A Case of Acute Intestinal Obstruction Caused by Remnant Fallopian Tube after Abdominal Hysterectomy

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INTRODUCTION

Abdominal hysterectomy is one of the common procedures done in India most commonly for dysfunctional uterine bleeding. Bowel obstruction occurs when the normal flow of intraluminal contents is interrupted. It may be caused by the pathology affecting the peristalsis, or mechanical. Bowel obstruction is usually managed with prompt surgical intervention.

In this case report, we discuss an unusual presentation of intestinal obstruction which was caused by adhesions around the remnant fallopian tube.

PRESENTATION OF CASE

A 56-year-old female presented to casualty with complaints of abdominal pain for 3 days and vomiting for 2 days. She was a known case of hypertension, diabetes mellitus, stable angina for 7 years and was on medication. Is past h/o abdominal hysterectomy done 20 years before due to? Dysfunctional uterine bleeding (medical records unavailable). On examination she was restless, tachypnoeic, tachycardic, hypertensive, uncontrolled blood sugars, and feculent drain from the nasogastric tube. Abdominal examination showed low midline scar, distension with tenderness present at umbilical, hypogastric and both iliac regions, showed guarding and rigidity at the umbilical, right lumbar and iliac regions and sluggish bowel sounds. X-ray erect and supine abdomen showed dilated bowel loops and multiple air-fluid levels.

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CLINICAL DIAGNOSIS

Diagnosis of intestinal obstruction was confirmed clinically and radiologically. She underwent an emergency laparotomy. A midline incision was done and the abdomen opened from the symphysis pubis to the supra umbilical region. Intraoperatively, dilated small bowels were noted with adhesions along the remnant fallopian tube which was encircling the ileal segment causing an obstruction. Adhesions and remnant fallopian tubes were removed. The viability of the bowel was checked by stimulation, 100 % oxygen mesenteric pulsation and visible peristalsis were seen. No other sites obstruction or perforation was noted. No bowel segment was resected. A thorough wash was given. Drains were kept at the subhepatic and pelvic regions and the abdomen closed in layers.

Figure 1. Adhesion Constricting the Segment of the Ileum

Figure 2. Remnant Fallopian Tube along with Band Constricting the Segment of Ileum. Segmental Cyanosis of the Ileum Can Be Seen

Postoperatively she was started on oral sips of fluids on POD -4 which was stopped due to abdominal distension. She was serially monitored for vitals, abdominal girth and subsiding of symptoms. She was then restarted with gradual sips of oral fluids on POD - 7 and a soft diet on the following day. X-ray abdomen erect and supine showed air-fluid level hence therapeutic oral gastrografin was given along with inj. metoclopramide due to gastroparesis. Hypokalemia was strictly corrected and a potassium-rich diet was given. Subsequently her abdominal complaints. Wound gapping with serous discharge secondary to fat necrosis was noted.

Wound swab from the operated wound showed the resistant strain of *Acinetobacter baumannii*, hence alternate sutures were removed and the daily dressing was done. Secondary suturing was done after the wound was healthy. She was then discharged with advice to follow up.

DISCUSSION OF MANAGEMENT

Abdominal surgery for various reasons can predispose to adhesion formation thereby resulting in acute or subacute intestinal obstruction. Adhesions are the abnormal fibrous bands of the normal healing process in the injured peritoneum due to disruption of the fibrinolytic system connecting the surfaces of the organ (which are usually separated).^{1,2} Small bowel obstruction accounts for 12-16 % of emergency surgical admissions³ and 20 % of emergency surgical procedures.⁴ Apart from the above-mentioned sequelae, other complications that are commonly encountered due to adhesions are chronic abdominal pain, infertility, cost burden, difficulties at operation etc.⁵ Initial management should focus on correcting fluid and electrolyte imbalances and if clinical condition necessitates it should be proceeded with immediate surgical intervention.⁶ Some of the methods that can prevent postoperative adhesion formation are meticulous surgical techniques such as using a less invasive technique like laparoscopy, minimizing the tissue handling such as limiting of packing, crushing and manipulation of tissues. Barrier agents such as Polytetrafluoroethylene (GoreTex), sodium hyaluronate/ carboxymethylcellulose (Serpafilm) can be recommended that are shown to decrease adhesion formation in gynaecological surgery compared to non-use of any barrier agents.⁷ The possibility of mechanical intestinal obstruction by fallopian tube should be kept in mind in both unoperated women and in patients who underwent hysterectomy with the leftover fallopian tube. A similar case of intestinal obstruction caused by entrapment of fallopian tube in the broad ligament defect was reported by Cameroon et al.⁸ In this study, both adhesion band formation and mechanical obstruction by remnant fallopian tube both contribute to intestinal obstruction. The timely surgical intervention had avoided the need for resection of the bowel. Surgeons need to adopt an adhesion reduction strategy for better surgical outcomes.

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