Case Report

Acute intestinal obstruction during pregnancy

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Abstract

Sub acute bowel obstruction is a rare complication during pregnancy. The condition is associated with significant maternal and fetal mortality. The delay in diagnosis is due to non specific symptoms and disinclination towards carrying out radiologic investigations in pregnancy. We are presenting the case of a 31 year old lady who presented in her 2nd trimester with symptoms suggestive of intestinal obstruction and a past history of abdominal surgery. Ultrasound abdomen showed multiple dilated small bowel loops, as cites and a single live fetus. X-ray abdomen and CECT were not done in order to prevent fetal exposure. A diagnosis of acute adhesive obstruction was made and exploratory laparo to my was done, which revealed extensive adhesions. Adhesiolysis was done. Her post-operative recovery was uneventful. This case highlights the fact that as Intestinal obstruction in pregnancy is a rare event, clinical suspicion is critical and should be increased in a patient with an abdominal scar. As the incidence of surgical procedures is increasing, it is likely to be seen more frequently. Once the diagnosis is made, the recommended treatment is surgery regardless of gestational age. Every effort should be made to avoid delay in treatment.

Key words: Sub acute bowel obstruction, Pregnancy, Adhenolysis.

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Introduction

The most common cause of bowel obstruction in pregnancy is adhesions due to previous surgery or illness. Reported incidence is 1 per 3000 pregnancies [1]. This may occur during mid-gestation when uterus rises into the abdomen, in 3rd trimester or post-partum. The consequences of intestinal obstruction in pregnancy carry additional risk to fetus. Since intestinal obstruction in pregnancy is rare, high index of suspicion, prompt radiological examination and standard therapeutic principles should be adhered to.

Case Report

A 31 year old lady in her 20th week of pregnancy was referred to KMC Manipal with 2 days history of abdominal pain, distention and obstipation. She had a past history of a laparotomy with right salpingectomy for ectopic pregnancy and a similar episode of intestinal obstruction 1 year back, managed conservatively.

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Examination revealed pallor, tachycardia, generalized abdominal distention, midline scar of previous laparotomy, periumbilical tenderness and absent bowel sounds. Blood investigation revealed leucocytosis. Ultrasound (USG) abdomen showed multiple dilated small bowel loops, ascites and a single live fetus. A

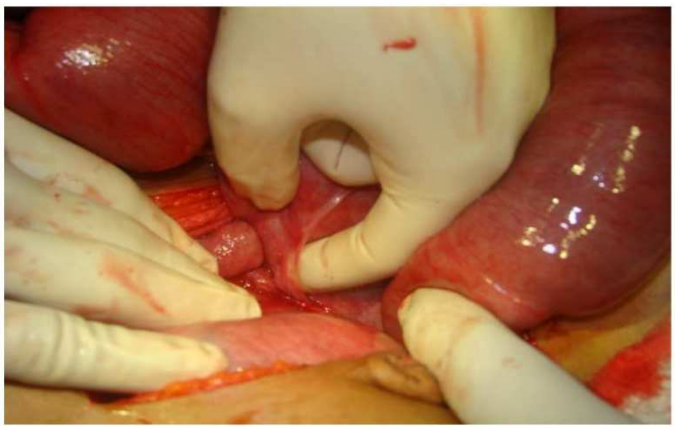

Fig 1: Operative Photograph showing dilated bowel loops and adhesive band

diagnosis of acute adhesive obstruction was made and exploratory laparotomy was done, which revealed extensive adhesions (Fig. 1). Adhesiolysis was done. Her post-operative recovery was uneventful. Later, she delivered a healthy baby at 37 weeks gestation.

Discussion

Bowel obstruction during pregnancy is rare and difficult to diagnose. More than 50% of cases are due to adhesions [2]**.** Other causes are volvulus, intususception and obstructed hernias. Most cases result from pressure of the uterus on intestinal adhesions around mid pregnancy, when the uterus becomes an abdominal organ or in the 3rd trimester when fetal head descends and immediate post partum period because of sudden uterine involution. Most women present with vomiting, abdominal pain and constipation. The presentation does not differ from the general population but since similar symptoms are seen in normal pregnancy, it is a difficult diagnosis and high suspicion is needed. In the first half of pregnancy nausea, vomiting, episodes of constipation, hyperemesis gravidarum, duodenal ulcer and gastritis are common. In the second half possibility of toxemia, Braxton hicks contractions and Abruptio placenta make the diagnosis less obvious. Fever, tachycardia, leucocytosis and localized pain signify more intense bowel sequelae.

USG is the first mode of imaging but if inconclusive and there is high suspicion, one must take help of plain X ray abdomen in third trimester, with caution. In addition, MRI has added benefits of multiplanar imaging, excellent soft tissue contrast and no risk of radiation.

In present times risk to premature neonate has been substantially reduced by tocolytics and advances in anesthesia and neonatology.

About 60% of patients diagnosed and treated in the second trimester of pregnancy complete their pregnancy till term, in contrast to 22% in third trimester [3]. Miller *et al* published a series of 410 patients diagnosed with small bowel obstruction [4]. Thirty-six percent of patients were operated at first admission and 11% at readmission.

Several studies have shown lower incidence of adhesions with laparoscopic surgeries [5, 6]. When confronted with these symptoms in pregnancy, one is not eager to use X-Ray for diagnosis, because of harmful effects on the fetus [7].

Treatment delay of more than 24 hours is reported as risk factor increasing mortality and morbidity [8]. A maternal mortality of 6-20% and fetal wastage of 30-40% has been reported, mostly attributable to diagnostic delay [9].

Conclusions

Intestinal obstruction is comparatively a rare event in pregnancy, which requires a high index of suspicion for diagnosis. As the incidence of surgical procedures is increasing, it is likely to be seen more frequently. One must consider this in any pregnant woman with an abdominal scar and characteristic features. Once the diagnosis is made, the recommended treatment is surgery regardless of gestational age. Every effort should be made to avoid delay in treatment.

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