

A RARE CASE OF BOWEL GANGRENE AFTER AN IUD DELIVERY**Sunil I. and Kaur H.***

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ABSTRACT

Intestinal obstruction is a rare entity during pregnancy and puerperium. The incidence is on the rise because of increasing number of abdominal surgeries. The diagnosis is often difficult and delayed due to other conditions of pregnancy that present with acute abdomen. Here we present a case report of a patient diagnosed with bowel gangrene on laparotomy operated for acute abdomen on the suspicion of uterus rupture following an IUD delivery. An increased awareness and suspicion of the condition is required to prevent catastrophic results due to delayed diagnosis.

KEYWORDS: Intestinal obstruction, bowel gangrene, pregnancy, puerperium.**INTRODUCTION**

The incidence of intestinal obstruction in pregnancy is 1 in 3000 pregnancies.^[1] It is diagnosed mostly in second and third trimester. However, it can occur during third trimester or during puerperium. The most common cause of obstruction in pregnancy is adhesive bands followed by volvulus and intussusception.^[2] Its incidence is increasing because of increasing number of abdominal and pelvic surgeries leading to surgical bands. Bowel obstruction presents with the symptoms of abdominal pain, nausea and vomiting. The diagnosis is often delayed due to vague clinical presentation and there are other conditions of pregnancy which have similar clinical picture like hyperemesis gravidarum. Here we present a case of bowel gangrene being diagnosed during puerperium following an IUD delivery.

CASE REPORT

A 35 years old Para-5 came to ASCOMS hospital in the Department of Obstetrics & Gynaecology. The patient had undergone a preterm vaginal delivery at five months gestational age of a dead fetus at Gandhi Nagar Hospital. After the delivery she developed acute pain abdomen along with fever. She was referred to Government Medical College, Jammu. There she was investigated and managed conservatively but her pain abdomen and fever did not subside. She came to ASCOMS hospital after three days with the same complaints. Her previous four deliveries were vaginal at home. There was no history of any surgery in the past and no history of any oral contraceptive pill intake. On admission to this hospital, her general condition was sick. Her respiratory rate was 30 per minute; pulse was 120 beats per minute; blood pressure was 130/90. On per abdomen examination, there was guarding and diffuse

tenderness. Her haemoglobin was 6.5 g% and was given one blood transfusion before surgery. Her WBC count was 12000 per cu mm, PTI 86% and platelet count was 2.4 lakhs per cu mm.

On ultrasound, there was significant free fluid in the abdomen and paracentesis was positive with blood tinged fluid. A diagnosis of haemoperitoneum was made and patient was taken up for surgery at the suspicion of rupture uterus. Surgery was done under general anaesthesia. A midline incision was given. About 300-400 ml of blood mixed peritoneal fluid was seen. The uterus, tubes and ovaries were found to be normal and there was no evidence of any rupture or perforation. The small gut was gangrenous as in Figure 1 & 2. Surgery team was called for further exploration of the intestines. No perforation, no twisting, no adhesions, no intussusception was seen. About 2 feet of jejunum and 3 feet of ileum was found to be gangrenous and was resected and the ends were anastomosed with each other. Total of three blood transfusions were given to the patient. Patient was kept on intravenous fluids, nasogastric suctioning and antibiotics in the post operative period. Post op period was uneventful. Patient was started on oral nutrition on fourth post op day and was discharged from hospital on the 12th post operative day.



Figure 1: Picture showing gangrenous small gut at laparotomy.



Figure 2: Picture showing gangrenous small gut at laparotomy.

DISCUSSION

Intestinal obstruction during pregnancy and puerperium is a rare event. Gibney EJ *et al* and Ballantyne GH in their studies reported volvulus as the commonest cause of intestinal obstruction during pregnancy and puerperium.^[3,4] A case series by Chiedozi LC *et al* reported volvulus as the second commonest cause of for the same and also intussusception as one of the causes.^[2] The leading point in adult intussusception is usually a tumor or some abnormality of the intestinal wall. An adhesive band is the commonest cause of small intestinal obstruction in most Western countries.^[5,6]

Intestinal obstruction during pregnancy poses an additional threat to the foetus. In our case report also the patient had lost her foetus. Chiedozi LC. *et al* have shown a 20% foetal wastage and maternal mortality of 10%.^[2] Gibney EJ *et al* have reported a maternal mortality of 10-33% for intestinal obstruction in pregnancy.^[3] Studies by Ottigner LW *et al* and Barnett WO *et al* have shown that intestinal obstruction can be reduced substantially by early diagnosis and intervention so that the foetal wastage can also be decreased.^[7,8]

There is concern regarding exposing the foetus to radiation for diagnosis of intestinal obstruction during pregnancy. However, an exposure of 10-20 cGy does not produce increased incidence of congenital anomalies in foetus.^[9] Diagnostic abdominal x-ray in the pregnant women thus appears to be acceptable risk in the appropriate setting. The diagnosis during pregnancy is often difficult due to many conditions of pregnancy that mimic intestinal obstruction. During puerperium, a lax abdominal wall may prevent from eliciting signs of intestinal obstruction. More often obstetric causes are sought for and treated to manage acute abdomen and intestinal causes are missed. Management of these patients should not be hampered by reluctance to perform surgery in pregnancy for the fear of premature labor. There is now evidence that abdominal surgery in the third trimester does not induce labor.^[10,11] Saunders and Milton also advise early surgical intervention in acute abdominal conditions in pregnancy and that a negative laparotomy carries little risk of disturbing the pregnancy.^[12] Kammerer WS *et al* have shown no significant increase in perinatal mortality due to laparotomy during for non-obstetric reasons during pregnancy.^[13] The risk to the premature neonate has been further reduced by the availability of tocolytic agents and recent advances in anesthesia and neonatology.

Though a rare event, the incidence of intestinal obstruction during pregnancy and puerperium is on the rise due to increasing number of cesarean sections. There is generally a delay in the diagnosis and cecal gangrene ensues in an average duration of 48-72 hours. A high index of suspicion is required to diagnose this condition at the earliest. An X-ray in a patient of acute abdomen must be done if the condition is suspected and laparotomy performed within golden time that is, 24 hours of onset to prevent gangrene of the intestine. Obstetricians need to be aware of the entity and must keep it in mind while treating acute abdomen. A team approach with surgeons can be helpful in treating this condition at the earliest.

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