla and prognostic and predictive factors of the disease.

Keywords: Breast cancer, positron emission tomography, axillary metastasis

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SS-79

Factors affecting recurrence in inguinal hernia repair

Turgut Anuk
Department of General Surgery, Kafkas University School of Medicine, Kars, Turkey

Objective: In this study, it was aimed to reveal the factors affecting recurrence in patients who were performed Lichtenstein tension-free herniorrhaphy (LTFH) for inguinal hernia.

Methods: Age, gender, operation under emergency/elective conditions, body mass index (BMI), primary/recurrence state, types of direct/indirect/combine typetrousers hernia, duration of follow-up, rates of recurrence, presence of scrotal component, and internal ring diameters were recorded from the files and operation reports of the patients undergoing LTFH for the diagnosis of inguinal hernia between May 2012 and August 2015. The patients having collagen tissue disease, history of pregnancy, and COPD and those that could not be followed up were excluded from the study. All patients were operated by a single surgeon. They were followed up for 30-60 months. They were divided into two groups as those developing recurrence and those not developing recurrence.

Results: Recurrence was observed in 16 patients during the mean follow-up duration of 46 (30-60) months. The distributions of gender and age were homogeneous (p=0.689 and p=0.081). The risk of recurrence development was higher in patients operated due to inguinal hernia (p=0.006). As the duration of follow-up with the cut-off value of 48.5 months prolonged, the rate of recurrence increased (p=0.035). High BMI values were found to affect the risk of recurrence development significantly (p<0.001). No significant difference was detected between the patients operated under emergency conditions and those operated under elective conditions (p=0.105). Considering intraoperative findings, the presence of scrotal component and increased diameter of internal ring were observed to have an effect on the development of recurrence (p=0.005 and p=0.007). Moreover, increased BMI (p<0.001 and Corr. Coef. +0.362) and internal ring diameter (p=0.006 and Corr. Coef. +0.178) affected the occurrence of recurrence with positive correlation. Considering the common effect of age, gender, hernia type (primary/recurrence), BMI, Emergency/elective conditions, presence of scrotal component, internal ring diameter, follow-up duration, and origin point of hernia (direct/indirect/trousers hernia) on recurrence, BMI (p<0.001), internal ring diameter width (p=0.002), and direct hernia (p=0.002) were found to increase the risk of recurrence development independently of all other factors.

Conclusion: According to the results of our study, the risk of recurrence increases in patients that have wide internal ring diameter and scrotal component and high BMI, particularly in those operated for recurrent inguinal hernia, in the follow-ups after 48 months.

Keywords: Inguinal hernia, recurrence, Lichtenstein tension-free herniorrhaphy

SS-80

Production of hook from "Disposable" laparoscopic Suction-Irrigation system

Burhan Hakan Kanat[1], Abdullah Böyük[1], Mustafa Girgin[2], Yavuz Selim İlhan[2], Ferhat Çay[3], İbrahim Erdemay[1]

[1]Department of General Surgery, Elazığ Training and Research Hospital, Elazığ, Turkey

[2]Department of General Surgery, Fırat University School of Medicine, Elazığ, Turkey

[3]Clinic of General Surgery, Midyat State Hospital, Mardin, Turkey

Objective: Disposable laparoscopic instruments are expensive. This study aimed to provide the re-use of disposable materials for a different purpose for decreasing the cost.

Methods: Some companies put disposable laparoscopic Suction-Irrigation system on the market by integrating monopolar cautery hook into it (Figure 1). After this laparoscopic Suction-Irrigation system is used for once, it is cleaned and broken for removing the part of hook inside it (Figure 2, 3). Nelaton catheter, which is made of plastic, is passed over the whole metal body (for protecting from undesired effects in the use of monopolar cautery) (Figure 4). Then, nelaton catheter is cut by leaving some part of the hook outside. After that, for maintaining the continuity of pneumoperitoneum, potential spaces of this apparatus are closed with silicon (Figure 5). The laparoscopic suction-Irrigation system's own apparatus is inserted and tightened for the insertion of the cautery in its back (Figure 6). Thus, laparoscopic hook is prepared (Figure 7).

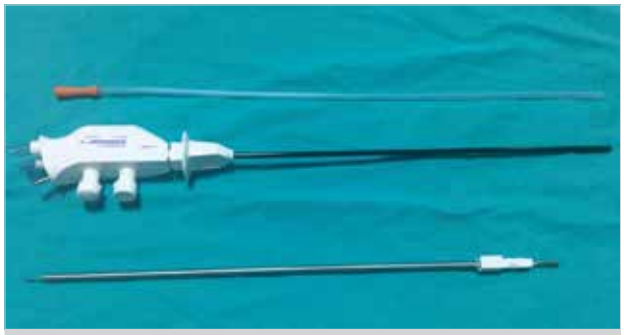

Figure 1. Laparoscopic suction-irrigation system

Figure 2. Breaking stage

Figure 3. Breaking stage

Figure 4. Passing nelaton catheter

Figure 5. For maintaining the continuance of pneumoperitoneum, closure of potential spaces of apparatus with silicon

Figure 6. The laparoscopic suction-Irrigation system's own apparatus broken for the insertion of the cautery

Results: It is known that disposable instruments are re-used because of financial concerns. Despite all negative results, many health institutions re-use medical tools regardless of their being disposable or reusable and their being safe by meeting all requirements in patient care. However, it cannot be guaranteed that a completely safe and reliable instrument is provided for all patients during the re-use of disposable tools. In this study, we suggest that cost can partially be decreased by producing a new tool from a disposable tool.

Figure 7. The final state

Conclusion: Before throwing disposable Suction-Irrigation system, it is cleaned and the part of hook is removed. After a simple process on it, it can be safely used as a laparoscopic monopolar hook cautery.

Keywords: Disposable, hook, recycling

SS-81

Mixed type gastric volvulus and its laparoscopic treatment

Ferhat Çay[1], Mustafa Girgin[2]

[1]Clinic of General Surgery, Midyat State Hospital, Mardin, Turkey

[2]Department of General Surgery, Fırat University, Elazığ, Turkey

Gastric volvulus is a rarely seen condition that can be life-threatening and it is difficult to diagnose it. Because this disease can progress with non-specific abdominal symptoms, its diagnosis can delay or be overlooked. It should be kept in mind in the differential diagnosis of patients who consult with the complaints of pain in the epigastrium, retching reflex, vomiting, and weight loss, which are accompanied by distension. Of radiological imaging techniques, chest radiography and thoracoabdominal computed tomography can be helpful in the establishment of diagnosis. Emergent laparoscopic surgery is the golden standard for the treatment of this disease. In this study, it was aimed to present a 65-year-old male patient with mixed type gastric volvulus, which is a very rare type.

Keywords: Laparoscopy, gastric volvulus, vomiting

SS-82

Treatment of facial burns with hyaluronic acid dressing

Reyyan Yıldırım, Muhammed Selim Bodur, Kadir Tomas, Serkan Tayar, Oğuz Erkul, Arif Burak Çekiç, Ali Güner, Serdar Türkyılmaz

Department of General Surgery, Karadeniz Technical University School of Medicine, Trabzon, Turkey

Objective: Burns including the head and neck region are called facial burns and they are frequently encountered. There are different approaches to the treatment of facial burns, both functional and cosmetic results of which are important. The use of dressings including hyaluronic acid is one of these approaches. In this study, it was aimed to present the functional/cosmetic results of the use of hyaluronic acid dressing and the effects of this dressing on pain in patients followed up due to facial burn.

Methods: The study included patients that were treated with hyaluronic acid dressing for superficial/deep second degree facial burns in the Burn Unit of Farabi Hospital in Karadeniz Technical University, Faculty of Medicine between April 2014 and April 2017. Hyalosafe© (Anika Therapeutics, Padova, Italy) was used as hyaluronic acid dressing. For assessing the effectiveness of the treatment, the effect of dressing on pain, the frequency of its application, duration of recovery, rate of wound infection development, formation of scar, and changes in pigmentation (Vancouver scar scale) were evaluated.

Results: The study included 54 (6.1%) of 885 patients followed up in the Burn Unit in the study period. Of these patients, 41 were male and 13 were female. Their median age was 65 (range, 1-86) years. The median total percentage of burned body was 15% (range, 5-55). While 15 patients had only facial burn, other 39 patients had accompanying burns in different parts of their bodies.

The median pain scores were 6, 4, and 2 (range, 2-8; range, 2-7; and range, 0-4) before application, in 6-12 hours after application, and in the period of first epithelization, respectively. Re-application was needed only in one case because the patient took off the dressing himself. The median duration of recovery was 9 (range, 4-24) days. Scar tissue was observed in two patients in the

examination performed 6 months after. The mean Vancouver score was 0.3. No wound infection and change in pigmentation was observed.

Conclusion: The use of hyaluronic acid dressing in facial burns is a functionally and cosmetically safe and effective treatment choice.

Keywords: Hyaluronic acid, cosmetic, burn, face

SS-83

Palliative surgery choice in the gastric outlet obstruction: Stomach-dividing Roux-en-Y gastrojejunostomy

Reyyan Yıldırım[1], Muhammed Selim Bodur[1], Mehmet Uluşahin[1], Oğuz Erkul[1], Hakan Küçükaslan[1], Mustafa Kandaz[2], Arif Burak Çekiç[1], Serdar Türkyılmaz[1], Ali Güner[1]

[1]Department of General Surgery, Karadeniz Technical University School of Medicine, Trabzon, Turkey

[2]Department of Radiation Oncology, Karadeniz Technical University School of Medicine, Trabzon, Turkey

Objective: Different endoscopic or surgical palliative treatments are used in patients with gastric outlet obstruction (GOO). While endoscopic treatment choices are generally applied in cases with short life expectancy, the effectiveness of surgical treatment has been demonstrated for long life expectancy. The most frequently preferred technique as surgical treatment is loop gastrojejunostomy, but some problems encountered in this method, including delayed gastric emptying and inadequate oral intake, have been reported. For reducing these problems, stomach-dividing gastrojejunostomy technique has been defined. In this study, the data of patients undergoing stomach-dividing Roux-en-Y gastrojejunostomy (SD-RNY-GJ) will be presented.

Methods: The data of patients who were performed SD-RNY-GJ due to GOO between March 2016 and July 2017 were evaluated from the database that was prospectively obtained. Patients' demographic features, indications, GOO scores, postoperative clinical data, complication rates, duration of hospitalization, and the rate of re-admission to hospital were assessed. SD-RNY-GJ is the procedure in which the stomach is openly or laparoscopically divided from the point 1-2 cm away from the lesser curvature with a linear stapler that is placed from the proximal level of the greater curvature and then Roux-en-Y gastrojejunostomy is performed in the proximal of the stomach.

Results: Of the successive 9 patients undergoing SD-RNY-GJ due to GOO, 5 were male and others were female. Their median age was 57 years (range, 50-89 years). The indications for surgery were benign stricture, gastric cancer, and periampullary tumor. While 7 patients were operated for malignant reasons, palliative surgery was required in 2 patients for benign reasons. Endoscopic treatment was tried in 4 patients and surgical treatment was carried out when it failed. While SD-RNY-GJ was performed with open technique in 8 patients, laparoscopic technique was used in one patient. Preoperative median GOO score was 0 (range, 0.1) and postoperative GOO score was 3 (range, 2-3). Nasogastric catheter was removed on the 3rd day and liquid food was started on the 4th day. No anastomotic leakage and delayed gastric emptying was observed. No patient was re-admitted to the hospital because of oral intake problem during follow-up.

Conclusion: In patients with GOO, palliative application of SD-RNY-GJ seems to be an effective and safe choice, but further comparative studies are needed.

Keywords: Surgery, gastric outlet obstruction, palliation, gastric cancer

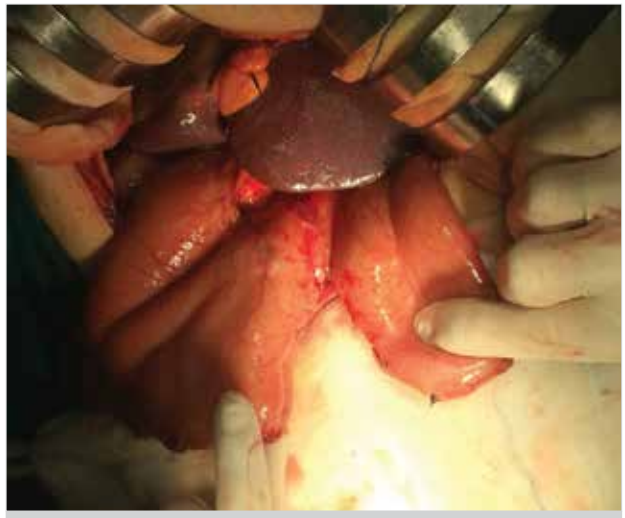

Figure 1. View of divided stomach in open surgery

SS-84

A rare cause of liver transplantation: Sickle-cell anemia

Bora Barut, Egemen Çiçek, Volkan İnce, Adil Başkıran, Kemal Barış Sarıcı, Sami Akbulut, Bülent Ünal, Sezai Yılmaz

Department of General Surgery, İnönü University School of Medicine, Malatya, Turkey

Objective: In this study, it was aimed to present the results of a case undergoing liver transplantation due to sickle-cell anemia.

Methods: A 44-year-old male patient was performed right lobe living donor liver transplantation four months ago due to liver cirrhosis that developed in association with sickle-cell anemia.

Results: Phycial Examination: There was hepatomegaly and diffuse acid in the abdomen. CT: The liver was macronodular cirrhotic. Endoscopy: There was esophageal varix. Laboratory: AST: 162 U/L ALT: 59 U/L, INR: 1.36, Albumin: 2.8 mg/dL, T.Bilurubin: >25 mg/dL, Na: 139 mmol/L, Creatin: 0.7 CHILD: 10/C MELD: 22. Preoperative HbS: 52.6 and postoperative 3rd month HbS: 9.9. The patient is being followed up without any problem in the postoperative 4th month.

Conclusion: Sickle-cell anemia (SCA) is a hematological disease that shows autosomal recessive inheritance and presents with microvascular occlusion and hemolytic anemia. The spleen is affected most of the time and splenic atrophy develops. The main hepatobiliary complications that develop secondary to SCA include acute hepatic crisis, acute/chronic intrahepatic cholestasis, hepatic infarction, abscess and biloma, cholelithiasis, choledocolithiasis, hepatic iron overload, and hepatitis B and C infection. Liver cirrhosis developing due to SCA is a rare clinical condition and the number of liver transplantation performed for this condition is limited to 22 across the world at present, but experience in this subject is increasing. Hepatic artery thrombus and formation of stone and debris in the biliary system are the main problems encountered in early or late period after transplantation.

In conclusion, liver transplantation can be used as an effective method in acute or chronic liver failure that occurs in association with SCA.

Keywords: Sickle-cell anemia, intrahepatic cholestasis, liver transplantation

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SS-85

Investigation of the effect of Deguelin on experimental breast cancer treatment

Serap Çelebi Yılmaz[1], Nina GhaniTabe[1], Hakan Cengiz[1], Halil Ateş[2], Tarık Salman[1,3], Mehmet Ali Koçdor[1,4], Hilal Koçdor[1,2]

[1]Department of Molecular Medicine, Dokuz Eylül University, Health Sciences Institute, İzmir, Turkey

[2]Department of Basic Oncology, Dokuz Eylül University, Oncology Institute, İzmir, Turkey

[3]Department of Medical Oncology, İzmir Katip Çelebi University, Atatürk Training and Research Hospital, İzmir, Turkey

[4]Department of General Surgery, Dokuz Eylül University School of Medicine, İzmir, Turkey

Objective: Breast cancer is a frequently seen cancer type among women in Turkey as in the world and it is the mostly studied cancer. The chemotherapeutics used for the treatment of cancer are toxic for normal tissues. Therefore, new preventive and curative agents with no or very low toxicity are needed. Deguelin is an agent the efficiency of which has been investigated in several cell line studies and which is included in the list of promising cancer agents with positive preliminary data in literature. With this point of view, the main question of our project is; "Is Deguelin more potent but less toxic in breast cancer compared to standard chemotherapeutics?" Despite intensive studies conducted for the prevention and treatment of cancer, cancer is still a leading cause of death. In developing countries, breast cancer is the most frequent cancer-associated cause of mortality among women. Doxorubicin and Paclitaxel are the agents that are commonly used in the treatment of breast cancer. Deguelin is a chemical agent defined to be among potential anticarcinogenic agents by cancer researchers in recent years. In the light of this information, the aim of this study is to evaluate the effectiveness of Deguelin, which can be a potential anticancer agent, in breast cancer cell lines and to compare its toxicity with that of cytotoxic drugs used in the standard treatment of breast cancer.

Methods: In this study, IC50 doses of Deguelin, Paclitaxel, and Doxorubicin were determined in MDA-MB-231, BT-474, MDA-MB-468 and MCF-7 in breast cancer cell lines with cell viability test. The determined doses were used as treatment doses. The cells treated with the agents were applied flow cytometric analyses (apoptosis, CellCycle), migration, colony formation, and western blot analyses and oxidative stress index (OSI) and superoxide dismutase (SOD) were measured. The effects of the standard treatment drugs and Deguelin on anticancer markers were compared. Statistical analyses were performed by using ANOVA and Holm-Sidak tests and the value of $p<0.05$ was accepted as significant.

Results: It was found that Deguelin significantly decreased SOD and OSI values in MCF-7,MDA-MB-231, and MDA-MB-468 cell lines and directed cells to apoptosis at a higher rate compared to standard chemotherapeutics ($p<0.05$). In the cell cycle analysis, Deguelin was observed to have a significant effect in G0/G1 phase in all cell lines compared to the control group ($p<0.05$). In the migration analysis, it was found that Deguelin prevented cell migration to a great extent. According to the Western blotting results, Deguelin increased p53 expression.

Conclusion: Deguelin, which is a potential anticancer agent, demonstrated similar features to the agents used in the standard treatment of breast cancer. Considering this result, it can be suggested that Deguelin can be used as an anticancer agent as a natural plant derivative.

Keywords: Breast cancer, deguelin, apoptosis, oxidative stress, migration

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SS-86

Total dermoid cyst and its excision with retrorectal approach and coccygectomy

Ramazan Topçu, İbrahim Tayfun Şahiner, Murat Kendirci, Settar Bostanoğlu
Department of General Surgery, Hitit University School of Medicine, Çorum, Turkey

Introduction: Although dermoid cysts are frequently seen in every part of the body, they are rarely encountered in the retrorectal/presacral region and their incidence is reported to be 1/40.000-63.000. Retrorectal cysts are congenital lesions with ectodermal origin and they generally occur in women in the reproductive period. Most of presacral masses are benign. Of them, developmental cysts are the most common congenital entities of the retrorectal region in adults. Because the tissue components develop from every three germinal layers, they are differentiated from teratomas. Although they are mostly asymptomatic, poorly-localized ones cause pelvic pain or feeling of rectal fullness. In this case report, a patient consulting with the complaints of abdominal pain and rectal fullness feeling and undergoing excision of presacral dermoid cyst with posterior approach was presented.

Case: A 68-year-old female patient was admitted to our outpatient clinic for the complaints of abdominal pain and feeling of rectal fullness. The results of laboratory analyses and tumor markers of the patient, who was performed TAH+BSO surgery, were normal. For radiological imaging, pelvic MR and lower abdominal CT were performed and they revealed a 5x6 cm cystic lesion in the retrorectal region. No pathology was detected in the colonoscopy. Surgery was planned for the patient and the mass was totally excised by including the coccyx in paracoccygeal transverse incision with posterior approach. The result of pathology was reported as dermoid cyst. No problem developed in the follow-ups of the patient and she was discharged from the hospital on the postoperative 5th day.

Discussion: Presacral dermoid cysts are rarely seen developmental cysts. Its differential diagnosis includes tailgut cyst, epidermoid cyst, rectal duplication cyst, lymphangioma, and neurenteric cyst. Fine needle aspiration biopsy is not recommended for the diagnosis of presacral cysts because it can lead to infection, local vascular and neural damage, and spread of tumor. The surgery of presacral cysts includes total excision of cyst. Two different procedures are applied as posterior-sacral and combined abdomino-sacral approaches. The way of surgical procedure depends on the size and localization of cyst. Because recurrence will develop in cysts that are not totally excised, coccygectomy is performed with cyst excision.

Conclusion: Presacral cysts are rare and they are diagnosed through CT, MRI, and EUS. If there is no suspicion of malignancy, preoperative biopsy is not recommended. For establishing pathological diagnosis, resolving patient's complaints, and reducing possible infections, malignancy and recurrence, coccygectomy+total cyst excision with posterior approach can be performed effectively and safely.

Keywords: Dermoid cyst, posterior approach, retrorectal mass

SS-87

Preoperative prediction of the success of emergency cervical cerclage by the evaluation of bacterial 16S rRNA in amniotic fluid

Hayal Uzelli Şimşek[1], Şeyda Çalışkan[2], Gülden Sönmez Tamer[3], Yiğit Çakıroğlu[1], Emek Doğer[1], Aydın Çorakçı[1], Eray Çalışkan[1]

[1]Department of Gynecology and Obstetrics, Kocaeli University School of Medicine, Kocaeli, Turkey
[2]Gölcük Necati Çelik State Hospital, Department of Microbiology, Kocaeli, Turkey
[3]Department of Microbiology, Kocaeli University School of Medicine, Kocaeli, Turkey

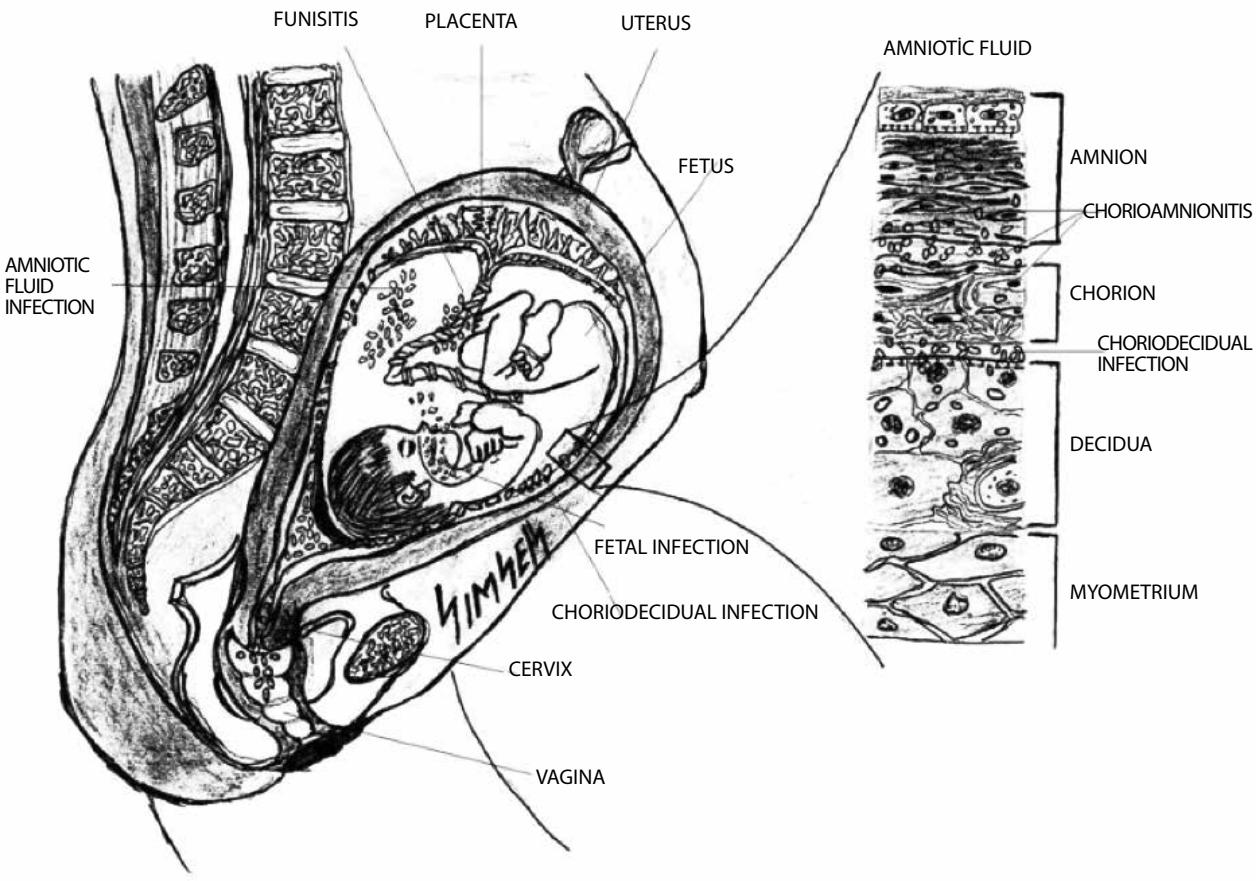

Figure 1. Ascending infection of fetus and amniotic fluid

Table 1. Distribution of labor results and neonatal findings according to the groups

Variable		Group 1[a] (n=19)	Group 2[b] (n=56)	p*
Duration of pregnancy (day)		170±41	263±21	<0.001
Delivery method	Normal vaginal delivery	8 (42)	22 (39)	<0.001
	Cesarean	5 (26)	34 (60)	
	Abort	6 (31)	0	
Presence of chorioamnionitis[c] (%)		5 (26.3)	0	=0.001
<7 Apgar 1. min (%)		17 (89.5)	2 (3.6)	<0.001
<7 Apgar 5. min (%)		14 (73.7)	2 (3.6)	<0.001
Birth weight of baby (gram)		837±856	3198±781	<0.001
Gender (%)	Female	10 (52.6)	22 (39.3)	0.30
	Male	9 (47.4)	34 (60.7)	
Application to the neonatal intensive care unit (%)		7 (36.8)	7 (12.5)	=0.02
Duration of hospitalization in the neonatal intensive care unit (day)		17±36.8	1.7±5.8	=0.003
Number of babies detected to have transient tachypnea of the newborn (%)		1 (5.3)	4 (7.1)	0.62
Number of babies detected to have sepsis (%)		3 (18.8)	0	0.01
Number of babies that died (%)		13 (68.4)	3 (5.4)	<0.001
Presence of growth in PCR (%)		9 (47.3)	0	<0.001

[a]: Patient group; [b]: Control group; *:p<0.05 significant; [c]: the presence of chorioamnionitis in patients was diagnosed with high temperature (>35.5°C), uterus tenderness, abdominal pain, smelly vaginal discharge, tachycardia in mother and/or baby, and presence of two times or more higher leukocyte number (>15000)

Objective: The aim of the study is to predict the prognosis by evaluating bacterial 16S rRNA through PCR before getting culture results in pregnant patients who have prolapsed amniotic membrane and who will be performed emergency cerclage. The relationship of perinatal and pregnancy results with the preoperative evaluation of the detection of bacterial 16S r RNA in the amniotic fluid before emergency cerclage in the case of amniotic membrane prolapse due to cervical dilatation in the 2nd trimester of pregnancy was investigated.

Methods: Nineteen parturient patients with cervical dilatation and prolapsed membranes were treated with emergency cerclage between 2010 and 2012. All patients were applied amniodrainage before cerclage and 16S rRNA was investigated in the

Table 2. PCR and culture results of the cerclage group with prolapsed amniotic membrane

Cerclage group (n=19)	Factors detected in PCR	Urine culture	Genital discharge culture	Blood culture	Amnion fluid culture	Gram staining
1	*Streptococcus Agalactia GY102*	none	none	none	none	none
2	*-Bacterium NLAE 1-H513*	none	none	none	none	none
3	*Streptococcus Agalactia GY102*	none	none	none	none	none
4	none	none	none	none	none	none
5	none	none	none	none	none	none
6	none	none	none	none	none	none
7	*Klebsiella HaNA22*	none	Candida	none	*Candida*	none
8	none	none	none	none	*Stafilacoccus*	none
9	*Enterococcus fecalis P26-24*	none	none	none	ESBL (+) *Escherichia Coli*	none
10	none	none	none	none	none	none
11	none	none	Candida	none	none	none
12	*Klebsiella HaNA22*	none	none	none	*Klebsiella pnömonia*	var
13	*Enterococcus fecalis GM*	none	none	none	none	none
14	none	none	none	none	none	none
15	*Stafilococcus sp clone JPL-53*	none	none	none	none	none
16	none	none	none	none	none	none
17	none	none	none	none	none	none
18	*Escherichia fergusoni ATCC 35469* *Escherichia sp ASG34*	none	none	none	none	none
19	none	none	none	none	none	none

Table 3. In the cerclage group patients with prolapsed amniotic membrane, evaluation of clinical data and prognosis in patients with and without contributing factors in PCR

Cerclage group	Presence of bacteria in PCR patients with contributing factors (n=9)	Presence of bacteria in PCR patients without contributing factors (n=10)	p*
High temperature (>37.5°C) (%)	2 (22)	0	0.21
Presence of contraction (%)	8 (88)	3 (30)	0.01
High CRP (>1) (%)	8 (88)	8 (80)	0.81
Leukocytosis (>15.000) (%)	3 (33)	3 (30)	0.63
Success of cerclage procedure (exceeding one week) (%)	6 (66)	7 (70)	0.63
Going home with live birth (%)	0	6 (60)	0.008
Going home with live birth (%)	148±16	189±47	0.02
Age of cerclage (beginning age)	140±15	143±21	0.78
Day of prolongation (the shortest-the longest number of prolonged days)	8±9.1 (1-28)	45±53.3 (2-142)	0.13

*p<0.05 significant

Figure 2. In the patient with healthy amniotic membrane, the left foot of the fetus is observed at the level of hymenal caruncle.

Figure 3. Sutured view of the cervix after emergency cervical cerclage

amniotic fluid by using PCR for determining possible microbial invasion of the amniotic cavity. Fifty six parturients that were detected to have abnormal quadruple screening test result requiring genetic amniocentesis were selected as the control group. The patients were removed from the cerclage group in the presence of ruptured membrane, infection, or placental detachment (Figure 1-3).

Results: In the cerclage group, the results of 16S rRNA were positive in 9 cases and negative in 10 cases. All patients in the control group had negative PCR results. The mean gestational week of PCR positive and negative cases were found to be 148 and 189 weeks, respectively. This difference was statistically significant ($p<0.02$). The pregnancy was prolonged for a time between 8 and 45 days. This prolongation with emergency cerclage was 8 days in PCR positive cases and 45 days in PCR negative days. In PCR negative cases, 6 babies (60%) were born live and the mean birth weight was 837 g. On the other hand, all babies were stillborn in PCR positive cases. In the cerclage group, the necessity of neonatal intensive care unit (NICU) and the duration of hospitalization in NICU were significantly high. Leukocyte values and genital, blood, and urine cultures that were taken at admission were analyzed in both groups and no significant difference was observed between them (Table 1-3).

Conclusion: The possible rate of 60% for live births is accepted as a good result in emergency cerclage when midtrimester parturients have prolapsed membranes. The success of cerclage procedure can be predicted based on 16S rRNA evaluation in preoperative amniotic fluid.

Keywords: Emergency cerclage, 16S rRNA, maternal result, perinatal result

SS-88

The role of non-operative treatment in high-grade liver damage secondary to gunshot injury

Rahman Şenocak, Ali Kağan Coşkun

Department of General Surgery, Health Sciences University, Gülhane Training and Research Hospital, Ankara, Turkey

Objective: Although conservative treatment choice is commonly accepted for blunt abdominal and sharp object injuries, there is still uncertainty about non-operative treatment of gunshot and penetrating injuries of the abdomen. In the last decade, a ten-

dency towards non-operative treatment has begun for liver injuries. There is no available internationally accepted suggestion on this subject.

Methods: In this study, the approach to a 61-year-old male patient, who was admitted to the emergency unit for penetrating abdominal injury due to gunshot injury, was evaluated with the outcomes.

Results: A 61-year-old male patient was brought to the emergency unit because of gunshot injury. In the physical examination, his blood pressure was within normal range but he was observed to be tachycardic and tachypneic. Entry from the level of the right midclavicular 8th-9th ribs and exit from the posterior level of 11th rib and also diffuse hematoma were observed. There was tenderness and defense in the right quadrants. The laboratory values were found to be; Hb: 12.3, ALT/AST: 100/106, LDH: 458, and WBC: 15300. In the FAST analysis, no pathology was detected except perihepatic fluid, hematoma in the 7th-8th segment of the liver, and air densities. Contrast-enhanced CT of the abdomen revealed laceration involving 25% of the right lobe and having a depth reaching 5 cm (grade 4) and intense perihepatic-perisplenic fluid content with 18 mm thickness (Figure 1). The patient was taken into the intensive care unit and monitorized. Non-operative approach was decided because his vital signs and laboratory values were stable. When bilirubin values were found to be high in the fluid sample taken from the collection regions, perihepatic percutaneous drainage catheter was placed (Figure 2). ERCP was performed because of high drainage catheter output and nasobiliary drainage catheter and sphincterotomy were applied to the right hepatic canal when contrast agent leakage was observed. Because percutaneous drainage amount decreased and bilirubin value became normal, nasobiliary catheter was removed under the guidance of imaging. No contrast agent leakage was observed in ERCP. After 21-day treatment, the patient was discharged without any complication.

Conclusion: Non-operative treatment of penetrating abdominal trauma has not been accepted as in blunt trauma. Although it has been reported in the first studies that good results can be obtained in low-grade injuries, there are a few data showing that patients with severe liver injuries can be followed non-operatively. Patients that are not hemodynamically stable and do not have peritonitis can be candidates for non-operative treatment. This study indicates that well-selected patients with isolated high-grade solid organ injuries can be treated non-operatively.

Keywords: Penetrating abdominal injury, non-operative treatment, liver injury

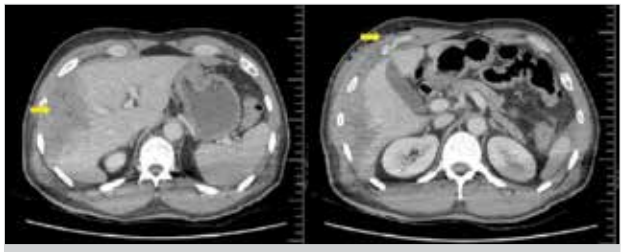

Figure 1. Grade 4 injury in the liver and air in the penetration site

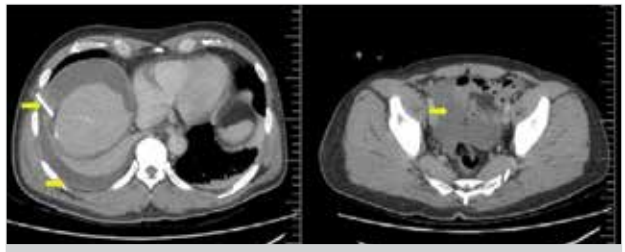

Figure 2. Percutaneous drainage process in the collection, pleural and pelvic collection development.

SS-89

A safe solution for difficult cholecystectomies: Subtotal cholecystectomy

Ali Cihat Yıldırım[1], Şahin Kahramanca[1], Turgut Anuk[2]

[1]Department of General Surgery, Kars Harakani State Hospital, Kars, Turkey

[2]Department of General Surgery, Kafkas University School of Medicine, Kars, Turkey

Admissions to the outpatient clinic of general surgery due to gallstone disease and the performed operations have an important place in daily surgical practice. When gallstone is symptomatic, complications, particularly acute cholecystitis, can develop at the rate of 7-11%. Surgical morbidity and mortality rates increase in patients becoming symptomatic and having cholecystitis attack. Subtotal cholecystectomy is accepted as a safe choice for the prevention of possible complications particularly in cases with acute gangrenous and necrotizing cholecystitis. In this study, it was aimed to reveal the results and effectiveness of subtotal cholecystectomy in patients operated in Kars Harakani State Hospital. The data of 84 patients operated due to symptomatic cholelithiasis and acute cholecystitis in Kars Harakani State Hospital between May 2014 and October 2017 were evaluated retrospectively. The mean age of the patients was 52 years and the female/male ratio was 3.5. Elective surgery was applied in 70 patients and cholecystectomy was performed in 14 patients for the pre-diagnosis of acute cholecystitis after hospitalization. While 74 of 84 patients were performed laparoscopic cholecystectomy, conversion cholecystectomy was performed in 10 patients because of surgical dissection difficulty and inability to reveal the Calot triangle. Of these 10 cases, reconstitutional partial

cholecystectomy was carried out due to the pre-diagnosis of Mirizzi syndrome in 5 cases and fenestral subtotal cholecystectomy was performed with open stone extraction and cholecystostomy in one case. Of partial cholecystectomy cases, 2 were male and 4 were female. Five of these 6 patients had a history of previous cholecystitis. In the postoperative follow-ups, while no postoperative surgical complication, particularly biliary tract injuries, developed in those undergoing subtotal cholecystectomy, only one patient had pulmonary thromboembolism in the postoperative follow-up. This patient was provided medical treatment by the Department of Chest Diseases and then discharged with full recovery.

It is important to decide on open surgery when needed in laparoscopic cholecystectomy, which is commonly performed in daily practice of general surgery. If anatomy cannot be revealed in these cases undergoing conversion, subtotal cholecystectomy should be considered instead of insisting on total cholecystectomy. It can be a safe alternative for the prevention of intraoperative complications in peripheral state hospitals particularly in the conditions of our country.

Keywords: Subtotal cholecystectomy, laparoscopic cholecystectomy, gallbladder, acute cholecystitis, mirizzi syndrome, chronic cholecystitis

Figure 1. Sutured after subtotal cholecystectomy

Figure 2. Sac stump of subtotal cholecystectomy material

SS-90

Comparison of the effectiveness of Deguelin in pancreas and prostate cancer cell lines with standard treatments

Zeliha Kılıç[1], Hakan Cengiz[2], Nilgün Yener[3], Mehmet Ali Koçdor[4], Halil Ateş[5], Tarık Salman[6], Hilal Koçdor[1,2]

[1]Department of Basic Oncology, Dokuz Eylül University, Oncology Institute, İzmir, Turkey
[2]Department of Molecular Medicine, Dokuz Eylül University, Health Sciences Institute, İzmir, Turkey
[3]Department of Medical Biochemistry, Dokuz Eylül University School of Medicine, İzmir, Turkey
[4]Department of General Surgery, Dokuz Eylül University School of Medicine, İzmir, Turkey
[5]Department of Clinical Oncology, Dokuz Eylül University, Oncology Institute, İzmir, Turkey
[6]Department of Medical Oncology, Katip Çelebi University, Atatürk Training and Research Hospital, İzmir, Turkey

Objective: The aim of this study is to investigate the effect of Deguelin, which is discussed to be a potential anticancer agent in recent years, on pancreas and prostate cancer cell lines. Pancreas cancer is a frequently diagnosed type of cancer with a poor prognosis across the world. It is the fourth cause of cancer-related deaths in adults in USA. It is an aggressive malignancy resistant to apoptosis and chemotherapeutic agents. Prostate cancer is the most common malignancy among men and it is the second main cause of cancer-associated deaths. It is very heterogeneous in terms of the grade and genetics of the disease and oncogene/tumor suppressor gene expression. Androgen-independent prostate cancer is resistant to both chemotherapy and irradiation because it is a very metastatic cancer type. The agents used for cancer treatment are toxic for normal tissues. Therefore, new preventive and curative drugs with no or low toxicity are needed. Deguelin is a rotenoid that is a natural plant derivative. In this study, it was aimed to compare the effectiveness of Deguelin, which is a potential chemotherapeutic agent, and gemcitabine and docetaxel, which are used in standard treatment, when they are used alone and in combination.

Methods: In this study, IC50 doses of Gemcitabine, Docetaxel and Deguelin were determined in PANC-1, PC-3, and DU-145 cell lines with cell viability test. The determined effective concentrations were applied for Gemcitabine, Docetaxel, Deg-

uelin, and their combinations in pancreas and prostate cancer cell lines. The cells treated with drugs were applied migration, flow cytometric study (apoptosis, cell cycle) and 3D angiogenesis analyses and the effects of drugs were compared. Statistical analyses were performed by using ANOVA, t-test, and Holm-Sidak test and the value of $p<0.05$ was accepted as significant.

Results: It was observed that Deguelin alone had cytotoxic effect even in small doses in pancreas cancer cell line and its effectiveness increased when combined with Gemcitabine, which is a standard chemotherapeutic agent. It was found that giving only Deguelin in both prostate cancer cell lines with negative androgene receptor could not kill cancer cells.

Conclusion: Deguelin, which is discussed as a potential anticancer agent, does not have cytotoxic effect in metastatic prostate cancer cell lines although it has anti-cancer effect in pancreas cancer cell line.

Keywords: Pancreas cancer, prostate cancer, gemcitabine, docetaxel, deguelin

SS-91

Patients' approaches and results in application of incisional hernia repair with abdominoplasty in female patients

Ogün Erşen, Sezgin Yılmaz, Murat Akıcı, Murat Çilekar

Department of General Surgery, Afyon Kocatepe University School of Medicine, Afyonkarahisar, Turkey

Incisional hernias developing particularly in patients with sub-umbilical and pfannenstiel incision are more predisposed to forming large hernia sacs. Skin fold caused by these large hernia sacs over the pubis and inability to provide the hygiene in the abdominal pannus can lead to the development of dermatitis and fungal infection and aesthetic disorder. It is seen that mostly female patients prefer surgery because of disturbance due to dismorphic appearance caused by the pannus, rather than hernia-associated risks and symptoms. In this study, it was aimed to present and discuss the reasons for preferring abdominoplasty in selected patients with incisional hernia and their postoperative results. The data obtained from a questionnaire asking about the reasons for preferring surgical treatment in female patients with incisional hernia and pannus causing an appearance of two vertical lines in the abdomen and their expectations are shown in the graph. The results of 18 patients accepting repair with abdominoplasty will be presented with their preoperative and postoperative photos and graphs.

Keywords: Abdominoplasty, incisional hernia, ventral hernia

SS-92

Reconstruction with autologous tissue or implant after nipple and skin sparing mastectomy in locally advanced breast cancer

Kamuran Zeynep Sevim[1], Bülent Çitgez[2], Sıtkı Gürkan Yetkin[2], Semra Karşıdağ[1], Hamdi Özşahin[2]

[1]Department of Plastic Surgery, Health Sciences University, Şişli Hamidiye Etfal Training and Research Hospital, İstanbul, Turkey

[2]Department of General Surgery, Health Sciences University, Şişli Hamidiye Etfal Training and Research Hospital, İstanbul, Turkey

Objective: Locally advanced breast cancer (LABC) includes the tumors invading into the costa and surrounding muscles or inflammatory tumors that are larger than 5 cm in diameter, have fixed axillary lymph node and positive ipsilateral supraclavicular, infraclavicular, or internal mammary nodes and present with ulceration, erythema or "peau d'orange" in the skin. In this patient group, radiotherapy is generally indicated and the way and timing of breast reconstruction are controversial. Local recurrence, the need for aggressive adjuvant and neoadjuvant therapies, and low life expectancy in patients are the factors that cause difficulty in repair.

Methods: Tissue expander/implant-based repair and autologous tissue repair were performed in 45 patients operated for the diagnosis of locally advanced breast cancer between 2014 and 2017. The patients were evaluated in terms of various parameters including their demographic features, complications leading to possible delay in adjuvant therapy, length of hospitalization, failed reconstruction, and presence of local recurrence.

Results: Repair procedures with autologous tissue and with implant were performed in 12 and 33 patients, respectively. In terms of delay in adjuvant therapy, radiotherapy and chemotherapy were started late in 25% of patients undergoing repair with implant and in 10% of patients undergoing repair with autologous tissue. While the frequency of complications was 30% in those undergoing repair with autologous tissue, it was about 40% in reconstruction with implant. The repair procedure failed in 3 of patients undergoing repair with implant and it resulted in implant loss. In 2 of the patients reconstructed with autologous tissue, necrosis exceeding the rate of 50% was observed in the latissimus dorsi flap.

Conclusion: Repair after mastectomy should be recommended to all patients with locally advanced breast cancer. However, because axillary lymph node dissection is performed and the possibility of adjuvant radiotherapy application is high in patients with locally advanced breast cancer, the frequency of possible complications in reconstruction choices is observed to be increasing. On the other hand, more successful results are obtained in repair processes in patients receiving neoadjuvant chemotherapy because the need for postmastectomy radiotherapy decreases. Tumor biology and the need for systemic treatment have a high effect on the results of breast repair. It was concluded that aesthetic results of breast reconstruction with autologous repair in patients receiving only adjuvant radiotherapy were significantly safer than in reconstruction with implant.

Keywords: Locally advanced breast cancer, repair with implant, autologous repair

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SS-93

The effect of standard therapy and Deguelin on vasculogenic mimicry in the experimental model of aggressive lung cancer: Bioimage informatics analysis

Hakan Cengiz[1], Mehmet Ali Koçdor[1,2], Halil Ateş[3], Süleyman Aydın[4], Hilal Koçdor[1,5]

[1]Department of Molecular Medicine, Dokuz Eylül University, Health Sciences Institute, İzmir, Turkey

[2]Department of General Surgery, Dokuz Eylül University School of Medicine, İzmir, Turkey

[3]Dokuz Eylül University, Oncology Institute, İzmir, Turkey

[4]Department of Medical Biochemistry, Fırat University School of Medicine, Elazığ, Turkey

[5]Department of Basic Oncology, Dokuz Eylül University, Oncology Institute, İzmir, Turkey

Objective: Lung cancer is a leading cause of mortality because of its aggressive behavior and it is often diagnosed at advanced stages. Standard medication regimens are unsatisfying. In previous studies, vasculogenic mimicry (VM) and increasing tumor cell motility were demonstrated to be markers of poor prognosis, high tumor grade, and tumor aggressiveness. Vasculogenic mimicry is defined as vessel-like network formation by tumor cells. It has been demonstrated that Deguelin, which is a rotenone derivative, potentially has anti-cancer effectiveness in many experimental cancer models. The aim of this study is to investigate the effects of Deguelin, Docetaxel, and combination doses of these molecules (IC50/2) on anti-VM activity and cell migration in Lewis Lung Carcinoma (LLC) cell.

Methods: Cell viability test for Deguelin and Docetaxel was performed in LLC cell line and IC50 values were found. With the determined effective doses, apoptosis and cell cycle analyses were performed in LLC cell line with BD FACSCanto II flow cytometry. Tubular formation (vasculogenic mimicry-VM) and cell migration method was applied. The 2-dimensional images of VM and cell migration were obtained through "bioimage informatics analysis". The obtained images were quantified by using the ImageJ program and with the help of a macro program designed for every method. Each method was repeated for three times. By using SigmaStat 3.5 (Systat Inc., Santa Cruz, CA, USA) software, ANOVA test was employed for multiple comparisons and Holme-Sidak test, from post hoc tests, was employed for paired comparison. The significance level was accepted to be $p<0.05$.

Results: Compared to the control group, combination and docetaxel groups were observed to be effective in apoptosis and cell cycle. There was a statistically significant difference between the control group and Deguelin and combination groups in terms of VM parameter ($p<0.05$). Deguelin was considered to have a strong anti-VM and anti-cell migration activity against LLC cells. Moreover, a synergism was detected between Deguelin and Docetaxel.

Conclusion: Deguelin apparently decreases tumor aggressiveness when it is used alone or combined with Decotaxel in LLC cell line. It has been concluded that vasculogenic mimicry can be an ideal marker for the determination of anti-tumor effectiveness with cancer modeling.

Keywords: Lewis lung carcinoma (LLC), deguelin, docetaxel, vasculogenic mimicry (VM), tumor cell motility, bioimage informatics analysis

SS-94

Does the frequency of complications increase with simultaneously applied with implant and adjuvant chemotherapy in breast reconstruction?

Bülent Çitgez[1], Kamuran Zeynep Sevim[2], Selami Şirvan[2], Sıtkı Gürkan Yetkin[1], Mehmet Mihmanlı[1], Ayşin Yeşilada[2]

[1]Department of General Surgery, Şişli Hamidiye Etfal Training and Research Hospital, İstanbul, Turkey

[2]Department of Plastic and Reconstructive Surgery, Şişli Etfal Training and Research Hospital, İstanbul, Turkey

Objective: Reconstruction simultaneously performed with prosthesis and/or tissue expander after skin and/or nipple sparing mastectomy is a frequently used technique at present, particularly in T1 or T2 tumors with multiple foci. However, while performing this reconstruction, it should be remembered that patients can also be given adjuvant chemotherapy as an oncologic necessity. Vandeweyer et al. reported in 2003 that cytotoxic treatments that were applied for preventing local and metastatic recurrences affected the frequency of possible complications, particularly the frequency of infection (ref1), and aesthetic success of breast reconstruction. In this study, different from the study of Vandeweyer et al., we wanted to emphasize that the rate of seroma development and the length of hemovac drain application significantly increased in patients receiving adjuvant chemotherapy and this elevated the incidence of infections and revision surgeries.

Methods: Of 110 patients undergoing breast reconstruction with implant after breast cancer in our department between May 2014 and June 2017, 82 patients receiving adjuvant or neoadjuvant chemotherapy were compared in terms of postoperative complication frequency (hematoma, seroma, implant loss, infection), secondary surgeries, and aesthetic results. These patients were followed up for 18 months on average.

Results: A statistically significant increase was observed in the rate of seroma in the patients given adjuvant chemotherapy (10.9%). In the patients receiving neoadjuvant chemotherapy and undergoing repair with implant, early postoperative hematoma and bleeding time disorders were observed (5.8%). Six patients had prolonged seroma, partial skin necrosis, and revision surgeries. Implant loss was seen in one patient.

Conclusion: Adjuvant chemotherapy is used with skin sparing mastectomy in patients having nodal invasion or more aggressive tumor biology. In patients receiving adjuvant chemotherapy and undergoing reconstruction with implant, the length of hemovac drain usage, which is normally 2-3 days, can increase to 20 days. Prolonged hemovac drain usage increases the frequencies of possible infections and revision surgeries and affects aesthetic results. In literature, the negative effects of radiotherapy, which is among adjuvant therapies, on breast reconstruction are generally mentioned. However, we wanted to draw attention to adjuvant chemotherapy and the complications in this case series. The treatment of breast cancer is a process that should be managed as multicentric.

Keywords: Adjuvant chemotherapy, repair with implant, skin sparing mastectomy

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SS-95

Comparison of Ferguson hemorrhoidectomy and sclerosing agent injection for the treatment of hemorrhoidal disease

Muzaffer Önder Öner, Mehmet Kadir Bartın, İlhan Taşdöven

Department of General Surgery, Health Sciences University, Van Training and Research Hospital, Van, Turkey

Objective: Hemorrhoids are the natural structures of the body which consist of mucosa, submucosal fibroelastic connective tissue, smooth muscles, and blood vessels. They help to provide fluid, solid, and gas continence. It has been found that at least 50% of the population consult to the hospital for hemorrhoidal disease in any time of their lives and 5-10% of these patients are treated with surgical intervention. In our study, it was aimed to compare the Ferguson technique with direct current electrotherapy or galvanization technique in patients having 2nd and 3rd grade hemorrhoidal disease presenting with clinical symptoms.

Methods: The study included 50 patients who were admitted to the outpatient clinic of general surgery in Van Training and Research Hospital for 3rd and 4th grade hemorrhoidal disease between January 2014 and June 2016. After receiving their written informed consents, the patients were randomized into 2 groups by numerating them based on the hospitalization order. The pa-

tients with an odd number (Group 1, 25 patients) were applied sclerotherapy and the patients with an even number (Group 2, 25 patients) were applied Ferguson technique. The groups were evaluated in terms of age, gender, clinical stage, duration of procedure, postoperative pain, duration of hospitalization, and recurrence.

Results: The study included 36 female (72%) and 14 male (28%) patients. The relationship between the duration of operation and surgical technique is shown in Table 2. The mean duration of procedure was found to be 40 minutes in Ferguson technique and 13 minutes in sclerotherapy. This difference was evaluated to be statistically significant ($p<0.05$).

The durations of hospitalization are presented in Table 2. The mean discharge from the hospital was 1.4 days after the procedure in Group 1 and 1 day after the procedure in Group 2. The difference between two groups was found to be statistically significant ($p<0.05$). Rectoscopy was performed for all patients in the postoperative 3rd month. According to the result of endoscopy and physical examination, the cases with 2nd and 3rd degree hemorrhoid were accepted as recurrence.

Table 1. Distribution of patients according to age, gender, and stage of disease

Groups	Female	Male	Mean age	2. degree hemorrhoid	3. degree hemorrhoid
Group 1 (n=25)	19	6	43.1	8 (%32)	17 (%68)
Group 2 (n=25)	17	8	42.6	11 (%44)	14 (%56)

Table 2. The effect of surgical technique on duration of operation, duration of hospitalization, and recurrence

Groups	Duration of operation	Duration of hospitalization	Recurrence
Group 1 (n=25)	26.3±6.09 (8-13) min	1.4±0.5 (1) day	4% (1 patient)
Group 2 (n=25)	40.2±6.53 (33-50) min	2.3±0.69 (1-3) day	16% (4 patients)

Conclusion: It is seen that sclerotherapy, which is a technique that is successfully used in the treatment of internal hemorrhoids, resolves many of complications and disadvantages encountered in other treatment modalities. When it is applied accurately, it causes minimal pain and it does not afflict. It does not require bowel preparation or premedication. Patients can get back to their daily lives and activities soon after the treatment.

Keywords: Sclerotherapy, hemorrhoidectomy, ferguson

SS-96

Comparison of sleeve gastrectomy and Roux-en-Y gastric bypass techniques in terms of weight loss in rats that are obese due to high-carbohydrate diet

Rıza Gürhan Işıl[1], Seracettin Eğin[1], Metin Yeşiltaş[1], Hasan Tok[1], Semih Hot[1], Berk Gökçek[1], Hakan Teoman Yanar[2]

[1]Department of General Surgery, Health Sciences University, Okmeydanı Training and Research Hospital, İstanbul, Turkey
[2]Department of General Surgery, İstanbul University School of Medicine, İstanbul, Turkey

Objective: Although sleeve gastrectomy gives excellent results in some cases, it does not work in some patients. We suggest that preoperative eating habits of patients affect the result. In recent years, the use of sleeve gastrectomy is rapidly increasing in bariatric surgery. On the other hand, the use of Roux-en-Y gastric bypass, which is considered as the golden standard technique in bariatric surgery, is decreasing. Despite the presence of studies on choosing surgery technique for obese patients in the literature, there is still no consensus on this subject. In this study, it was aimed to compare the results of sleeve gastrectomy and Roux-en-Y techniques in rats whose preoperative caloric intake mostly included glucose.

Methods: Twenty two Wistar-Albino male rats were given high-glucose diet (20% glucose water every other day) and normal pellet diet (every day) for one month. After the rats became obese, they were divided into 3 groups: Group A including those undergoing only laparotomy (n: 6), Group B including those undergoing sleeve gastrectomy (n: 8), and Group C including those undergoing Roux-en-Y (n: 8). The rats' weights, body mass indices (BMI), and percentages of final weight losses were recorded before beginning high-glucose diet, intraoperatively, and in the postoperative 1st, 2nd, 3rd, and 4th weeks.

Results: The mean weight of the rats in Group A was 374.66±7.14 g at the beginning of the study, 524±13.02 g on the day of operation, 512±12 g in the postoperative 1st week, 539.17±12.59 g in the postoperative 2nd week, 563±10.29 g in the postoperative 3rd week, and 594.50±8.52 g in the postoperative 4th week. The mean weight of the rats in Group B was 374.87±7.5 g at the beginning of the study, 529.37±10.59 g on the day of operation, 499.38±10.67 g in the postoperative 1st week, 500.63±11.04 g in the postoperative 2nd week, 506±12.80 g in the postoperative 3rd week, and 511.88±15.67 g in the postoperative 4th week. The mean weight of the rats in Group C was 374.50±9.87 g at the beginning of the study, 529.75±15.30 g on the day of operation,

508.75±29.83 g in the postoperative 1st week, 476.13±29.73 g in the postoperative 2nd week, 438.13±29.87 g in the postoperative 3rd week, and 401.63±29.50 g in the postoperative 4th week. No significant difference was found among three groups in terms of weight and BMI measured at the beginning of the study and on the day of operation.

Although weight loss was higher in Group C in the postoperative 1st week, there was no statistically significant difference among three groups. The percentages of weight loss in the postoperative 2nd, 3rd, and 4th weeks were higher in Group C than in other two groups.

Conclusion: The effectiveness of sleeve gastrectomy was not observed in rats feeding with high-glucose diet. Further prospective studies on human beings are needed on this subject.

Keywords: Sleeve gastrectomy, roux-en-Y, obesity

SS-97

Penetrating cardiac injuries: 17 case reports with the results

Kemal Eyvaz, Salim Balin, Hasan Ediz Sıkar, Hasan Fehmi Küçük, Levent Kaptanoğlu, Mehmet Eser, Necmi Kurt

Department of General Surgery, Health Sciences University, İstanbul, Turkey

Penetrating cardiac injuries are trauma cases that are more rarely encountered compared to other cases. Because of their rarity, it is difficult to diagnose and to treat them and their mortality rate is very high. Life-threatening factors in cardiac injuries include vascular injury, hypovolemia depending on the extent of injury, valvular damage, and cardiac tamponade. The aim of this study is to demonstrate the features of patients exposing to penetrating cardiac injury, surgical intervention, and results affecting survival. The data of 17 patients that were admitted to Kartal Training and Research Hospital for cardiac injury between June 2005 and December 2012 were evaluated retrospectively. Patients' age, gender, way of injury, means of transport to the hospital, cardiac injury region, accompanying abdominal injury hemodynamic state, surgical experience, and postoperative follow-up were recorded. Of the patients, 15 were male and 2 were female. Fourteen patients were injured by a gun and 3 patients were injured by a sharp object. Six patients were transported with an ambulance, but 11 patients were brought to the hospital by a private citizen. Sixteen patients were hemodynamically unstable. Eight patients had right ventricular injury, 6 had left ventricular injury, 2 had right atrium injury, and 1 had coronory artery injury. While 5 of the patients were operated by surgeons not having any experience in cardiac injuries, 12 were operated by surgeons having experience in cardiac injuries. Mortality occurred in 4 patients and the mean length of hospitalization was 5.24 days. Because it is difficult to diagnose and treat cardiac injuries due to their rarity, they are among important causes of mortality. Fast transport to the hospital, fast establishment of diagnosis, and adequate surgical experience have an important role in decreasing mortality.

Keywords: Cardiac injury, emergency, trauma, surgery

SS-98

Predictive factors in incidental thyroid carcinomas: A retrospective study

Orhan Üreyen[1], Demet Alay[1], Hüseyin Fenercioğlu[1], Rafet Güneş Öztürk[2], Zehra Hilal Adıbelli[3], Enver İlhan[1]

[1]Department of General Surgery, Health Sciences University, İzmir Bozyaka Training and Research Hospital, İzmir, Turkey

[2]Department of Medical Pathology, Health Sciences University, İzmir Bozyaka Training and Research Hospital, İzmir, Turkey

[3] Department of Radiology, Health Sciences University, İzmir Bozyaka Training and Research Hospital, İzmir, Turkey

Objective: In recent years, the incidence of incidental thyroid cancer has increased in patients operated for benign thyroid disease. Despite this increase, no specific features have been revealed for the determination of patients with incidental thyroid carcinoma yet. In our study, it was aimed to investigate the presence of any specific features for incidental thyroid cancer by comparing the patients who were incidentally found to have thyroid carcinoma among those undergoing thyroidectomy with malignant and benign cases in our series.

Methods: The patients performed thyroidectomy for benign or malignant reasons were divided into 3 groups as Group 1 (benign preoperative fine needle biopsy-FNAB, benign surgery histopathology), Group 2 (benign preoperative FNAB, malignant surgery histopathology-incidental group), and Group 3 (malignant FNAB, malignant suspected surgery histopathology). Data such as age, gender, nodule structure according to ultrasound findings, and presence of calcification were recorded and inter-group comparisons were performed.

Results: The study included 100 patients, including 77% female and 23% male patients. There were 51 cases in Group 1 (51%), 16 cases in Group 2 (16%), and 3 cases in Group 3 (33%). No difference was found between the incidental group and Group 1 and 3 in terms of the mean age ($p>0.05$). There was a significant difference between Group 2 and Group 3 with regard to gender ($p=0.025$). According to the findings of ultrasonography, the nodule diameter over 20 mm was found to be correlated between Group 2 and Group 3 ($p=0.005$). The nodule diameter was 21 mm and above in 87.5% in Group 2 and in 45.5% in Group 3. In the analysis evaluating whether thyroid cancer arose from a major nodule or not, 96% of Group 3 had nodules that were applied FNAB. This rate was 21.4% in Group 2 and there was no significant difference between them ($p<0.0001$). No relationship was detected between type of nodule, number of nodule, presence of calcification in nodule, and diameter of nodule and incidental thyroid carcinoma ($p>0.05$). Tumor diameters of Group 2 and Group 3 were 13.0±9.8 and 18.8±15.5 mm, respectively, and there was no significant difference between them ($p>0.05$).

Conclusion: We found that incidental thyroid carcinoma was associated with nodules other than major nodule that was evaluated to be suitable for FNAB. In patients having multiple nodules greater than 2 cm, particularly in male patients, biopsy should be performed not only for nodule with a potential malignancy but also for other nodules.

Keywords: Fine needle aspiration biopsy, incidental, thyroid carcinoma

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SS-99

Factors affecting bowel resection in incarcerated hernias of the abdominal wall

Kemal Eyvaz, Hasan Ediz Sıkar, Salim Balin, Hasan Fehmi Küçük, Mehmet Eser, Levent Kaptanoğlu

Department of General Surgery, Health Sciences University, İstanbul, Turkey

Hernia operation is among the most common general surgery interventions in America and Europe. There are many treatment methods for hernias of the abdominal wall. Because the elderly patients are generally followed up conservatively, the risk of incarceration is high for them. Patients with incarcerated hernia usually consult to the emergency unit with a swelling in the inguinal region or in the anterior abdomen. In this study, data of 103 patients who were admitted to Lütfi Kırdar Kartal Training and Research Hospital between December 2010 and December 2012 were evaluated and factors affecting morbidity and mortality in incarcerated hernias of the abdominal wall were presented. The mean age of the patients was 64 years. Of them, 55 were male and 48 were female. Fifty patients were operated for inguinal hernia, 32 patients for umbilical hernia, 9 patients for femoral hernia, and 12 patients for incisional hernia. While 66 of the patients were admitted to the hospital in 6 hours following bowel incarceration, 35 patients were admitted after 6 hours. The rate of bowel resection was significantly higher in patients that consulted later than 6 hours and had comorbid diseases. Because hernias of the abdominal wall cause morbidity if it is late, they should be operated in elective conditions as soon as they are diagnosed.

Keywords: Incarcerated hernia, bowel resection, emergency

SS-100

Our experience on simultaneous breast reconstruction performed after subcutaneous mastectomy

Erol Kozanoğlu[1], Fazilet Erözgen[2], Ekrem Ferlengez[2], Mahmut Said Değerli[2], Turgay Yıldız[2], Leyla Zeynel Tigrel[2], Yusuf Emre Altundal[2]

[1]Department of Plastic Reconstructive and Aesthetic Surgery, Haseki Training and Research Hospital, İstanbul, Turkey

[2]Department of General Surgery, Haseki Training and Research Hospital, İstanbul, Turkey

Objective: Nowadays, treatment of breast cancer has changed dimension with the cooperation of the departments of general surgery and plastic reconstructive and aesthetic surgery. The importance of breast reconstruction has also increased with social awareness improving in parallel with this development. For the prevention of breast absence in patients even in early postoperative period, simultaneous repairs are performed. In this presentation, we aim to share our experience on breast reconstruction performed simultaneously with subcutaneous mastectomy.

Methods: We performed subcutaneous mastectomy and simultaneous reconstruction in 8 female patients as the Breast Diseases Council at Haseki Training and Research Hospital between March 2017 and September 2017. The mean age of the patients was 44 years (30-60 years). While 5 patients had left breast involvement, 3 patients had right breast involvement. Before the operation, patients' needs for postoperative adjuvant radiotherapy were evaluated considering the anatomic closeness of breast tumor to the skin and to the pectoral muscle and metastatic state of the axilla. While 3 patients having indication for radiotherapy were performed repair procedure with tissue expander with integrated magnetic port, 5 patients were implemented permanent silicon-filled round implant in the same session with subcutaneous mastectomy. Resection and repair above lateral breast incision were performed in 5 patients. Inframammarian incision was used in 2 patients and transareolar incision was used in one patient. For the selection of prosthesis volume that would be used in repair, diameter of breast base before mastectomy was considered as a key criterion. The mean duration of follow-up was 5 months (2-7 months).

Results: While the nipples were preserved in all 5 patients undergoing subcutaneous mastectomy and permanent implant procedure, they were excised in patients undergoing tissue expander. The mean incision length was found to be 10.5 cm (7-17 cm). The mean prosthesis volume was 390 cc (250-550 cc). All of patients undergoing tissue expander were referred to the oncology department for chemoradiotherapy in the postoperative 1st month. While chemotherapy that was given in the postoperative 1st month was sufficient for 4 patients in the permanent implant group, adjuvant radiotherapy was added to chemotherapy because of the presence of multiple focuses only in one patient. No prosthesis-related complication was encountered during the follow-ups of the patients.

Conclusion: At present, the first treatment choice after subcutaneous mastectomy is simultaneous application of reconstruction and prosthesis. High level of patient satisfaction and low rates of complications bring this approach forward. For accurate selection of patients and high oncological and aesthetic success, the coordination of the Departments of General Surgery and Plastic Reconstructive and Aesthetic Surgery is inevitable.

Keywords: Plastic Reconstructive and Aesthetic Surgery, breast cancer

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SS-101

Smart tourniquet system for military use in extremity injuries

Erdem İnanç Budak[1], Faruk Beytar[1], Aytekin Ünlü[2], Osman Eroğul[1]

[1]Department of Biomedical Engineering, TOBB Economy and Technology University, Ankara, Turkey

[2]Department of General Surgery, Health Sciences University Gulhane School of Medicine, Ankara, Turkey

Non-prevention of blood loss in extremity injuries in battlefield results in mortality. Tourniquets are irreplaceable tools for the prevention of war injuries. Tourniquet is a medical instrument that helps to stop bleeding by placing a 4-7 cm-wide band around the proximal region of the injured extremity. Although application of tourniquet seems simple, loss of life can be significantly prevented with correct application. The Combat Application Tourniquet (CAT) and Special Operations Forces Tactical Tourniquet (SOFTT) are used in battlefields by NATO countries. Any of tourniquet systems that have been produced for military purpose cannot be applied with a single hand and rapidly. In the tourniquet system developed in this study, the pressure required for stopping blood flow is applied on the injured extremity with a belt wound on a reel moving with the help of a motor. When the arm or leg button on the device is pressed, the system begins to run actively until adequately tightening the tourniquet on the extremity after taking up the space of the belt with a low power. The system, which stops when it first reaches the predetermined threshold pressure value, gets feedback from the power sensor. After gripping the extremity tightly, the tourniquet system applies pressure until stopping blood flow and then passes to standby mode. For preventing the extremity to be gangrene, the system automatically unwinds after one hour and then repeats the tightening process again. When the system starts to run, all information about the tourniquet procedure including the time, location, and pressure value is transferred to the "DONANIMLI ER" system within the scope of "CENKER project", which is conducted by ASELSAN, according to the Bluetooth protocol. By conveying the information taken by CENKER to a center, the location where

tourniquet procedure is applied and other information are reached by the center. This smart tourniquet system repeats the procedure until switching it off. Through this system that sends information to the center for each tourniquet application, it is aimed to follow the military and security staff for possible injuries.

Keywords: Extremity injuries, tourniquet application, stopping bleeding

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POSTER PRESENTATIONS

PS-01

"Burned-out" seminomatous testicular tumor that appears as retroperitoneal metastasis

Semra Demirli Atıcı[1], Halit Batuhan Demir[1], Yasemin Kırmızı[1], Dilek Kuzukıran[2], Can Arıcan[1]

[1]Health Sciences University, Tepecik Training and Research Hospital, İzmir, Turkey

[2]Bitlis Tatvan State Hospital, Bitlis, Turkey

Burned-out testicular tumors differ from primary extragonadal testicular tumors and they are seen more rarely. There is no clinical evidence in the physical examination of the testis. The word "burned-out" refers to the testis tumor which is detected with metastasis to the retroperitoneal region, mediastinum, supraclavicular, cervical and axillary lymph nodes and which regresses spontaneously, and completely or partially. Various immunological and ischemic mechanisms are suggested in the pathophysiology of partial or complete regression of the tumor. Burned-out germ cell tumors should also be in our minds in cases that appear as masses in retroperitoneum or mediastinum, and the patient should be assessed in detail. To ensure a complete cure, orchiectomy should be performed before beginning the systemic chemotherapy in patients. In this case report, we planned to present a case with an unknown primary, who had a mass in the retroperitoneal region and in whom burned-out testicular tumor was found. Primary extragonadal germ cell tumors constitute 3-5% of germ cell tumors. In the order of frequency, the regions where they occur are mediastinum, retroperitoneum, pineal gland and presacral region. Although extragonadal germ cell tumors, which are mediastinal and intracranial, are generally primary, almost all of the retroperitoneal tumors are regarded as the metastasis of the testicular tumor. Although rarely, visceral metastases can be seen in the lung, liver, brain, gastrointestinal tract, bone, kidneys, adrenal glands, tonsils, spleen, and peritoneum. In addition, there are publications reporting metastases to the thyroid and prostate glands. The first case was reported by Prym in 1927. "Burned-out" phenomenon in extragonadal germ cell tumors refers to the detection of spontaneously and completely regressed testicular tumor through the metastases to retroperitoneal region, and to the mediastinal, supraclavicular, cervical and axillary lymph nodes. Burned-out testicular tumors differ from primary extragonadal testicular tumors and they are seen more rarely. Most of the time, there are no findings in the physical examination of the testis. Burned-out germ cell tumors should be kept in mind in cases that appear as masses in the retroperitoneum or mediastinum, and the patient should be assessed in detail. Orchiectomy should be performed before beginning the systemic chemotherapy in patients in order to ensure a complete cure.

Keywords: Retroperitoneal mass, burned out, germ cell tumor, orchiectomy

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PS-02

The efficacy of using saffron in the improvement of the immune system in the treatment of patients with purulent septic injuries

Hidayet Bilaloğlu İsayev

Azerbaijan Health Ministry, Scientific Surgery Center, Baku, Azerbaijan

Objective: Decrease in immune system causes an increase in inflammatory processes. Taking this into consideration, inclusion of immune stimulation therapy in treatment protocols is one of the most important points for such patients. The aim of the study is to investigate the efficacy of using saffron to increase the immune system of patients with purulent septic injuries.

Methods: Forty-two patients with purulent septic injuries in soft tissues were divided into three groups: Seventeen patients in the first group received per-os 100 mL of 0.03% saffron solution as immune system stimulant; the second group (15 patients) was administered 1 mL of 1% t-activin solution through intramuscular injections twice a day as an immune system stimulant. The third control group (10 patients) did not receive any immunostimulant medication. Immune indices, T-lymphocytes (T-1), T helpers (Th), T-suppressors (Ts), neutrophils (Nt) in wound secretion, and phagocytes (PC) were examined.

Conclusion: It was observed that phagocyte level increased in Group 1, and the increase was observed to be more prominent when compared with Group 2. There was no difference in the level of neutrophils. On the 7th day of treatment, the increase in T-lymphocytes, T-helpers, neutrophils and phagocytes was more prominent in Group 1. These immune indices increased by 1.3-1.8 times. On the 14th day of treatment, they increased by 2.1 -2.5 times compared to the beginning. They were 15-2 times faster in the clinical index in Groups I and II than in Group III. The same ratio between Group I and Group II is 1.07-1.27. Reproduction duration in Group I and Group II was 1.5 and 1.1 times shorter than in the treatments performed with the control group. Considering the information given above, the use of saffron has a high immuno-simulating effect in the treatment of purulent processes and it is easy to prepare and the patient can easily use it.

Keywords: Purulent-septic wound, immunity, saffron

PS-03

Diagnostic and therapeutic laparoscopic surgery in a case of omental infarction that is a rare cause of acute abdomen

Mehmet Babür, Özkan Demiroglu, Serdar Gümüş, Mehmet Ali Can, Mehmet Ali Açıkgöz
Health Sciences University, Diyarbakır Gazi Yaşargil Training and Research Hospital, Diyarbakır, Turkey

Omental infarction is a rare pathology that was described about a hundred years ago. Primary omental infarct is a rare cause of acute abdominal pain and frequently mimics other causes of acute abdomen. Thanks to the widespread use of CT, diagnosis can be made for epiploic appendagitis or segmental omental infarction within the abdomen at an increasing rate. The excision of the ischemic omentum in the primary torsion is the ideal treatment modality. Omental infarction is 3.5 times more common in men than in women. It is usually seen in obese patients in the fourth and fifth decades. In addition, clinical findings are nonspecific. The most common reason for hospital admission is abdominal pain with sudden onset, an increasing severity, and a localization on the right side. PE findings can vary, but sensitivity and rebound can frequently be observed in the upper right or lower quadrant. Mild fever and leukocytosis may occur. In our case, fever and leukocytosis were not detected. It can be confused with acute appendicitis, acute cholecystitis, diverticulitis, and renal colic in differential diagnosis. The definite diagnosis can be made during the hospitalization process in patients who are considered to be operated due to acute appendicitis. CT reveals a heterogeneous ovoid structure which is between the rectus abdominis and the colon, localized in the omentum, typically on the right upper or lower quadrant, has a density higher than the fat tissue, and sometimes causes thickening in the neighboring intestinal wall. The appearance of hyperdense ring (ring sign) formed by the thickened visceral peritoneum around the mass is typical. In our case, a 28-year-old male patient was admitted to the emergency department with the complaints of severe abdominal pain in the right lower quadrant, nausea and vomiting about 48 hours ago. The physical examination revealed rebound and defense+wbc:N in the lower right quadrant, and no abnormalitys in the other parameters. He had no fever. He had no abnormalities in the USG. Contrast-enhanced CT revealed 5 mm retrocecal appendix with air densities. In the right lower quadrant, a density enhancement was observed in 4x3 cm area in the omental adipose tissue (omental infarct?). In conclusion, omental infarct should be considered in the differential diagnosis as a benign, usually self-confined and a rare cause for acute abdomen. Some of the cases can be treated conservatively, and synchronous acute abdomen causes (appendicitis cholecystitis, perforation, etc.) accompanied by omental infarct can be treated with minimally invasive laparoscopic surgery.

Keywords: Laparoscopy, diagnostic, spontaneous, omental infarct

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PS-04

Ileus developing due to spontaneous transomental hernia

Mehmet Babür, Yusuf Yağmur, Serdar Gümüş, Mehmet Ali Can, Mehmet Ali Açıkgöz, İlhan Taş
Health Sciences University, Diyarbakır Gazi Yaşargil Training and Research Hospital, Diyarbakır, Turkey

Introduction: Internal hernias occur when the internal organs exit from a congenital or acquired peritoneal or mesenteric opening in the peritoneal cavity. Internal hernias are the causes of 4.1% of all intestinal obstructions. Transomental hernias constitute 1-4% of these hernias. Transomental hernias are very rare and are usually congenital; they are rarely traumatic or iatrogenic. Despite the advances in imaging techniques, the diagnosis of this disease is difficult and it is still frequently diagnosed during surgery. We are presenting a case with spontaneous transomental hernia that causes small bowel obstruction.

Case: A 74-year-old female patient was admitted to the emergency unitdue to the complaints of an abdominal pain that suddenly started 10 hours ago and bile vomiting and she had no history of previous similar pain attacks. However, she occasionally had constipation complaints. She did not have any history of previous surgical procedures or abdominal trauma. She had a moderate general condition, she was conscious and cooperative. In the examination of the abdomen, there was mild distension and sensitivity in the epigastric region. There was tympanic sound in percussion. The intestinal sounds were hyperactive. There was no defense or rebound. There were no abnormal values except for WBC: 17.98 (83.6% leukocyte) (x10^9/L), LDH: 355 (U/L) in the laboratory findings. In Standing Direct Abdominal Radiograph (SDAR), small intestine air fluid levels were observed. Abdominal tomography revealed mildly dilated small intestine segments and air fluid levels. Laparotomy was performed in the patient with the existing findings. During the operation, it was seen that 40 cm jejunal segment herniated through 4 cm defect in the omentum majus and the proximal segments were dilated. There was mild ischemia in the herniating intestinal segment and there was no necrosis. The omental defect was cut. The intestines were detorsioned. The color of the intestines recovered. The operation was terminated. In the PAAC graph, which was taken in the patient due to her complaint of coughing in the postoperative follow-ups, it was revealed that the sinus on the left was closed and there was mild atelectasis. The patient who recovered with respiratory exercise was discharged on the postoperative 5th day.

Conclusion: Although transomental hernias are rare, they should be kept in mind in the differential diagnosis of patients who have not undergone any surgery previously and who do not have abdominal wall hernia but have ileus symptoms. Early diagnosis and surgery allow the treatment of this disease before the development of stricture in herniated organs and associated life-

threatening pathologies such as perforation, peritonitis or peritonitis. This will prevent unnecessary organ resection, which has higher morbidity and mortality.

Keywords: Transomental hernia, spontaneous, ileus, acute

PS-05

Invagination leading to adult intestinal obstruction

Aydın Öztürk, Şükrü Taş

Department of General Surgery, Çanakkale Onsekiz Mart University School of Medicine, Çanakkale, Turkey

Objective: A 39-year-old female patient was admitted to the emergency department with the complaint of severe abdominal pain. In the abdominal examination of the patient, the abdomen was sensitive and there was defense. There was no abnormality in the history of the patient who had distension. It was found out that the pains of the patient, who had them for a few days, became unbearable.

Methods: BP was measured as 110/70 mmHg, pulse rate as 90/min and temperature as 36.5 °C. No abnormality was detected in the laboratory values except leukocytosis value of 15,000 mm^3. In the CT of the whole abdomen, invagination of the ileal loops was seen in the lower right quadrant. The patient was taken to urgent surgery. The exploration revealed invagination in jejunaileal small intestine segments. Reduction was achieved by rubbing and manipulation. While an approximately 100 cm segment was released, polypoid formations with miscellaneous dimensions, about 1-2-3 cm in size, were palpated at different points in this segment. Because the resection would be for approximately 100 cm and the procedure would be early for the young patient, the abdomen was closed. During the follow-ups, the patient tolerated oral intake on the postoperative 2nd day and vomiting and distension developed on the 6th day. In control CT, localized invagination was seen again in the lower right quadrant. When the patient was re-operated and re-explored, it was seen that the previous segment took the same shape and the intestines into which it invaginated were tense and edematous at an advanced level. It was decided to perform resection without reduction. Because anastomosis would be risky, double-barrel ileostomy was started. On the postoperative 1st day, oral feeding was started and the patient was discharged from the hospital by giving appointment for closing the ileostomy.

Results: Invagination is usually seen in childhood and detected in adult intestinal obstructions at a rate of 1-5%. While the etiology of invaginations seen in children is idiopathic, a large variety of factors such as Meckel's diverticulum, pancolitis, nodular lymphoid hyperplasia, granulomas, lipomas, MALT lymphoma, adenocarcinomas, Burkitt's lymphoma, ectopic pancreas, endometriosis and intestinal melanoma can be mentioned. Symptoms may be acute, intermittent, and chronic in invaginations. Our patient had acute symptoms. The diagnosis was made using CT. The treatment of invagination is usually surgical. If intraoperative diagnosis is invagination in patients with acute abdomen, we should definitely search for the etiologic factor. It is likely that invagination recurs even years after the correction surgeries performed without the treatment of etiologic factor. In our case, invagination repeated on the postoperative 5th and 6th days.

Conclusion: It should be kept in mind that invagination may occur in adult cases with intestinal obstruction and the etiologic cause should be tried to be determined when diagnosed.

Keywords: Invagination, intestinal obstruction, polyp

Figure 1. Invagination

Figure 2. Invagination

PS-06

Imaging findings of amyand hernia and acute appendicitis in a case

[1]Seda Kanbağlı, [2]Barış Candan

[1]Clinic of Radiology, Burdur State Hospital, Burdur, Turkey
[2]Clinic of General Surgery, Burdur State Hospital, Burdur, Turkey

Objective: Amyand hernia is a rare type of inguinal hernia in which the vermiform appendix is located within the hernia sac. It is seen in less than 1% of inguinal hernias. Complications such as acute appendicitis or perforated appendicitis are even less common (0.1%). Clinically, atypical presentation of acute appendicitis is expected and the clinical picture may mimic the incarcerated inguinal hernia. It is important to recognize it in clinical practice because it causes some problems in clinical and surgical aspects. In this presentation, we aimed to present the computed tomography (CT) findings of amyand hernia which was incidentally detected through radiology, had inflammatory indications and contained appendicitis in a case who consulted with the complaint of abdominal pain.

Methods: In the physical examination of a 72-year-old male patient, who was admitted to the emergency department with the complaint of abdominal pain, a painful swelling was detected in the right inguinal region. In the laboratory tests, the white blood cell value was 8392 mm^3 and CRP was 1.08 mg/dL. CT examination was performed for ruling out strangulation and the appendix extending from the pericaecal region to the right inguinal channel was observed in the imaging. The appendix wall was observed to be thickened and the presence of fluid was observed in its periphery. The patient was taken to surgery with the pre-diagnoses of acute appendicitis and incarcerated inguinal hernia. It was seen during the operation that the cecum extended into the hernia sac. In addition, an inflamed appendix with appendix fecalith was seen within the hernia sac. Appendectomy was performed and the defect area was repaired.

Results: The first person to report the presence of perforated appendix in the inguinal hernia was Claudius Amyand in 1736. Then, three types of classification were established: (A) intact appendix without inflammatory symptoms; (B) appendix with inflammatory symptoms; and (C) perforated appendicitis. Its diagnosis is difficult in the preoperative period and it is usually an incidental finding. De Garengeot hernia and incarcerated inguinal hernia should be considered in the differential diagnosis.

Conclusion: Amyand hernia is a rare condition and therefore, it should be kept in mind by surgeons in the differential diagnosis, especially in cases with incarcerated hernias. CT examination is helpful in the diagnosis of Amyand's hernia, in distinguishing incarcerated reducible inguinal hernia from Amyand hernia containing appendicitis, and in predicting possible surgical complications. This case shows that this pathology should be kept in mind and should comprehensively be reviewed.

Keywords: Amyand hernia, acute appendicitis, computed tomography, inguinal hernia

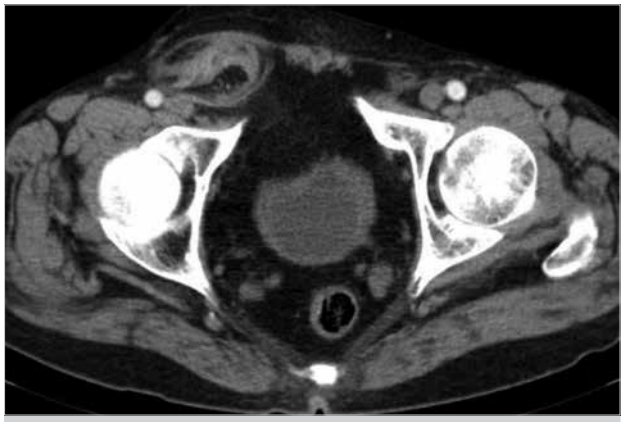

Figure 1.

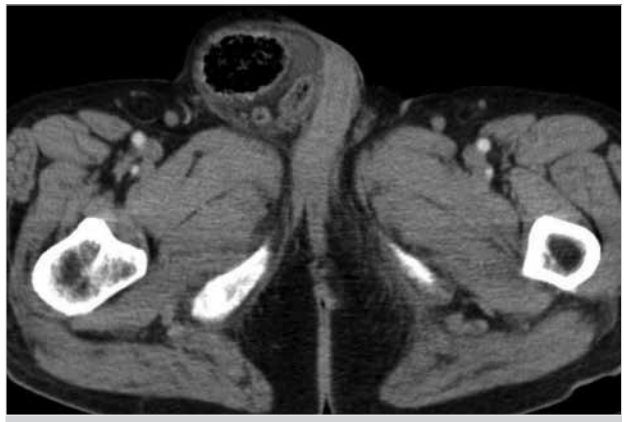

Figure 2.

Figure 3.

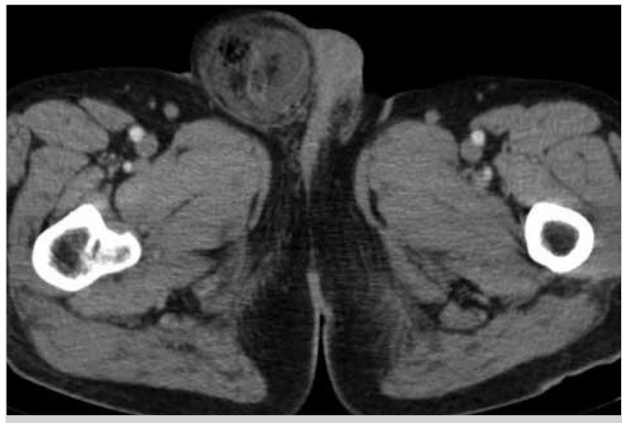

Figure 4.

PS-07

A chronic wound case with facial burns and paralysis

Metin Yalaza, Özgür Akgül, Umut Fırat Turan, Sadettin Er, Arife Düzgün Polat

Ankara Numune Training and Research Hospital, Ankara, Turkey

Chronic wound is the interruption of healing cycle due to reasons such as angiogenesis, innervation and degeneration in cellular migration. A patient whose face was burnt following a facial paralysis and who had a chronic ischemic wound is presented. A 34-year-old male patient consulted to the outpatient clinic of chronic wound due to a wound on his foot that had not healed for a month on May 2016. It was found out in his history that the patient had undergone a surgery due to neural tube defect in his childhood, and he did not have urine-stool control. The patient was performing clean intermittent catheterization and using diapers. In the physical examination of the patient, there was a 3x5 cm lesion, the center of which had necrosis and which was consistent with ischemic wound, in the left heel and he had first-degree burn in a 3x4 cm area on the left maxillary region of the face. The right side facial functions of the patient were not complete, and there was facial weakness especially in closing the eye and in lifting the eyebrow. The burn was caused by hot steam during the hot application with an iron. The application was the recommendation of neurology specialist for the facial paralysis; however, the method that was used was the preference of the patient. Wound care and dressing were performed in the patient whose laboratory examinations and lower extremity color Doppler examinations showed no abnormalities. It was observed that the patient who was followed up in the outpatient clinic responded to the treatment. In the control examination, the facial paralysis was observed to disappear.

Keywords: Burn, facial paralysis, chronic wounds

Figure 1. Wound on foot, burn, and facial paralysis finding

Figure 2. Facial paralysis finding

PS-08

A rare syndrome developing after opening percutaneous endoscopic gastrostomy

Murat Ferhat Ferhatoğlu, Abdülcabbar Kartal, Taner Kıvılcım, Ali İlker Filiz

Department of General Surgery, Okan University School of Medicine, İstanbul, Turkey

Introduction: Percutaneous endoscopic gastrostomy (PEG), which was first introduced in the 1980s, is an extremely successful method which is used for nutrition purposes in patients who cannot take oral food for a long period, which is alternative to surgi-

Figure 1. Inner disc of PEG embedded in the gastric submucosa

cal stomas, and which is an extremely comfortable method for both physician and patient. Hemorrhage, colocutaneous fistula, necrotizing soft-tissue infection, and gastric perforation are the major complications of this procedure, and they are seen at a rate of about 3%. Buried bumper syndrome (BBS) is also a major complication and occurs as a result of the progression of the gastrostomy tube through the stomach wall of the internal disc within the stomach, which results in inadequate nourishment through catheter and results in stagnation of food.

Case: The patient and relatives consulted to the outpatient clinic because of the discharge and redness at the side of the PEG opened in the patient who had Alzheimer's disease and who was cared at home for 5 years. In the upper gastrointestinal system endoscopy, it is seen that the inner mouth of the gastrostomy tube entered the gastric mucosa (Figure 1). Oral antibiotherapy was started in the patient in whom PEG was inserted again and the patient was discharged with full recovery.

Conclusion: Difficult progression of the food given to the patient with PEG and the symptoms of inflammation around PEG should make the endoscopist suspicious about BBS, and the endoscopist should make an upper gastrointestinal system endoscopy for the diagnosis. The appearance of the elevated mucosa around the inner disk of the PEG catheter or the appearance of the submucosal location of the inner disk is the definite diagnosis, and the replacement of the existing PEG catheter with the new one is the definite treatment. It should be kept in mind that if this complication which may occur in patients fed through PEG is not noticed for a long time, it may lead to fatal outcomes in these patients with serious risk factors such as bleeding, perforation, abscess formation and peritonitis and in patients who already have comorbid risk factors.

Keywords: Gastrostomy, percutaneous, complication, bumper

PS-09

A GIST case presenting with symptoms as an incarcerated inguinal hernia

Murat Ferhat Ferhatoğlu, Abdülcabbar Kartal, Taner Kıvılcım, Ali İlker Filiz

Department of General Surgery, Okan University School of Medicine, İstanbul, Turkey

Introduction: Gastrointestinal stromal tumor (GIST) is the most common mesenchymal tumors of the gastrointestinal tract. Inguinal hernias usually include small intestines and omentum, more rarely appendix, sigmoid colon and bladder. When the general literature is examined, it is seen that the presence of GIST in the inguinal hernia sac has been reported in only 2 cases up to now.

Figure 1. Incarcerated left inguinal hernia

Figure 2. Hemorrhagic fragile mass originating from the hernia sac

Case: A 67-year-old male patient was admitted to the emergency department with the complaint of left groin pain and swelling. As a result of the physical examination, the patient was diagnosed with left incarcerated inguinal hernia (Figure 1). It was seen that the patient had a subfebril fever and the leukocyte count was 11,400/mm^3. The patient with normal flat abdominal X-ray was taken to surgery under emergency conditions. During the operation, a 13x4 cm hemorrhagic, sporadically necrotic and fragile mass was detected in the hernia sac (Figure 2). The mass was isolated and excised from the spermatic cord elements and the testis. Multiple nodular structures attached to the peritoneum in the abdomen were felt with palpation through the inguinal canal. It was understood in the pathological examination that the excised cyst was a GIST.

Conclusion: Small intestinal GISTs are generally asymptomatic, but large GISTs may give symptoms as a result of the mass effect that they make according to their localizations. Incarcerated inguinal hernia is an indisputable surgical condition that requires urgent intervention, but the incidence of GIST in incarcerated hernia is an extremely rare situation which has been reported in only 2 cases in the literature up to now. The absence of complaints related to the inguinal hernia in the patient's history and the presence of long-standing ongoing symptoms related to the digestive system should make the clinician think on the situation and the imaging methods should be used. It may be possible to make a diagnosis preoperatively in this way.

Keywords: Stromal, tumor, hernia, incarcerated

PS-10

A case with difficult diagnosis and treatment: Pancreaticoduodenal artery rupture

Murat Ferhat Ferhatoğlu, Abdülcabbar Kartal, Taner Kıvılcım, Ali İlker Filiz

Department of General Surgery, Okan University School of Medicine, İstanbul, Turkey

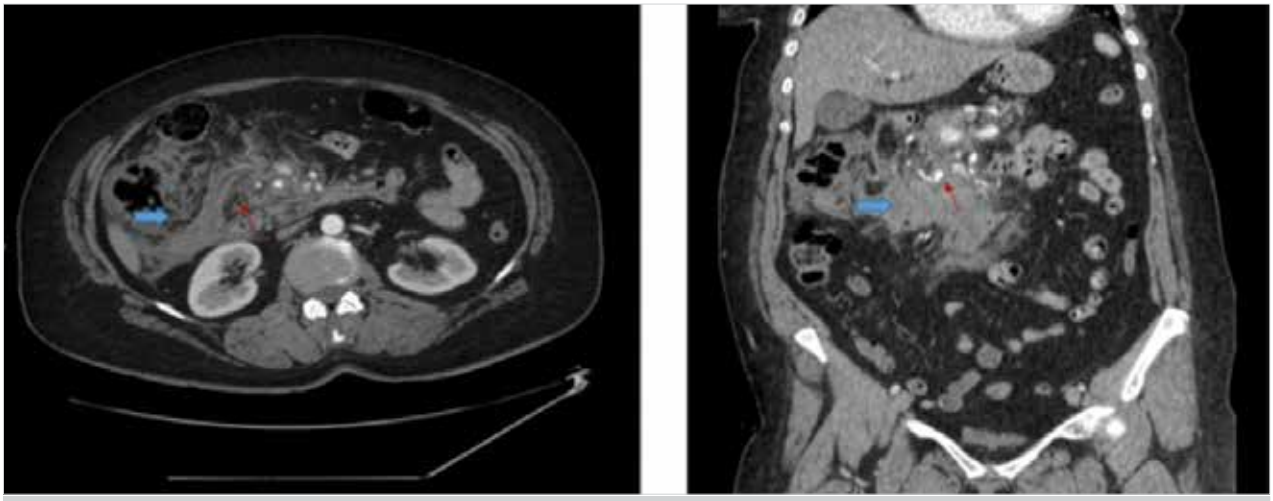

Figure 1. Retroperitoneal hematoma (blue arrow), aneurysm originating from the pancreaticoduodenal artery (red arrow)

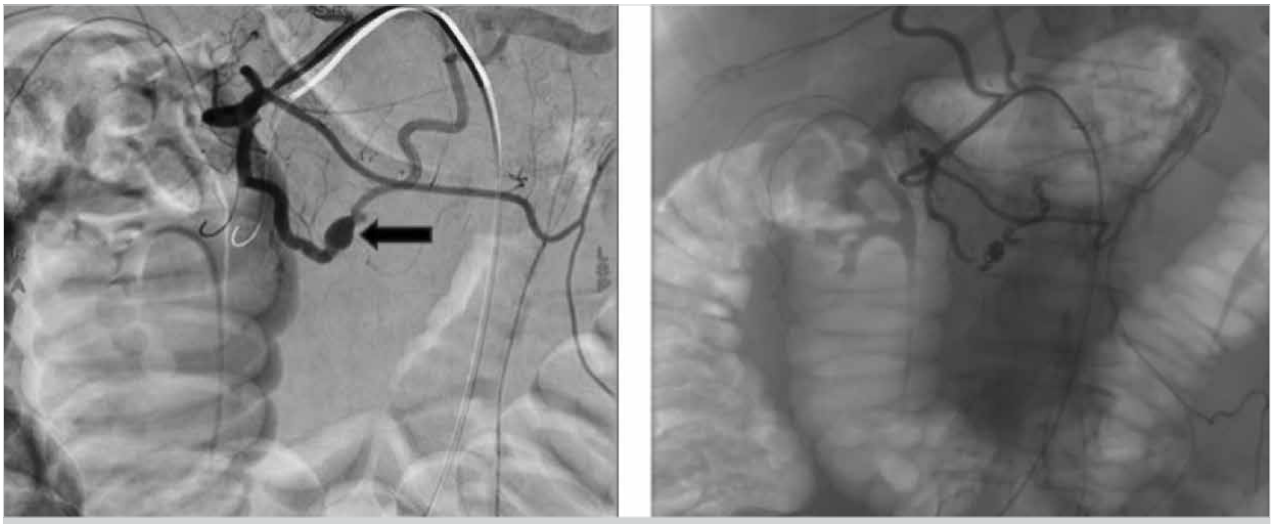

Figure 2. View of aneurysm in the digital subtraction angiography (black arrow) and coil materials

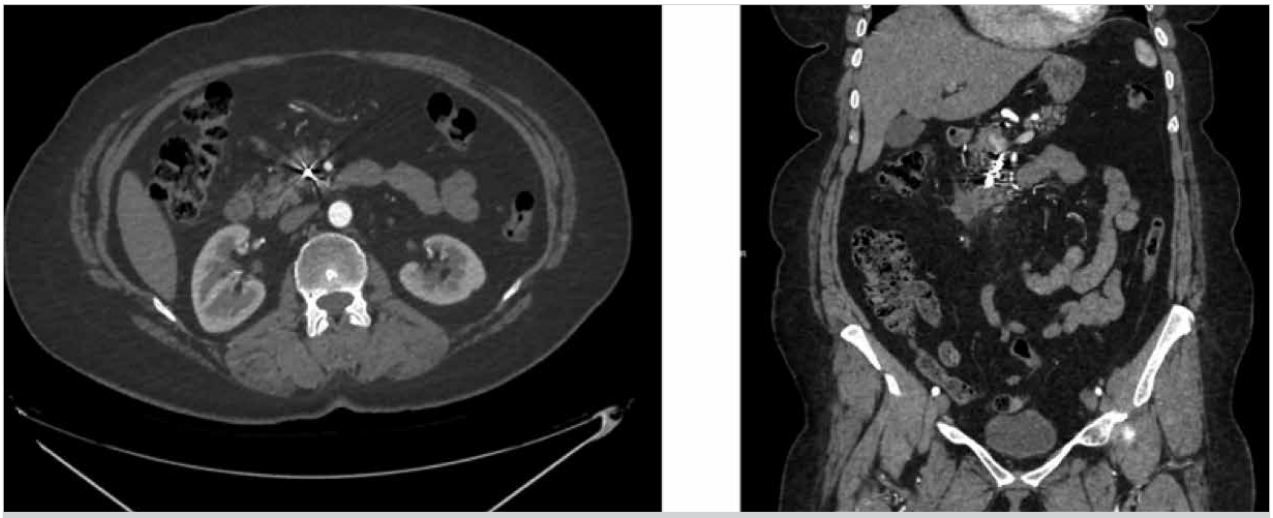

Figure 3. Resorbed hematoma and coil material

Introduction: Splanchnic artery aneurysms (SAAs) are rare vascular anomalies. Pancreaticoduodenal artery aneurysms are the subgroup of SAA and they constitute 2% of SAAs. SAAs are mostly seen in the splenic artery (60%) and less frequently in the hepatic artery (20%), superior mesenteric artery (5.5%), celiac truncus (4%), gastric and gastroepiploic arteries (3%), pancreaticoduodenal artery (2%), gastroduodenal artery (1.5%) and inferior mesenteric artery (1%). The diagnosis of the ruptures of these aneurysms is difficult and mortality is high. Definite and quick diagnosis saves lives.

Case: A 56-year-old female patient was admitted to the emergency department due to a sudden onset of abdominal pain. There was no symptom of acute abdomen in the physical examination of the patient who had no other diseases except for hypertension. Computed tomography (CT) of the abdomen showed paraduodenal heterogeneity and aneurysm originating from the fluid and pancreaticoduodenal artery (Figure 1). The patient in whom emergency selective angiography and coil embolization were performed was discharged on the 4th day after the intervention (Figure 2). In control CT taken 1 month after the procedure, coil materials were observed, but no evidence was found in favor of hematoma (Figure 3).

Conclusion: Pancreaticoduodenal artery aneurysms are a rare type of aneurysm which has the risks of rupture and mortality. Most of the aneurysms are asymptomatic. Because of the difficulty of surgical approach, minimally invasive methods are preferred. While the proportion of non-surgical treatments before 1980 was about 3%, they have been started to be used more frequently in recent years. We think that non-surgical treatment methods should be tried firstly in splanchnic artery aneurysm ruptures.

Keywords: Artery, rupture, pancreaticoduodenal

PS-11

A giant case of Non-Hodgkin's lymphoma leading to total ileocecal obstruction

Mehmet Sertkaya[1], Fatih Mehmet Yazar[2], Arif Emre[2], Ahmet Necati Şanlı[2], Ali İşler[2], Murat Baykara[3], Abdulkadir Yasir Bahar[4], Deniz Esin Tekcan Şanlı[5]

[1]Clinic of General Surgery, Viranşehir State Hospital, Şanlıurfa, Turkey
[2]Department of General Surgery, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[3]Department of Radiology, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[4]Department of Pathology, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[5]Clinic of Radiology, Necip Fazıl City Hospital, Kahramanmaraş, Turkey

Introduction: Primary gastrointestinal (GI) lymphomas are very rare and they constitute only about 1-4% of all GI malignancies. GI tract is the place where the extranodal involvement most commonly occurs in non-Hodgkin's lymphoma (NHL). GI lymphomas tend to be more common in the stomach, and are less commonly seen in the small intestine. The most common localization of small intestinal lymphomas is the terminal ileum. We present a case of total intestinal obstruction caused by a giant NHL.

Case: A 72-year-old female patient consulted with a medical history of partial bowel obstruction symptoms, intermittent right lower quadrant pain, weight loss, vomiting and tiredness. Physical examination revealed a palpable mass in the lower right quadrant and moderate abdominal tenderness. Abdominal ultrasonography revealed a heterogeneous internal structure and a mass that was 130x70x72 mm in size at the midline level of the abdomen. The patient with inability to defecate was hospitalized with the diagnosis of ileus. Computed tomography showed a 13 cm ileocecal mass and a total obstruction at this level, and bowel dilatation in the proximal part. The patient was urgently taken to surgery, the mass was completely excised, and an ileotrans-

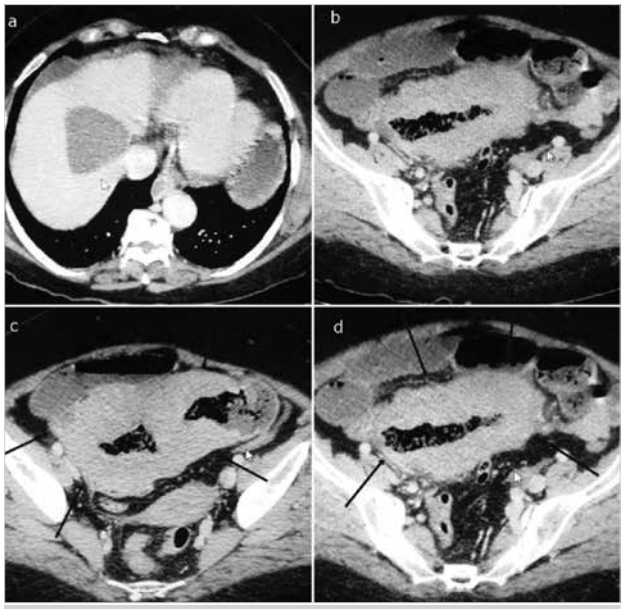

Figure 1. CT images of ileocaecal mass

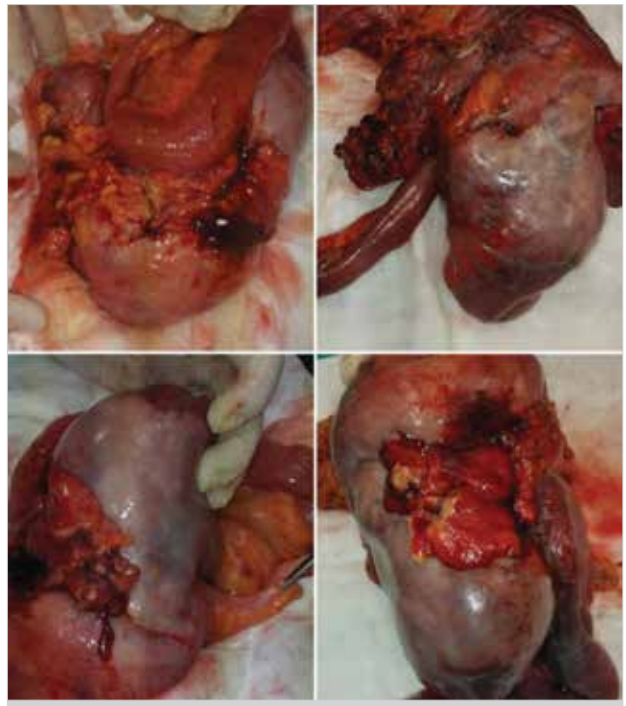

Figure 2. View of ileocaecal mass after resection (the appendix can be seen)

verse anastomosis was performed. The patient was discharged on the 10th day after admission to the hospital. In pathologic evaluation of the specimen, CD20 positive diffuse large B-cell non-Hodgkin lymphoma was detected.

Conclusion: The symptoms that are seen in small bowel tumors are GI bleeding, chronic abdominal pain, diarrhea and intestinal obstruction. Due to the high proportion of lymphoid tissue, ileocecal region is the place where intestinal lymphomas are most commonly encountered. Non-Hodgkin B-cell lymphoma is the most common subtype of the primary lymphoma of small intestine and has poorer prognosis than the other subtypes. Our patient had diffuse B-cell non-Hodgkin's lymphoma involving ileocecal region. During the follow-up period of 16 months, no recurrence was detected in our patient who received postoperative radiotherapy and chemotherapy treatment. In B-cell non-Hodgkin's lymphoma, the ileocecal region is the region where the most involvement occurs in the GI tract. The diagnostic tools include abdominal X-ray, abdominal ultrasound and CT scan, and in special cases PET-CT. The treatment consists of surgery and chemoradiotherapy. B-cell non-Hodgkin's lymphoma should be considered in the differential diagnosis of patients with bowel obstruction.

Keywords: Giant ileocaecal mass, non-Hodgkin's lymphoma, bowel obstruction

PS-12

Primary thyroid lymphoma

Kazım Çağlar Özçelik[1], Arif Hakan Demirel[1], Yeşim Atak[1], Ulvi Murat Yüksel[2], Cemil Binarbaşı[1]

[1]Department of General Surgery, Yıldırım Beyazıt University, Yenimahalle Training and Research Hospital, Ankara, Turkey
[2]Department of General Surgery, Ankara Oncology Training and Research Hospital, Ankara, Turkey

Introduction: Although differentiated thyroid cancers, originating from thyroiditis, constitute the majority of thyroid cancers, other thyroid-associated cancers can rarely be detected, as well. Especially thyroid-associated primary thyroid lymphoma (PTL) differs in terms of diagnosis, treatment, follow-up and prognosis. In our study, these differences were examined in a patient diagnosed with PTL.

Case: A 71-year-old female patient who was followed-up at an external health clinic due to multinodular goiter consulted to our clinic due to a mass growing without pain and shortness of breath lasting for the last 1 month. No complaints of weight loss, night sweats and fever were specified in the history. A nodule filling the left lobe of the thyroid gland was palpated. In the preoperative thyroid function test, sick euthyroid was found; both lobes were hyperplasic in the neck ultrasonography and an approximately 6-cm irregularly-circumscribed hypoechogenic nodule that was filling the left lobe and had calcification was detected. The patient in whom chronic lymphocytic thyroiditis was detected as a result of the FNAB taken from the nodule was taken to surgery. Bilateral total thyroidectomy and central lymph node sampling were performed. Postoperative pathology was reported as aggressive B-cell thyroid-associated extranodal lymphoma in the left thyroid nodule and lymph nodes. In the staging 18F-FDG positron emission tomography, lymph nodes with increased activity were detected in the left cervix and right and left lung hilar region. The patient with no tumor infiltration in bone marrow biopsy was accepted as stage 3E according to Ann-Arbor classification. In addition to

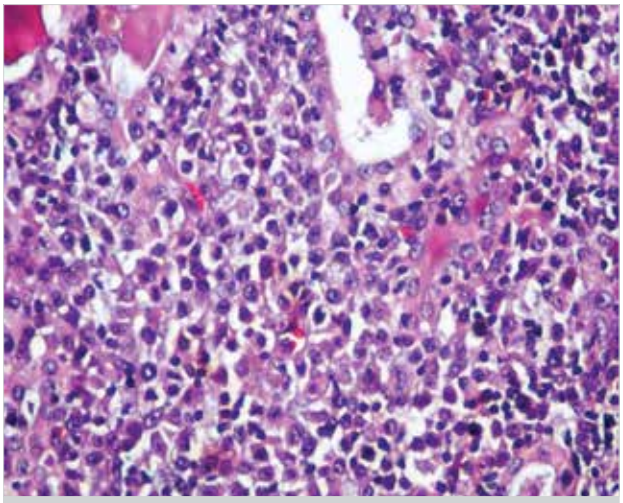

Figure 1. Positive staining with B-cell marker in the lymph node

cyclophophamide, doxorubicin, vincristine, prednisolone (CHOP protocol), rituximab chemotherapy was started in the patient.

Conclusion: PTL constitutes less than 5% of thyroid cancers. The diagnosis is usually made through surgery that is performed due to the suspicion of carcinoma, and the B-cell lymphomas are encountered most commonly. It is observed eight times more frequently in women than in men in the sixth decade. Clinical presentation is painless and rapidly growing mass, but B symptoms of lymphoma are detected in only 20% of PTL patients. The treatment in PTL is chemotherapy as in other lymphomas, and its sensitivity to radiotherapy is high and the prognosis is good. Male gender, tumor size greater than 10 cm, lymphatic and mediastinal involvement, B symptoms and age over 60 are poor prognostic factors. As a result, PTL should be kept in mind in rapidly growing masses in elderly female patients, and thick-needle biopsy should be performed if FNAB is inadequate for diagnosis.

Keywords: Lymphoma, primary, thyroid

PS-13

Tall cell variant of thyroid papillary carcinoma: Long-term follow-up of a rare and aggressive subtype in three cases

Kazım Çağlar Özçelik[1], Ulvi Murat Yüksel[2], Oktay Karasöse[4], İsmail Zihni[3], Hüseyin Pülat[5], Cemil Binarbaşı[1]

[1]Department of General Surgery, Yıldırım Beyazıt University, Yenimahalle Training and Research Hospital, Ankara, Turkey
[2]Department of General Surgery, Ankara Oncology Training and Research Hospital, Ankara, Turkey
[3]Department of General Surgery, Van Training and Research Hospital, Van, Turkey
[4]Department of General Surgery, Samsun Training and Research Hospital, Samsun, Turkey
[5]Clinic of General Surgery, Mersin State Hospital, Mersin, Turkey

Introduction: Thyroid papillary carcinomas (TPC) are the most common endocrine malignancies. Although the long-term prognosis is good, the prognosis of the tall-cell variant (TCV) subtype is the worst among TPCs. The long-term outcomes of the 3 patients treated with TCV diagnosis in 2000 were examined in the study.

Case 1: Total thyroidectomy and lateral neck dissection were applied in a 50-year-old male patient. The tumor was multicentric and the largest one was found to be 1.2 cm in size. Vascular and capsule invasion was observed in the tumor. In 32 lymph nodes dissected through neck dissection, 5 metastatic lymph nodes were detected and no capsule invasion was detected in the lymph nodes. The patient received radioactive iodine (RAI) treatment in the postoperative 4th month. Activity involvement was not detected in thyroid scintigraphy that was performed for screening. The patient who underwent RAI treatment 4 times in total has been being followed up for 204 months with disease free survival.

Case 2: Total thyroidectomy was performed in a 66-year-old man in whom bone metastasis was detected during the diagnosis. The tumor was 2.3 cm in a single focus, and had extrathyroidal capsular invasion with vein. The patient received RAI treatment in the 4th month. In the 46th month, in addition to persistent disease, cervical lymph node and lung metastasis were detected. Neck dissection was applied in the patient; 1 metastatic lymph node was detected in 48 lymph nodes and there was capsule invasion. The patient received RAI treatment 5 times along with chemotherapy/radiotherapy treatment, but died due to persistent disease in the 144th month.

Case 3: Total thyroidectomy was performed in a 73-year-old male patient who had mediastinal and pulmonary metastasis at the time of diagnosis. The tumor was 2.1 cm in size and had extrathyroidal capsular invasion with vein. He received RAI treatment in the 4th month, and had persistent disease with TSH-suppressed Tg value over 300 after the treatment. The patient died due to the disease in the 19th month.

Conclusion: Thyroid papillary carcinoma is the most aggressive subtype of tall-cell variant PTCs with the worst prognosis. In addition to the fact that it is seen at an advanced age, it is usually associated with lymph node and distant organ metastasis at the time of diagnosis. In this disease with low disease-free survival time, it is stated that aggressive surgery can provide benefit.

Keywords: Carcinoma, tall cell, thyroid

PS-14

Conservative treatment of the patient in whom peritonitis and sepsis developed due to iatrogenic column perforation

Zafer Kılbaş, Murat Özkara

Department of General Surgery, Health Sciences University, Gülhane Training and Research Hospital, Ankara, Turkey

Objective: Colonoscopy is widely used in everyday practice and the rate of complications has greatly decreased with the increase of experience, but it can be fatal if it develops. The presence of peritonitis requires early surgical intervention.

Methods: We wanted to report that successful results could be achieved with percutaneous drainage and conservative treatment in a patient with colon perforation and localized peritonitis.

Results: A 22-year-old female patient was assessed with the suspicion of perforation after colonoscopy. In her history, there were many abdominal surgeries performed due to meningomyelocele. Neo-bladder formation from ileum, tube cecostomy due to cecum perforation, partial cecum resection and loop ileostomy were some of these operations. The general condition of the patient was consistent with the SIRS picture. In her examination, there were muscle rigidity and rebound positivity in the right lower quadrant of the abdomen and in pelvic region. She was taken to intensive care and broad-spectrum antibiotherapy was started. Imaging revealed plenty of free fluid in the right lower quadrant and in the pelvic, and a percutaneous catheter was inserted. Approximately 700 cc intestinal content was taken out through percutaneous drainage. The sepsis picture of the patient quickly recovered and the patient was discharged with full recovery on the seventh day of the treatment. Iatrogenic colon perforation can lead to peritonitis and sepsis in a short time, and early diagnosis and intervention is very important. While it is suggested that surgical intervention is performed early in patients with peritonitis and sepsis; what made our patient different is that she could successfully be treated with percutaneous drainage and conservative approach. Two things were determinant. The first is that the patient had an active working ileostomy, and the second is that the multiple abdominal operations contributed to the limitation of the sepsis picture. Because of the intraabdominal adhesions, approximately 1000 cc of the intestinal fluid that was draining into the abdomen was confined to the right lower quadrant and pelvis, and could be effectively drained through percutaneous drainage.

Conclusion: Successful results can be achieved with percutaneous drainage and conservative approach in selected patients in whom localized peritonitis+sepsis develop due to iatrogenic colon perforation.

Keywords: Perforation of the colon, peritonitis, conservative approach

PS-15

Coexistence of phyllodes tumor and invasive ductal cancer in breast

Hilmi Bozkurt[1], Mustafa Görür[2], İhsan Burak Karakaya[2], Oktay İrkörucu[2]

[1]Clinic of General Surgery, Nizip State Hospital, Gaziantep, Turkey

[2]Department of General Surgery, Health Sciences University, Adana Numune Training and Research Hospital, Adana, Turkey

Introduction: Phyllodes tumor of the breast is a rare fibroepithelial tumor and is frequently seen in young adult women. Phyllodes tumor of the breast constitutes approximately 1% of all breast tumors and approximately 3% of all fibroepithelial tumors. Their pre-operative diagnosis is difficult. Because of the lack of specific mammography and ultrasonographic findings, they cannot be distinguished from fibroadenomas with these imaging methods, and they are mostly followed up as fibroadenomas. Patients often consult with the complaint of a sudden growth of a mass that has existed for a long time. Clear surgical margins and large local excision are the first approach to be preferred. The association of phyllodes tumor and invasive ductal carcinoma in the same breast is very rare. A 42-year-old female patient in whom invasive ductal carcinoma was preoperatively detected within phyllodes tumor in the same breast is presented in this article.

Case: There was no risk factor for breast cancer in a 42-year-old premenopausal female patient who consulted to an external clinic due to a significantly growing mass in the right breast in

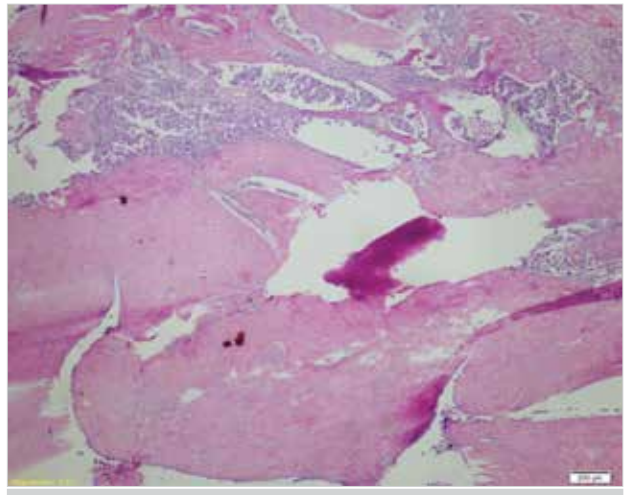

Figure 1. Coexistence of invasive ductal carcinoma and phyllodes tumor

the last 3 months. In the USG performed in the external clinic, an approximately 15 cm mass consistent with a fibroadenoma was detected in the right breast. Excisional biopsy was performed in the patient at the same center, and the pathology was reported as borderline phyllodes tumor that was 18x15x18 cm in size, and it was found that an area of about 2x2.5x1.5 cm in this tumor was different and it was found to be invasive ductal carcinoma in the sections taken from this tumor. The patient was referred to our clinic with the pathology results and preparations. The patient was discussed in oncology council when multifocal FDG involvement and axillary involvement were detected in the PET-CT. It was decided to perform modified radical mastectomy. The pathology was multifocal intraductal carcinoma. No axillary metastatic lymph node was found. Drains were removed and the patient who had negative surgical margins was discharged on the fifth postoperative day.

Conclusion: It is difficult to diagnose phyllodes tumor. Rarely, invasive carcinomas can accompany. Other carcinomas that may accompany should be kept in mind in the diagnosis and treatment of phyllodes tumors.

Keywords: Phyllodes tumor, invasive ductal carcinoma, borderline

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PS-16

Project of product tracking system

Salih Celepli[1], Ersen Üsal[1], Mustafa Şahin[2]

[1]Turkish Pharmaceuticals and Medical Devices Agency, Ankara, Turkey

[2]President of Selçuk University, Konya, Turkey

Following the publication of the 4703 numbered Law on the Preparation and Implementation of Technical Legislation on Products; 3 directives of the European Union related to medical devices were harmonized by the Ministry of Health and published in the Official Journal as a regulation. With these regulations, the rules concerning the importation of medical devices and the supply to the market have been determined. One of these rules is the registration of medical devices that are imported and marketed. With the protocol signed by the Ministry of Health, the Ministry of Finance and the Ministry of Labor and Social Security; the project of Turkey Pharmaceuticals and Medical Devices National Data Bank (TPMDNDB) was started under the coordinatorship of Hacettepe University. This project was put into effect in July 2017 and medical devices were started to be recorded through barcode scanning. Then, with the contract signed by the Ministry of Health Turkey Pharmaceuticals and Medical Devices Agency (TPMDA) and the Scientific and Technological Research Council of Turkey (STRCT) on January 7, 2014; studies were started for the project of Product Tracking System (PTS), which aims to follow the medical devices individually, including their delivery paths. Within the scope of PTS project; it is aimed to develop a system that includes the tracking of the medical devices and cosmetic products produced in our country or imported, beginning from the production line to the selling point and the patient. Access to safe products, effective auditing, determination of health policies, and fight against the unrecorded economy are important achievements of the project.

Keywords: Product tracking, medical device, auditing

PS-17

Clinical investigations in medical devices

Salih Celepli[1], Mehmet Doğan Erden[1], Hatice Zabunoğlu[1], Mustafa Şahin[2]

[1]Turkish Pharmaceuticals and Medical Devices Agency, Ankara, Turkey

[2]President of Selçuk University, Konya, Turkey

Within the scope of harmonization with the EU legislation, there are three main regulations in our country regarding the basic requirements that medical devices and accessories must have, and regarding their design, manufacture, supply to the market and service, and auditing. These regulations are "Medical Device Regulation" and "Regulation for the Active Implantable Medical Devices" published in the Official Newspaper dated June 7, 2011 and numbered 27957, and "Regulation on in vitro diagnostic medical devices" published in the Official Newspaper dated 9 January, 2007 and numbered 26398.

In addition to the current medical device regulations; the procedures and principles related to medical device clinical investigations within the framework of international agreements, EU standards and good clinical practices were regulated in "Regulation on Medical Device Clinical Trials" published in the Official Newspaper dated September 6, 2014 and numbered 29,111. The evaluation of the data obtained in a medical device in terms of whether it has reached the performance prescribed by the manufacturer and whether it has been manufactured in accordance with the requirements of the medical device regulations in terms of health/product safety is called as the clinical evaluation. Clinical evaluation is an ongoing process throughout the life of a medical device and is based on a comprehensive analysis of the clinical data obtained before and after the supply to the market, the intended use of the device, and clinical performance data and safety information. It is understood that the sources and types of data used for clinical evaluation are

composed of clinical studies and these scientific studies constituting clinical data are used for clinical evaluation. Clinical research is defined as scientific and systematic research or studies carried out on volunteers or on materials taken from them in order to evaluate the safety, effectiveness or performance of a medical device that is within the scope of the "Medical Device Regulation" and the "Regulation for the Active Implantable Medical Devices", and these researches are carried out by a qualified physician or dentist who has completed his/her research or doctorate and who has a good command of his/her expertise. Clinical trials are assessed in accordance with the current legislative provisions and relevant harmonized standards (ISO 14155-1).

Keywords: Medical device, regulation, clinical research

PS-18

Horizon-2020

Salih Celepli[1], İhsan Kaan Erkman[2], Mustafa Şahin[3]

[1]Turkish Pharmaceuticals and Medical Devices Agency, Ankara, Turkey

[2]Ministry of European Ministry, Ankara, Turkey

[3]President of Selçuk University, Konya, Turkey

European Union Framework Programs are carried out within the scope of EU policies to strengthen European research and technology development capacity, to promote university-industry cooperation, and to develop the coordination in various aspects with EU members, countries associated with the program and other countries in cooperation with EU. The National Coordination of the Horizon 2020 Program was assumed by STRCT. Horizon 2020, which is the new Framework for Research and Innovation of the European Union, has been realized with a budget of around 80 billion Euros for 2014-2020.

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- Quick access to more information and new markets
- Increasing recognizability
- Increasing competitiveness
- Developing advanced research ability
- Access to the best infrastructure
- Supporting career development
- International and inter-sectoral circulation

Horizon-2020, which is the new R & D and Innovation Program of the European Union, consists of three components.
1. Scientific Excellence
2. Industrial Competitiveness and Leadership
3. Solutions to Social Problems

Science with and for Society, the programs of Extension of Excellence and Extension of Participation, the initiatives of the articles 185 and 187 are also included in Horizon 2020. During Horizon 2020; Turkey will participate in the European Metrology Program for Innovation and Research (EMPIR), one of Article 185 initiatives, and in Eurostars 2 Program which aim to unite the national research and innovation fundings in EU member states and in associated countries. Article 187 initiatives (Joint Technology Initiatives) are public private partnerships established in order to accomplish research and innovation activities in strategic areas under the leadership of private sector. Joint Technology Initiatives cover Smart, Clean and Integrated Transportation; Food Safety, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and Bio-Economics; Safe, Clean and Efficient Energy; Health, Demographic Change and Prosperity; Information and Communication Technologies.

Keywords: Research, technology development, promotion, European Union

PS-19

Surgical use of Yb-doped femtosecond fiber laser system

Salih Celepli[1], Koray Eken[2], Mustafa Şahin[3]
[1]Turkish Pharmaceuticals and Medical Devices Agency, Ankara, Turkey
[2]CEO of the FiberLAST A.Ş., Ankara, Turkey
[3]President of Selçuk University, Konya, Turkey

Cataract is the most common cause of preventable blindness. Every year, more than 19 million people are performed cataract surgery. In addition to the fact that the history of this operation dates back to 2000s B.C., significant progressions have been achieved thanks to significant developments in the methods used for cataract surgeries and eye science (intraocular lens, phacoemulsification, precision surgical instruments), which began in the last quarter of the 20th century. Femtosecond laser technology was applied in cataract surgeries on people for the first time after 2009. The use of lasers is preferred especially for their high sensitivity and reproducibility. Open sides to development in the technology of femtosecond cataract surgery prevent it to be used extensively. These difficulties can be divided into two as basic difficulties and technical difficulties. Technical challenges include high cost, the sizes of the system and complexity. More fundamental difficulties stem from the interaction of ultraspeed pulses with the tissue. It is always desirable to reduce unwanted environmental damage and post-operative complications, which can be achieved by reducing the energy of the pulses or the average power. These developments will also indirectly contribute to the simplification of the required laser technology. In this study, Yb-doped femtosecond fiber laser system has been designed that can take advantage of the newly discovered "Ablation-cooled material removal with laser". The laser system has been integrated with optical coherence tomography (OCT) for imaging during cataract surgery. In order to keep the mean power low, ablation-cooled regime was provided with a cluster-mode. This specially formulated system which minimizes undesirable damages on the tissue reliably can make cleaner and more efficient cuts. Preliminary experiments were performed to compare the ablation-cooled regimen with the conventional regimen on plexiglass and samples of a dead calf's eye. All of the experiments indicate that this regime shrinks the pulsing energy and makes the ablation more efficiently by heating the periphery of the target. Specifically, the pulse flow required for entering into the cornea was reduced by 15 fold. The system was made a portable prototype that physicians can use through a specially developed computer control program.

Keywords: Fiber laser, ablation, Yb-doped laser, laser applications in surgery

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PS-20

Medical device auditing, documentation and evaluation

Salih Celepli[1], Kemal Tekin[2], Ersen Ünsal[1], Mustafa Şahin[3]
[1]Turkish Pharmaceuticals and Medical Devices Agency, Ankara, Turkey
[2]University of Turkish Aviation Association, Ankara, Turkey
[3]President of Selçuk University, Konya, Turkey

Notified bodies in the product and system documentation process, and cultural dimensions in the concept of professional skepticism in auditor sufficiency. Despite the existence of a global consensus on the important role of professional skepticism in auditing, there is not any generally accepted and comprehensive definition (Hurtt et al., 2003, Nelson, 2009). Professional skepticism details of which are given in Chapter 2.5 is defined as "An attitude involving careful consideration of situations that indicate mistakes caused by errors or trickery and a rigorous evaluation of auditing evidence, acting in a questioning manner" in the International Standards on Auditing - Glossary of Terms (ISA 200; 77).

McMillan and White (1993) describe the professional skepticism as the "sensitivity to the evidence that reduces the risk of error and fraud in financial statements." While Shaub and Lawrence (1996) define professional skepticism as professional supervisor's preference in performing the task of preventing or reducing the harmful consequences of another person's behavior, Kadous (2000) states that professional skepticism means independence from customer and customer demands, and that public service is superior to the customer service. Professional skepticism which is defined as "the application of the questioning mind and the informed neutrality attitude" by Fornelli and Desmond (2011) is defined as "a concept involving the qualities about being skeptical in a professional environment that requires standard care and attention" by Glover and Prawitt (2014). As can be understood from these definitions; the academic literature adopts different perspectives while discussing on professional skepticism. Hurtt (2003) examines and classifies the studies on professional skepticism in the auditing literature in four main sections; the classification is made as "researches that involve opinions and perceptions of non-auditors", "researches that only mention professional skepticism", "studies that use professional skepticism as a variable", and "studies that focus on professional skepticism".

Keywords: Product auditing, professional skepticism, documentation

PS-21

Hepatobiliary system anomaly: Gallbladder duplication

Şahin Kahramanca[1], Turgut Anuk[2]

[1]Clinic of General Surgery, Kars State Hospital, Kars, Turkey

[2]Department of General Surgery, Kafkas University School of Medicine, Kars, Turkey

Introduction: Gallbladder duplication, which is seen at 1/3000-1/5000 births, is a rare variation of hepatobilier system. It has been grouped with various classifications in the literature. Boyden and Harlaftis classifications are the two most famous of them.

Gallbladder duplications, which have no specific symptoms, usually manifest themselves incidentally or with complications depending on cholelithiasis. Preoperative ultrasonography (USG) and tomography (CT) are useful for diagnosis.

Case: In a 56-year-old male patient who consulted to a physician with the complaint of pain that was on the right upper quadrant for 3 years and increased for the last 1 week, the leukocyte value was 8600/mm^3 at the time of admission, and gallbladder wall thickness in the USG was normal, and millimetric multiple stones were detected in the lumen.

In the intraoperative exploration of the patient undergoing laparoscopic cholecystectomy with North American technique, Y-type gallbladder in which a single cystic duct originated from the choledoch and was divided into two at 4-5 mm distal part of the bifurcation to continue with 2 separate gallbladders.

The main cystic canal was clamped at 2 mm distal of the bifurcation and cholecystectomy was completed. The patient in whom no complications developed was discharged on the postoperative 2nd day.

Conclusion: Gallbladder duplication, which first entered the literature in the year of 31 B.C., is a rare malformation that occurs in 3000-5000 births in large series of autopsies. In the literature, the anomaly of triple gallbladder has been reported in one case. USG, CT and ERCP are the methods that can be used to diagnose gallbladder duplication.

Choledochal cysts, pericholecystic fluid collection and gallbladder diverticula should be considered in the differential diagnosis. When Boyden made the first classification in 1926, the gallbladder duplications were divided into two groups as Y-type duplication in which two main cystic ducts opened to the single main bile duct, and as H type duplication in which two cystic ducts separately opened into the main bile duct.

The malformation in our case was an example of Y-type duplication. As a result, laparoscopic cholecystectomy should be planned in gallbladder duplications in order to prevent recurrent laparotomies and to prevent possible complications if it can be performed in the same session.

Keywords: Gallbladder duplication, hepatobiliary system, cholecystectomy

Figure 1. Macroscopic view of the gallbladder

PS-22

Postoperative period in surgically treated Crohn's patients

İbrahim Mungan[1], Sema Turan[1], Serdar Yamanyar[1], Birol Bostancı[2]

[1]Intensive Care Unit, Turkish High Specialization Hospital, Ankara, Turkey

[2]Department of Gastrosurgery, Turkish High Specialization Hospital, Ankara, Turkey

Objective: Crohn's disease affects the entire gastrointestinal tract, usually shows a segmental involvement, and has extraintestinal findings. Medical treatment is primarily performed during the acute episodes of the disease. However, surgical treatment is on the agenda with acute or subacute complications in the majority of patients. While the probability of surgical intervention is 75% in 20-year period of the disease, it can rise to 90% in 30 years. The overall mortality rate is reported to be 2.5-6.5%. Compared to other benign intestinal pathologies, the risk of postoperative complications is stated to increase after resection in Crohn's disease. Our aim in this study is to evaluate the postoperative outcomes of surgical treatment in Crohn's patients and the length of stay in intensive care units.

Methods: The file records of 498 patients who consulted to our hospital in 2016 due to Crohn's disease were retrospectively scanned and the data of 22 patients for whom surgical intervention was required in a 12-month period were recorded in detail. These data were evaluated using the program IBM SPSS 20.

Table 1. Descriptive statistics

	n	Min.	Max.	Mean
Age	22	25	59	40.41
Postoperative time	22	3	45	10.00
Duration of intensive care	22	1	45	4.45

Table 2. Descriptive statistics 2

	n	%
Ileocecal resection	14	63.6
Emergency	4	18.2
Mortality	1	4.5
Anastomosis leakage	1	4.5

Results: In the evaluation of 10 female and 12 male patients, the mean age was 40.4 years and four patients were taken to surgery in urgent conditions. Mortality occurred only in one patient (on the postoperative 45th day), and anastomotic leakage was observed as a complication in another patient (4.5%). When wound infection was included, the total postoperative morbidity rate was determined as 27.27% (n=6). In our patients, the mean length of postoperative follow-up in the intensive care unit was 4.5 days (range 1-45 days). The mean length of follow-up in the clinic was 10 days (range 3-45 days). Ileocecal resection was performed in four patients (63.6%), and no significant relation was found between the type and size of the surgical intervention or the inclusion of ileocecal resection and the postoperative morbidity and mortality in the statistical analysis.

Conclusion: Today, avoiding surgery as much as possible in the treatment of Crohn's disease and using surgery only for the treatment of complications is an acccepted way of management.

Resection, by-pass and strictureplasty applications are used as surgical methods. Anastomotic complication rates have been reported to be 10-25% in many studies. In our study, mortality and morbidity rates were among those accepted in many studies, and there were no decrease in postoperative morbidity and mortality in patients in whom ileocecal resection was included, as in some studies.

Keywords: Crohn's disease, surgery, postoperative period

PS-23

Personal implant design and manufacturing process

Osman Eroğul[1], Mustafa Şahin[2]

[1]Department of Biomedical Engineering, TOBB Economy and Technology University, Ankara, Turkey

[2]President of Selçuk University, Konya, Turkey

Due to the reasons such as traffic accidents, firearm injuries, and natural disasters, fragmented bone fractures and injuries may occur in people. These fragmented bone losses differ depending on the bone structure of the person and the severity of the event. To eliminate these losses, it is necessary to produce personal implants that are not commercially available. The following steps are followed in the manufacturing process of these implants.

In the first stage, sectional images are obtained through imaging modalities such as computerized tomography (CT) and magnetic resonance (MR), three-dimensional (3D) image reconstruction of the damaged area of the body is created with these images. Then the noise and unnecessary parts in the images are removed and the missing piece is designed by taking the opinion of the surgeon who will perform the surgery. During the design phase, topographic scanning of the patient is performed using 3D optics or laser scanners. This 3D image is combined with the image of the designed implant; it is aligned on the defect, and whether or not it covers the defect is explored.

Upon the completion of the controls, a plastic model of the implant is produced using 3D printers. After the physician confirms that the plastic model is suitable for the implant operation, a metal implant with Titanium-Aluminum-Vanadium (Ti6Al4V) alloy is produced using 3D metal printers. After the cleaning and removal of the metal implant from the supports, the normalization process is performed by heating and cooling up to certain temperatures in heat treatment furnace in a controlled way in order to remove the mechanical stresses and strains. After the completion of the heat treatment, surface modification and polishing are carried out so that the implant has the desired surface roughness. After the sterilization of the implant with gamma ray, the procedure is completed by packing the implant in a sterile way and by delivering to the surgeon for surgery. In this study, the procedures performed during the design and production process of the implants were explained through sample cases and the results of the applications were discussed.

Keywords: Implant, design, topographic examination

PS-24

Gastric medullary carcinoma: The presentation of a rare case

Büşra Yaprak Bayrak[1], Ahmet Tuğrul Eruyar[1], Abdullah Güneş[2], Osman Civil[2]

[1]Pathology Laboratory, Health Sciences University Derince Training and Research Hospital, Kocaeli, Turkey

[2]Department of General Surgery Health Sciences University, Derince Training and Research Hospital, Kocaeli, Turkey

Objective: Medullary carcinoma has long been accepted as a subtype of colorectal cancer associated with microsatellite instability and Lynch syndrome. In the 4th edition of the World Health Organization Digestive System, "stomach medullary carcinoma" was added as a separate title. Gastric medullary carcinoma (GMC) is a very rare neoplasm. Here, we present an 80-year-old male patient with low differentiated stomach carcinoma and lymphoid stroma with pT3 N2 pathologic stage.

Methods: In the endoscopy of an 80-year-old male patient, who consulted to an external clinic with abdominal pain and stomach burns, a massive ulcerated mass was detected and the biopsy was reported as carcinoma. Total gastrectomy revealed a 6x6x2 cm tumoral tissue which was macroscopically located in the pylorus and involved the entire wall folds of the stomach. Histopathological and immunohistochemical analyses were performed. The patient was discharged on the postoperative 7th day without any surgical complications.

Results: A low-differentiated carcinoma which had peritumoral lymphocytic response in abundant quantities in the sections, showed moderate desmoplasia, penetrated into serosa but did not exceed, showed lymphatic and perineural invasion, had carcinomatous metastases in 8 lymph nodes, and had polygonal cells with vesicular nuclei and abundant cytoplasms was observed. Immunohistochemically, cytokeratin showed a positive staining with intense lymphocytic infiltration CD3 and CD20 around the tumor cells, and C-erb-b2 showed a weak incomplete membranous staining (score 1) in approximately 10% of tumor cells. When the morphological features and immunohistochemical examination findings were evaluated together, the tumor was reported as GMC and pathologic stage as pT3 N2.

Conclusion: GMC is an extremely rare gastric neoplasm which typically has good prognosis in patients with early diagnosis and is seen in elderly men. Histologically, it has been described that GMC constitutes more than 90% of a dense lymphocytic infiltrate and poorly differentiated solid type adenocarcinoma, shows a growth pattern of pushing on the tumor edges and is excluded from other gastric carcinoma types. Here, we have presented a very rare case of GMC found in the stage of pT3 N2. This study reveals the importance of histopathological and immunohistochemical findings in the differential diagnosis of rare tumors such as medullary carcinoma.

Keywords: Malignant differentiation, lymphoid stroma, gastric carcinoma, gastric medullary carcinoma

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PS-25

Hydatid cyst in the gluteal region

Şahin Kahramanca

Clinic of General Surgery, Kars State Hospital, Kars, Turkey

Introduction: Cyst hydatid disease is a zoonotic disease that is frequently seen in some endemic regions due to echinococcus infestation. Although it is usually found in the liver and lung, it is rarely seen in the intra-abdominal organs such as the kidney, pancreas and omentum and much more rarely in the musculoskeletal system. The diagnosis is made by indirect hemagglutination test which is supported by 1/160 or more positivity and by radiological diagnostic methods such as ultrasonography and tomography. We will present a patient with a hydatid cyst in the subcutaneous region of the right gluteal region.

Case: In the ultrasonography of a patient who applied to the general surgery polyclinic with the complaint of a 4x3 cm painful swelling in the right gluteal region, a 35x25 mm cystic lesion was detected in the upper external quadrant of gluteus maximus muscle, and operation decision was made. The cystic lesion was totally excised under local anesthesia. Histopathological evaluation was reported as hydatid cyst. During the controls of the patient, no hydatid cysts were found in the liver and lungs. The indirect hemagglutination test was determined to be 1/160 positive, and albendazole 600 mg was started in the patient.

Figure 1. Macroscopic view of the daughter vesicle associated with hydatid cyst infestation in the right gluteal region

Conclusion: Cyst hydatid disease should be kept in mind in settlements where animal husbandry has developed as in our country, in cystic lesions located in the musculoskeletal system of the patients with liver and/or lung cyst anamnesis, and the necessary examinations should be done in order to exclude echinococcal infestation and the treatment should be planned surgically.

Keywords: Gluteal region, hydatid cyst, hemagglutination

PS-26

Rare stomach tumor, Schwannoma, which causes obstruction

Turgut Anuk[1], Şahin Kahramanca[2], Mahmut Can Yağmurdur[1]

[1]Department of General Surgery, Kafkas University School of Medicine, Kars, Turkey

[2]Clinic of General Surgery, Kars State Hospital, Kars, Turkey

Introduction: Schwannoma is a rare benign neoplasm originating from the nerve cell sheath. While gastrointestinal system (GIS) schwannomas are most commonly seen in the stomach, it is followed by colon and rectum, respectively. In our case, we aimed to present a geriatric patient with stomach schwannoma that caused obstruction and was incidentally detected.

Case: A 69-year-old male patient who was brought to the emergency department due to an extravehicular traffic accident was referred to the Department of Orthopedics with the diagnosis of femur fracture. In the physical examination of the patient who was consulted to our department due to vomiting, abdominal pain and swelling in the abdomen on the third day of hospitalization, abdominal distension, defense at the midline abdomen and rebound were detected. The patient in whom wall thickening and ileus were detected in small intestinal loops in the abdominal tomography was taken to surgery with the prediagnosis of acute abdomen. Widespread distension in the small intestines and 5x6x4 cm massive lesion in the anterior side of the stomach large curvature were observed during the exploration. Because it was a well-circumscribed lesion and the mass was semi-mobile, and because there were no ulceration, retraction and adhesion that would suggest any malignancy on the serosal surfaces, it was thought that the mass was benign; therefore, the stomach was opened to perform biopsy, and then frozen section procedure was performed on biopsy materials. After obtaining the frozen section result, which was reported as a massive lesion consistent with Schwannoma, wedge resection was performed with intact surgical margins. Histopathological and immunochemical examination was reported as gastric schwannoma. In the upper gastrointestinal endoscopy that was postoperativele performed, no recurrence was observed in the biopsies taken from the resection edges.

Conclusion: Gastric schwannoma is one of the rare types of gastric tumors. They are often asymptomatic, but rarely cause complaints such as GIS bleeding and anemia. The diagnosis is usually made late in Schwannoma. In GIS schwannomas detected incidentally during laparotomy as in our case, local excision is sufficient for surgical treatment.

Keywords: Stomach, Schwannoma, surgery

PS-27

Benign pneumoperitoneum

Muhammet Bağbur Nacaroğlu[1], Ahmet Necati Şanlı[1], Ali İşler[1], Deniz Esin Tekcan Şanlı[2], Fatih Mehmet Yazar[1]

[1]Department of General Surgery, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey

[2]Clinic of Radiology, Kahramanmaraş Necip Fazıl City Hospital, Kahramanmaraş, Turkey

Introduction: Pneumoperitoneum occurs as a result of the rupture of the lumen internal organs such as stomach, small intestine and colon. The detection of intraabdominal free air usually indicates the need for an emergency surgical treatment. Benign pneumoperitoneum is the existence of asymptomatic intraabdominal free air.

Case: A 78-year-old female patient who consulted with the complaints of bloody stool, diarrhea and abdominal pain was hospitalized to investigate the etiology of gastrointestinal bleeding. No abnormality, except for pangastritis, was found in the endoscopy. In the colonoscopy, the mucosa between 80th and 140th cm from the entrance appeared to be diffuse ulcerated and erosioned. Abdominal tomography taken in terms of malignancy showed diffuse free air values in the neighborhood of the stomach antrum, in the perigastric area and in the anterior wall of the abdomen, beginning from the upper quadrant. However, emergency surgery was not considered due to the fact that the abdomen was relieved and that there was not

Figure 1. Intraabdominal free air

any defense and rebound in the physical examination of the patient. The patient whose oral feeding was closed was followed up with ambulatory abdominal x-ray. The patient was discharged from the hospital when the free air decreased below the diaphragm, the patient's general condition was good, and vital findings remained stable.

Conclusion: In this study, we have wanted to emphasize that although intraabdominal free air firstly suggests the perforation of the stomach or intestine, there may be intraabdominal free air without perforation; thus, surgical intervention should not be immediately performed.

Keywords: Emergency surgery, pneumoperitoneum, free air

PS-28

Extrahepatic hydatid cyst that was incidentally found during appendectomy

Mehmet Sertkaya[1], Fatih Mehmet Yazar[2], Arif Emre[2], Ahmet Necati Şanlı[2], Murat Baykara[3], Deniz Esin Tekcan Şanlı[4], Ali İşler[2], Ali Özkömeç[2]

[1]Clinic of General Surgery, Viranşehir State Hospital, Şanlıurfa, Turkey
[2]Department of General Surgery, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[3]Department of Radiology, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[4]Clinic of Radiology, Necip Fazıl City Hospital, Kahramanmaraş, Turkey

Introduction: Hydatid cysts are mostly seen in the liver and secondly in the lung. Primary and isolated extrahepatic intraabdominal cysts are rare. It has been reported that the most common extrahepatic regions are the peritoneal cavity and spleen. We present our experience in an unusual cyst hydatid case which we have successfully diagnosed and treated.

Case: A 43-year-old male patient was admitted to the emergency department due to the complaints of right lower quadrant pain and vomiting, which lasted for the last 2 days. He did not have any significant disease in his history. In the physical examination, there was sensitivity, defense and rebound in the lower right quadrant. Laboratory tests showed increased leukocytosis and C-reactive protein, and other biochemical parameters were normal. An appearance consistent with fecaloid in the proximal and distal parts of the appendix, an appendix with the diameter of 10 mm, and a 51x39 mm cystic hypodense lesion with thick wall in the inferior region of the cecum were observed in the abdominal computed tomography (CT). The patient was operated with the diagnosis of perforated appendicitis. During the operation, it was observed that the appendix was perforated and there was a mass of approximately 5 cm around the cecum. The mass was completely excised and appendectomy was performed. When the resected mass was cut with a scalpel, it was seen that there was a hydatid cyst filled with vesicles. Pathology result was reported as hydatid cyst and acute appendicitis. Before the patient was discharged from the hospital, thoracic and the entire abdominal CT were taken and no cyst was found in anywhere else. The patient was discharged without any problem on the 4th postoperative day.

Discussion: Hydatid disease is caused by Echinococcus granulosus, and it is the parasitic disease of Mediterranean countries. Although the liver is the most frequently affected organ, it can be found anywhere in the human body. Rare forms of settlement can affect the diagnosis and treatment and create dilemmas. In this case; although we saw a cystic mass in the pre-operative tomography, we did not think that it could be a hydatid cyst. However, we removed the mass without causing any spread or perforating it.

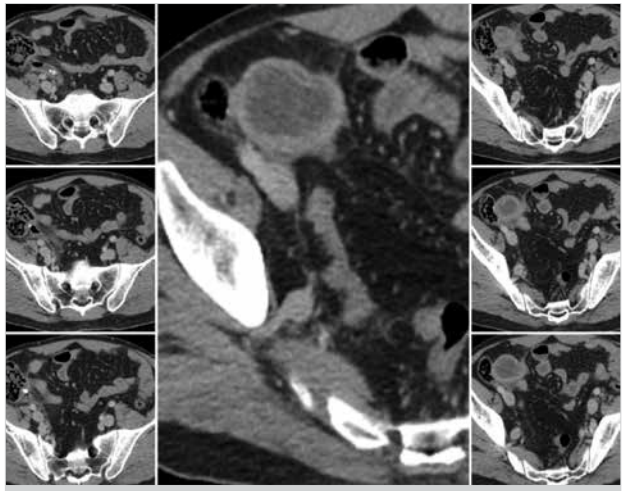

Figure 1. CT sections in which proximal and distal intraluminal hyperdense lesions that suggests acute appendicitis and cystic mass in the right lower quadrant are viewed together

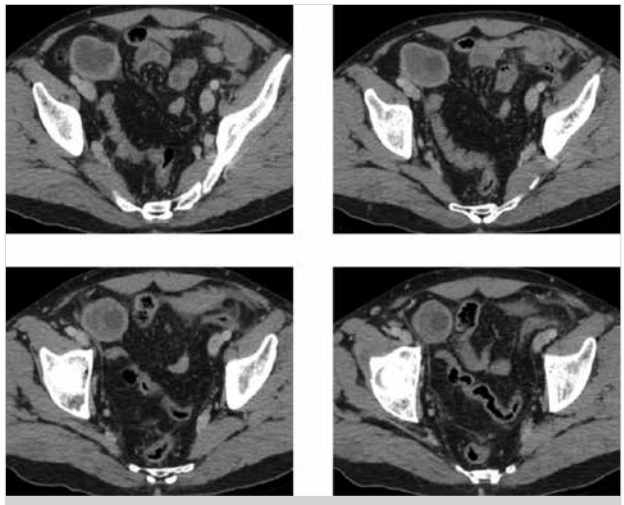

Figure 2. CT sections showing hydatid cyst located in the neighborhood of the inferior part of the cecum

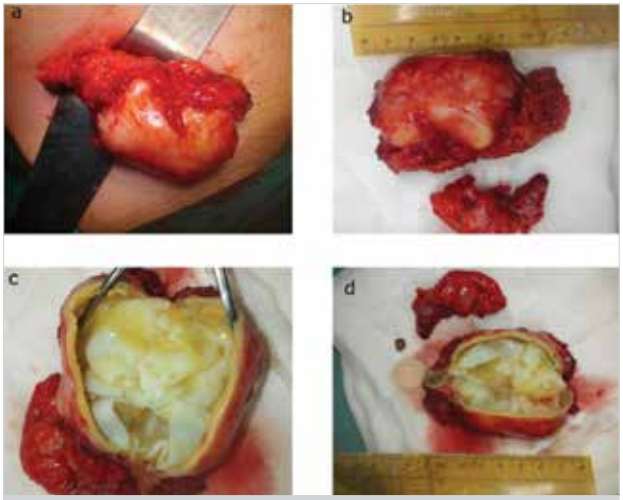

Figure 3. a-d. (a) Cyst was excised before appendectomy. (b) view of the appendix and hydatid cyst together (c) view of the inside of cyst (d) appendix, fecaloid, and cystic vesicles together

Conclusion: When either radiologists or surgeons encounter cystic masses, they should always consider the possible localizations of echinococcal hydatid cysts in unusual areas because misinterpretation and misdiagnosis can lead to unexpected and negative consequences.

Keywords: Appendectomy, extrahepatic, hydatid cyst

PS-29

A rare anterior abdominal wall hernia; magnetic resonance imaging findings of Spigelian hernia

Recep Demirgül[1], Ender Alkan[2], Muhsin Nuh Aybay[2], Kemal Peker[3]

[1]Clinic of General Surgery, Kelkit State Hospital, Gümüşhane, Turkey

[2]Department of Radiology, Health Sciences University School of Medicine, Konya Training and Research Hospital, Konya, Turkey

[3]Department of General Surgery, Erzincan University School of Medicine, Gazi Mengücek Training and Research Hospital, Erzincan, Turkey

Objective: Spigelian hernia constitutes approximately 1-2% of the anterior abdominal wall hernias and it is rarely seen. Patients usually consult with the complaints of pain and palpable swelling. In this presentation, we aimed to present magnetic resonance imaging (MRI) findings of a 42-year-old female patient who was admitted to our clinic due to abdominal pain and in whom Spigelian hernia was detected.

Methods: Abdominal ultrasonography (USG) and lower abdomen MRI examinations were performed in the 42-year-old female patient who was admitted to our emergency department with the complaints of palpable swelling and abdominal pain on the anterior abdominal wall.

Results: No abnormality was detected in the blood examinations and direct radiographs of the patient. In the USG examination, a 75x55 mm non-reduced hernia sac that was extending from the 25-mm defect to the under skin and that was containing intestinal loops and free fluid in the left lower quadrant was observed. In the lower abdomen MRI examination, a large-sized hernia extending between the transversus abdominis and the external oblique muscles in the lateral region of the left rectus abdominis and a 25×16 mm defect in the transverse fascia were observed. The patient was diagnosed with Spigelian hernia with current imaging findings.

Conclusion: Spigelian hernias are one of the rare causes of abdominal pain etiology. They are easily recognized with palpable swelling and typical localization in the anterior abdominal wall. Although the diagnosis can be made clinically, imaging methods are necessary to distinguish the diameter of the sac neck and the anatomical structures in it. They are the hernias which originate from the defect in the aponeurosis of the internal oblique and transverse abdominal muscles on the semilunar line in the lateral neighborhood of the rectus muscle in the right lateral region of the abdomen. Because of the high risk of strangulation, early diagnosis and treatment are important.

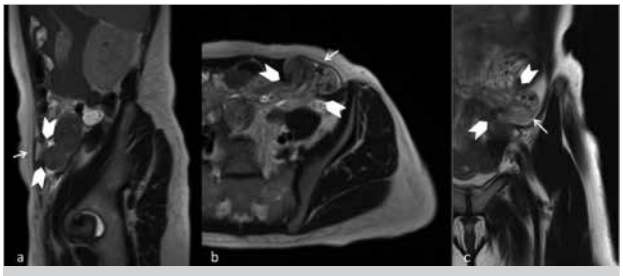

Figure 1. MR image of Spigelian hernia

Keywords: Spigelian hernia, abdominal pain, abdominal ultrasonography, abdominal magnetic resonance imaging

PS-30

Diagnostic value of magnetic resonance cholangiopancreatography in the diagnosis of acute calculous cholecystitis perforation

Recep Demirgül[1], Ender Alkan[2], Kemal Peker[3]

[1]Clinic of General Surgery, Kelkit State Hospital, Gümüşhane, Turkey
[2]Department of Radiology, Health Sciences University School of Medicine, Konya Training and Research Hospital, Konya, Turkey
[3]Department of General Surgery, Erzincan University School of Medicine, Gazi Mengücek Training and Research Hospital, Erzincan, Turkey

Objective: Gallbladder perforation is a rare but serious complication of acute cholecystitis. Early diagnosis is important because of the fact that the morbidity rate is 35% and the mortality rate is around 10%. In this presentation, we aimed to present magnetic resonance cholangiopancreatography (MRCP) findings of a 40-year-old female patient who was admitted to our emergency department due to acute abdominal pain and in whom gallbladder perforation was detected, and we aimed to emphasize the importance of MRCP in the diagnosis of gallbladder perforation.

Methods: In the abdominal ultrasonography (USG) of the patient who was admitted to the emergency service due to pain in the back after eating for a long time, stones were detected in the gallbladder. However, abdominal ultrasonography (USG) was performed again in the patient who stated that her pain was persistent and severe in the last one day, and the diagnosis of acute calculous cholecystitis was made. Because the complaints of the patient, who was admitted to the general surgery department, did not recover as a result of the treatments that were applied, MRCP examination was performed in the patient.

Results: In the MRCP examination performed, several stones, the largest of which was 11 mm in diameter, were observed in the gallbladder lumen. The gallbladder wall thickness was measured as 11 mm and it was observed to have significantly increased. After a 15x7 mm fluid collection including a millimetric stone was observed in the lateral neighborhood of the gallbladder, the patient was diagnosed with acute calculous cholecystitis and with gallbladder perforation based on existing findings. It was seen that the collection around the gallbladder was bile fluid and the gallbladder wall was ruptured.

Conclusion: MRCP is an important imaging modality in biliary perforation because it has high success rates in monitoring the integrity loss of the gallbladder wall and in revealing the relationship between pericholecystic fluid and the gallbladder.

Keywords: Acute-stoned cholecystitis, perforation, magnetic resonance cholangiopancreatography

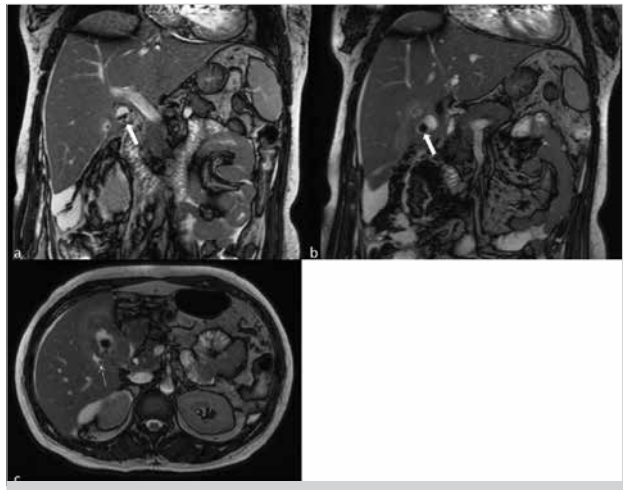

Figure 1. MRCP views

PS-31

Misapplication of cologne in stoma care

Murat Ferhat Ferhatoğlu, Taner Kıvılcım, Abdülcabbar Kartal, Alp Gürkan

Department of General Surgery, Okan University School of Medicine, İstanbul, Turkey

Introduction: Stoma is generally defined as an opening in which the intestinal system organs are diverted towards the abdominal skin. It is often used for the terms of ileostomy or colostomy. Patients with stoma can have some adaptation problems because of this completely changed anatomy and physiology. Although basic education on stoma care is given, patient and family sometimes have serious difficulties in adaptation to this condition. In this study, a patient that had to be re-operated because of wrong application of the family in stoma care is presented.

Case: A 79-year-old male patient was performed laparoscopic low anterior resection+ileostomy surgery due to adenocarcinoma of the rectum. The patient was followed up in the intensive care unit postoperatively and taken to the clinic on the second postoperative day. On the 3rd day, edema and darkening were observed in the ileostomy of the patient, who was given oral food. Because the appearance of the stoma deteriorated in the follow ups, it was decided to perform relaparotomy on the postoperative 5th day. In the patient whose ileostomy got better after operation, similar problems began on the postoperative 2nd day again. When the family of the patient was observed, it was found that they cleaned the stoma with a cloth including cologne for many times a day. After preventing this misapplication, the patient's ileostomy improved and he was begun to be given oral food. Then, he was discharged from the hospital with full recovery.

Conclusion: We think that education on stoma care should be given not only to patient but also to the patient's family.

Keywords: Stoma, care, complication

PS-32
Cholecystectomy: A retrospective analysis of 5205 patients

Murat Ferhat Ferhatoğlu, Abdülcabbar Kartal, Taner Kıvılcım, Alp Gürkan
Department of General Surgery, Okan University School of Medicine, İstanbul, Turkey

Objective: Cholecystectomy is a surgical procedure that is frequently performed by general surgeons. Increasing lifetime with the development of the world has elevated the rate of gallstone disease and the number of cholecystectomy has increased over the years. In this study, the procedure of cholecystectomy was evaluated considering demographic data, surgical technique, and pathological results.

Methods: Demographic data, surgical technique, and pathological results of 5205 patients undergoing cholecystectomy in the Department of General Surgeryat Bursa State Hospital between January 2012 and December 2015 were evaluated retrospectively.

Results: Of the patients, 1320 were male and 3885 were female (Male/female ratio: 0.33). Their mean age was calculated as 52,7914,19 years. Of the operations, 529 were performed with open technique and 4676 with closed technique (open surgery/closed surgery ratio: 0.11). No relationship was found between age and gender and the preferred surgical technique (p=0.07 & p=0.08). In the evaluation of pathology reports, it was found that 4897 (94.08%) patients had chronic cholecystitis, 202 patients (3.9%) had acute cholecystitis, 38 patients (0.7%) had gangrenous cholecystitis, and 68 patients (1.3%) had xanthogranulomatosis cholecystitis. The rate of chronic cholecystitis was detected to be increased in parallel with the increasing age (p=0,00006). When malignant and premalignant lesions were evaluated (n=129, 2.47%), 13 adenoma, 72 metaplasia, 25 dysplasia, and 19 cancer cases were found and the coexistence of all malignant and premalignant lesions with chronic cholecystitis was observed. The presence of metaplasia was more common among women (p=0,022). High body mass index, Caucasian race, and female gender are the known risk factors for gallstone disease. In our study, it was observed that cholecystectomy was performed in women more frequently. Chronic cholecystitis was found to be more common in the pathological examinations of the advanced aged patients. We attributed this result to the inflammatory process that lasted for many years. In the evaluation of premalignant and malignant lesions, it was observed that women had metaplasia more often, but there was no difference between female and male patients in terms of dysplasia, adenoma, and carcinoma.

Conclusion: Advanced age is an important risk factor for the development of chronic cholecystitis and the coexistence of premalignant-malignant lesions with chronic cholecystitis appears as a remarkable finding. Cholecystectomy comes to the forefront as the only technique for cholecystopathy that develops at advanced ages.

Keywords: Cholecystectomy, cholecystopathy, gall, stone

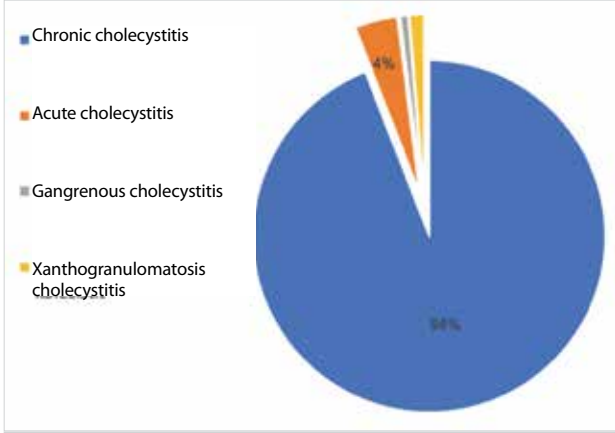

Figure 1. Patients' analyses according to pathological results

PS-33
Case of abdominal lymphangioma incidentally detected in appendectomy

Mehmet Sertkaya[1], Fatih Mehmet Yazar[2], Arif Emre[2], Ahmet Necati Şanlı[2], Erkan Mavigök[3], Ferhat Aslan[3], Güven Arslan[3], Deniz Esin Tekcan Şanlı[4]
[1]Clinic of General Surgery, Viranşehir State Hospital, Şanlıurfa, Turkey
[2]Department of General Surgery, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[3]Department of Gynecology and Obstetrics, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[4]Clinic of Radiology, Necip Fazıl City Hospital, Kahramanmaraş, Turkey

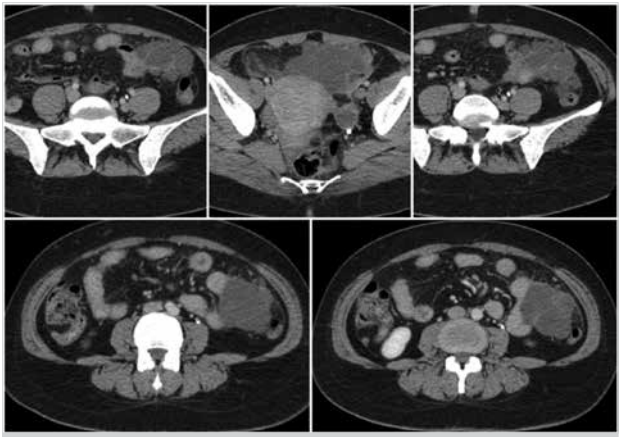

Figure 1. Retrocecal appendix and intraabdominal lymphangiomas are viewed.

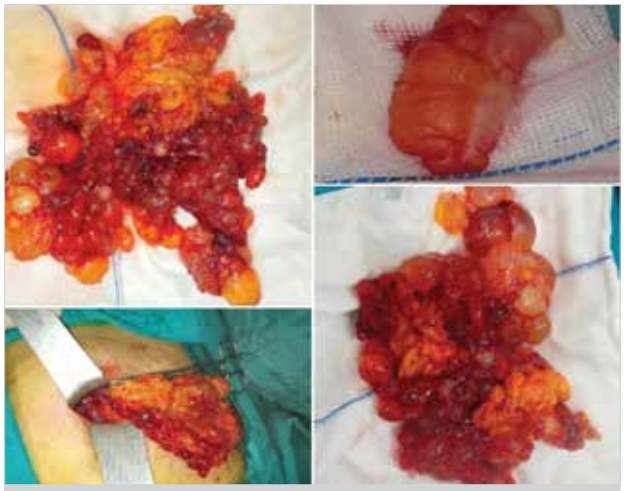

Figure 2. The appendix and omentum affected by lymphangioma and resected are viewed

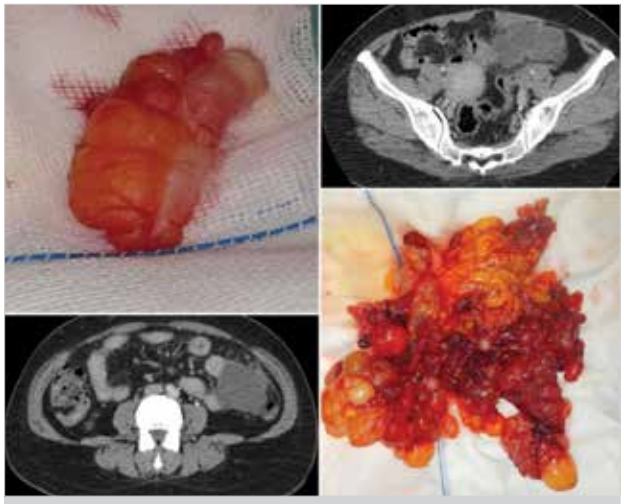

Figure 3. CT sections of appendicitis and lymphangioma and appendectomy material

Introduction: Abdominal lymphangiomas are very rarely seen cystic lesions and they are mostly localized in the mesentery of the small intestine. In this study, it was aimed to present a patient who was admitted to the emergency unit with the clinical picture of atypical acute appendicitis and incidentally found to have a cystic lymphangioma localized in the mesentery of the small intestine in the ultrasonography (US) and computed tomography (CT) examination.

Case: A 38-year-old female patient was admitted to the emergency unit with the complaints of right lower quadrant pain, loss of appetite, and nausea which she had for one day. The physical examination of the patient, who had no comorbid disease but intermittently had left lower quadrant pain occurring for 5-6 months, revealed sensitivity in both lower quadrants and rebound in the right lower quadrant. Mild leukocytosis and high CRP were found in laboratory analyses. Appendix could not be viewed in US. However, there were lesions consisting of multiple cystic structures, the largest of which was 30x33 mm, and extending from the neighborhood of the lower pole of the left kidney to the anterior part of the bladder in the pelvis. The abdominal CT revealed cystic areas with 7 mm acute retrocecal appendicitis. The largest of cystic lesions was 60 mm and they extended from the pelvic region to the neighborhood of the lower pole of the spleen, had no relationship with the spleen, and included septations. In imaging examination, fatty planes between the cystic area and the small intestine loops in the left were unclear. The patient was taken into emergency surgery due to the diagnosis of acute appendicitis and it was found that it was with retrocecal localization. In the operation, it was noticed that multiple cystic structures originating from the omentum were extending to the left lower quadrant. Therefore, the incision was expanded towards the left side and the omentum including all omentum-associated cysts was resected with appendectomy. The patient was discharged on the postoperative 4th day without any problem. The result of pathology was reported as lymphangioma.

Conclusion: It is thought that abdominal lymphangiomas develop in association with the proliferation and dilatation of lymphatic sacs that cannot form any link with veins and blindly end up depending on the developmental defects in the lymphatic vessels. Their clinical findings and symptoms are non-specific. Although they can remain asymptomatic for a long time, they can present with symptoms such as acute or chronic abdominal pain and distension. Cystic lesions can be viewed with US, but for understanding their relationship with other organs, CT and magnetic resonance imaging are required. The treatment of lymphangiomas is surgical excision. Percutaneous drainage is not recommended because of recurrence risk.

Keywords: Abdominal lymphangioma, acute appendicitis, cystic lesions

PS-34

A case of a giant ovarian cyst causing acute abdomen

Mehmet Sertkaya[1], Arif Emre[2], Fatih Mehmet Yazar[2], Erkan Mavigök[3], Ali İşler[2], Ahmet Necati Şanlı[2], Ali Özkömeç[2], Deniz Esin Tekcan Şanlı[4]

[1]Clinic of General Surgery, Viranşehir State Hospital, Şanlıurfa, Turkey
[2]Department of General Surgery, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[3]Department of Gynecology and Obstetrics, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[4]Clinic of Radiology, Necip Fazıl City Hospital, Kahramanmaraş, Turkey

Introduction: Benign ovarian cysts are frequently seen and they are called giant ovarian cysts when they reach the size above 15 cm. They can be confused with mesenteric cysts, intraabdominal acid, peritoneal inclusion cysts, and lymphangiomas. They can lead to acute abdomen due to abdominal distension. In this study, it is aimed to present a case of acute abdomen caused by a giant ovarian cyst.

Case: In a short time after a 52-year-old female patient was hospitalized in the Department of Gynecology and Obstetrics due to the complaints of abdominal pain and swelling in the abdomen, she was consulted to our clinic for acute abdomen considering the complaints of diffuse abdominal pain and excessive abdominal distension. The medical history of the patient included right hemocholectomy that had been pathologically reported as moderately differentiated adenocarcinoma 4 months ago. In the ultrasonography (US), an appearance of anechoic cyst with 73x58 mm triloculated thick septa and localization near the left adnexal lodge in the midline was observed. A 15x12 cm mass appearing to have originated from the left ovary was reported in the computed tomography (CT) (Figure 1). In the examinations of the patient, tumor markers were high as well as CRP and leukocytosis. The physical examination of the patient revealed extensive abdominal distension and diffuse sensitivity. Defense and rebound could not be evaluated because of distension. The patient was taken into emergency surgery. A giant ovarian cyst originating from the left ovary was encountered. From the cyst, 3 liters of slightly cloudy fluid were aspirated without spreading into the abdomen. Total excision including the ovary was performed (Figure 2). The patient was discharged without any problem on the postoperative 5th day.

Discussion: This patient was firstly evaluated as adnexal mass and hospitalized for operation by the Department of Gynecology and Obstetrics. However, because the patient had the signs of acute abdomen and underwent an operation due to right colon cancer recently, she was consulted to our clinic. Considering her intestinal, urinary, and respiratory system symptoms associated with excessive abdominal distension despite US and CR results, the patient was emergently operated due to the diagnosis of acute abdomen.

Conclusion: In this study, it was aimed to emphasize that giant ovarian cysts can cause different clinical pictures and acute abdomen by impairing other system functions because of increased intraabdominal pressure associated with excessive abdominal distension.

Keywords: Acute abdomen, abdominal distension, giant ovarian cyst

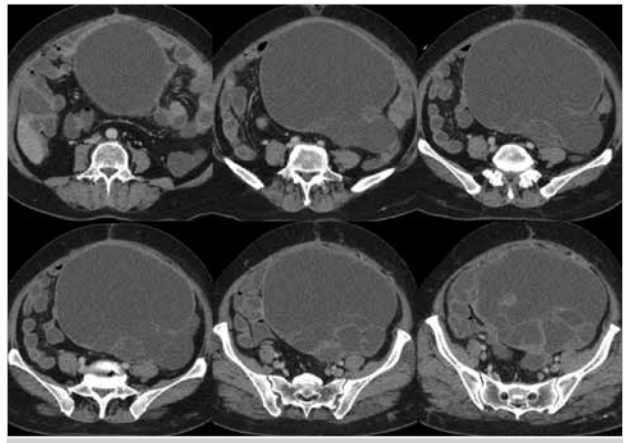

Figure 1. CT sections in which giant ovarian cyst is viewed with the signs of increased intraabdominal pressure, such as edema in the bowel walls and change of place in the intestines

Figure 2. View of aspirated giant cyst and the left ovary after resection

PS-35

Abdominal compress covered with iodine-impregnated surgical drapes can be used as an intraabdominal packing material that does not adhere to the intestines

Mehmet Eren Yüksel, Mustafa Sami Bostan, Namık Özkan

Department of General Surgery, Aksaray University School of Medicine, Aksaray Training and Research Hospital, Aksaray, Turkey

Objective: Diffuse abdominal or retroperitoneal bleeding is fatal in the presence of coagulopathy, hypothermia, and acidosis. Temporary abdominal packing can be used for taking bleeding under control and improving physiological-metabolic disorders. In general, abdominal compresses are used for abdominal packing. However, abdominal compresses used in abdominal packing adhere to surrounding tissues, particularly to the small and large intestines. Even while separating compresses from the intestines gently and cautiously, intestinal serosa openings, bleeding, and secondary organ injuries can occur. Therefore, abdominal compress material that does not adhere to the intestines and surrounding tissues is needed.

Methods: After covering abdominal compresses with iodine-impregnated surgical drapes, they were intraabdominally placed for controlling bleeding. In this way, bleeding was taken under control and an intrabdominal packing material that did not adhere to the intestines and surrounding tissues and that did not cause tissue damage was developed.

Results: Compresses covered with iodine-impregnated surgical drapes absorb less intraabdominal free blood compared to normal abdominal compresses, which suggests the idea that compresses covered with iodine-impregnated surgical draper will be inadequate for the control of bleeding. However, these covered compresses can protect patient against abdominal compartment syndrome because they stop bleeding with direct compression and they increase intraabdominal pressure less due to not

Figure 1. Covering abdominal compress with iodine-impregnated surgical drape

Figure 2. Abdominal compress covered with iodine-impregnated surgical drape

Figure 3. Intraabdominal packing. Abdominal packing was applied to a patient, who had diffuse abdominal and retroperitoneal bleeding after gunshot injury, with compresses covered with iodine-impregnated surgical drapes.

absorbing intrabdominal free blood and not swelling. Iodine-impregnated adhesive drapes are used for decreasing the possible development of surgical site infection. However, there are also some studies suggesting that iodized adhesive surgical drapes do not decrease surgical site infection. Therefore, the effect of abdominal compresses covered with iodine-impregnated surgical drapes on the development of intraabdominal abscess and infection should be investigated. In medical literature, the cases of iodine allergy developing after the use of iodine-impregnated surgical drape have been reported. For this reason, iodine allergy should be paid attention in patients who are applied intraabdominal packing with iodized material.

Conclusion: Abdominal compresses that are covered by iodine-impregnated surgical drapes can be used as intraabdominal packing material that does not adhere to the intestines and surrounding tissues in diffuse intraabdominal and retroperitoneal bleedings.

Keywords: Bleeding, abdominal packing, abdominal compress, iodine-impregnated surgical drapes

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PS-36

Median arcuate ligament syndrome

Semih Yaman[1], Bahri Özer[1], Muhammed Fatih Keyif[1], Mustafa Şit[1], Selçuk Köksal[1], Ferdi Bolat[1], Elif Yalçın[1], Özgür Kurtkulağı[1], Özkan Kılınç[2], Mehmet Hayri Erkol[1]

[1]Department of General Surgery, Abant İzzet Baysal University School of Medicine, Bolu, Turkey

[2]Department of Radiology, Abant İzzet Baysal University School of Medicine, Bolu, Turkey

Median arcuate ligament syndrome (MALS) is also called celiac artery compression syndrome. MAL develops due to low blood flow to the organs of the gastrointestinal system in association with compression on the celiac artery proximal in the exit of the aorta. Patients with this disease are generally asymptomatic. Symptomatic patients have epigastric pain that increases with expiration after meals, nausea, vomiting, and loss of weight. Our patient also had severe abdominal pain and vomiting that occurred intermittently for 2 years. For diagnosis, color Doppler USG of the celiac artery, conventional angiography, and angiography obtained with multi-slice CT can be used. Although proximal narrowing of the celiac artery can be clearly viewed through conventional angiography, lesion is revealed through minimal invasive CT angiography, particularly in sections obtained in lateral position. In our patient, the disease was firstly observed in MR and the diagnosis was confirmed through angiography performed after MR. The aim of treatment in MALS patients is to return blood flow of the celiac artery to normal. The surgical treatment can be performed by cutting median arcuate ligament with open or laparoscopic techniques. In our case, hypertrophic median arcuate ligament was cut with open surgical technique. In conclusion, MALS, as a rare clinical condition, should be considered in the differential diagnosis in the presence of epigastric pain, nausea, and weight loss particularly for young patients and it should be treated. Because late recurrences are reported in these patients, they should be followed up for a long time. In our patient, who was discharged without any problem, no recurrence was observed in the 10-month follow-up.

Keywords: Nausea-vomiting, abdominal pain, median arcuate ligament syndrome

Resim 1. MR'da çölyak artere bası

Resim 2. Anjiografi'de çölyak artere bası

PS-37

Approach in superior mesenteric artery syndrome

Semih Yaman, Muhammet Fatih Keyif, Bahri Özer, Mustafa Şit, Ferdi Bolat, Selçuk Köksal, Elif Yalçın, Özgür Kurtkulağı, Mehmet Hayri Erkol

Department of General Surgery, Abant İzzet Baysal University School of Medicine, Bolu, Turkey

Superior mesenteric artery syndrome (SMAS) develops due to the compression of the third portion of the duodenum between the superior mesenteric artery (SMA) and the aorta and it is also called aortomesenteric duodenal compression, CAST syndrome, chronic duodenal ileus, and Wilkie's syndrome. It is a rare syndrome that presents with epigastric pain occurring after food intake, bloating, nausea, vomiting, loss of appetite, early satiety, and weight loss. Esophagus-stomach-duodenum radiography, upper GIS endoscopy, gastric emptying scintigraphy, ultrasonography (USG), abdominal computed tomography (CT), angio CT, magentic resonance imaging (MRI), and selective angiography are used as the diagnostic techniques. Conservative approaches are primarily recommended for its treatment. In conservative treatment, nutrition and weight gain of patient and thus increased fat tissue are aimed for preventing acute angling of the superior mesenteric artery. Surgery is indicated for cases with the failure of conservative treatment. Its surgical treatment consists of by-pass, which will provide the passage to the jejunum, or anastomosis techniques. Different techniques have been defined for surgical treatment, but the most frequently preferred one is side-to-side duodenojejunostomy. In this case report, it was aimed to evaluate the treatment approach to a patient diagnosed with SMAS with literature.

Keywords: Nausea-vomiting, abdominal pain, superior mesenteric artery

Figure 1. The diameter of the left renal vein was measured as 12 mm in the preaortic region and 3 mm in the region at the aortic level. Its compression between SMA and aorta is viewed.

Figure 2. Decreased angle between SMA and aorta is viewed in the sagittal section in the abdominal tomography

PS-38

Bleeding of the upper GIS cannot always be stopped endoscopically in patients using multiple anticoagulants

Muhammet Fatih Keyif, Semih Yaman, Bahri Özer, Mustafa Şit, Ferdi Bolat, Selçuk Köksal, Elif Yalçın, Özgür Kurtkulağı, Mehmet Hayri Erkol

Department of General Surgery, Abant İzzet Baysal University School of Medicine, Bolu, Turkey

Bleeding of upper GIS includes hemorrhage that occurs into the lumen from any point between the upper region of the esophagus and Treitz ligament. Its incidence varies between 50 and 150 of 100,000 annual admissions. In upper GIS bleeding, most of deaths occur in the elderly patients over 60 years old and in patients with severe comorbid diseases such as heart disease, cancer, and renal failure. In general, 85% of all GIS bleeding cases originate from GIS. Approximately 70-80% of these bleedings stop spontaneously. Surgical interventions that were blindly performed in the period before the use of endoscopy for diagnosis and treatment have been left behind anymore. Surgery is recommended only in patients with persistent bleeding or in those not having any benefit from endoscopic treatment. Both of our cases had upper GIS bleeding due to the use of multiple antico-

Figure 1. Endoscopic view of Dieulafoy's lesion (female patient)

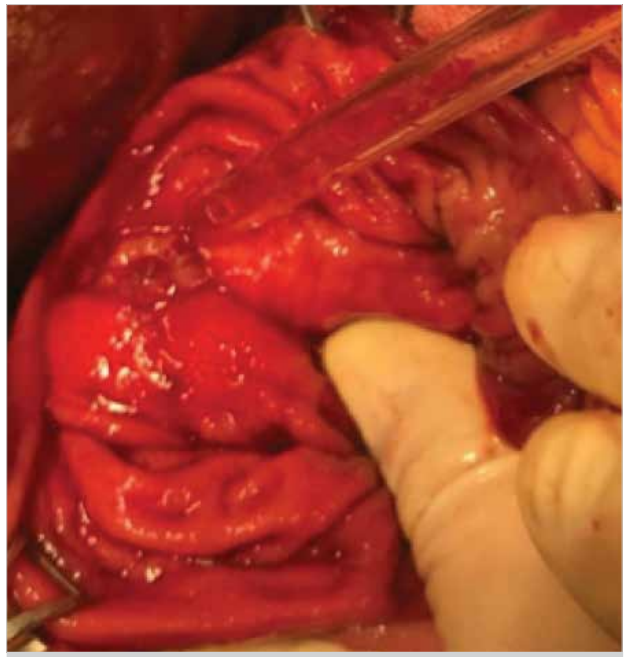

Figure 2. Intraoperative view of Dieulafoy's lesion

agulants and bleeding could not be stopped with endoscopic techniques. They were urgently operated and bleeding was taken under control.

Keywords: Anticoagulant, bleeding, stomach

PS-39
Enema kits are not always innocent

Semih Yaman, Muhammet Fatih Keyif, Bahri Özer, Mustafa Şit, Elif Yalçın, Selçuk Köksal, Ferdi Bolat, Özgür Kurtkulağı, Mehmet Hayri Erkol

Department of General Surgery, Abant İzzet Baysal University School of Medicine, Bolu, Turkey

Colonoscopy is an examination technique that is especially recommended for the elderly patients and for patients with symptoms related to the intestines. For an accurate approach, the colon and rectum should also be cleaned with enemas other than laxatives. Trauma-associated rectal injuries are rarely seen clinical conditions with high mortality, surgical treatment of which is still controversial. Iatrogenic rectal injuries generally develop during the placement of the head of enema on the rectum in enema practices. Moreover, although rare, rectum perforations associated with colonoscopy, polypectomy, electrocoagulation, biopsy,

Figure 1. IV, abdominal CT with oral, rectal contrast agent

Figure 2. IV, abdominal CT with oral, rectal contrast agent

and rectal foreign body have been reported. In this study, it was aimed to present conservative approach in a case developing rectum microperforation due to enema application by oneself into hemorrhoid that occurred because of chronic constipation.

Keywords: Colonoscopy, enema, perforation, rectum

PS-40

Torus hyperplasia of the stomach that accompanies to the linitis plastica of the stomach and that is rarely seen

Semih Yaman[1], Muhammet Fatih Keyif[1], Bahri Özer[1], Mustafa Şit[1], Selçuk Köksal[1], Ferdi Bolat[1], Elif Yalçın[1], Özgür Kurtkulağı[1], Halil Gökkuş[2], Mehmet Hayri Erkol[1]

[1]Department of General Surgery, Abant İzzet Baysal University School of Medicine, Bolu, Turkey

[2]Department of Radiology, Abant İzzet Baysal University School of Medicine, Bolu, Turkey

Tori are nodular mature bone spurs changing according to anatomic location. Torus palatinus (TP) and torus mandibularis (TM) are the most common intraoral exostoses. Despite the fact that TP has been known for more than a century and it has been the subject of many studies since the beginning of this century, its biological meanings and morphological importance are not understood exactly. In our case, torus hyperplasia of the stomach, which is hardly ever reported in the literature, was accompanying to the linitis plastica of the stomach in our patient who was performed total gastrectomy. Our patient had difficulty in swallowing, early satiety, and weight loss. During endoscopy, endoscope could not be entered into the stomach. The stomach was observed to be severely hard and narrow. Endoscopic biopsy was taken and its result was reported in favor of signet-ring cell gastric cancer and linitis plastica. The result of CT was found to be consistent with linitis plastica and advanced contrast enhancement in the wall and spleen invasion were observed. Total gastrectomy and splenectomy were performed to the patient. The pathology was reported as inflammatory linitis plastica and torus hyperplasia. In this case report, it was aimed to present the case of torus hyperplasia in the stomach, which is almost never encountered.

Keywords: Linitis plastica, stomach, torus hyperplasia

Figure 1. Linitis plastica and torus hyperplasia of the stomach that does not allow endoscopic passage

Figure 2. CT view of severely increased wall of the stomach and spleen invasion in association with linitis plastica and torus hyperplasia of the stomach

PS-41

Do foot plantar pressure and foot size change after bariatric surgery?

Mehmet Kadir Bartın[1], Muzaffer Önder Öner[1], Müge Bartın[2]

[1]Department of General Surgery, Health Sciences University, Van Training and Research Hospital, Van, Turkey

[2]Department of Internal Diseases, Health Sciences University, Van Training and Research Hospital, Van, Turkey

Objective: Obesity is defined as excessive fat accumulation that can affect the health negatively by WHO. Adipose tissue constitutes 15-18% of body weight in men and 20-25% of body weight in women. Increases in these rates lead to obesity (exceeding 25% in men and 30% in women). The aim of this study is to investigate the occurrence of any decrease in foot sizes and the changes in foot plantar pressure and also their relationships with gender, age and BMI in patients undergoing bariatric surgery.

Methods: Pedobarographic data, foot sizes, and other data in the preoperative period and in the postoperative 12th month were recorded for 31 patients undergoing LSV between February 2014 and April 2016 were recorded. Foot sizes were evaluated by using non-parametric t-test and Chi-square test and pedobarographic data were evaluated through Pearson correlation test. Pedobarographic measurements were performed by measuring heel pressures with the distance of 8 cm between two feet.

Results: LSG procedure was performed to 31 patients (27 female and 4 male), the mean BMI value of whom was 40.3. The patients completing postoperative 12th month were examined. The mean preoperative foot size was 40.1 (±1.9). Foot size was found to be decreased in 23 patients (75%). In the examinations performed after 12 months, the mean foot size was 39.3 (±1.9) and there was a statistically significant decrease in foot size (p<0,001). The decrease in foot size was insignificant between male and female genders (p=0.21). When the patients were evaluated according to their ages by dividing them as those at the age below 35 years and those at the age above 35 years, the decrease in their foot sizes was not significant (p=0.,53). In the evaluation of preoperative pedobarographic measurements in 31 patients, the mean static pressure on the right and left foot heels was recorded as 9.8 N/cm^2. In the postoperative 12th month, the mean heel pressure was detected as 8.1 N/cm^2 and this difference was statistically significant (p<0,001). The difference between two genders in terms of pedobarographic measurements was not significant (p=0.55). Moreover, no significant difference was found in the pedobarographic values of the patients divided according to their ages as those below and above 35 years old (p=0.51).

Conclusion: Obesity is a complex disease that is characterized by increased fat in the body composition and it causes some pathologies associated with changes in the musculoskeletal system. With the treatment of obesity, these pathological changes in the musculoskeletal system can be reverted. In our study, a significant decrease in the foot sizes and in static plantar heel pressure due to decreased BMI were detected in the postoperative 12th month of patients who were performed bariatric surgery and this result affects the foot health positively.

Keywords: Pedobarography, obesity

PS-42

Small intestine perforation caused by goose bone: A rare cause of acute abdomen

Salim Balin[1], Kemal Eyvaz[2]

[1]Clinic of General Surgery, Kartal Training and Research Hospital, İstanbul, Turkey

[2]Department of General Surgery, Health Sciences University School of Medicine, İstanbul, Turkey

Intestinal perforation due to swallowing a foreign body is a rare cause of acute abdomen. While planning its treatment, it is important to determine its etiology that causes acute abdomen and the degree of perforation. Diagnostic laparoscopy provides a great convenience for the detection of perforation location. In this case report, a 35-year-old male patient who was admitted to the emergency unit with the complaint of abdominal pain lasting for 2 days is presented. At admission to the emergency unit, his white blood cell count was 18000 mm^3 and his temperature was 38,3 C^0 and his ultrasonographic examination revealed free fluid in the pelvis. No free air was found in the direct abdominal radiography in standing position. Diagnostic laparoscopy was performed for acute abdomen in the patient and color change was observed in the 60 cm proximal region of the ileocecal valve, but it was decided to perform laparotomy because pathology could not be revealed. In the laparotomy, small intestine perforation caused by an approximately 4 cm foreign body was observed in the defined location. Foreign body was removed with enterotomy and primary repair was performed. Because of no problem in the clinical follow-ups of the patient, he was discharged on the postoperative 4th day. Then, it was learned that the patient had eaten goose meat 4 days ago.

Keywords: Foreign body, intestinal perforation, goose bone

PS-43

A rare cause of ileus: Abdominal cocoon

Şahin Kaymak, Rahman Şenocak, Hüseyin Sinan, Mustafa Tahir Özer, Orhan Kozak

Department of General Surgery, Health Sciences University School of Medicine, Gülhane Training and Research Hospital, Ankara, Turkey

Introduction: Abdominal cocoon is a rare cause of ileus that primarily or secondarily presents with acute or sub-acute intestinal obstruction symptoms because all or some part of intestinal loops are covered with a fibrocollagenose membrane. In this

Figure 1. View of abdominal cocoon

Figure 2. Necrotic terminal ileum segment

case report, a patient who was admitted to our department with the symptoms of ileus and operated for abdominal cocoon is presented.

Case: A 93-year-old male patient was admitted to the emergency unit due to the complaints of nausea-vomiting and inability to defecate. The patient stated that he previously had similar complaints that spontaneously regressed. Diffuse air-fluid levelings were found in the small intestine loops in the erect abdominal radiography and the patient was hospitalized for nasogastric decompression. The patient was operated on the next day because his clinical condition did not improve despite fluid-electrolyte replacement. In the exploration, it was observed that the region including segments from the 50 cm distal part of Treitz ligament to the 15 cm proximal part of the ileocecal juncture was covered with a capsulated fibrous membrane. In the distal area, the wall of the ileum was narrowed in an approximately 5 cm segment and it was progressing towards necrosis (Figure 1, 2). Massive bridectomy+terminal ileum resection+end ileostomy operation was performed. His ostomy was active on the postoperative 2nd day and he was discharged on the 7th day with recovery.

Conclusion: In conclusion, abdominal cocoon is a rarely seen disease that is difficult to diagnose and it is a rare but surgically curable cause of ileus. In patients with consistent clinical picture, abdominal cocoon should be considered in the differential diagnosis of ileus.

Keywords: Ileus, abdominal, cocoon

PS-44

A rare complication experienced during laparoscopic sleeve gastrectomy: Stapling of gastric tube

Şahin Kaymak, Hüseyin Sinan, Mustafa Tahir Özer

Department of General Surgery, Health Sciences University School of Medicine, Gülhane Training and Research Hospital, Ankara, Turkey

Introduction: Gastric positioning system (GastriSail) is a device that can be used for the application of aspiration, irrigation, and decompression and that can be used as a sizing guide for other gastric surgeries. In this study, we wanted to share our experience on the use of GastriSail.

Case: A 62-year-old female patient consulted to our department for the complaint of overweight. It was learned from her medical history that she was overweight for about 20 years and she could not lose weight despite various diets and exercise programs. Bariatric surgery was planned for the patient whose body mass index (BMI) was 44,1 kg/m^2. The patient was taken into operation for laparoscopic sleeve gastrectomy. While performing gastric dissection and separating the stomach along the greater curvatura, Gastrisail was used for better view in the operation. Until the gastroesophageal junction, the greater curvature of the stomach was separated and prepared for resection. Then, resection was performed with laparoscopic stapler. A slight difficulty was felt in two points during re-

Figure 1. Gastric tissue removed after operation

Figure 1. Postoperative view of gastric tube

section. Following resection, an approximately 200 cc diluted methylene blue solution was given into the residual stomach with the help of GastriSail for controlling the presence of leakage from the stapler line. It was observed that methylene blue was leaking from two 6-7 mm openings in the stapler line. These openings were primarily sutured with 2/0 vicryl intracorporeally. After repair, leakage test was repeated and no leakage was observed. In the examination performed following the removal of the specimen out of the abdomen, it was observed that the apparatus of the GastriSail that was used for the formation of sail in the second and third stapler cartridge region in the stapler line was cut and left in the excised gastric tissue. It was understood that the leaking points found in the test performed with methylene blue in the stapler line were caused by cutting this tubule from the area on the side of excised gastric tissue. When the specimen was opened, an approximately 12 cm silicon tubule of the GastriSail was found.

Conclusion: Although this type of new systems and devices offers technical facilities for surgeon, some problems can sometimes occur becase of insufficient experience for they are new techniques. We suggest that before cutting with stapler in the GastriSail device, sail formation apparatus should be checked for assuring its position by anaesthetists.

Keywords: Laparoscopy, stapler, sleeve gastrectomy, gastric positioning system

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PS-45

A case that is rarely seen in acute abdomen: Gastrointestinal stromal tumor

Havva Nur Alparslan Yümün[1], Yasin Duran[2]

[1]Clinic of General Surgery, Çorlu State Hospital, Tekirdağ, Turkey

[2]Department of General Surgery, Namık Kemal University School of Medicine, Tekirdağ, Turkey

Introduction: Gastrointestinal stromal tumors are the most common mesenchymal tumors of the gastrointestinal tract. They mostly occur in the stomach and small intestine. Their treatment is surgical. The aim of surgery is to remove tumor totally without leaving residual tissue and with negative surgical margin.

Case: A 48-year-old male patient was admitted to the outpatient clinic of general surgery due to abdominal pain lasting for 2 months. Abdominal tomography revealed multiple metastases in the liver, a 84x48 mm mass, and free air and fluid suggesting closed perforation. The patient was operated and the mass was removed with clean surgical margin and end-to-end anastomosis was performed to the intestine.

Conclusion: In conclusion, gastrointestinal stromal tumors are rarely seen mesenchymal tumors that should be kept in mind in the differential diagnosis. Moreover, further examinations should be performed by considering the possibility of metastasis.

Keywords: Gastrointestinal stromal tumors, acute abdomen, closed perforation

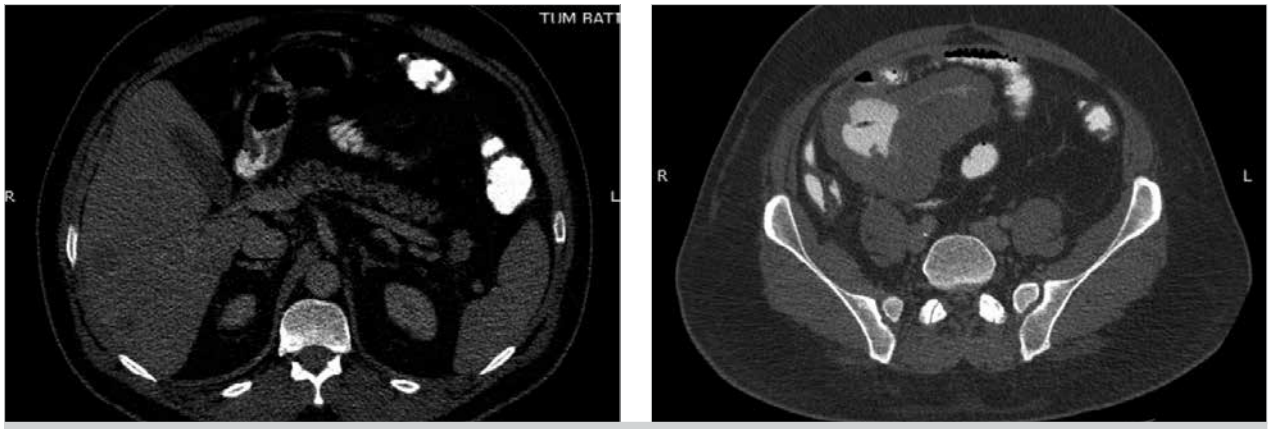

Figure 1. a, b. Multiple metastases in the liver in tomography

PS-46

Management of a patient with breast cancer incidentally detected after breast reduction surgery

Orhan Üreyen[1], Demet Alay[1], Enver İlhan[1], Demet Kocatepe Çavdar[2], Melike Güngör[3], Funda Taşlı[2]

[1]Department of General Surgery, Health Sciences University, İzmir Bozyaka Training and Research Hospital, İzmir, Turkey

[2]Department of Medical Pathology, Health Sciences University, İzmir Bozyaka Training and Research Hospital, İzmir, Turkey

[3]Department of Plastic Surgery, Health Sciences University, İzmir Bozyaka Training and Research Hospital, İzmir, Turkey

Introduction: Breast reduction surgery is one of the most common reconstructive surgical procedures across the world and it is applied for resolving both aesthetic and postural complaints in macromastia patients. In the histopathological examination of the excised specimens, invasive breast cancer was detected at the rate of 0.06%-0.4%. In this study, the management of a case with invasive breast cancer detected after breast reduction surgery was presented.

Case: Bilateral macromastia was detected in a 53-year-old postmenopausal female patient who consulted to the outpatient clinic of plastic surgery due to macromastia. No finding was found in her medical history and familial history. Her mammography taken in an external center revealed BIRADS-2 lesions in the right breast and her ultrasonography was normal. The patient was performed bilateral reduction mammoplasty (free nipple) by the department of plastic surgery. As a result of the histopathological examination of specimens, "invasive breast carcinoma-non-specific type" was detected in the left breast. The size of the tumor was 1x0.8x0.5 cm. According to the Bloom- Richardson grading system, the tumor's tubular formation was 1, nuclear pleomorphism was 2, and mitosis was 1 and score was 4/9 (HG:1). A few cribriform type ductal carcinoma in situ areas were observed in the tumor. No perineural and lymphovascular invasion was detected. Surgical margins and the skin were intact. The immunohistochemical staining demonstrated estrogen receptor 70% (++), progesterone receptor 90% (+++), e-cadherin (+), CK5/6 (-), SMA (-), CD10 (-), cerbB2 (-), and Ki67 6%. Then systemic screening was performed in the patient and no distant metastasis was observed. In the re-evaluation of the previous mammography, a microlobulated 9 mm lesion with the suspicion of malignancy was detected in the left breast. In the repeated MR and ultrasonography of the breast, edema and BIRADS-2 lesions were found in the breasts. Pathologic lymph gland was not seen in both axillae. Then, the patient was applied sentinel lymph node sampling with combined method for the left axilla. Two lymph nodes were excised. Histopathological results of both excised lymph nodes were reported as non-specific reactive hyperplasia. The case was discussed in the multidisciplinary oncology council and it was decided to perform radiotherapy and hormonotherapy. Hormonotherapy of the patient, whose radiotherapy was completed, is continuing. She has been followed up without any problem for about 15 months.

Conclusion: In patients who will be performed macromastia, preoperative clinical and radiological examination should definitely be performed. All material should be excised by remembering that incidental tumor can be detected in the excised specimen.

Keywords: Macromastia, breast cancer, breast reduction

PS-47

The effect of waiting before firing stapler on bleeding focuses occurring in the stapler line during gastric resection in laparoscopic sleeve gastrectomy performed for the surgical treatment of obesity

Mehmet Kadir Bartın[1], Muzaffer Önder Öner[1], Müge Bartın[2]

[1]Department of General Surgery, Health Sciences University School of Medicine, Van Training and Research Hospital, Van, Turkey

[2]Department of Internal Diseases, Health Sciences University School of Medicine, Van Training and Research Hospital, Van, Turkey

Objective: In this study, it was aimed to investigate the effect of duration of compression applied to the fired endoscopic linear stapler on the number of stapler line bleedings and efforts for stopping bleeding while performing gastric resection in 30 patients undergoing laparoscopic vertical sleeve gastrectomy due to obesity.

Methods: Successive 30 patients who were performed laparoscopic vertical sleeve gastrectomy for obesity were prospectively included in the study. The patients who underwent gastric resection with endoscopic stapler were divided into 3 equal groups according to the waiting periods before firing, as Group A (0. sec), Group B (20. sec), and Group C (60. sec). The number of bleedings requiring aspiration in stapler line and time of hemostasis after bleeding were determined and data were recorded. These data were analyzed by using t-test and Chi-square test.

Results: Total number of bleeding focuses was similar in Group B and C and apparently lower in Group A. Bleeding was observed in 7 focuses in Group A, 2 focuses in Group B, and 1 focus in Group C. The times of hemostasis were also similar.

Conclusion: It has been found that waiting for at least 20 seconds before firing stapler during resection in LSG decreases the possibility of bleeding.

Keywords: Stapler line bleeding, sleeve gastrectomy, bariatric surgery

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PS-48

Left-sided gallbladder

Metin Yalaza, Özgür Akgül, Ahmet Soykurt, Münevver Moran

Department of General Surgery, Ankara Numune Training and Research Hospital, Ankara, Turkey

The gallbladder originates from the endodermal extension of hepatic diverticulum and it is located below the right lobe of the liver. The position of the gallbladder can vary according to the liver and its localization can be transverse, intrahepatic, retrodisplaced, and left-sided. When the gallbladder is congenitally located on the left of the round ligament without situs inversus, it is called left-sided gallbladder (LSG) and it is a rarely seen condition. The number of cases reported in literature is not more than 200 and its incidence is 0,4%. Left-sided gallbladder is observed below the left lobe of the liver between segment III and IV or in segment III on the left side of the falciform ligament. It is important to determine this variation in laparoscopic cholecystectomy. This variation cannot be detected based on routine examinations before surgery. To encounter such a gallbladder with replaced or accessory veins during laparoscopy is a surprising and unforgettable experience. For safe laparoscopic cholecystectomy, to be aware of possible anomalies in the junction of the cystic canal with common bile duct and selective use of intraoperative cholangiography is important. In this visual presentation, a case of LSG detected in laparoscopic cholecystectomy is presented and different forms and surgical importance of this anatomic anomaly are discussed.

Keywords: Aberrant gallbladder, cholecystectomy, left-sided gallbladder

Figure 1. Intraoperative position of the gallbladder (arrow: divided part of the ligamentum falciforme)

Figure 2. Gallbladder bed after dissection

PS-49

Ureteral incision in the inguinal hernia repair of a patient with renal transplantation

Ali İşler, Ahmet Necati Şanlı, Ali Özkömeç, İlhami Taner Kale, Fatih Mehmet Yazar

Department of General Surgery, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey

Introduction: In the renal transplantation surgery, transplanted kidney is placed into the iliac fossa preperitoneally. Therefore, transplanted ureter is more superficial. In this study, it was aimed to present a case in which the ureter of the transplanted kidney was cut in inguinal hernia repair.

Case: Our case was a 51-year-old male patient that had been performed living donor renal transplantation in 1987. The patient, who had undergone inguinal hernia operation in an external center and had developed postoperative anuria with increased BUN and creatinine levels, was referred to the Department of Nephrology in our hospital. Considering the possibility of ureteral incision in the patient whose renal USG revealed hydronephrosis, he was taken into operation. It was observed in the surgery that the ureter was cut and proximal and distal ends were anastomosed. By performing ureteroureterostomy procedure, the operation was completed. His BUN and creatinine levels were decreased in the postoperative follow ups and he was discharged.

Conclusion: In renal transplant patients, ureteral obstruction can develop because of many reasons such as hematoma, ureteral torsion, and retroperitoneal fibrosis in early or late period. Since 1954 when the first successful renal transplantation was achieved, the rate of ureteral obstruction associated with inguinal hernia has been reported as 4% in renal transplant patients. However, the incision of transplanted ureter in inguinal hernia repair has been reported for once in renal transplant patients. In this study, we want to emphasize that inguinal hernia repair should be performed by experienced surgeons with full knowledge of anatomy and more attention should be paid during operation in transplant patients.

Keywords: Anuria, inguinal hernia, renal transplantation, ureteral incision

Figure 1. Ureteral incision

Figure 2. Ureteroureterostomy and hernia repair with dual mesh

PS-50

Our results of sleeve gastrectomy for morbid obesity

Muzaffer Önder Öner, Mehmet Kadir Bartın, İlhan Taşdöven

Department of General Surgery, Health Sciences University School of Medicine, Van Training and Research Hospital, Van, Turkey

Objective: Morbid obesity, which is a serious health problem with increasing rate particularly in developed countries, is a chronic disease that directly affects lifetime and quality of life. It is not only a weight issue, but also a disease that influences prognosis by presenting with many multisystemic diseases. Laparoscopic sleeve gastrectomy (LSG), which is frequently used for the treatment of morbid obesity, positively contributes to weight loss and treatment of comorbid diseases (hypertension, diabetes, and arrhythmia). In this study, it was aimed to retrospectively evaluate patients who were performed LSG for the diagnosis of morbid obesity in our clinic under the light of literature.

Table 1. The mean weights, mean BMI values, and mean percentages of weight loss of patients

Postoperative time	Mean weight	Mean BMI	Mean percentage of weight loss
1st month	110.8	42.8 kg/m^2	18.1
3rd month	100	38.8 kg/m^2	35.1
6th month	91.4	35.6 kg/m^2	48.7
12th month	85.6	32.5 kg/m^2	42.6

Methods: The files of 19 patients that were applied LSG for morbid obesity in the Department of General Surgery between January 2015 and January 2016 were evaluated retrospectively. The patients' postoperative 1st month, 3rd month, 6th month, and 12th month follow-ups were performed and the changes in their body mass indices (BMI) and percentages of weight loss were recorded.

Results: The preoperative mean weight of the patients was 119,1 kg (103-168 kg) and their mean BMI was 45,29 kg/m^2 (41,04-52,8). After the operation, their mean weight was measured as 108 kg in the postoperative 1st month and 89,45 kg in the postoperative 6th month. At the end of the 12th month, the mean BMI was found to be 32,5 and the mean percentage of weight loss was 42,6%.

Conclusion: In the treatment of morbid obesity, sleeve gastrectomy is a safe technique that facilitates weight loss and helps comorbid diseases developing secondary to obesity to heal.

Keywords: Morbid obesity, laparoscopic sleeve gastrectomy, comorbidity

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PS-51

The effects of infliximab and hyperbaric oxygen therapy combination on inflammation in acute necrotizing pancreatitis

Serdar Taşçı[1], Rahman Şenocak[2], Şahin Kaymak[2], Emin Lapsekili[2], Mustafa Tahir Özer[2], Orhan Kozak[2]

[1]Clinic of General Surgery, Çukurova Dr. Aşkım Tüfekçi State Hospital, Adana, Turkey

[2]Department of General Surgery, Health Sciences University School of Medicine, Gülhane Training and Research Hospital, Ankara, Turkey

Objective: The role of oxygen free radicals (OFR) in the onset and progression of acute pancreatitis has become evident in the studies on acute pancreatitis model. The main mechanism is the presence of an increase in favor of oxidation in the intracellular oxidation- reduction balance as a result of changes associated with OFR production. Besides that, the severity of systemic inflammation in pancreatitis is related to the activation of various inflammatory mediators. Tumor necrosis factors alpha (TNFα) has a central role in the development of inflammation.

Method: In this study, the effects of infliximab, which is aTNFα inhibitor and hyperbaric oxygen therapy on inflammation, were investigated in a acute necrotizing pancreatitis model. In the study, 60 Wistar-Albino rats were put into 5 groups, each including 12 rats. Experimental pancreatitis model was performed with laparotomy, duodenal puncture, and intraductal taurocholic acid infusion. Laparotomy and pancreas manipulation were carried out in the first group rats (sham) and laparotomy and experimental pancreatitis were carried out in the second group (control). In the treatment groups (Group 3, 4, and 5), infliximab, hyperbaric oxygen (HBO) and HBO combined with infliximab were appplied, respectively. All rats were sacrificed at the 48th hour and blood sample for serum amylase was taken with pancreas tissue.

Results: Severe necrotizing pancreatitis was successfully formed in Group 2, 3, 4, and 5. In the histological evaluation, diffuse acinar necrosis, fat necrosis, hemorrhage, and inflammation were observed in the tissue sections of the pancreatitis group. Amylase and malondialdehyde (MDA) levels were highly lower in the 3rd, 4th, and 5th groups compared to the 2nd group and this difference was statistically significant ($p<0.001$ for both). Decreases were also detected in superoxide dismutase (SOD) and glutathione peroxidase (GSH) levels, but they were not statistically significant. In the examination of pathological score, an apparent recovery was observed in the 3rd, 4th, and 5th groups compared to the 2nd group and this improvement was more apparent in the 5th group ($p<0.001$, $p<0.003$ and $p<0.001$, respectively). Regression in edema, inflammation, acinar necrosis, and fat necrosis was apparent in all treatment groups, which was statistically significant.

Conclusion: The results of the study are promising and they suggest that combination therapy is beneficial. However, the agents should be examined in further prospective randomized clinical studies for a definite deduction on the clinical practice of the results.

Keywords: Pancreatitis, infliximab, hyperbaric oxygen

PS-52

Calculous gallbladder adherent to the anterior wall of the abdomen: 2 cases

Metin Yalaza, Özgür Akgül, İbrahim Doğan, Barış Zülfikaroğlu
Ankara Numune Training and Research Hospital, Ankara, Turkey

Postoperative adhesions are the pathological adhesions occurring between the abdominopelvic structures in the postoperative period. They can be observed in all quadrants and they cause intestinal obstruction, infertility, pain, and reoperations. Sometimes, they can change the course of a secondary operation that is necessary. Therefore, postoperative adhesion is an important health issue. The gallbladder is often restricted by surrounding organs, particularly omental adhesions, after cholecystitis. More rarely, the gallbladder is observed to be adherent to the surrounding organs or abdominal wall in association with upper abdominal procedures. In the cases with this adhesion, laparoscopic cholecystectomy can be difficult because it is not easy to reveal anatomic structures due to difficult dissection. There is no clear criterion for determining indications for laparoscopic surgery in patients with abdominal adhesions. In this study, we present two cholelithiasis patients who were previously operated for hydatid cyst and had gallbladder that was adherent to the anterior abdominal wall secondary to this operation. Laparoscopic cholecystectomy was successfully performed in these two cases.

Keywords: Adhesion, laparoscopic cholecystectomy, gallbladder

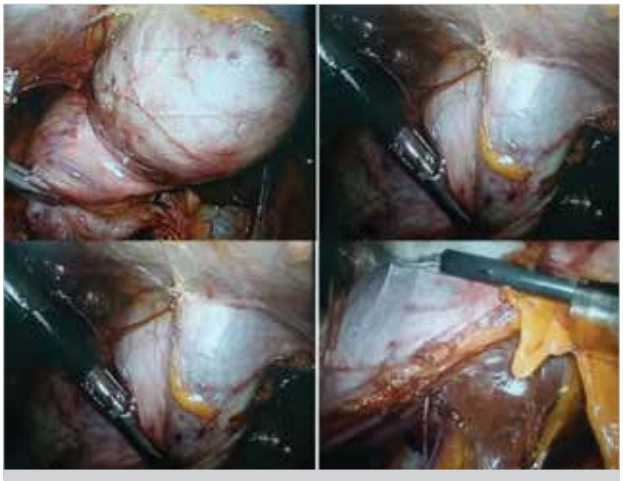

Figure 1. 1st case

Figure 2. 2nd case

PS-53

Laparoscopic appendectomy in a patient with situs inversus totalis

Emre Bozkurt, Mahmut Kaan Demircioğlu, Sinan Ömeroğlu, Mustafa Fevzi Celayır, Mehmet Mihmanlı
Department of General Surgery, Health Sciences University Şişli Hamidiye Etfal Training and Research Hospital, İstanbul, Turkey

Introduction: This study was performed to investigate the applicability of laparoscopic appendectomy, which is a minimal invasive method, for the treatment of acute appendicitis in a case of situs inversus totalis. The incidence of situs inversus totalis, in which major thoracic and abdominal organs are transposed (the mirror image), is 1:10000. Acute appendicitis is a pathology requiring surgical intervention and the possibility of having acute appendicitis during lifetime is 7-8%. It was aimed to contribute to literature with a successful minimal invasive intervention performed in a patient with situs inversus totalis, who was admitted to the emergency unit for left lower quadrant pain and diagnosed with acute appendicitis.

Case: A 23-year-old female patient with the diagnosis of situs inversus totalis was admitted to the emergency unit due to the complaint of abdominal pain lasting for 24 hours. Her physical examination revealed defense and rebound in the left lower quadrant of the abdomen. Her leukocyte value was 16.4x106/L, neutrophile was 92%, and C-reactive protein was 86 mg/L (normal:0-5 mg/L). The result of complete urinalysis was normal. No finding was detected in the PA chest radiography and direct abdominal radiography in standing position. Abdominal ultrasonography revealed increased inflammatory echo and minimal free

Figure 1. a-c. Preoperative trocar locations (a); placements of trocars (b); postoperative view after suturing the skin (c)

Figure 2. a, b. The liver-gallbladder localized in the left upper quadrant of the abdomen (a); inflamed appendix located in the left lower quadrant of the abdomen (b)

fluid in the left lower quadrant. The patient was performed iv contrast-enhanced computed tomography (CT) of the abdomen and its result was reported as a 9 mm, blindly ending intestinal loop with inflamed surrounding in the left lower quadrant of the abdomen and acute appendicitis. Laparoscopic appendectomy was planned for the patient. Following bladder catheterization under general anesthesia, a 10 mm trocar was inserted from the umbilicus and another 10 mm trocar was inserted from the suprapubic region. Then a 5 mm trocar was placed at the point where the midline of these two ports intersected with the right midclavicular line. In the exploration, the appendix located in the left lower quadrant of the cecum abdomen was edematous and it was covered with fibrin. Appendicular artery was ligated and cut. The radix was ligated twice, and the appendix was closed above that and cut and removed by using an endo-bag. The patient was given oral food at the postoperative 4th hour and he was discharged at the postoperative 14th hour with no complaint.

Conclusion: Although rare, acute appendicitis can be encountered in a patient consulting with left lower quadrant pain. Laparoscopic appendectomy can safely be performed in patients with situs inversus totalis by an experienced team.

Keywords: Acute appendicitis, laparoscopic appendectomy, situs inversus totalis

PS-54

3rd primary lung and larynx tumor case: Colon tumor case with ileus

Enver İlhan, Orhan Üreyen, Demet Alay, Emrah Dadalı, Hüseyin Fenercioğlu

Department of General Surgery, Health Sciences University İzmir Bozyaka Training and Research Hospital, İzmir, Turkey

Introduction: Multiple primary tumors are the tumors that develop simultaneously or at different times in the same patient. They are examined in two groups as synchronous or metachoronous ones. The second tumor is called synchronous if it is detected at the time of the diagnosis of the first disease or within the following 6 months and called metachoronous if it is detected after the 6th month. The frequency of multiple primary malignant neoplasia is between 0.7% and 11.7%. In patients with extrapulmonary malignancy, the rate of second primary lung cancer is between 1.6% and 3%. Its prognosis is worse than that in those with single primary tumor. The risk of the synchronous or metachoronous tumor development is increased in the cases with primary tumor compared to healthy individuals.

Case: The physical examination of a 62-year-old male patient who was admitted to the emergency unit for abdominal pain revealed abdominal distension, diffuse tenderness, and muscular defense. It was learned from his medical history that he had undergone chemotherapy and radiotherapy due to lung and larynx cancer 2 years ago. Diffuse air-fluid levels were found in the direct abdominal radiography in standing position. Abdominal tomography demonstrated free fluid around the liver, between the bowel loops, and in the pelvis. Wall thickness that narrowed the lumen and did not allow passage was observed in the 6 cm segment of the distal descending colon. Moreover, free air density was seen in the abdomen. The patient was operated with midline incision based on these findings. There was an approximately 5 cm mass in the descending colon. Its proximal region was severely dilated. With these findings, the patient was performed left hemicholectomy and Hartmann cholostomy. In the histopathological examination of the surgical material, moderately differentiated adenocarcinoma was detected. The case was evaluated as T3N0 with the presence of 17 reactive lymph nodes. On the postoperative 4th day, respiratory arrest developed in the patient and he was exitus.

Conclusion: In conclusion, the routine follow-ups of cancer cases should be performed considering the risk for the development of a second or third malignancy.

Keywords: Emergency surgery, appendicitis, situs inversus

PS-55

Management of acute appendicitis in isolated colon inversus

Orhan Üreyen, Enver İlhan, Demet Alay, Emrah Dadalı, Hüseyin Fenercioğlu

Department of General Surgery, Health Sciences University İzmir Bozyaka Training and Research Hospital, İzmir, Turkey

Introduction: Situs inversus or isolated colon malrotation is rarely seen. Situs inversus can be total or partial. Its incidence is 1/6000-1/35000. It is an autosomal recessively inherited disorder and the patients are generally asymptomatic. The rate of acute appendicitis in patients with situs inversus is between 0.016% and 0.024%, not more than its frequency in the general population. However, the diagnosis of acute appendicitis can be difficult because of positional variations in these patients.

Case: A 64-year-old female patient was admitted to the emergency unit due to the complaints of abdominal pain, nausea, and loss of appetite lasting for 2-3 days. In the physical examination, tenderness and rebound were observed in the left lower quadrant.

Figure 1. The cecum and appendix localized in the left lower quadrant in the abdominal tomography

In the abdominal tomography, the cecum was located in the left side of the midline and it appeared dilated. An appendix tissue associated with the cecum, ending as blind sac, having out-to-out diameter reaching 13 mm in the axial plane, and having wall thickness reaching 3-4 mm was observed. Mesenteric adipose tissue around the tissue was edematous and there was free fluid between the bowel loops and in the Douglas pouch. Diagnostic laparoscopy was performed based on these findings. It was observed that the cecum was located in the left lower quadrant and the descending colon was in the left lower quadrant. Because the appendix was perforated from its root and there was purulent matter around it, appendectomy was completed with McBurney incision that was performed from the left side. Histopathological result of appendectomy was consistent with perforated appendicitis. The patient without any postoperative problem was discharged on the 5th day.

Conclusion: Although diverticulitis is known to be the most frequent cause of left lower quadrant pains, rare entities such as situs inversus and isolated colon malrotation should be kept in mind in the presence of different clinical symptoms and acute appendicitis, which is one of the most common emergency surgery pathologies, should be suspected.

Keywords: Ileus, colon cancer, metachoronous

PS-56

Retroperitoneal giant liposarcoma: Case presentation

Orhan Üreyen[1], Enver İlhan[1], Demet Alay[1], Hüseyin Fenercioğlu[1], Olçun Ümit Ünal[2]

[1]Department of General Surgery, Health Sciences University İzmir Bozyaka Training and Research Hospital, İzmir, Turkey
[2]Department of Medical Oncology, Health Sciences University İzmir Bozyaka Training and Research Hospital, İzmir, Turkey

Introduction: Retroperitoneal liposarcomas are rarely encountered tumors. Soft tissue sarcomas constitute 1% of all solid malignancies in adults. Of them, 10-20% has retroperitoneal localization and approximately 15% are liposarcomas. On the other hand, retroperitoneal tumors constitute 0.16-0.2% of all tumors. When they become symptomatic, they reach large sizes.

Case: In the physical examination of a 46-year-old female patient that was referred to our clinic by an external center due to the diagnosis of intraabdominal mass diagnosis, a giant mass was palpated in the abdomen. It was learned from her medical history that she had visited physician for abdominal pain for the last two years, but no pathology had been found. Moreover, she was a tha-

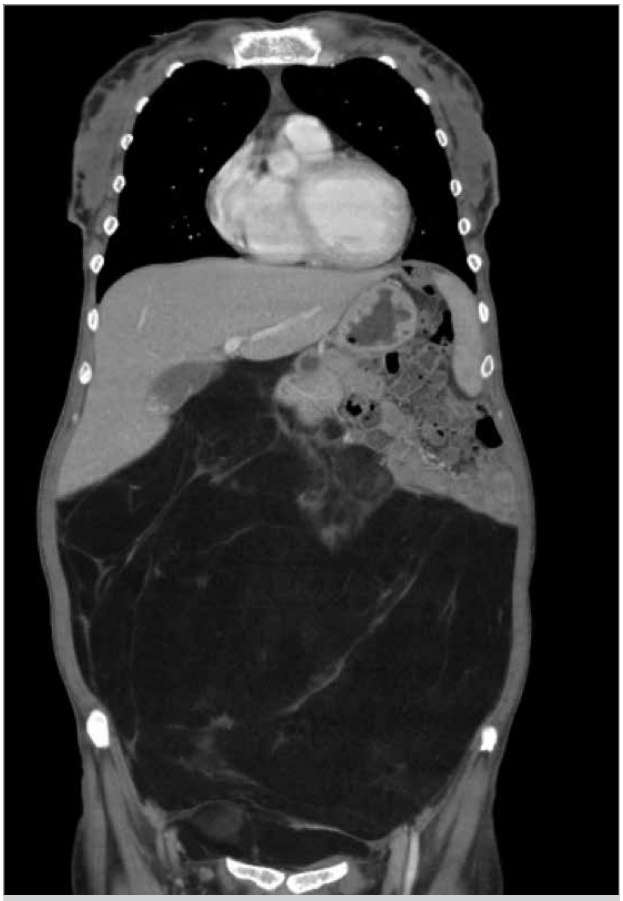

Figure 1. View of abdominal tomography

Figure 2. Intraoperative view of mass

lassemia carrier. In the abdominal tomography and ultrasonography, an intraabdominal gross mass lesion that was located intraperitoneally, filled the left side of the midline beginning from the caudal part of the liver, and included fat content extending to the pelvis and also septations in itself was observed. The primary diagnosis was considered to be malignant liposarcomas. The patient was operated with midline incision. In the abdomen, a 40x30 cm semisolid lesion that was thought to originate from the retroperitoneum in the intraperitoneal region, pushed the cecum, ascending colon, and hepatic flexura to the lateral part, pushed the right kidney to the midline, left kidney to the superior part, and the bladder to the inferior part, and made compression on the right ovarium and ovarian vessels was observed. The mass was separated from the intraabdominal structures and totally excised. In the macroscopic examination of the excised material, its size was measured as 38x28x10 cm and weight as 13 kg. In histopathological examination, the mass was reported as well-differentiated liposarcoma. The patient was evaluated by the oncology council and given three sessions of ifosfamide+ doxorubicin regime. After one year, the patient had retroperitoneal recurrence and she was additionally given four sessions of trabectedin therapy. Her lesions are stable for the last 5 months. The patient has had no systemic metastasis for about 20 months.

Conclusion: Radical surgery is needed in the treatment of retroperitoneal sarcomas. The most important cause of local recurrences is inability to perform mass excision with intact surgical margins. For making this possible, it should be detected early when it is small in size.

Keywords: Surgical treatment, liposarcoma, retroperitoneum

PS-57

The role of surgery in corrosive substance intake

Mahmut Kaan Demircioğlu, Emre Bozkurt, Esin Kabul Gürbulak, Bülent Çitgez, Muharrem Battal, Mehmet Mihmanlı

Department of General Surgery, Health Sciences University Şişli Hamidiye Etfal Training and Research Hospital, İstanbul, Turkey

Introduction: Suicidal intake of corrosive substance is a clinical condition that is frequently encountered in emergency units at present. The management, follow-up, and the decision of surgical intervention is multifactorial for these patients and the subject will be discussed on a case in our hospital in this study. The aim of this study is to evaluate the follow-up of these patients, timing of surgical intervention, and the choices of surgical interventions and to contribute to the literature.

Figure 1. Stomach with necrosis

Figure 2. Esophagus with necrosis

Figure 3. Entire specimen

Case: A 29-year-old male patient without a known psychiatric disorder was taken to the emergency unit by 112 service because he drank a glass of nitric acid for committing suicide. In his first examination in the emergency unit, he was drowsy and he had superficial respiration. The Glaskow coma score was 8. Because his general condition was poor and he had deep acidosis, he was intubated and followed in the intensive care unit. Piperacillin-Tazobactam (Tazocin™; Pfizer) 4*3.5 gr was initiated. Hemodiafiltration was planned for the patient whose pH value was 7.2, K+ was 6.14 mmol/L, and WBC value was 31.56x106/L. On the first day of follow up, pH value was 7.45, K+ was 3.5 mmol/L, and WBC was 17.7x106/L and his clinical condition was stable. He was performed gastroscopy. Ulcerated areas were found in the larynx and esophageal entry was fragile and severely edematous. The esophagus was all-around ulcerated. The procedure could not be completed because of edema and by giving steroid to the patient, it was planned to repeat the procedure. Prednisone 1 mg/kg/day was added to the treatment of the patient and gastroscopy was re-performed after two days. The mucosa at the level of upper sphincter in the esophagus and the pharynx was edematous and erythematous. Just in the distal part of the sphincter, mucosa was near normal in a 4-5 cm region. The middle-distal esophagus and the entire gastric mucosa were necrotized (Zargar classification, Grade 3b). The decision of emergency laparotomy was taken. The patient was performed subtotal esophagectomy, cervical distal esophagostomy, and total gastrectomy with transhiatal approach under general anesthesia in emergency conditions and a feeding jejunostomy was opened. As treatment planning, the patient was applied colon interposition under elective conditions. He was begun to be fed from the jejunostomy on the postoperative 1st day. The abdominal drains of the patient, who had serous fluids from the abdominal drains, were removed on the postoperative 5th day. Because he had no pathological feature requiring intubation in his otorhinolaryngologic examination and his general health state was good, he was extubated and his follow up was continued in the clinic.

Conclusion: In patients with a history of corrosive substance intake, an appropriate and on-time surgical intervention with a multidisciplinary approach is life saving.

Keywords: Corrosive substance, esophagus, stomach, necrosis, gastroscopy

PS-58

Early endoscopic intervention for swallowing a foreign body

Zeynep Gül Demircioğlu, Mahmut Kaan Demircioğlu, Onur Güven, Hakan Mustafa Köksal, Mehmet Köstek, Mehmet Mihmanlı

Department of General Surgery, Health Sciences University Şişli Hamidiye Etfal Training and Research Hospital, İstanbul, Turkey

Introduction: Swallowing a foreign body is one cause of admissions to the emergency unit and it sometimes requires close clinical follow-up, endoscopic intervention, or surgical intervention. These choices will be discussed over a patient in our clinic. The aim of this study is to investigate the effective results of endoscopic intervention both in diagnosis and in treatment in early period after swallowing foreign bodies.

Case: A 27-year-old male patient was admitted to the emergency unit after swallowing two pins. The patient, who had a history of previous anti-reflux surgery, had no complaints of abdominal pain, nausea, and vomiting. His physical examination revealed no acute abdomen findings and he was applied postero-anterior chest radiography and direct abdominal radiography in standing position. Because two pins were viewed in cross position at the level of the antrum of the stomach in the direct abdominal radiography, it was decided to perform emergency gastroscopy. The oropharynx was passed and the esophagus was entered with a gastroscope under sedation. The mucosa of the esophagus was found to be normal. The cardia was passed and the stomach was entered. One of the pins was found in the stomach. It was removed from the stomach with the help of a foreign body forceps. When the stomach was examined with gastroscope for the second time, it was advanced towards the duodenum because the other pin could not be viewed. The second pin was found in the 2nd part of the duodenum. It was removed with foreign body forceps. While removing the pin, it fell into the mouth cavity and it was taken from there with forceps with the help of laryngoscope. After the procedure, the patient was clinically followed up and chest radiography and direct abdominal radiography in standing position were performed for control examination. Because he did not define abdominal pain during follow-up and control radiographies revealed no pathological finding, he was discharged on the same day.

Figure 1. Direct abdominal radiography in standing position

Conclusion: If foreign body is at the level that can be reached with an endoscope, particularly in cases of swallowing sharp foreign bodies, early endoscopic intervention should be kept in mind in clinical practice with regard to diagnosis and treatment.

Keywords: Foreign body, endoscopy, stomach, duodenum

Figure 2. Foreign body in the antrum of the stomach

Figure 3. Foreign body forceps

PS-59

The use of vacuum assisted closure (VAC) as bridging before surgical treatment in patients with complicated open abdominal wound presenting with high-output enterocutaneous fistula

Mustafa Fevzi Celayir, Hakan Mustafa Köksal, Mert Tanal, Taner Ünlü, Evren Besler, Kinyas Kartal, Bülent Çitgez, Mehmet Uludağ, Mehmet Mihmanlı

Department of General Surgery, Health Sciences University Şişli Hamidiye Etfal Training and Research Hospital, İstanbul, Turkey

Introduction: The VAC system has become an effective alternative for the treatment and management of complicated open abdominal wounds and enterocutaneous fistulae. In this study, we share our experience in the use of VAC treatment and surgical treatment together in a patient developing enterocutaneous fistula in early postoperative period. The use of VAC system in the treatment of complicated wounds is safe and effective. The VAC treatment should be considered as a primary care in the coexistence of abdominal incision and fistula.

Case: A 38-year-old male patient, who was admitted to the emergency unit due to abdominal pain and inability to defecate, was hospitalized for the diagnosis of subileus. His CT revealed thickening in the descending colon. In the colonoscopy, multiple polyps beginning from 4 cm of the rectum and involving the whole colon were detected. Familial adenomatous polyposis was considered. There was an ulcerovegetan tumor allowing the passage of endoscope in the sigmoid. Biopsies were taken. The result of pathology was reported as adenocarcinoma. The patient was taken into operation on the 3rd day of hospitalization. While receiving written informed consent of the patient before surgery, he specified that he did not want pouch anastomosis. Total proctocholectomy +end ileostomy was performed in the operation. The patient was operated on the same day. There was an incision associated with abdominal closure material in the proximal jejunum. The abdomen could not be entered because of adhesions. The mouth of fistula was applied ostomy bag independently of VAC and the open abdomen was applied VAC. With a variance of 2-3 days, open wound was reduced at the rate of 50% without contaminating the abdomen with the open wound and fistula content by using a 40-day treatment protocol. However, it was decided to perform surgery because fistula output was fixed as 650 cc a day and ostomy as 200 cc VAC. In the operation, intraabdominal adhesion was quite low and fistula content did not contaminate the abdomen. Fistulized jejunum loop was resected and anastomosis was performed with stapler. No complication developed in the early postoperative period.

Conclusion: VAC system is a widely accepted device in the treatment of chronic and acute open wounds. The use of VAC for bridging is effective and useful for providing abdominal sterilization and accelerating wound healing during the period until surgical treatment of high-output enterecutaneous fistulae.

Figure 1. The first day of VAC application

Figure 2. Preoperative period after 40-day VAC application

Keywords: Wound separation, open abdomen, VAC treatment, enterocutaneous fistula

PS-60

A rare cause of intestinal obstruction: Abdominal cocoon syndrome

İhsan Burak Karakaya, Abit Yaman, Hüseyin Kılavuz, Ali Kaan Şanal, Faruk Karateke

Department of General Surgery, Health Sciences University, Adana City Hospital, Adana, Turkey

Abdominal cocoon syndrome, which is also called sclerosing encapsulating peritonitis, is a disease that mostly occurs because the small intestine is covered with a fibrocollagenose membrane and it is characterized by ileus symptoms. A 42-year-old male patient was admitted to our clinic due to the complaints of abdominal pain, nausea-vomiting, and inability to defecate lasting for 3 days. It was learned from his history that he had similar complaints for several times in the last 2 years. Because he did not respond to

Figure 1. Fibrocollagenose membrane covering the small intestine

Figure 2. Abdominal cocoon syndrome

medical treatment, it was decided to perform laparotomy. In laparotomy, a fibrous membrane surrounding small intestine loops was observed. Abdominal cocoon syndrome was firstly defined as "peritonitis chronica fibrosa incapsulata" by Owtschinnikow in 1907. It is difficult to diagnose this disease preoperatively. Its diagnosis is generally established intraoperatively.

Keywords: Abdominal, cocoon, syndrome, ileus

PS-61

Oncological safety of axillary lymphatic mapping in the patients having breast cancer

Uğur Deveci[1], Kağan Gökçe[2], Mahmut Sertan Kapaklı[1], Sina Mochtare[1], Manuk Norayk Manukyan[1], Abut Kebudi[3]

[1]Department of General Surgery, Maltepe University Socool of Medicine, İstanbul, Turkey

[2]Department of General Surgery, Haydarpaşa Training and Research Hospital, İstanbul, Turkey

[3]Department of General Surgery, Okan University School of Medicine, İstanbul, Turkey

Figure 1. Blue stain injection

Axillary lymph node metastasis is still the most important prognostic factor in breast cancer. Arm lymphedema that can develop after axillary curage in the patients with breast cancer having axillary lymph node metastasis cause severe morbidity. Axillary Lymphatic Mapping (ALM) technique was defined for decreasing lymphedema development associated with axillary dissection. The purpose in this technique is to detect and protect lymphatic gland of the arm. A few studies have revealed some evidence on that ALM technique reduces arm lymphedema. However, none of these studies have examined the oncological safety of this method. The purpose of this study is to detect lymphatic glands of the arm by using ALM technique and to evaluate oncological safety of ALM by examining metastatic involvement rates in the primary breast cancer patients

Figure 2. Arm after injection

Figure 3. Stained lymph node in axilla

who were detected to have axillary metastasis preoperatively and who were planned to be performed axillary level I and II dissection. The patients for whom surgical intervention was planned due to breast tumor between April 2009 and April 2013 were examined retrospectively and the decision of axillary curage was made for 25 patients.

In all patients, 5 cc isosulfan blue was injected from the corresponding arm just before opening clavipectoral fascia in axillary dissection and then standard level I and II axillary dissection was carried out. Axillary dissection material was removed as a single piece.Stained lymph glands were detected and sent separately to pathological examination. The mean number of lymph nodes in the axillary dissection according to histopathological examination results was 21,64 (11-39)±7.48. Metastasis was detected in lymph glands of the arm in 2 (8%) of 25 patients. These two patients were in stages T2N3M0 and T1N3M0. Blue stained metastatic lymph node was not detected in any of the other patients with axilla involvement. Similarly, blue stained metastatic lymph node was not detected in any of the patients having negative axilla clinically. This prospective study indicates that ALM technique is an oncologically safe method in the patients who have clinically negative axilla andfor whom axillary curage decision was taken. Investigation of survival and local recurrence in patients whose arm lymphatics, which have been detected with axillary lymphatic mapping, are protected should be the study subject of the following study.

Keywords: Breast, cancer, lymphatic mapping

PS-62

Coexistence of pseudoobstruction and pancreatitis in SLE

Ahmet Necati Şanlı[1], Ali İşler[1], Ali Özkömeç[1], Fatih Mehmet Yazar[1], Hasan Göğebakan[2], Gözde Yıldırım Çetin[2]

[1]Department of General Surgery, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey

[2]Department of Rheumatology, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey

Introduction: Systemic lupus erythematosus is a multisystemic autoimmune disease that is more commonly seen in women and that has an unknown etiology. SLE can affect any part of gastrointestinal system from oral mucosa to rectum. Gastrointestinal symptoms occur in more than 50% of the patients. Coexistence of intestinal pseudoobstruction and pancreatitis, which can develop secondary to SLE, is a rarely encountered condition.

Case: Our case is a 29-year-old female patient who has been followed up due to SLE by the Department of Rheumatology for 12 years. The patient who gave birth a year ago has quitted follow up and treatment for the last 7 months. In the computed tomography of the patient who had no history of previous surgery and who consulted to the emergency service because of abdominal pain lasting for 4 days and the complaint of inability to defecate lasting for 2 days, diffuse intraperitoneal free fluid at moderate level in the abdomen, expansion and air fluid levels in the jejunal segments, long segment wall thickening consistent with submucosal edema in distal ileal loops, and fluid target image in the wall were detected It was evaluated as the involvement of the primary disease (SLE). Considering the recommendations of the Department of Rheumatology, 400 mg/kg IVIG and 1mg/kg prednol therapy was administered. Oral regimen was initiated for the patient who started defecation on the 4th day of the treatment. Pancreatitis was considered to have occurred in the patient because biochemistry analysis of the patient, which was performed because her abdominal pain repeated on the 5th day, revealed elevated amylase and lipase values and her temperature increased to 40°C. An increase was observed in the amylase and lipase levels of the patient who was followed-up with fluid and antibiotic therapy instead of oral regimen. It was considered that pancreatitis was associated with SLE activation. The patient whose complaints regressed in her follow-ups and laboratory values turned to the normal level with medical treatment was discharged from the hospital with the recommendations of the Outpatient Clinic of Rheumatology in the control examination.

Conclusion: It should be known that ileus associated with pseudoobstruction developing due to the involvement of gastrointestinal system can develop in the patients diagnosed with SLE. Treatment approach in the patients with SLE diagnosis is

primarily medical and early surgery should be avoided. It should be taken into consideration that complications and additional pathologies can develop in treatment and follow-ups. The patients with SLE should be treated with multidisciplinary approach.

Keywords: Systemic lupus erythematosus, pseudoobstruction, pancreatitis

PS-63

Comparison of Ferguson and Milligan-Morgan hemorrhoidectomy techniques with direct current electrotherapy in the treatment of hemorrhoidal disease

Mehmet Kadir Bartın[1], Muzaffer Önder Öner[1], Müge Bartın[2]

[1]Department of General Surgery, Health Sciences University Van Training and Research Hospital, Van, Turkey
[2]Department of Internal Diseases, Health Sciences University Van Training and Research Hospital, Van, Turkey

Objective: In this study, it was aimed to investigate the effectiveness of direct current electrotherapy or galvanization technique in patients with 2nd and 3rd grade hemorrhoidal disease displaying clinical symptoms.

Methods: The study included 100 patients with 3rd and 4th grade hemorrhoidal disease, who were admitted to our hospital between January 2014 and June 2017. Hemorrhoidectomy was performed with Ferguson technique for one of every four patients (Group 1) and with Milligan-Morgan technique for another one patient (Group 2). Other two patients were applied electrotherapy (Group 3). Galvanization or direct current electrotherapy was performed by using ULTROİDKİT™ (Microvasive Inc. Watertown MA). The patients were evaluated in terms of age, gender, duration of procedure, postoperative pain, duration of hospitalization, and recurrence. The data were analyzed by using SPSS (Statistical Package for Social Science) 11,5 software.

Results: The study included 72 (72%) female 28 (28%) male patients. The distribution of the patients according to age, gender, and stage of disease is shown in Table 1. No statistically significant difference was found among the groups in terms of age, gender, and stage of disease (p>0.05). The relationship between durations of operation and surgical techniques is given in Table 2. The mean duration of the procedure was found to be 40 minutes in Ferguson technique, 36 minutes in Milligan-Morgan technique, and 26 minutes in galvanization technique. The difference between Group 3 and other two groups was found to be statistically significant (p<0.05). The durations of hospitalization is presented in Table 2. The patients were discharged approximately 2,3 days after the procedure in Group 1; 2.5 days after the procedure in Group 2; and 1,4 days after the procedure in Group 3. The difference between Group 3 and other groups was also statistically significant (p<0.05). Rectoscopy was performed for all patients in the postoperative 3rd month. The patients having 2nd and 3rd grade hemorrhoid according to the result of endoscopy and physical examination were accepted to have recurrence. As seen in Table 2, the rate of recurrence was 4% in direct current electrotherapy but 16% in Milligan-Morgan technique and the difference was evaluated to be statistically significant (p<0.05). In the evaluation of postoperative pain on the operation day, the score was between 1 and 4 in 48% of Group 3, 88% of Group 2, and 90% of Group 1 according to VAS. In the pain group with scores of 4-6 according to VAS, the rates were 8% in Group 3, 40% in Group 2, and 45% in Group 1. The distribution of patients having intolerable pain with score 6-10 was 4,2% in Group 3, 12% in Group 2, and 15% in Group 1. In terms of pain scoring, all results were found to be statistically significant in favor of direct current electrotherapy (p<0.05).

Conclusion: It is seen that direct current electrocoagulation, which is a technique successfully used in the treatment of internal hemorrhoids, resolves many of complications and drawbacks that occur in other treatment modalities.

Keywords: Galvanization, ferguson, milligan-morgan

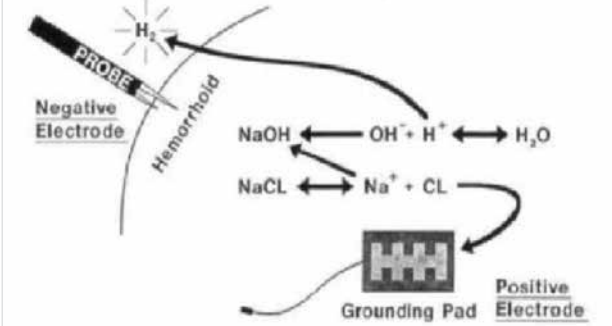

Figure 1. Galvanization effect mechanism

Table 1. Distribution of patients according to age, gender, and stage of disease

Groups	Female	Male	Mean age	2nd grade hemorrhoid	3rd grade hemorrhoid
Group 1 n: 25	15	10	42.6	11	14
Group 2 n: 25	17	8	45.5	16	9
Group 3 n: 50	38	12	43.1	16	34

Table 2. The effect of surgical technique on duration of operation, duration of hospitalizaiton, and recurrence

Groups	Duration of operation	Duration of hospitalization	Recurrence
Group 1 n:25	39.2±5.52 min	2.2±0.09 days	16% (4 patients)
Group 2 n:25	40.2±6.53 min	2.3±0.69 days	16% (4 patients)
Group 3 n:50	26.3±6.09 min	1.4±0.5 days	8% (4 patients)

Table 3. Distribution of patients according to postoperative pain

Pain score	Group 1 n:25	Group 2 n:25	Group 3 n:50
VAS 1-4	22	24	12
VAS 4-6	10	9	2
VAS 6-10	3	3	1

PS-64

A rare cause of ileus: Petersen hernia

Onur Olgaç Karagülle[1], Erkan Yavuz[2], Aytaç Biricik[2], Osman Bilgin Gülçiçek[2], Fatih Çelebi[2]

[1]Ergani State Hospital, Diyarbakır, Türkiye

[2]Health Sciences University Bağcılar Training and Research Hospital, İstanbul, Turkey

Petersen hernia is a specific type of internal hernia that occurs due to the migration of the small intestine into the space between gastrojejunostomy limb and transverse mesocolon. Although it is primarily reported to occur after subtotal gastrectomy procedures performed for peptic ulcer or gastric cancer surgery, its frequency after Roux-en-Y gastric bypass (RYGB) and biliopancreatic diversion surgeries has increased. In this case report, it was aimed to present a patient with Petersen hernia that developed 20 years after distal gastrectomy RYGB anastomosis performed for peptic ulcer. The 59-year-old patient who intermittently had abdominal pain occurring as cramps for 2 days was admitted to the emergency unit for the complaints of nausea and dark, black vomiting. The patient had tachycardia, but other vital signs were normal. It was learned from the anamnesis that the patient had a history of smoking one pack of cigarette a day for 40 years and hypertension and because the patienthad been operated for peptic ulcer 26 years ago, the patient had lost weight by 22 kilograms and the body mass index decreased from 29,8 to 22,5. In the abdominal examination, a median incision scar was observed above the umbilicus and there was a sensitivity that began from the epigastric region and radiated to the right upper quadrant of the abdomen. The patient was taken into operation with the pre-diagnosis of internal herniation in the tomography. It was found in the exploration that the patient had been operated distal gastrectomy and antecolic RYGB. When the exploration was continued, it was observed that the small intestine was herniated in the space between the roux limb of Roux en-y anastomosis and transverse mesocolon and it turned around itself for about 90 degree. The herniated small intestine and meso were edematous. This loop was reduced back and its feeding was observed. Because it had viability, resection was not performed and the space between the roux limb and mesocolon (Petersen space) was closed with non-absorbable suturing material. In the same session, a defect was found in the mesentery in the neighboring jejunojejunostomy anastomosis line and this area was also closed with non-absorbable suture. Although ulcer surgery has not been performed any more in recent years, the number of bariatric surgery has increased across the world and internal herniation occurring after RYGB surgery has become to gain importance in literature. Closure of potential defects with various techniques in laparoscopic or open surgery will decrease the rate of postoperative complications.

Keywords: Petersen hernia, internal hernia, ileus

Figure 1. Herniated bowel loops between antecolically performed roux limb and transverse mesocolon

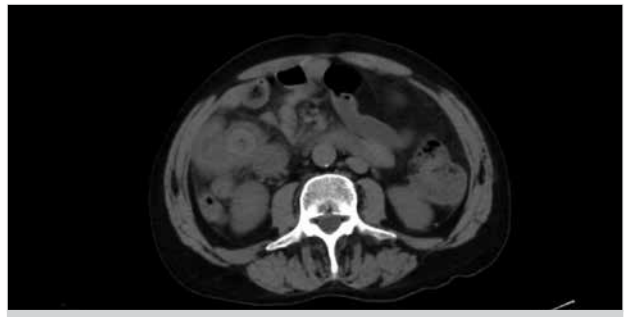

Figure 2. In the case undergoing Roux-Y reconstruction after gastrectomy, herniation of ileal loops from the space in the dorsal of roux limb meso in non-contrast abdominal CT

PS-65

Successful endovascular treatment of acute bleeding from advanced gastric cancer with gastroduodenal artery embolization

Rahman Şenocak, Oğuz Hançerlioğulları, Ali Kağan Coşkun

Department of General Surgery, Health Sciences University Gülhane Training and Research Hospital, Ankara, Turkey

Objective: Unresectable gastric cancer has certain clinical features, and bleeding is usually silent and chronic. Evidence of bleeding before or at presentation was shown in more than 10% of unresectable gastric cancers. As a first line treatment, therapeutic endoscopy has been used for gastric cancer bleeding; however, endoscopic bleeding control is difficult when bleeding is massive or diffuse. Interventional radiology can be an effective alternative for patients with recurring or persistent hemorrhage after endoscopy.

Methods: While a 62-year-old male patient with the ongoing complaints of severe back pain and fatigue approximately for 3 months were investigated by different clinics, gastric adenocarcinoma including focal mucinous components were identified at an upper

Figure 1.

gastrointestinal endoscopy. Locally advanced gastric cancer was diagnosed (cT3N2M0) at computed tomography scanning (Figure 1a) and neoadjuvant chemotherapy was initiated. Later, he was hospitalized due to upper gastrointestinal bleeding, with hemodynamic instability and severe anemia was seen on lab work (hemoglobin: 6.4 g/dL, hematocrit: 22.5). After the patient was replaced with 11 units of red packed blood in 15 days, he could not undergo endoscopy due to being in poor condition. Therefore, we decided to perform angiographic embolization.

Results: The right femoral artery was punctured. After successful catheterization, tumoral blush within right gastric artery (Figure 1b) and distal parts of gastroduedonal artery (Figure 1c) were seen. In contrast angiogram, actively bleeding areas were embolized (Figure 1d). The final angiogram performed after embolization showed no extravasation of contrast medium. After the procedure, there were no complications and hemoglobin levels were stable in the follow up. The patient was initiated chemotherapy again.

Conclusion: Transcatheter arterial embolization can be a safe and effective technique to control bleeding in patients with bleeding gastric cancer that is either unresectable or involves high surgical risk. The control of active bleeding can improve the clinical course and immediate survival, although the prognosis is determined by tumor stage and progression.

Keywords: Unresectable gastric cancer, angiographic embolization, upper gastrointestinal bleeding

PS-66

Can PET/CT replace sentinel lymph node biopsy for axillary evaluation in breast cancer?

Taner Kıvılcım[1], Kemal Ünal[2], Murat Ferhat Ferhatoğlu[1], Abdulcabbar Kartal[1], Alara Kurtis[3], Ali İlker Filiz[1], Abut Kebudi[1]

[1]Department of General Surgery, Okan University School of Medicine, İstanbul, Turkey
[2]Department of Nuclear Medicine, Okan University School of Medicine, İstanbul, Turkey
[3]Fourth year student, Okan University School of Medicine, İstanbul, Turkey

Objective: Although axillary sentinel lymph node biopsy (SLNB) is clinically used as a standard method in patients having negative axilla for staging breast cancer, it is currently an interventional procedure having complications. In this study, it was examined whether positron emission tomography/computed tomography (PET/CT) evaluation can be an alternative to SLNB or not.

Methods: The patients who consulted to the Department of Nuclear Medicine in Okan University Hospital between January 2017 and September 2017, who were diagnosed with breast cancer, and for whom preoperative PET/CT evaluation was carried out, were evaluated. The patients, who were operated and for whom axillary pathological study was performed, were included in the study. Axillary evaluation performed by PET/CT and pathologic results of axillary lymph nodes were compared. Statistical analysis was carried out by using Statistical Package for Social Sciences (SPSS) 22.0 software.

Results: A total of 43 female patients within age interval of 25-80 (mean:54) years were evaluated. Four patients, for whom pathological axillary evaluation was not carried out, were excluded. The results of remaining 39 patients were summarized in Table 1. No statistically significant differences were observed in the evaluation made by Mc Nemar test (p=0.62). Moreover, it was detected in the correlation analysis that was performed according to SUV max values that axillary positivity rate increased as SUV max value increased (r value: 0.668, p<0.0001).

Conclusion: PET/CT is a diagnostic method, effectiveness of which has been proven in many solid cancers, and its use for breast cancer staging is increasing day by day. Besides that, there is lymphedema risk of almost 7% in SLNB. The number of studies showing the effectiveness of PET/CT, which is not an invasive technique for axillary evaluation, is gradually increasing. Although specificity of PET/CT was found as 94.7% in the study conducted by Song et al., its sensitivity was found as 48.1%. In our study, it was also seen that false positivity rates were higher in PET/CT evaluation. Nevertheless, it is seen that the test gives more significant results as SUV max value increases. Therefore, we think that the determination of a cut-off value for SUV max value in further studies on larger case series will increase PET/CT sensitivity.

Table 1. Comparison of PET/CT and axillary pathological evaluation results

		Axillary pathological evaluation		
		Positive	**Negative**	**Total**
PET/CT	Positive	22	3	25
	Negative	1	13	14
	Total	23	16	39

Keywords: Breast cancer, PET/CT, sentinel lymph node, staging

PS-67

Successful conservative treatment of type 3 injury (ductal injury) developing after ERCP

Rahman Şenocak[1], Ali Kağan Coşkun[1], Şahin Kaymak[1], Serdar Sakin[2]

[1]Department of General Surgery, Health Sciences University Gülhane Training and Research Hospital, Ankara, Turkey
[2]Department of Gastroenterology, Health Sciences University Gülhane Training and Research Hospital, Ankara, Turkey

Objective: Bile duct injuries are usually secondary to guidewire and instrumentations and could involve extra or intrahepatic ducts. After frequent manipulation and various usage of instruments, stent implantation in such patients may reduce complications and mortality, with enabling possible perforation seal off. Although ERCP considered as a safe procedure, it is associated with complications such as perforation of the bile duct, pancreatic duct and duodenum.

Method: Herein, we present successful conservative treatment of a rare injury (Type 3 ductal) developing after ERCP and highlight the associated mechanism of injury and possible preventive strategies.

Results: A 68-year-old male patient presented to the emergency department with complaints of right upper quadrant pain for 1 week. Laboratory parameters were compatible with cholestasis. Endoscopic ultrasonography revealed dilated bile duct with 10.6 mm in diameter and sludge in biliary tract. Therefore, the patient underwent ERCP. The patient underwent multiple cannulation, pre-cut sphincterotomy, removal of some sludges and stones with the help of basket and balloon, and implantation of a 10 F stent (Figure 1). However, fever and abdominal pain developed. An abdominal CT demonstrated free air in the posterior portion of the common bile duct (Figure 2). Conservative treatment were decided. First control CT scan showed free air regressed, but free collection was developed in subhepatic space. At second CT scan, free air was observed to disappear completely and free collection regressed (Figure 3).

Conclusion: Perforations occur during ERCP at rates ranging from 0.1% to 0.6%. Risk factors for perforation include precut, a dilated common bile duct, duration of procedure, biliary stricture dilation and performance of a sphincterotomy. Bile duct injuries are classified as type III injuries, which are secondary to instrumentation and guidewire. Therefore, after frequent manipulation and instrument usage, stent implantation may reduce complications that can be fatal, with enabling possible perforation seal off.

Keywords: Endoscopic retrograde cholangio-pancreatography, Bile duct injuries, stent implementation

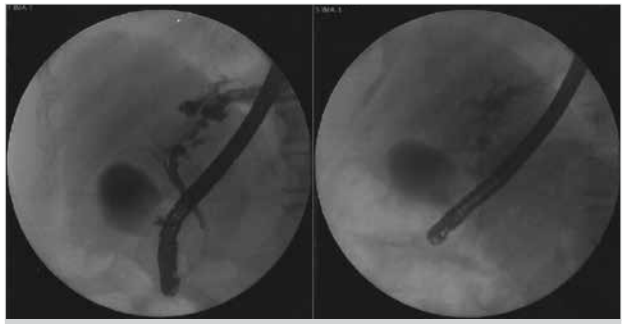

Figure 1.

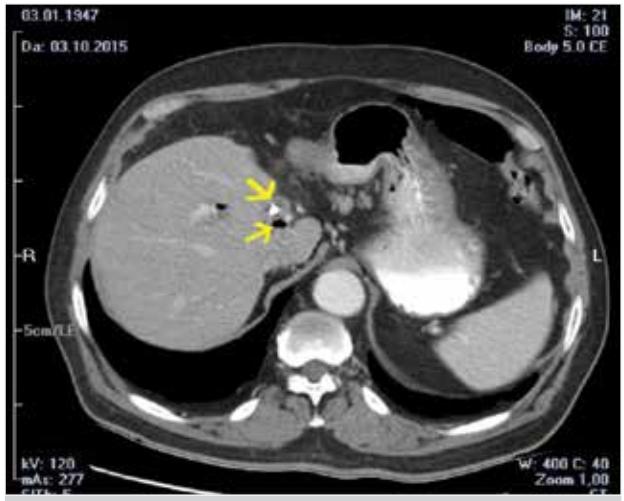

Figure 2.

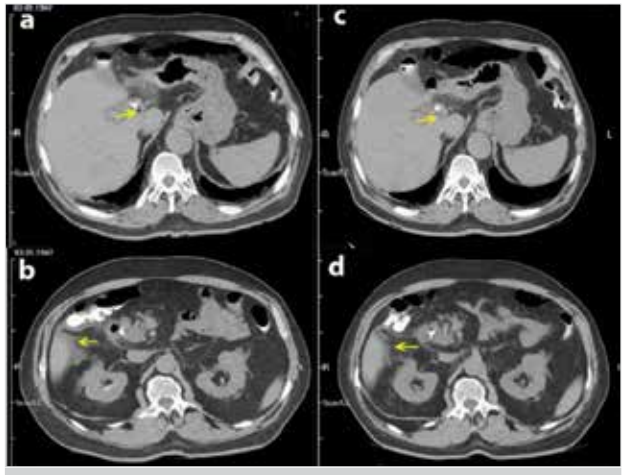

Figure 3.

PS-68

Pectoralis minor reverse valve flap

Bülent Çitgez[1], Kamuran Zeynep Sevim[2], Memet Yazar[2], Sıtkı Gürkan Yetkin[1], Semra Karşıdağ[2], Hamdi Özşahin[1]

[1]Department of General Surgery, Şişli Hamidiye Training and Research Hospital, İstanbul, Turkey
[2]Department of Plastic and Reconstructive Surgery, Şişli Hamidiye Training and Research Hospital, İstanbul, Turkey

Introduction: Treatment of breast cancer has undergone a great change following breast conserving surgeries and skin sparing mastectomies. Repair with simultaneous tissue expander following skin sparing mastectomy in multiple focused breast cancers or patients with the diagnosis of ductal carcinoma in situ is often performed in our clinics. Although we plan tissue expander during surgery since we cannot be sure of negativity of surgical margins, there are cases which we excise segmentally from the pectoralis major muscle. Here we will describe a patient in whom pectoralis minor muscle is transposed as a saving procedure in such a case.

Case: A 38-year-old female patient was taken into operation by planning skin sparing mastectomy due to invasive ductal carcinoma in the left breast. It was observed during the surgery that an almost 5x3 cm mass localized in upper outer quadrant invaded to pectoralis major muscle in an area of 2x1 cm and pectoralis major muscle was removed in that region. Then after ensuring that there was not any tumor in surgical margins with frozen section, insertion of a 400 cc round tissue expander was planned. However, a muscle pouch to cover the tissue expander completely in the upper outer quadrant could not be formed. Therefore, 6x4 cm sized pectoralis minor muscle was elevated in the form of a lid as a flap with superior pedicle and adapted to the region where there was a defect. The patient was discharged from the hospital without any problem on the postoperative 2nd day. The expansion of tissue expander was initiated on the postoperative 20th day and expansion process was completed without any problem.

Conclusion: In simultaneous breast cancer repair with tissue expander, staying of the whole implant in the pouch that is formed of muscle is important. Although the repair with pectoralis minor muscle flap is rarely performed in lumpectomy defects localized in upper lateral quadrant or in pneumonectomy defects, it becomes a quite valuable muscle flap when appropriate. Localization of pectoralis minor in the neighborhood of defect is useful; however, protection of pectoral nerve is important while elevating this flap.

Keywords: Pectoralis minor flap, subcutaneous mastectomy, repair with tissue expander

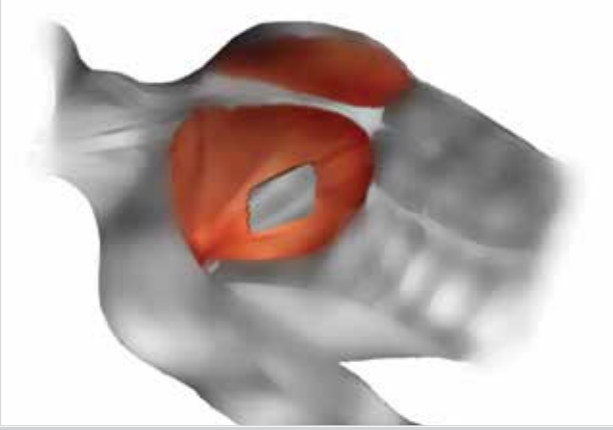

Figure 1.

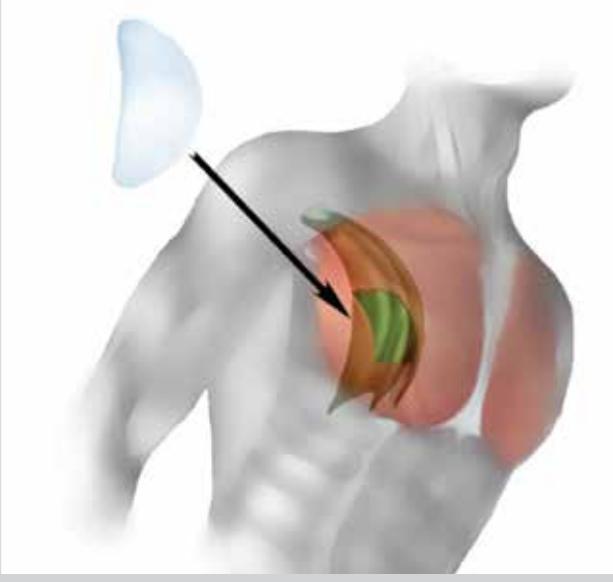

Figure 2.

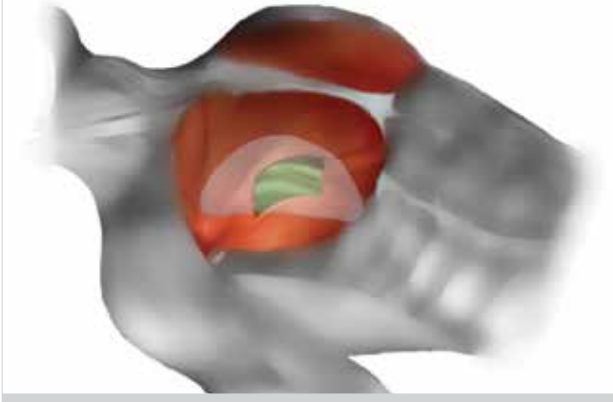

Figure 3.

PS-69

Primary thyroid lymphoma case having respiratory distress and displaying sub-type transformation during treatment

Yeşim Akdeniz[1], Recayi Çapoğlu[1], Ali İmran Küçük[2], Fahri Yılmaz[3], Tuba Hacıbekiroğlu[4], Yasemin Gündüz[5], Belma Koçer[1]

[1]Department of General Surgery, Sakarya University Training and Research Hospital, Sakarya, Turkey
[2]Department of Surgical Oncology, Sakarya University Training and Research Hospital, Sakarya, Turkey
[3]Department of Pathology, Sakarya University Training and Research Hospital, Sakarya, Turkey
[4]Department of Hematology, Sakarya University Training and Research Hospital, Sakarya, Turkey
[5]Department of Radiology, Sakarya University Training and Research Hospital, Sakarya, Turkey

Introduction: Primary thyroid lymphomas are rare tumors that constitute 0,5-5% of all thyroid malignancies and that often develop in association with hashimoto thyroiditis. In our study, we presented a case which presented with a sudden growing mass and shortness of breath, was diagnosed after surgery, recurred in the early phase, and underwent a histological sub-type change.

Case: A 63-year-old female patient consulted to the outpatient clinic with a suddenly growing mass in the neck and respiratory distress. The patient did not have symptoms such as night sweating and weight loss. Soft multinodular thyroid gland filling the whole neck was palpated in the examination (Figure 1). In the thyroid USG, it was observed that the thyroid size was increased and there were multiple nodules, the largest of which was 35 mm. There was no lymph node. FNAB was performed to the patient. The result was interpreted as benign cystic colloidal nodule associated with thyroiditis. In the MR performed in the morning of the operation, a multinodular thyroid gland which did not display invasion and pushed surrounding tissue was observed (Figure 2). She was operated and BTT was applied (Figure 3). The pathological result was reported as extranodal marginal

Figure 1. Preoperative appearance of the patient

Figure 2. Preoperative neck MRI image of the patient; thyroid gland size has increased and measured approximately as 1,5x6x9 cm

Figure 3. Bilateral total thyroidectomy material

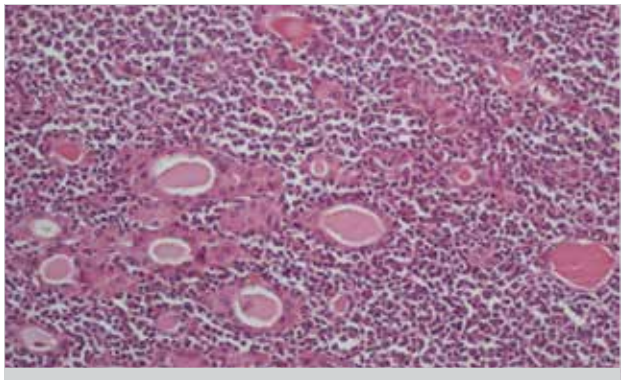

Figure 4. Figure of the first operation pathology preparate; hurtle cells in marginal zone lymphoma (H&E x200)

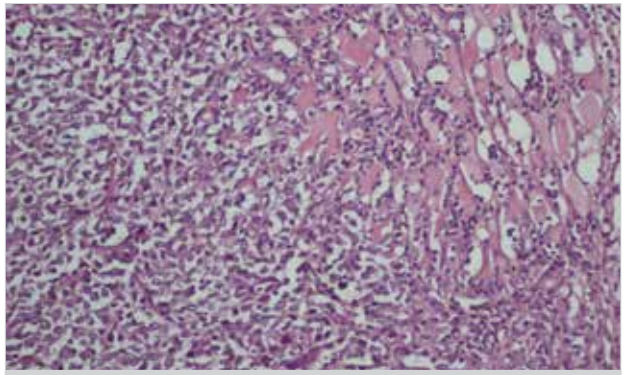

Figure 5. Figure of the second operation pathology preparate; infiltration of large B-cell lymphoma in to skeletal muscles (H&Ex200)

zone B cell lymphoma (Figure 4). The patient was referred to the Department of Hematology. Bone marrow biopsy of the patient was normal. PET was performed for scanning the whole body. As a result of PET performed in the postoperative first month, a mass which deviated trachea to the left, filled the retroclavicular region, and was considered to invade the esophagus was observed. The patient was operated again due to increasing respiratory distress and compression findings during planning of the treatment. A hard-thyroid mass which could not be resected from the surrounding tissues was observed in the operation. Tissue biopsy was taken. The pathological result was reported as diffuse large B-cell lymphoma infiltration. Because there were small atypical lymphocytes and there was infiltration in the surrounding muscle tissue, transformation of extranodal marginal zone lymphoma into large cell lymphoma was considered (Figure 5). Three sessions of CHOP and rituximab chemotherapy were administered to the patient. No recurrence signwas found in the control PET performed in the postoperative 4th month. The patient is still receiving RT.

Conclusion: Although rare, thyroid lymphoma can present with suddenly growing mass and shortness of breath symptoms and its histological types can rarely turn into more aggressive types in a short time.

Keywords: Lymphoma, thyroid, transformation

PS-70

A rare clinical case seen after peptic ulcer perforation: Chylous fistula

Mahmut Kaan Demircioğlu, Zeynep Gül Demircioğlu, Mehmet Taner Ünlü, Bülent Çitgez, Mehmet Uludağ, Mehmet Mihmanlı

Department of General Surgery, Health Sciences University Şişli Hamidiye Etfal Training and Research Hospital, İstanbul, Turkey

Introduction: Chylous fistula developing after peptic ulcer perforation is not seen among usual complications. The purpose of this study is to evaluate follow-up and management of chylous fistula developing after peptic ulcer perforation in the postoperative period on the case basis.

Figure 1. Abdominal CT image

Case: A 70-year-old female patient was admitted to the emergency unit of our hospital due to severe abdominal pain. There were defense and rebound in four quadrants of the abdomen in the physical examination of the patient, who had known diagnoses of diabetes, coronary artery disease, atrial fibrillation, hypertension, and peripheral arterial disease and below-knee amputation in her right leg. The patient had high values of leukocytosis (WBC: 21.9x106/L) and acute phase reactant (crp: 74mg/L) and she was immobilized. Because her IV contrast-enhanced thoracoabdominal CT revealed intraabdominal free air and fluid, she was taken into emergency operation for acute abdomen Figure. After entering into the abdomen with median incision above the umbilicus under general anesthesia, intraabdominal bilious fluid and an approximately 0.5 cm perforation in the prepyloric region were observed. She was applied Graham-Rafi omentoplasty. She was followed up as intubated in the intensive care unit in the postoperative period and her oral regime was stopped for two days. Then, the patient, who tolerated extubation, was transferred to the clinic and oral water was started on the postoperative 4th day. Her drain was serous and chylous fluid came from the drain on the postoperative 4th day following oral food intake. Her drain triglyceride was 710 mg/dL and drian cholesterol was 68 mg/dL. After closing oral nutrition of the patient, central catheter was inserted, and medium chain fat-rich parenteral nutrition and somatostatin were begun. In two days after the closure of oral intake, her drain content turned to be serous, but when her oral intake was opened, chylous fluid was seen again. The patient, who had chylous fluid as soon as her oral intake was opened, removed her own drain on the postoperative 45th day. In the follow ups, she had no fever and no intrabdominal free fluid was observed in the control abdominal ultrasonography. Because she tolerated oral intake, she was discharged one week after removing her drain herself.

Conclusion: The development of chylous fistula after peptic ulcer perforation is a rare clinical Figure and it should be remembered particularly in patients with comorbidities in postoperative period. In the development of chylous fistula, discontinuation of oral intake and initiation of parenteral nutrition and somatostatin should be considered primarily compared to surgical intervention, especially for elderly patients and for patients with comorbid diseases.

Keywords: Peptic ulcer perforation, chylous fistula, omentoplasty

PS-71

Adrenal arteriovenous malformation

Turgay Şimşek[1], Sertaç Ata Güler[1], Nuh Zafer Cantürk[1], Özgür Çakır[2], Yeşim Gürbüz[3]

[1]Department of General Surgery, Kocaeli University School of Medicine, Kocaeli, Turkey

[2]Department of Radiology, Kocaeli University School of Medicine, Kocaeli, Turkey

[3]Department of Pathology, Kocaeli University School of Medicine, Kocaeli, Turkey

Introduction: Arteriovenous malformation (AVM) is the developmental anomaly of vascular structures. The first definition of AVM was made by Emmanuel, Luschka, and Virchow in the mid-nineteenth century. It shows a tendency of expansion in time. While it may remain asymptomatic during lifetime, it can present with different symptoms such as bleeding, pain, and attack according to their localization. They occur generally in the 2nd or 4th decades. It is composed of capillary bed formed by dysplastic dilated arteries and veins and abnormal veins in which arterial blood not containing neural parenchyma flows directly into the draining veins. We presented our patient who was operated with the pre-diagnosis of adrenal adenoma and who had adrenal arteriovenous malformation that had not been defined in the literature before.

Case: A 48-year-old female patient consulted to our department with right side pain. A mass containing solid-cystic regions and millimetric calcifications in her right adrenal gland was observed in her abdominal ultrasonography and Computerized Tomography (CT). In Magnetic Resonance Imaging (MRI), no vascular structures displaying tortuosity and ectasia in the center and periphery of the mass that had no clear signal loss in the chemical shift and no apparent contrast enhancement after IVKM was observed. Laparoscopic surrenalectomy was performed considering the lesion could be atypical adenoma or carcinoma. In pathological immunohistochemical examination, arteriovenous malformation diagnosis was established by observing positive staining with CD34 and masson trichrome in vein wall, with orcein in elastic fibers, and with PAS-AB in fibrin sections. The patient was discharged from the hospital without any problem.

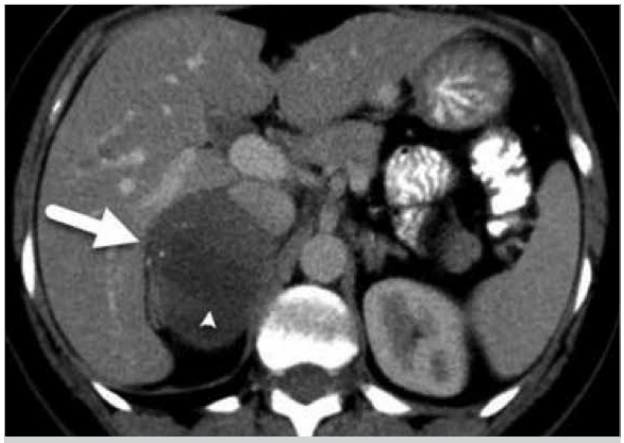

Figure 1. Heterogeneous mass (white arrow) having solid and cystic components (top of arrow) in contrast enhanced axial CT

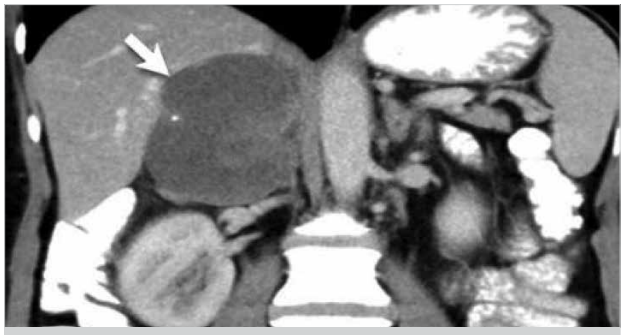

Figure 2. Coronal CT

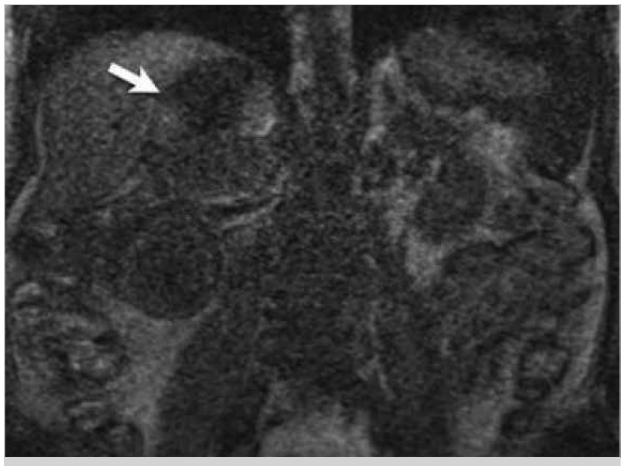

Figure 3. Hypointense lesion in unenhanced coronal T1 weighted image

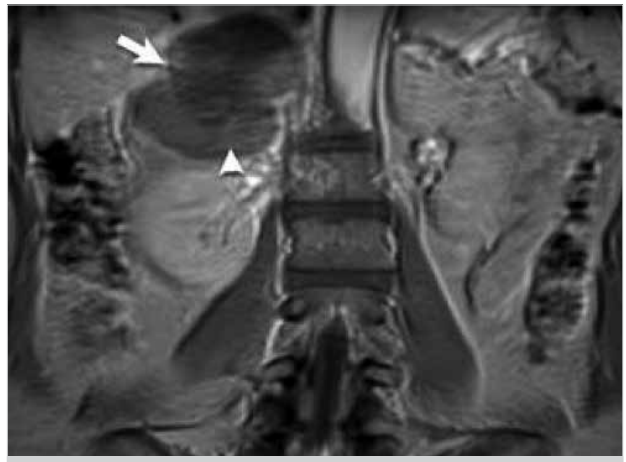

Figure 4. Heterogeneous mass (white arrow) having cystic center which is peripherally enhanced (top of arrow) in enhanced coronal T1 weighted image

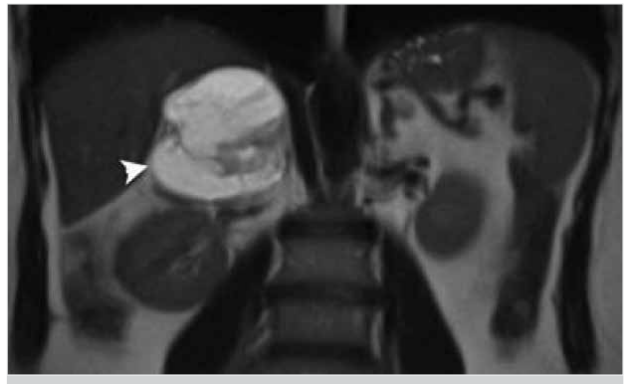

Figure 5. Heterogeneous mass (top of arrow) with cystic hyperintense septal in coronal T2 weighted image

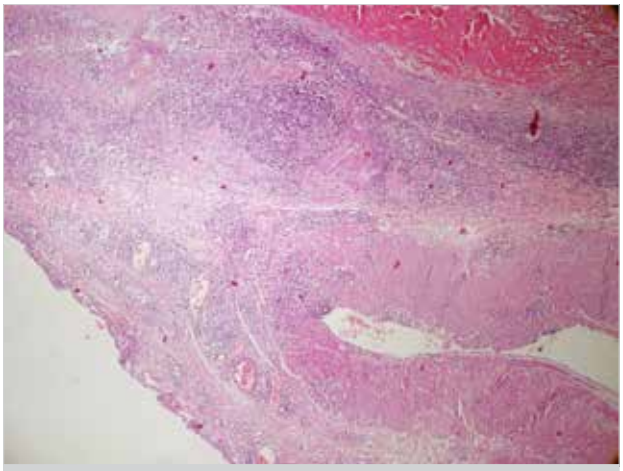

Figure 6. Malformed artery, vein and capillary vein structures without certain regularity (H&E 4x)

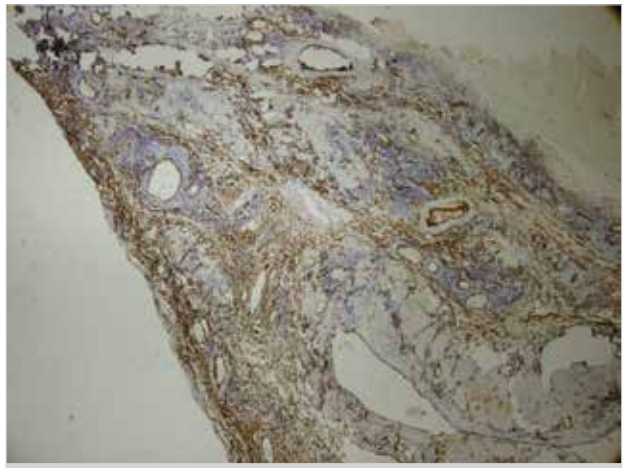

Figure 7. Vascular endothelium displays positive reaction with 4a:cd34 stain (cd34 4x)

Conclusion: Identification of patients having the suspicion of AVM has become easy with the development of noninvasive modern diagnostic imaging techniques such as CT, CT angiography, MRI, and MR angiography in recent years. Although nutrient artery and draining veins can be understood by MR angiography, conventional angiography is necessary for completion of examination and determination of the most suitable treatment. We did not perform these examinations since we considered the existence of preoperative adenoma- carcinoma in our patient. Although it is reported in the literature that AVM can occur in different regions of the body such as brain, spleen, lung, kidneys, spinal cord, iris, and spermatic cord, we did not encounter a patient with adrenal AVM in the literature. Surgical excision plays an important role in the treatment of AVM. Although Prager et al. recommended to perform open adrenalectomy especially for masses larger than 6 cm and having high possibility of malignancy, there is not a standard surgical method for adrenal masses. Laparoscopic adrenalectomy has recently become into prominence as in our case.

Keywords: Arteriovenous malformation, laparoscopic adrenalectomy, adrenal adenoma

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PS-72

Laparoscopic continuous stapling device

Hilal Şenuysal[1], Meltem Elitaş[1], Tuğrul Tansuğ[2]

[1]Department of Mechatronics Engineering, Sabancı University, İstanbul, Turkey

[2]Private Practice, İstanbul, Turkey

Objective: During the use of linear stapling devices which are still utilized in laparoscopic and robotic surgeries, the device is removed out of the abdomen after each stapling and the cartridge of the stapler is changed. This necessity affects the concentration of the surgical team during operation and causes prolongation and troubles in the surgery because of gas leakage out of the abdomen or impaired order of trocars. It was aimed to design and produce a continuous stapling device that would not require the change of the cartridge for surgeon to staple and to cut the organs and tissue in needed length.

Methods: The design of Laparoscopic Continuous Surgical Stapling Device was made by using SolidWorks (2015) software. The design was introduced in the Invention Competition at the 8th Surgical Research Congress and awarded with the grand prize. The application for its patent was done. The protoype is still being studied on.

Results: Laparoscopic continuous stapling device has the feature of continuous stapling owing to the stapler band and gears inside it. The movement of the stapler trigger rotates a wheel on which the stapler band is wrapped. The full stapler band advances in the stapler canal with retaining pins under control and comes to the upper claw of the stapler. The lower claw is opened and then closed after taking the tissue that will be stapled. The staplers placing into the groove in the lower claw with the applied force are closed in the shape of "B". The tissue that has been stapled by surgeon to push the knife pusher is divided into two parts in the way that a triple stapler order occurs in both sides. The lower claw opens, the emptied stapler band moves along the stapler band canal above the upper claw, and wraps around the empty band wheel. With the repeat of these movements, continuous stapling process goes on until the completion of necessary stapling in the tissue or organ.

Conclusion: It is suggested that, with the continuous stapling device's coming into use after necessary testing process, the durations of laparoscopic surgeries will be shortened, and problems related to the change of stapler cartridge will be resolved. Moreover, this new surgical stapling device will allow stapling procedures to be easier also in robotic surgery. Because stapler device on the arm of the robot will not require the change of cartridge, it will be easily used by the surgeon at the console.

Keywords: Surgical stapler, laparoscopic stapling, continuous stapling

PS-73

Treatment of a subdiaphragmatic abscess causing fistula and pneumothorax

Mehmet Sertkaya[1], Muhammet Sayan[2], Arif Emre[3], Ahmet Necati Şanlı[3], Deniz Esin Tekcan Şanlı[4], Ali İşler[3], Ali Özkömeç[3]

[1]Department of General Surgery, Viranşehir State Hospital, Şanlıurfa, Turkey
[2]Department of Thoracic Surgery, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[3]Department of General Surgery, Kahramanmaraş Sütçü İmam University School of Medicine, Kahramanmaraş, Turkey
[4]Department of Radiology, Necip Fazıl City Hospital, Kahramanmaraş, Turkey

Introduction: Subdiaphragmatic abscess is characterized by accumulation of abscess under diaphragm in intra-abdominal cavity and it can develop due to primary and secondary causes. Previous frequent surgeries are seen among the causes. We would like to present a subdiaphragmatic abscess causing pneumothorax and our treatment method.

Case: A 75-year-old male patient was admitted to the emergency unit with right upper quadrant abdominal pain and fever complaints. In his medical history, there were chronic obstructive pulmonary disease (COPD), an operation performed due to hepatic hydatid disease 2 years ago, and another operation due to incisional hernia which developed afterwards. The patient having right subcostal incision scar had minimal tenderness in his right upper quadrant. In his laboratory examinations, leukocy-

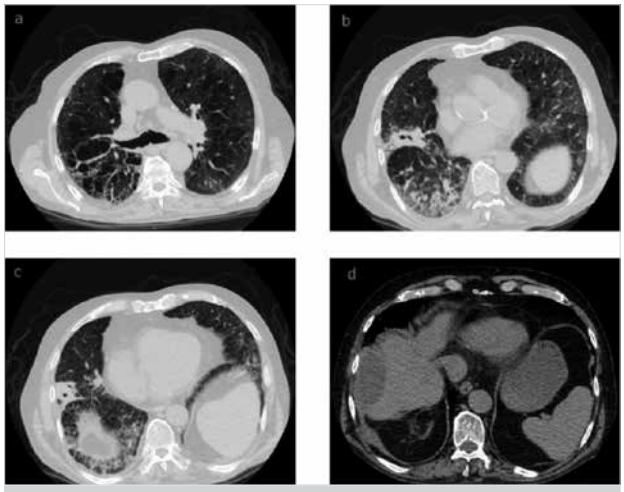

Figure 1. a-d. COPD lung (a); subdiaphragmatic abscess lung window (b, c); abdomen window (d)

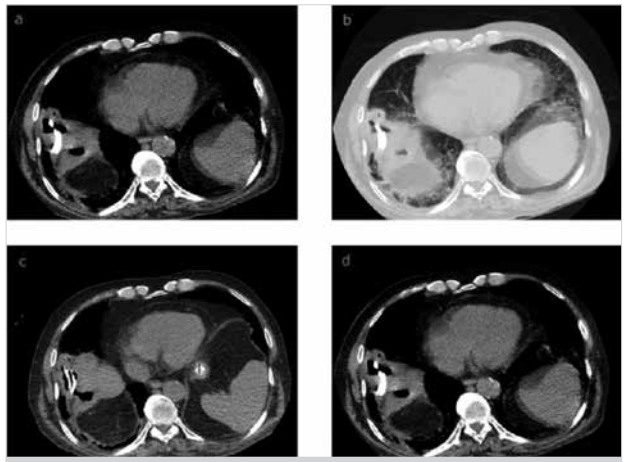

Figure 2. a-d. It is observed that fistula with drain is associated with abdomen and lung (a, c, d) abdomen window; lung window (b)

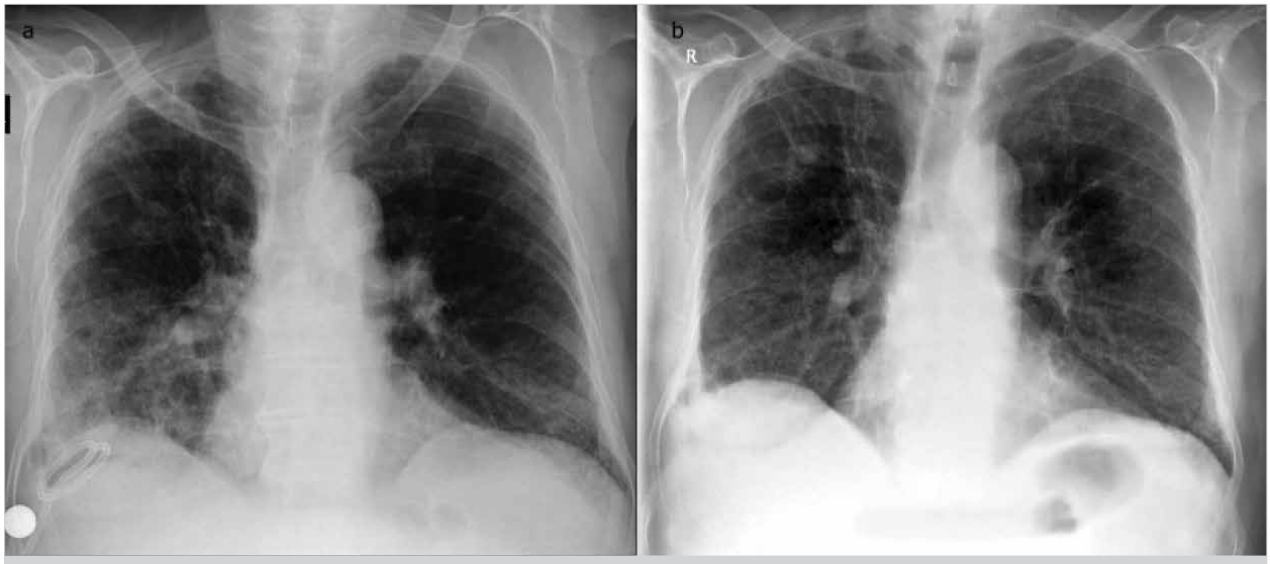

Figure 3. a, b. PA chest radiography (a); after inserting drain (b) 6 months after discharge

tosis and high level of C-reactive protein (CRP) were detected. Because a 75x40 mm image consistent with an abscess was observed in the right subdiaphragmatic region in the ultrasonography, the patient was hospitalized with the purpose of percutaneous drainage and treatment. Ceftriaxone and metronidazole were empirically initiated to the patient. After consulting the Department of Radiology, percutaneous drain was inserted to the patient and culture was taken from the incoming fluid. Daily washing was performed from the drain. Meropenem was initiated to the patient when Pseudomonas Aeruginosa grew in his culture that was analyzed because of intermittent fever developing in spite of the 8- day treatment. In his follow-ups, decrease was observed in the values of leukocyte and CRP and there was no increase in his temperature. However, a high air level was observed in the patient's drain. In the computed tomography (CT), it was observed that fistula developed between abscess pouch and pleura. Then the drain was converted to the underwater seal drainage system and daily washing was continued. In the follow-ups, transparent fluid was observed in the drain after washing and no problem was seen in the chest radiographies. Therefore, the drain was clamped and then removed. The patient was discharged from the hospital on the 24th day of his hospitalization. There was no abnormality in the follow-up after 6 months of his discharge from the hospital, except COPD findings in his chest radiography.

Percutaneous drainage is the first treatment alternative for adequately located abscesses in the treatment of intraabdominal abscesses. Abscesses tend to spread by causing necrosis in the neighboring tissues. In our patient, there was also a subdiaphragmatic abscess becoming chronic and closing by fistulazing intermittently.

Conclusion: Development of fistula and pneumothorax in diaphragm due to necrosis caused our therapy to take longer time. However, converting the drain to the underwater seal drainage system provided us to treat our patient without needing open surgery.

Keywords: Fistula, pneumothorax, percutaneous drainage, subdiaphragmatic abscess

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PS-74

Hydatid cyst mimicking solid tumor in the stomach: Presentation of a rare case

Çağrı Tiryaki[1], Büşra Yaprak Bayrak[2], Murat Burç Yazıcıoğlu[1], Ahmet Tuğrul Eruyar[2], Ali Çiftçi[1], Osman Civil[1], Abdullah Güneş[1]

[1]Department of General Surgery, Kocaeli Derince Training and Research Hospital, Kocaeli, Turkey
[2]Pathology Laboratory, Kocaeli Derince Training and Research Hospital, Kocaeli, Turkey

Objective: Hydatid cyst is seen endemically in Middle East, India, Africa, South America, New Zealand, and Turkey. It is most commonly located in liver and lung in human. It is rarely seen in spleen, kidney, bone, and, brain. The rare involvement of the disease in some regions makes its diagnosis difficult. The purpose of this study is to emphasize that the disease, which is still an important health problem in endemic regions at present, should be kept in mind in the differential diagnosis of solid-cystic lesions of the stomach.

Methods: A 55-year-old female patient consulted to our department with the complaints of stomach-ache, dyspepsia and, postprandial bloating. Physical examination and laboratory data were normal. It was learned that she had been operated due to hydatid cyst in liver 10 years ago. In the endoscopy, there was a mass that made pressure externally in the gastric antrum. Radiologically, it was considered that the mass could be consistent with gastrointestinal stromal tumor (GIST). With these findings, the mass was removed by wedge resection. It was examined histopathologically. Albendazole therapy at the dose of 10 mg/kg was initiated. The patient was discharged from the hospital with recommendations on the postoperative 10th day without any surgical complication.

Results: In the resection material which was sent for analysis without impairing its integrity, a macroscopically 8x6 cm cystic structure which had wall thickness of 7 mm and from which a necrosis-like fluid discharged was observed. Cyst wall contained diffuse eosinophil. Structures similar to acellular lamellar membrane in lumen were observed in the necrotic material. The case was reported as hydatid cyst as a result of clinical, radiological and histopathological examinations.

Conclusion: Hydatid cyst is a prevalent disease caused by a parasite called *Echinococcus granulosus*. This disease, which can cause very important problems concerning human health, maintains its importance in countries where agriculture and animal husbandry are widespread and general hygiene and infrastructure problems could not be solved completely. The symptoms frequently result from the mass effect as in our case. Imaging is the primary method used for its diagnosis. Surgical intervention is the basic step of treatment for cysts which are large, have mass effect, involve vital organs or have the possibility of rupturing. Their rare anatomical localizations cause difficulties in diagnosis. Their clinical findings and radiological images can be nonspecific and can be confused with solid/cystic tumors. In a patient consulting with a cys- like mass in the stomach in endemic regions, life threatening complications can be prevented by keeping hydatid cyst in mind in differential diagnosis.

Keywords: Hydatid cyst, stomach, radiological and endoscopic imaging

PS-75

Adrenocortical adenoma displaying myxoid changes

Turgay Şimşek[1], Sertaç Ata Güler[1], Anıl Çubukçu[1], Nuh Zafer Cantürk[1], Emre Özcan[1], Yeşim Gürbüz[2]

[1]Department of General Surgery, Kocaeli University School of Medicine, Kocaeli, Turkey

[2]Department of Pathology, Kocaeli University School of Medicine, Kocaeli, Turkey

Introduction: Adrenal masses may be functional, nonfunctional, benign or malignant. Biochemical values and imaging methods can be used for diagnosis. The patients with adrenocortical adenoma are generally 60 years old or over and they are nonfunctional. Myxoid changes are the changes that have been rarely reported both in adrenocortical adenomas and adrenocortical cancers. We wanted to present our case with the diagnosis of adrenocortical adenoma presenting with myxoid changes, which is rarely seen in the literature.

Case: A 64-year-old female patient consulted to our department with left side pain. In her abdominal ultrasonography, a 28.4x33 mm solid lesion having an isoechoic well-circumscribed margin with spleen was observed in the surrenal lodge. Her magnetic resonance imaging (MRI) revealed a contrast enhancing 25x34 mm lesion, not suppressed in out-of-phase series, was observed in the left adrenal gland and it was evaluated as nonadenoma (metastasis?, adrenalcarcinoma?). In the PET/CT not showing malignancy finding with FDG affinity, a nodular lesion displaying metabolism at the level of ground activity was observed in the left surrenal region. Left surrenalectomy was performed for the patient for whom operation decision was made in the multidisciplinary endocrine council. In the microscopic examination of 3 cm surrenalectomy material, a tumoral lesion making compression on the surrounding surrenal tissue was observed. It was observed that the tumor was generally formed of cells not involving pleomorphism and having large polygonal eosinophilic cytoplasm, clear nucleolus and heterogeneous chromatin. It was also observed in the sections that tumor region was formed of myxoid stroma that covered almost 50% of it and tumor cells in the stroma formed cords and pseudo-glandular structures. In the immunohistochemical examination of the tumor cells, a strong positive staining with vimentin and melan-a, a weak positive staining with pancytokeratin, calretinin, synaptophysin and inhibin focal, and a negative staining with chromogranin, estrogen receptor and Congo red were observed. Ki-67 proliferation index was evaluated as 3%. When the patient was evaluated with clinical data, she was accepted to have adrenocortical adenoma presenting myxoid changes. She was discharged from the hospital without any problem after two days.

Conclusion: Adrenocortical tumor cases having many phenotypic and clinical characteristics and having morphologically borderline characteristic have been published. These morphological and clinical characteristics, which are evaluated generally as benign, are associated with malignancy. In our case, the metastasis was diagnosed as adrenocortical adenoma displaying postoperative benign behavior and being operated with the prediagnosis of adrenal carcinoma. In the literature, some of the nonfunctional cases with hypertension benefited from surgery. Our case had recovery in the hypertension course.

Keywords: Adrenocortical adenoma, myxoid degeneration, surrenalectomy

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PS-76

Anticancer effectiveness of Deguelin and Curcumin on anaplastic thyroid cancer cells

Mehmet Ali Koçdor[1], Hakan Cengiz[2], Zeliha Kılıç[2], Halil Ateş[3], Hilal Koçdor[2,3]

[1]Department of General Surgery, Dokuz Eylül University School of Medicine, İzmir, Turkey

[2]Department of Molecular Medicine, Dokuz Eylül University Institute of Medical Sciences, İzmir, Turkey

[3]Department of Basic Oncology, Dokuz Eylül University Institute of Oncology, İzmir, Turkey

Objective: Anaplastic thyroid cancer (ATC) is one of the cancers having the highest mortality and average life expectancy is limited with 4 months. Apart from surgery in the early phase, the effectiveness of current treatment methods is quite low. In this study, anticancer effectiveness of Deguelin and Curcumin, which are two new potential agents, on CAL62 anaplastic thyroid cancer cells was tested and this effectiveness was compared with docetaxel, which is used in the standard medical treatment of ATC. Contribution of these two agents to the standard treatment was examined.

Methods: At first, IC50 (Inhibitory cell) concentrations of Deguelin, Curcumin and Docetaxel were determined. This dose was applied to CAL62 cells. Aggressiveness and metastatic potential of tumor cells were evaluated with the parameters of quantitative cell migration analysis, quantitative angiogenesis and vasculogenic mimicry (VM). Moreover, apoptosis was evaluated by flow cytometry and effectiveness of treatments on cell cycling was tested.

Results: It was found that Deguelin, which is a derivative of rotenone, had a stronger apoptotic potential than Docetaxel and Curcumin, which is a natural compound, had a stronger anti-migratory capacity than Docetaxel. However, a clear synergism was

not detected with Docetaxel. These two agents were found to be statistically significantly effective in the parameters of angiogenesis and VM.

Conclusion: Deguelin and Curcumin, which are known to have quite low toxic profiles, have anticancer effectiveness on anaplastic thyroid cancer cell lines and potential of lowering the tumor aggressiveness and metastatic capacity in this cancer type which has a very high mortality.

Keywords: Deguelin, curcumin, anaplastic, thyroid, cancer, anticancer

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Technical difficulties in completion thyroidectomy due to thyroid cancer in patient with total laryngectomy: an anatomic complexity

İbrahim Ethem Cakcak, Eyüp Kahya, Uğur Kahan Öztürk, Atakan Sezer

Department of General Surgery, Trakya University School of Medicine, Edirne, Turkey

Introduction: Total laryngectomy is one of the major therapies in the treatment of laryngeal cancer and it can be performed simultaneously during surgery. Thyroid cancer accompanying laryngeal cancer is rare and it requires a multidisciplinary approach in treatment algorithm. We aimed to plan the management of technical difficulties and anatomical confusion in a completion thyroidectomy performed in a patient for adjuvant therapy, who had undergone total laryngectomy and bilateral subtotal thyroidectomy due to laryngeal squamous cell carcinoma.

Case: A 68-year-old male patient was admitted to our department because a 4 cm thyroid cancer accompanying laryngeal carcinoma was encountered in his pathological examination after total laryngectomy and subtotal bilateral thyroidectomy performed due to laryngeal squamous cell carcinoma. In neck USG of the patient having total laryngectomy and tracheostomy, a residual tissue consistent with bilateral thyroid tissue causing nodular formation in cranial of tracheostomy stoma was observed. It was decided to perform completion total thyroidectomy for the purpose of giving adjuvant radioactive iodine treatment when follicular neoplasia was observed in the fine-needle aspiration biopsy (FNAB) conducted to the nodules in the residual tissue of the patient. The patient was given semi-fowler position and thyroid lodge was reached over stoma with Kocher incision. N/G catheter was primarily inserted to the patient for esophageal identification because there was no anatomical relationship between the thyroid gland, which had importance for putting forward the anatomical structures in primary thyroid surgery, and strap muscles, trachea, recurrent laryngeal nerve and esophagus. Thyroid gland was reached from the lateral region of strap muscles with the posterolateral backdoor approach. N/G was palpated and esophagus was viewed and thyroid residual tissue was dissected at both lodges.

Conclusion: Encountering thyroid cancer incidentally in the patients with total laryngectomy can make it difficult to perform completion total thyroidectomy. The anatomical relationship between thyroid gland and strap muscles, trachea, recurrent laryngeal nerve and esophagus can become catastrophic in the patient with laryngectomy because of the removal of larynx. Since residual thyroid tissue remained between strap muscles, esophagus, and neck vein/artery, identification of these anatomical structures in completion thyroidectomy is important for preventing morbidity. An appropriate surgery can be performed in these difficult cases without causing additional morbidity by knowing anatomical changes of the patient with laryngectomy and the experience of completion thyroidectomy.

Keywords: Laryngeal cancer, thyroid cancer, completion thyroidectomy

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