



RIGHT PARADUODENAL HERNIA COMPLICATING PREGNANCY: A CASE REPORT

Gynaecology

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KEYWORDS

INTRODUCTION

Intestinal obstruction is a serious complication that may rarely be seen in pregnancy, resulting in maternal and fetal mortality. The incidence of intestinal obstruction during pregnancy varies widely from 1 in 66,431 to 1 in 1,500 deliveries. Approximately 50-90% and 30% of pregnant women respectively suffer from nausea and vomiting¹.

The causes of intestinal obstruction in pregnancy include adhesions, volvulus, intussusception, carcinoma, hernia and acute appendicitis. It is associated with high maternal and perinatal mortality of 6% and 20% respectively. Among the numerous etiology of small bowel obstruction, one of the rarest is internal herniation representing only 1% of all cases. In 1857, Treitz defined an internal hernia as a retroperitoneal protrusion of an abdominal organ through a peritoneal fold. These hernias can be classified according to their etiology as either congenital or acquired. Paraduodenal hernia is most common form of congenital internal hernia and constitute a protrusion of bowel into the retroperitoneal space through peritoneal defects near the 3rd and 4th portion of duodenum. The risk of intestinal torsion is maximum at around 16-20 and 32-36 weeks of pregnancy and puerperium¹. The intestinal obstructions has even led to maternal and/or fetal death in some reported cases²⁻⁶.

CASE REPORT

A, 24 years old pregnant lady G3P2L0 with 31 weeks POG, presented to gynae casualty on 2/12/2018 with complaints of acute onset abdominal pain with distension for two days. Pain was diffuse and she was not able to tolerate food for the last two days. She also gave history of several episodes of vomiting and not passed stool for two days.

On presentation, she was conscious, but dehydrated and cachexic. She had tachycardia, tachypnea and her BP was 100/60 mmHg. On per abdomen examination -abdomen was grossly distended with guarding and rigidity with absent bowel sounds. Uterus couldn't be palpated due to gross distention and fetal heart sound was also not audible. On per vaginal examination- cervical os was closed and uneffaced and presenting part was high up. Immediately USG whole abdomen was done which was suggestive of single live intrauterine fetus of 32 weeks of gestational age with posterior placenta anterior reaching upto os with liquor (AFI) <1cm. An episode of fetal bradycardia was observed during ultrasonography. There was evidence of a large fluid filled structure noted in right hypochondrium reaching upto right iliac fossa with dense floating bowel loops s/o suggestive of intestinal obstruction (Fig. 1).

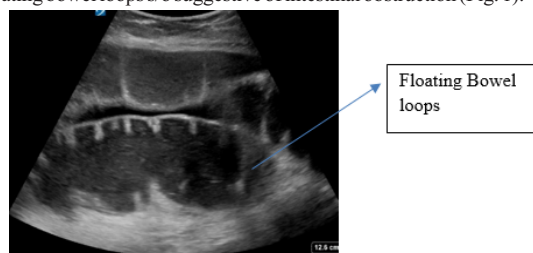


Fig. 1: Ultrasound showing dense floating bowel loops suggestive of intestinal obstruction

Surgical consultation was done and decision of exploratory laparotomy was taken after informed consent. Intraoperatively small bowel was grossly distended and uterus couldn't be visualised (Fig. 2). Uterus could be visualised only after taking out the distended bowel loops. An emergency LSCS was performed first. A fresh still born male baby of 1.6 kg was delivered. After completing LSCS the cause of intestinal obstruction was traced. It was observed that stomach and duodenum were grossly distended. Proximal one- third of jejunum was within a sac like structure. The sac wall was formed by an anomaly of the mesentery of transverse and descending colon. The distal edge of this sac was formed by superior mesenteric vessels acting as the constriction ring above which the small bowel was trapped. The sac was opened and content was reduced. Hernial orifice was closed and gastrostomy with appendectomy was performed. The abdomen was closed in layers. Patient's post operative recovery was slow and she was kept nil per oral on IV fluids for 11 days. Patient was discharged on 17th day. After 4 weeks of surgery, gastrostomy closure was performed. Patient has been followed upto 6 months and doing well.

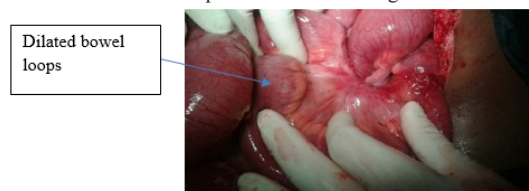


Fig. 2: Intraoperative dilated bowel loops

DISCUSSION

Bowel obstruction during pregnancy is rare and difficult to diagnose. More than 50% cases are due to adhesions. Other causes are volvulus, intussusception, and obstructed hernia. Most cases results from pressure of the uterus on intestinal adhesions around mid-pregnancy when the uterus become an abdominal organ or in 3rd trimester when fetal head descends and in immediate postpartum period because of sudden uterine involution. Most of the symptoms matches with pregnancy's symptoms. In the second half possibility of toxemia, Braxton hicks contraction and abruptio placenta make diagnosis less obvious.

Para duodenal hernia in pregnancy has rarely been reported in literature. One case report was published in 1991. In the largest series of small bowel obstruction in pregnancy, published by Miller et al, most of the cases were due to adhesions, volvulus, intussusception and only two cases were reported to be due to paraduodenal hernia. 36% patients were operated at 1st admission and 11% at readmission⁵. Treatment delay of more than 24 hours is reported as risk factor increasing mortality and morbidity. A maternal mortality of 6-20% and perinatal mortality of 30-40% has been reported, mostly due to delay in diagnostic in pregnancy.

Therefore, it is very important to have a high index of suspicion for diagnosis because nausea, vomiting, abdominal pain and constipation are easily mistaken for some of common symptoms due to pregnancy and displacement of the bowel by gravid uterus also hampers examination. So, early and aggressive intervention are required to

decrease the morbidity and mortality of this rare complication of pregnancy.

CONCLUSION

In summary paraduodenal hernia in pregnancy is a rare complication. It can be suspected on the basis of clinical presentation and ultrasound findings, but still exact diagnosis can be made only by surgery. The management is usually similar to non-pregnant state and the combined expertise of obstetrician, radiologist, and surgeons are needed to manage the patient.

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