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Laparoscopic Removal of an Artery Forceps

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ABSTRACT

Numerous foreign bodies, such as surgical gauze, pads and instruments, and other items, have been left behind in the abdominal cavity during open surgeries. These have been traditionally removed at redo open surgeries. Here we describe a case of an artery forceps left behind at a previous surgery (open cholecystectomy and appendicectomy) performed 5 years earlier that was removed by laparoscopy.

Key Words: Laparoscopy, Intraabdominal foreign body, Retained artery forceps, Laparoscopic retrieval.

INTRODUCTION

Foreign bodies left behind inadvertently during prior surgery need to be removed because they are associated with important complications that have serious medical and legal consequences. Objects forgotten during surgery have so far been dealt with by open operations.[1,2] An increasing familiarity with laparoscopic techniques has encouraged surgeons to use them for this purpose.

This case report describes removal by laparoscopy of such a retained artery forceps.

CASE REPORT

A 30-year-old female patient came to our department with complaints of recurrent diffuse abdominal pain and vomiting of 4-years' duration. She had undergone open cholecystectomy and appendicectomy at another hospital 5 years previously. She was investigated with repeated ultrasounds of the abdomen elsewhere for the same problem. On examination, she was found to have a small upper right paramedian scar. Her abdomen was soft on palpation, with a vague firm mass in the right iliac fossa (RIF). In view of the above findings, a provisional diagnosis of RIF mass with recurrent subacute intestinal obstruction was made. She was evaluated with blood investigations, abdominal ultrasound, and a computed tomography (CT) scan of the abdomen. To our surprise, the CT scan of the abdomen showed a 6-inch metallic object in the right lower quadrant of the abdomen **(Figures 1 and 2)**.

Earlier, we had laparoscopically removed a retained gauze piece from a patient. Hence, we decided to attempt laparoscopic removal of the artery forceps.

METHOD

As the patient had an upper right paramedian scar, we introduced the Veress needle through the left hypochondrium and insufflated the abdomen with 3 liters of carbon dioxide. The scope was introduced through the 10-mm port placed in the left hypochondrium. Extensive omental adhesions were present on the right half of the abdomen. An accessory 5-mm port was placed in the left

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Figure 1. Six-inch metallic object: artery forceps in the right lower quadrant of abdomen.

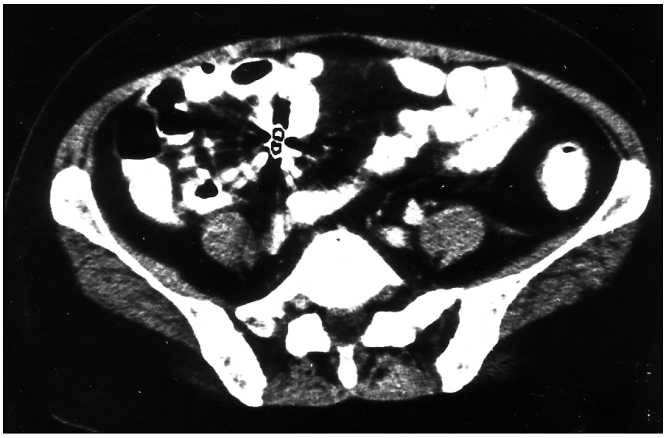

Figure 2. Computed tomography scan of abdomen showing metallic object.

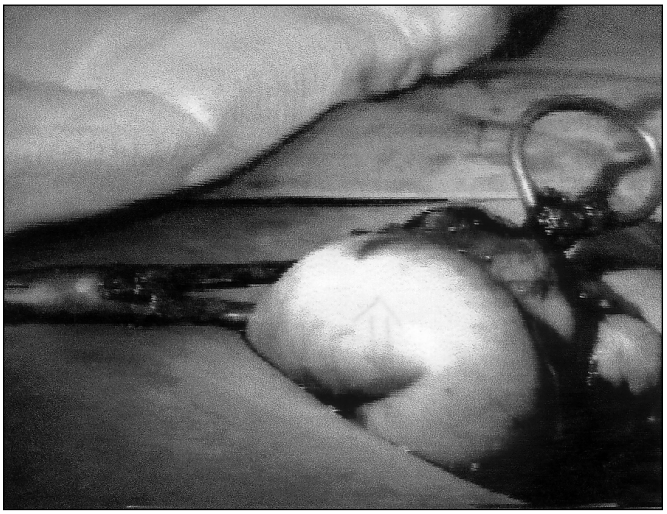

Figure 3. Artery forceps causing through and through perforation of the small bowel.

flank. The adhesions were slowly released with bipolar cautery. A 10 x 8-cm omental mass was visualized in the right lower quadrant. Two accessory 5-mm ports were placed in the RIF and suprapubic region. The omental mass was slowly dissected. As we were dissecting, the tip of the artery forceps was visualized, and using that as a guide, we continued the dissection. It was found that the forceps was traversing through a loop of the small bowel causing a through and through perforation (**Figure 3**). Due to space constraints within the peritoneal cavity, we decided to exteriorize the tip of the artery forceps through the RIF port (**Figure 4**).

The RIF incision was enlarged to 5 cm to enable exteriorization of the bowel and removal of the handle of the instrument. The muscles were divided along the line of the incision and the artery forceps along with the portion of the small bowel was exteriorized. The damaged small bowel along with the forceps was resected, and an end-to-end anastomosis was performed. The repaired bowel was returned to the peritoneal cavity. A suprapubic drain was placed. The RIF wound was closed in layers. The port sites were closed.

The patient's postoperative stay was uneventful, and she

Figure 4. Tip of artery forceps being extracted through an extended right iliac fossa port.

was discharged on the fifth postoperative day. She was well at follow-up after 2 weeks.

DISCUSSION

Foreign bodies identified postoperatively are becoming a rarity due to increased precaution taken during surgery and underreporting of such cases. But when encountered, they need to be removed because the medical and legal implications are considerable. In this modern age when specialized investigations are being increasingly done for evaluation of patients, a simple investigation like a plain x-ray of the abdomen is still a valuable tool as this case report shows.

CONCLUSION

Until recently, a large incision was required based on the location and size of the object. Laparoscopic surgery is a viable alternative to open surgery for removal of forgotten surgical objects. In the hands of experienced laparoscopic surgeons, it is associated with minimal stress to the patient and reduced postoperative stay.

References:

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