



A surgeon's nightmare: Complications

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ABSTRACT

Objective: Our study aimed to determine the physically and psychologically most difficult complication resulting in chronic discomfort and occurring sensationally in the postoperative period of operations performed frequently in the daily surgical routine.

Material and Methods: We performed a survey among surgeons who participated in the 19th National Surgery Congress. The questions were related to the complications encountered in the frequent procedures performed in the daily general surgery routine and resulting in chronic life discomfort but which are not life threatening. Three hundred and sixty general surgeons participated in the survey and they were asked which complication among the given ones was the most difficult for a surgeon to manage physically and psychologically. The received answers were recorded and evaluated with descriptive statistical analysis.

Results: Among the surgeons who participated in the survey, 345 were male (96%) and 15 female (4%); 218 (61%) general surgeons served in universities whereas 112 (30%) surgeons served in other public institutes and 30 (9%) served in private hospitals. With regard to the ranking of the complications that are most difficult to manage by the surgeons, pain and hemorrhage developing after hemorrhoidectomy were in the first place with 90 (25%) votes, whereas persistent hypocalcemia after total thyroidectomy was in the second place with 73 (20%) votes. Furthermore, 286 (80%) surgeons stated that the complications did not discourage them from performing the same operation again.

Conclusion: Our results indicated that among the determined complications of operations performed in daily surgery routine, pain and hemorrhage developing after hemorrhoidectomy were the most difficult to manage. In addition, it was observed that complications did not discourage surgeons to perform the same operation again, contrary to popular belief.

Keywords: Surgery, complications, surveys, postoperative hemorrhage

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INTRODUCTION

Surgical complications (SC) that are learned by surgeons through living, is briefly defined by lawyers as harmful effects that are accepted to occur by a standard treatment, despite taking all kinds of measures (1). Management of surgical complications is sometimes more difficult than the operation itself. A harmful consequence may occur in every medical intervention at all times. It is regarded as normal deviations and risks of medical intervention even in the presence of necessary care and attention, and is considered as malpractice if there is lack of required attention (2). Even if the indications for surgery are clearly defined, sometimes they may be controversial. While informing the patient on surgery, SCs should be mentioned. The SCs should be written in the informed consent forms, in a way that patients could understand. Even though the physician assures his/her safety with all legal documents, in case of risk actualization and developing complications, the surgeon should endeavor his/her best to fix it.

MATERIAL AND METHODS

A survey regarding SCs that are not life threatening or are unexpected in the immediate postoperative period, in operations frequently performed during daily practice was applied at the 19th National Surgical Congress to the participating surgeons. The complications were selected to be as close to one another in terms of patient comfort and life threatening potential. For example, management of hoarseness after total thyroidectomy is more difficult than management of permanent hypocalcemia, or life-threatening potential of pelvic sepsis after hemorrhoidectomy is higher than that of post-operative pain and minimal bleeding. One of the most worrisome complications for a surgeon is intestinal anastomotic leakage. Therefore, very serious complications were not included in the survey. 360 general surgeons attended the survey. Operations and complications listed in Table 1 were presented to the surgeons, and they were asked to identify the most challenging SC in terms of physical and mental aspects on management. They were asked if these complications discouraged them from performing similar surgeries again.

RESULTS

345 of the respondents (96%) were male, and 15 (4%) were female, with a mean age of 46 years. 218 (61%) surgeons were from universities, 112 (30%) from other public institutions, and 30 (9%) from pri-

Table 1. Operations, complications and their rates

Operation	Complication	n=360	%
Laparoscopic operations	Strangulated port hernia (EPOP)	58	16
Cholecystectomy	Post-cholecystectomy syndrome	18	5
Inguinal herniorrhaphy	Chronic neuropathic pain	65	18
Anti-reflux operations	Chronic dysphagia	56	16
HD related procedures	Chronic pain and bleeding	90	25
Total thyroidectomy	Permanent hypocalcemia	73	20

EPOP: Early postoperative period; HD: hemorrhoidal disease

vate hospitals. The most difficult to manage post-surgical complication was identified as post-hemorrhoidectomy pain and bleeding (25%). The second was identified as permanent hypocalcemia after thyroidectomy (20%). Replies of surgeons to the survey are shown in Table 1. Contrary to popular belief, 286 surgeons (80%) reported that they were not discouraged to perform the same operation again after experiencing difficulty in managing its complications.

DISCUSSION

Surgical complications are undesirable problems negatively affecting patients, surgeons and other health workers. This problem impairs the patient's quality of life, and forces the patient to come to outpatient clinics constantly. Serious SC usually occurs during the first years in the profession of a surgeon. Operating room(s) are high-risk areas where there may be serious complications (3). These complications adversely affect surgeons both physically and mentally as well as patients. In a survey conducted among 7900 US general surgeons in 2008, Shanafelt et al. (4) reported emotional burnout in 40% and depression in 30% due to complications.

Experienced surgeons stay stronger than young surgeons against SCs. According to studies, they develop stronger mechanisms in doing so. The biggest factor that surgical complications cause a negative impact on the surgeon is reported as incriminating and punitive approaches by the institution. Negative view of their colleagues and lack of support constitute a major obstacle in effectively dealing with SC (5). When deciding on an operation, indications should be completely identified and all possible SCs should be explained to the patient as much as possible. Correct diagnosis is of course very important. In a study conducted in Cleveland, the correct diagnosis rate of patients with perianal complaints by surgeons has been only 70.4%. This result shows that in approximately 30% of patients, a wrong diagnosis and treatment was engaged (6).

Surgical complications are learned experiences. This experience does not always have a positive impact on other patients. Surgeons may prefer a more conservative approach when deciding on the treatment of other patients due to these situations. The depression and burnout syndrome developing in the surgeon due to surgical complications not only affect the surgeon and his family but also adversely affect the surgeon's clinical performance and patient safety (7).

CONCLUSION

Surgical complications adversely affect surgeons in terms of physical and mental aspects as well as patients, at least to the same extent. It is important to be thoroughly aware of common complications. We think that this knowledge is also important in making the surgeon more careful against such complications. Also according to the survey results, it is both interesting and pleasing to identify that SCs did not direct surgeons to defensive practice of medicine.

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