

Omental Adhesion to Degenerating Fibroid – A Rare Cause of Acute Small Bowel Obstruction in Pregnancy

ABSTRACT

Intestinal obstruction during pregnancy is a rare condition, which is associated with a significant risk for fetomaternal morbidity and mortality. Often there is a delay in diagnosis due to lack of specific symptoms. A 34-year-old primigravida at 27 weeks of gestation presented with small bowel obstruction which was confirmed on CT scan. She underwent a laparotomy which revealed an adhesive band from omentum to the degenerating fibroid obstructing the ileum. Prompt diagnosis and timely surgical intervention avoid increased morbidity and mortality.

Key words: Fibroid, Intestinal obstruction, Laparotomy, Omentum, Pregnancy

INTRODUCTION

Intestinal obstruction (IO) in pregnancy is a rare condition with incidence of 0.001–0.003%.^[1] Although uncommon, IO in pregnancy carries significant maternal (2–4%) and fetal (17%) mortality along with risk of preterm delivery in 45% of the cases.^[2] When a pregnant patient presents with abdominal pain, causes like preterm labor and gastritis are considered but rarely a suspicion of IO arises, leading to delayed diagnosis. Known causes of IO in pregnancy include postsurgical adhesion, volvulus, intussusceptions, hernia, carcinoma, and idiopathic ileus. Here, we report a rare case where the IO was caused due to a band which developed as a complication of red degeneration of fibroid.

CASE REPORT

A 34-year-old primigravida with 27 weeks gestation presented with epigastric pain along with multiple episodes of vomiting for a day. Her past history included hospital admission for red degeneration of fibroid with threatened abortion at 15 weeks gestation (single fundal subserosal fibroid of 3 × 4 × 3 cm at the time of presentation) which was managed conservatively. She underwent laparoscopic appendectomy 2 years back. Patient was diagnosed with gestational diabetes mellitus in 2nd trimester (on OHA), she is a known case of hypothyroidism and bronchial asthma.

She described the pain as “on and off crampy abdominal pain” with severe nausea, retching and 4–5 episodes of vomiting. She was passing flatus and her bowels had opened normally the day prior. On admission, patient was afebrile with normal vitals. The uterus was soft and there were no contractions palpable. She had epigastric tenderness, but normal bowel sounds. Laboratory studies showed a normal hemogram

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with mildly elevated CRP. She had unremarkable liver function and kidney function tests. Her urine dipstick indicated ketones 2+. Ultrasonography showed a single intrauterine pregnancy of 27 weeks with cephalic presentation and positive fetal heart activity, AFI-13.7 cm. The placenta was located on the anterior wall of the uterus and a fundal fibroid of 4 × 4 × 5 cm. A provisional diagnosis of preterm labor was made. Patient was started on IV antacids and antiemetics along with adequate IV fluids. Oral progesterone support was started and betamethasone given for fetal lung maturity. However, patient's clinical symptoms continued to worsen in next 24 h with bilious vomiting and marked tenderness of epigastrium. A repeat USG done showed prominent bowel loops with possibility of IO. X-ray done was suggestive of bowel obstruction. Surgery reference was made and CT scan was done with abdominal shield. CT scan showed small bowel obstruction (SBO) likely due to compression by fibrotic band, close to the degenerating subserous fundal fibroid. Patient and relatives were counseled regarding the urgent need for exploratory laparotomy and its associated risks including fetal loss.

Patient was taken for exploratory laparotomy under general anesthesia, upper midline incision was made.



Figure 1: Plain CT image of abdomen and pelvis, (a) Axial and (b) coronal view showing dilated bowel loops(arrows) and myoma (labelled).

Intraoperative – there were dilated small bowel loops with a subserosal fibroid of $4 \times 4 \times 5$ cm on right lateral aspect of uterine fundus with an omental band adherent to the myoma obstructing the ileal loop going under it. Band was divided free from myoma. Small bowel loop was freed and myoma was excised.

Post-operative patient was shifted to ICU, she was started on uterine relaxants and progesterone support along with antibiotics. Continuous fetal monitoring was done for next 24 h. Within next 48 h, patient passed flatus, tolerated oral feeds, and improved symptomatically. She was discharged on post-operative day 4. Later at 38 weeks, gestation elective cesarian was done and she delivered a healthy male baby weighing 2.5 kg.

DISCUSSION

Diagnosing IO in pregnancy can be difficult as clinical symptoms are often misdiagnosed due to pregnancy. Physical examination is often arduous as the gravid uterus limits the examination of abdominal quadrants. Hence, often there is a delay in diagnosis and treatment of IO. In addition, there is a reluctance to utilize radiation-based investigation in a pregnant woman. CT has been recommended by the American College of Radiology as the diagnostic imaging modality for IO in patients with clinical suspicion.^[3] There for screening with ionizing radiation should be considered during pregnancy when the benefits outweigh the risks.^[4]

SBO in pregnancy is most commonly caused by adhesions from previous abdominal surgery (60%) and, more rarely, by hernias, malignancy, volvulus (25%), or intussusception (5%).^[5] In our patient, the pathology was a band formed between the omentum and degenerating fibroid

which obstructed the small bowel. This is an extremely rare complication of red degeneration on fibroid with limited case reports on the same.

There is currently no recommended treatment strategy for patients with SBO during pregnancy. Webster *et al.*^[2] reviewed published cases from 1992 to 2014 from which 46 cases of SBO in pregnancy were identified. In cases of adhesional SBO, 91% of cases were surgically managed, with 14% fetal loss. Two cases (9%) were managed conservatively with no fetal-maternal complications. Treatment depends on many factors, including the cause of blockage and the gestational age of the fetus. Conservative approaches should be considered initially, such as nasogastric decompression, intravenous fluid, and antispasmodics. In this case, though conservative management was attempted, as the symptoms worsened laparotomy was necessary. A positive fetal prognosis was considered at 27 weeks even if laparotomy triggers preterm labor, as we have an advanced neonatal care set up in our institute.

CONCLUSION

Although IO is an extremely rare event in pregnancy, it carries significant maternal and fetal mortality risk. Obstetricians should be highly cautious in evaluating abdominal pain in a pregnant female, especially in a woman with a history of abdominal surgery. Various diagnostic modalities including X-ray, CT, and MRI can be utilized in such cases. Appropriate timely diagnosis and treatment of IO complicating pregnancy are of vital importance in saving both mother and the fetus.

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