

A case of early small bowel obstruction after total abdominal hysterectomy: A rare case

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ABSTRACT

Hysterectomies are one of the foremost commonly performed operations. The formation of adhesions may be a well-known complication of hysterectomy. We present a case of adhesion-related small bowel obstruction (SBO) occurring within 1 week of a total abdominal hysterectomy and bilateral salpingo-oophorectomy. The patient underwent exploratory laparotomy. Intraoperative findings showed drainage of 100 mL serous fluid and dilated jejunal and ileal loops with adhesions of the terminal ileum with the vaginal vault. Careful surgical technique measures and also the use of anti-adhesive agents wherever appropriate should be taken. It is, therefore, important to always consider the complication of adhesion-related SBO following surgery, no matter how short the period of time is.

Key words: Bilateral salpingo-oophorectomy, Early small bowel obstruction, Total abdominal hysterectomy

Hysterectomies are one of the most commonly performed operations. Post-operative small bowel obstruction (SBO), either mechanical or functional, is a major cause of mortality and morbidity following abdominal and pelvic surgery [1]. Although SBO after hysterectomy is uncommon when compared with reported rates it observed between 0.12% and 1.1% depending on the route of surgery [2-4]. Early SBO is defined as occurring within the first 30 days following surgery, whereas late SBO occurs after the first 30 days [2]. The formation of adhesions may be a well-known complication of hysterectomy. Adhesion is commonly asymptomatic but sometimes, it may presents symptom.

We present a case of SBO occurring within 1 week of a complete abdominal hysterectomy and bilateral salpingo-oophorectomy. To the best of our knowledge, there are no such previous case reports where adhesion-related SBO has occurred within 7 days. The doubtless very short interval between surgery and adhesion-related SBO is very important as this might impact the differential diagnoses of patients presenting postoperatively.

CASE REPORT

A 45-year-old female presented with complaints of menorrhagia for 5-6 months and something coming out through per vagina


for 2-3 months. According to the patient's menstrual history, the last menstrual period was 2 months back. The menstrual period was irregular ranging from 6 to 7 days of bleeding in 30 days of the cycle and during menses, it bleeds heavily with clots. The patient also gave an obstetric history of P4L4A0 and a history of tubectomy 17 years back.

On examination, the patient was conscious, oriented, and responsive to time, place, and person. The patient had normal gait with no icterus, pallor, or cyanosis. The vitals were stable with a blood pressure of 128/74mmHg, pulse rate of 74/min, and afebrile.

Routine blood investigations were done found within normal limits. On ultrasonography, a 7×9 cm intramural growth was present. The growth was hypoechoic as compared to the normal myometrium and present in the anterior part of the body of the uterus. These findings were suggestive of uterine fibroid.

The total abdominal hysterectomy and bilateral salpingo-oophorectomy were done for the fibroid and abnormal uterine bleeding but on post-operative day (POD) 5, the patient started complaining of abdominal distension and multiple episodes of vomiting. On POD 6, surgery opinion was taken.

On examination, the patient was vitally stable. Per abdominal examination showed abdominal distension with diffuse tenderness. Bowel sounds were sluggish and per rectal finding was normal with fecal staining. X-ray erect abdomen showed

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multiple air-fluid levels (Fig. 1a). Contrast-enhanced computed tomography abdomen was suggestive of moderately dilated small bowel loops with multiple air-fluid levels with a transition point in the distal ileum (Fig. 1b). All routine blood investigations were normal.

The patient underwent exploratory laparotomy. Intraoperatively, we found 100 mL serous fluid, dilated jejunal and ileal loops with adhesions of the terminal ileum and the vaginal vault (Fig. 2a). Adhesiolysis was done. Post-operative recovery was uneventful and the patient was discharged. The first follow-up after 2 weeks showed no fresh complaint. At the second follow-up after 1 month, the patient recovered well without any complication (Fig. 2b).

DISCUSSION

Hysterectomies are one of the foremost commonly performed operations within India. The formation of adhesions may be a well-known complication of hysterectomy. Adhesion is completely asymptomatic but sometimes, it presents such as chronic pelvic pain, infertility, and SBO.

Following surgical trauma, there is a disruption of mast cells which releases vasoactive substances. An inflammatory response is evoked, thereby promoting pro-coagulatory and anti-fibrinolytic reactions. This leads to increased fibrin production

and deposition. Surgical injury reduces blood flow to the tissue, producing an ischemic state that results in the local presence of the fibrin matrix. No new adhesion formation occurs after a few days. With normal healing, fibrinolytic activity breaks down any fibrinous exudates within 72 h, and then, it prevents the formation of adhesions [5-8].

Adhesions following gynecological surgery are a serious reason behind morbidity, with 34.5% of patient's being readmitted at some point because of an adhesion-related problem [3]. This report presents a case where adhesion-related SBO occurred within only 6 days. We were not able to find previous case reports of obstruction occurring secondary to adhesions in such a short span of time. A similar study was done by Sheyn *et al.* to estimate the incidence and risk factors of early post-operative SBO in patients undergoing hysterectomy for benign indications [9].

Hence, SBO should be kept as a differential diagnosis for the patients presenting after a few days of gynecological surgery with symptoms such as abdominal pain and vomiting. The present condition is also important as it allows the pathogenesis of adhesion formation to be reviewed in light of this rapid onset of adhesion formation and its complications. Of all gynecological operations done for benign conditions, total abdominal hysterectomy has been shown to hold the very best risk of developing adhesion-related bowel obstruction (1.36–4.5/100) [3,10]. This risk of adhesions is believed to be reduced in laparoscopic procedures as compared to open procedures because of the less invasive nature of the procedure [11].

Adhesions can cause an array of complications and so it is important to require any measures possible to scale back the chance. Measures to cut back the formation of adhesions include a careful surgical technique to stop tissue trauma by achieving meticulous hemostasis, minimizing the chance of infections, and avoiding any foreign body retention wherever possible with the help of anti-adhesive agents [11].

CONCLUSION

Adhesions are a serious reason behind morbidity after gynecological surgery. It is important to take adequate measures to cut back this risk by performing a careful surgical technique and also by the use of anti-adhesive agents. It is, therefore, important to always consider the complication of adhesion-related SBO following the surgery, no matter how short the period of time is as the rapidity with which the adhesions formed and caused bowel obstruction is also able to increase the understanding of this pathogenesis of adhesions.

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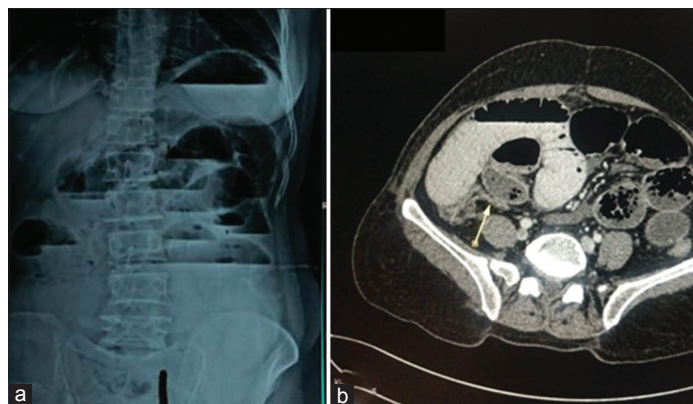


Figure 1: (a) X-ray erect abdomen showing multiple air-fluid levels; (b) contrast-enhanced computed tomography suggests small bowel obstruction in multiple levels

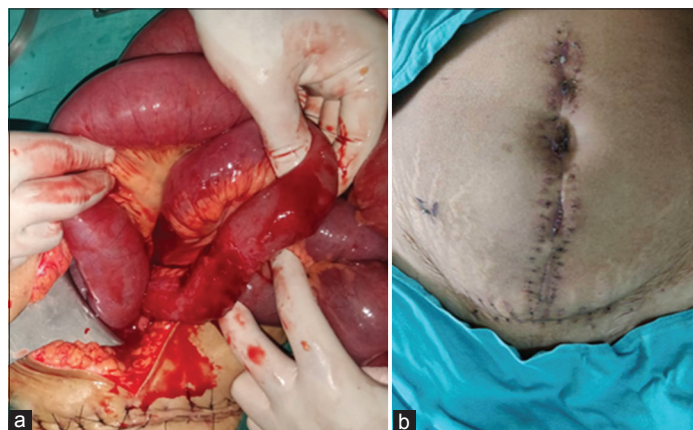


Figure 2: (a) Intraoperative image showing bowel adhesion; (b) post-operative image after follow-up of 1 month

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