

Sub-Acute Intestinal Obstruction in A Uterine Leiomyoma: A Case Report

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Abstract

One of the most prevalent benign tumours in women of reproductive age is uterine leiomyoma. Depending on the location, size, and quantity of the myomas, different symptoms may result. We describe a rare instance of sub acute small intestinal obstruction brought on by large uterine fibroids, which manifested as severe abdominal discomfort and repeated vomiting episodes. When the CT and MRI pelvis revealed a huge fibroid uterus that was creating an extrinsic mass impact on the terminal ileum and subacute small intestinal blockage, the patient, who was already known to have uterine fibroids, was investigated for the reason of acute abdomen. An adhesion band was seen during surgery linking the myoma to the ileum, where a constriction band had developed and was the source of the obstruction. Small bowel resection anastomosis was performed after a total abdominal hysterectomy. To minimise delays and unforeseen consequences, intestinal obstruction should be checked out in situations when a large uterine leiomyoma presents with symptoms of an acute abdomen.

Keywords: Leiomyoma, Uterine Fibroid, Small Bowel Obstruction, Laparotomy, Hysterectomy, Acute Abdomen, Adhesion.

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Introduction

ER was attended by a 41-year-old woman who had been experiencing abdominal discomfort for the previous five days. She was a known case of a large uterine leiomyoma for which hysterectomy was proposed but she didn't follow through on it. She described the pain as diffuse and colicky in nature, relieved with antispasmodics.

It was associated with nausea and repeated episodes of non-bloody non bilious vomiting. She complained of constipation and pain during passing flatus. Her last menstrual period was 3 weeks prior to this reporting, with normal flow and duration. She denied history of any abnormal uterine bleeding, loss of weight, dysuria, hematuria or fever with chills. She has no history of past surgeries.

On examination, BMI was 32kg/m². Her vitals were HR 82, RR 18, BP 150/90mmHg and 98.0 F temperature. Following abdominal examination, a firm mass that was the size of a 26-week-pregnant uterus was felt along with diffuse discomfort, and on the left, a distinct mass measuring 10 cm was felt near the lumbar area with restricted transverse

movement. Upon inspection using a speculum, the cervix was not visible. Cervix could not be reached during bimanual pelvic examination; vagina was stretched to the left. The same mass felt pushing the anterior and right fornix downward. No faecal stains was seen during rectal examination.

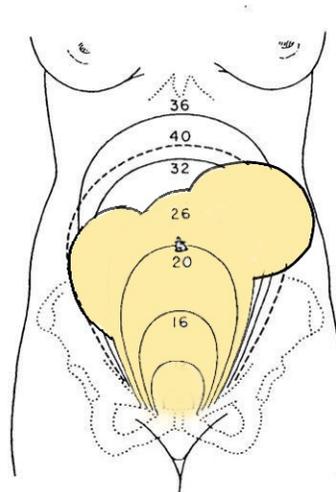


Figure 1: Pelvic mass extending above umbilicus into the left lumbar quadrant

Investigation & imaging

The laboratory tests were unremarkable. A Trans abdominal ultrasound was visualized to assess the uterus with adnexa and showed a bulky uterus with multiple intramural fibroids, largest measuring 16 X 15 cm; bilateral adnexa not visualized.

X ray abdomen erect showed multiple air fluid levels (Figure 2). To rule out an ovarian mass or sarcomatoid changes in the fibroid CT abdomen (plain and contrast) with MRI screening was done and showed a massive subserous fibroid measuring 15 X 12 X 19 cms noted in the right posterolateral wall (Figure 4) causing an abrupt narrow transition zone at the level of terminal ileum 6cm proximal to the ileocaecal junction. Jejunum and rest of the ileum appear dilated with collapsed large intestine (Figure 3).



Figure 2: Multiple air fluid levels

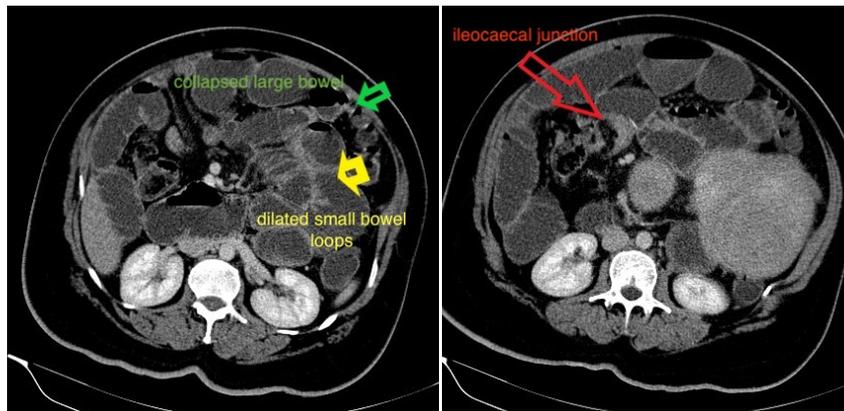


Figure 3: Large bowel appears collapsed, small bowels appears dilated and a transient zone is seen 6 cm proximal to Ileocaecal junction

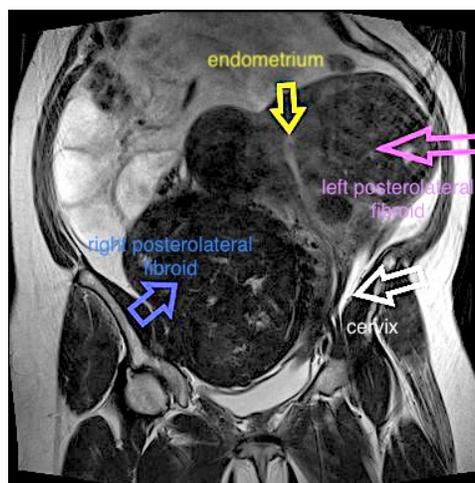


Figure 4: Cervix is pushed up seen at the level of L5-S1 and S1-S2.

Management

Upon admission, analgesics and intravenous antibiotics were begun. An elective hysterectomy was suggested after a preliminary diagnosis of sub-acute intestinal blockage, likely caused by the uterine fibroid. Prior to surgery bilateral DJ ureteric stenting was done. She underwent Exploratory Laparotomy proceed total abdominal hysterectomy with left salpingo-oophorectomy and small bowel resection & anastomosis. Uterus was irregularly enlarged to 32 weeks size, with multiple fibroids, largest 20x20cm arising from right lateral wall of body of the uterus with round ligament stretched over it- A Pseudo Broad Ligament Fibroid weighing 5.4kg (Figure 6). An adhesive band of 10cm seen connecting this fibroid and the ileum. The same released. At the site of its attachment, a constriction band with 3 cm width was seen (15 cms proximal to the ileocaecal junction) which was inflamed and non-gangrenous (Figure 7). Due to concern of ischemia, this segment of ileum was resected and cut ends anastomosed. Intra op and post op period were uneventful and hence discharged.



Figure 5: Lateral abdomen view after draping



Figure 6: Pseudo broad ligament fibroid



Figure 7: The constriction site and the adhesive band

Histopathology

Uterine specimen confirmed leiomyoma (largest one with extensive hyalinization and myxoid change measuring 22X17X15 cm in diameter). Distal ileum segment showed evidence of serositis and constriction band showed a fibromuscular cord with evidence of inflammation.

Discussion

Intestinal obstruction still accounts for 5% of emergency admissions and is one of the most frequent causes of acute abdominal discomfort worldwide [1]. Adhesive obstruction overtook obstructed hernia as the most frequent cause of intestinal obstruction in the West at the turn of the century, with just a few recent researches continuing to support this [2]. Although the frequency of adhesive obstruction has been steadily rising in the developing world, most centres still list strangulated and obstructed hernias as the leading cause of intestinal obstruction. According to a research from Chandigarh in India, adhesions account for 27% of cases compared to 22% of obstructed hernias [3]. Abdominal adhesions, which commonly develop following abdominal surgery [4] are fibrous bands that cross two or more intraabdominal organs and/or the inner abdominal wall (i.e., peritoneal membrane).

In the absence of past abdominal surgery or as a complication of abdominopelvic radiotherapy, adhesions can also develop as a result of inflammatory diseases of the abdomen. Since the patient in our scenario has never had surgery, it is less probable that the clinicians will attribute the intestinal obstruction to adhesions.

Although uterine fibroids and small bowel obstruction (SBO) are frequently observed as different clinical situations in emergency rooms, it is unusual for both to occur in the same patient when the latter is the cause of the former [5]. The intestine and the infarcted mass may adhere to one another, the fibroid may compress the bowel mechanically, or the colon may become entangled in a serosal pedunculated fibroid [6].

In our case, a CT scan of the abdomen revealed dilated small intestine loops with a transition point in the distal ileum, and an MRI screening revealed several, sizable fibroids that were likely the source of the obstruction. During surgery, it was discovered that the SBO was predominantly brought on by adhesions connecting the large fibroids to the intestine rather than by the fibroids directly compressing the intestine.

The inflammatory intestinal loop was removed as a result of the adhesive band being released.

Due to her advanced age and complete family, hysterectomy was also done to stop recurrence.

Conclusion

When a patient with a known uterine fibroid presents with the aforementioned clinical situation, intestinal obstruction should be taken into consideration as a differential diagnosis. A high level of suspicion is required to arrive at an early diagnosis and thereafter proceed on with surgical intervention.

References

1. Jena SS, Obili RCR, Das SAP, Ray S, Yadav A, Mehta NN, Nundy S. Intestinal obstruction in a tertiary care centre in India: Are the differences with the western experience becoming less? *Ann Med Surg (Lond)*. 2021 Dec 2; 72: 103125.
2. Malik A.M., Shah M., Pathan R., Sufi K. Pattern of acute intestinal obstruction: is there a change in the underlying etiology?

- Saudi J. *Gastroenterol.* 2010;16(4):272–274.
3. Sinha S., Kaushik R., Yadav T.D., Sharma R., Attri A.K. Mechanical bowel obstruction: the Chandigarh experience. *Trop. Gastroenterol.* 2002;23(1):13–15.
 4. Tabibian N, Swehli E, Boyd A, Umbreen A, Tabibian JH. Abdominal adhesions: A practical review of an often-overlooked entity. *Ann Med Surg (Lond).* 2017 Jan 31; 15:9-13.
 5. Sas D, Yang FJ, Agbayani N, Li SF. Small bowel obstruction caused by massive fibroids. *Am J Emerg Med.* 2021 Mar; 41:263. e1-263.e3.
 6. Fontana R, Kamel PL. Small bowel obstruction associated with a leiomyomatous uterus. A case report and review of the literature. *J Clin Gastroenterol.* 1990 Dec;12(6):690–2.