LESS

Case Report

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Nightmare of a surgeon; “stapler missfire during sleeve gastrectomy" due to swallowed orogastric tube intraoperatively: A case report

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ABSTRACT

Obesity is at the top of the list of chronic diseases a pandemic disease in the world as the second cause of preventable deaths. Bariatric and methabolic surgery is one of the main interests in general surgery. Therefore, obesity surgery is one of the most made surgeries in the world. There is a trend for sleeve gastrectomy that is as the most applied and accepted technique in bariatric surgery compared to other bariatric surgery techniques. A 25-year-old male patient with BMI: 45.7 operated for sleeve gastrectomy. Intraoperatively, the 4th 60 mm Ethicon Echelon blue cartige with the guidance of 40 F bugie was applied (fired) in standard fashion. The operation, we were doing it in a systematic way that we used in previous operations. However, after stapler discarded, it was observed that there was a foreign body “shinning” in the stapler line. Although the surgery is always done systematically, it can happen when it does not always go well. After this surprising situation during this straigtforward surgery, we began to investigate what was wrong? and how this happened? How to move in developing decide to manage a complications can be the savior of every surgeon. In this article, we aimed to present our case and the management of the catastrophobic event.

Keywords: Mismatch fire, orogastric catheter, sleeve gastrectomy, stapler line

Introduction

Laparoscopic sleeve gastrectomy (LSG) has been shown to be a safe and effective long-term treatment in bariatric surgery. Since the first made of LSG, the complication of stapler line leak has been a major concern for surgeons. Many reasons are listed for stapler line leaks. One of them is; technical problems in the stapler line.[1,2]

Despite the innovations in stapler technology, the most post-operative complications occur due to this stapler line problems. This once again reveals the importance of the line. The most common complications after resection of the staple line are bleeding and leaks.[3] One of the conditions that can cause leakage may be a foreign body reaction. Therefore, it is important for surgeons to check the stapler line once again carefully.

Case Report

A 25-year-old male patient operated for sleeve gastrectomy. During the operation, we were doing it in a system-

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atic way that we used in previous operations. However, after the 4th 60 mm Ethicon Echelon blue cartige stapler discarded, it was observed that there was a foreign body in the stapler line. During the controls, it was found that the foreign body was a swallowed orogastric catheter during the ongoing operation (Fig. 1).

In laparoscopic cases, anesthesia routinely applies a nasogastric or orogastric catheter. It was understood that the first orogastric catheter was swallowed and after anesthesia staff change, another orogastric tube was inserted assuming that there was not a previously put tube. We asked the orogastric to be pulled by anesthesia before the stapling stage of surgery and it was pulled out. Staplers were fired with the guidance of 40F bougie 4–6 cm proximal to the pylorus. During control of stapler of the stapler line here was a foreign body shining at the fourth stapler line 4–5 cm distal to the özofagogastric junction. The orogastric catheter was pulled out of the stomach (Fig. 2). The stapler line was sutured continually with a 2/0 v-loc suture so that it was included in the open part. No leakage was observed in the intraoperative methylene blue test.

The patient started to take liquid regimen at the 6th h. No fever, hypotension, or tachycardia developed in the follow-ups. No leakage findings were observed. The patient was discharged on the 2nd post-operative day.

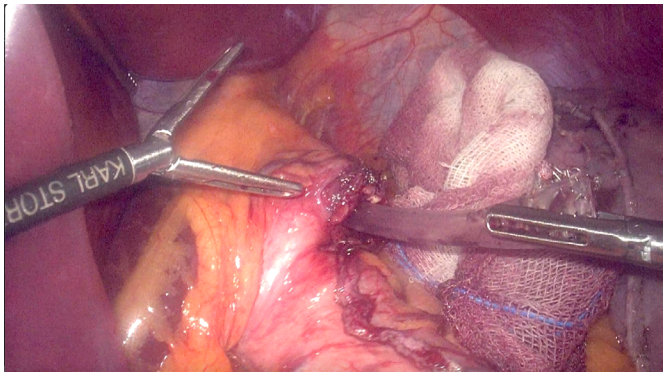

Figure 1. Cut the nasogastric catheter with a stapler.

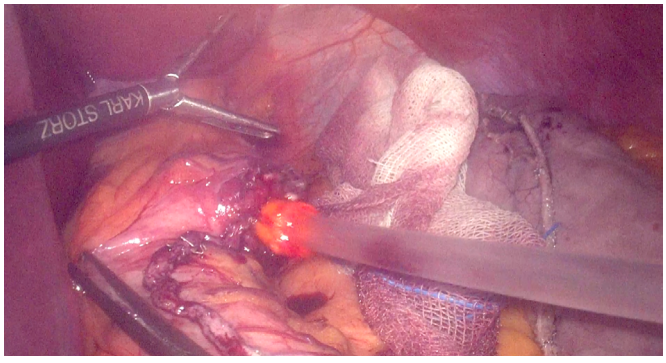

Figure 2. Nasogastric catheter was pulled out of the stomach.

Written informed consent form was obtained from the patient.

Discussion

LSG has become one of the most popular operations in obesity surgeries. Technical convenience, not need any anastomosis, and bowel surgery are the main reasons why surgeons and patients prefer LSG surgery.

The most important intra-abdominal complications of LSG are stapler line bleeding and leakage, and surgeons try to minimize them using some various techniques. The purpose of all these techniques applied is to prevent leaks that may occur in the stapler line.[4,5]

Stapler line leaks are a very serious complication. The patients increase the period of hospital stay, mortality, and morbidity. Therefore, the stapler line check is very important. Among the controls; it should be make sure that the stapler line is smooth and not trouble, there is no gap on stapler line, foreign body or other tissue is not cut.[6]

Some studies have shown that the suture technique, which is one of the existing staple line support methods, has been shown to reduce complications in the post-operative period more effectively. Surgeons generally use V-loc style sutures in their cases. Depend on this suture material, it has been shown that there is a significant reduction in post-operative complications.[3]

The secret of surgical success; it includes factors such as the use of technical equipment, operating room environment and team coordination. Human errors are important in laparoscopy surgeries. Problems can be difficult to resolve during laparoscopic surgery. Therefore, some approaches before surgery can contribute to the prevention of problems. These; organization of the operating room and all equipment, staff training, instrument and device checklist, and teamwork. In teamwork; there should be a coordinated work with anesthesia, staff, and nurse. This teamwork should be able to see the surgeon's next step. Thus, complications are minimized with teamwork.[7]

Conclusion

LSG surgery is an effective and simple operation, but it is an operation that must undergo a series of strict controls. This operations weaks points is leak and bleeding, so the surgeon should be taken to extra care. We think teamwork is very important for LSG. The next move of the surgeon should be predicted by the team members and should be

worked as harmonious as possible. In this case, it was observed that the nasogastric tube was cut with a stapler. It was understood that this situation developed with a moment forget of the anesthesia team. It should not be forgotten that anything can happen at any time in surgery. We think that the important thing is to make the checks properly and to apply them during the operation. Hence, complications for patients can be make less. In addition, we think that suture support will be very useful against the complications that in the stapler line.

Disclosures

Informed Consent: Written informed consent form was obtained from the patient.

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