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Case Report

A rare case of 5-mm trocar-site hernias after laparoscopy rectopexy requiring surgical repair

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ABSTRACT

The 5 mm trocar-site hernia are very rare complication of laparoscopic surgery and surgeons usually avoid fascial closure at 5 mm trocar-site. We show a case of laparoscopic anterior rectomeshplasty with early omental herniation through a 5 mm trocar-site and surgical repair, as well as an advice on whether or not to undertake a fascial closure of the 5 mm trocar-site.

Keywords: 5 mm trocar hernia, Laparoscopy rectopexy, Rectal prolapse, Fascial closure

INTRODUCTION

Hernias at the trocar site are a rare complication of laparoscopic surgery. Despite the fact that trocar-site hernias are more common at sites larger than 10 mm, hernias can nevertheless form at 5-mm sites following laparoscopy and cause major problems.[1]

CASE REPORT

A 24 years old male patient was admitted to our institution with the complaints of pain abdomen since 3 years, constipation since 2 year and rectal protrusion during defecation since 1 year. Direct examination showed full thickness rectal prolapse of approx. length of 15 cm with rectal ulcer. He was severely malnourished with BMI (16.5 kg/m^2), haemoglobin (5.9 gm%). After weeks of nutrition build-up and haemoglobin optimization patient was taken up for surgery. He underwent laparoscopic anterior rectomeshplasty with duration of surgery around 2.5 hours. Early post operative days were uneventful. On POD 5 patient had pain and bulge at left lower 5 mm trocar site, after skin suture removal there were around 10 cm omental herniation (Figure 1). Trocar site were explored locally and hernia was reduced with fascial closure of incision. On regular follow-up of 2 years patient doing well with full return of activity.

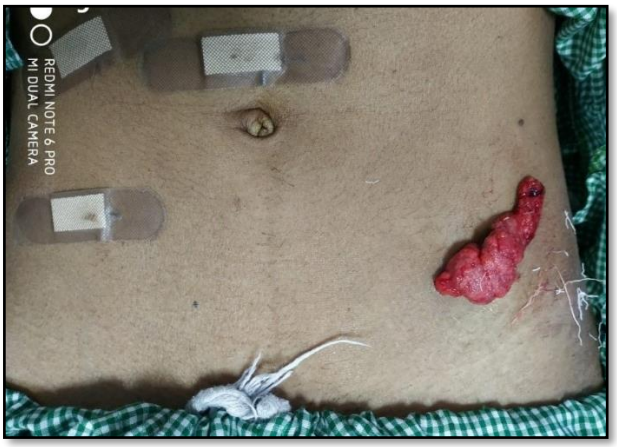

Figure 1: The 5 mm trocar-site omental herniation.

DISCUSSION

To avoid herniation, current surgical knowledge recommends closing 10-mm or larger port sites. Most surgeons don't close 5-mm port sites because they believe the fascial defects aren't substantial enough to provide a

major risk of hernia development, therefore the extra time and effort required to close them isn't justified.

According to current evidence, trocar site hernias are more likely at 10-mm sites.[1,2] In extensive case series and reviews, the incidence of trocar hernias ranges from 0.2% to 3.1% and has been linked to trocar size.[3-9] Incisional hernias are not prevented by facial closure. According to level II studies in general surgery and urology, paramedian position and blunt type trocars have been extensively documented as methods by which fascial closure is not required in 10-and 12-mm incisions.[4] Increased operational periods and extensive manipulation can lengthen 5-mm fascial incisions, increasing the incidence of trocar site hernias, according to a study of 5-mm trocar site hernias.[5] Para-median locations versus median locations (including the umbilicus) have been associated with conflicting rates of trocar hernias reported in the literature.[10-12] In our case patient was of young age with moderate operative time but with poor nutrition. These factors may have aided in early herniation.

CONCLUSION

Lesson learnt in this case report is in 5-mm incisions where considerable, protracted manipulation occurred, which may have enlarged or widened the initial defect, we would advise surgeons to seek fascial closure.

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