



## POSTPARTUM INTESTINAL OBSTRUCTION - A CASE REPORT DIVYA LAKSHMI A

Department of Obstetrics and Gynaecology, STANLEY MEDICAL COLLEGE AND HOSPITAL

**Abstract :** Intestinal Obstruction during pregnancy due to fibrous band adhesions without previous abdominal surgeries is rare. It presents more commonly in the postpartum period. Mortality rates are higher due to delay in diagnosis and it requires high index of suspicion. Here we report a case of Postpartum Intestinal obstruction due to fibrous band adhesion with no history of previous surgery who was diagnosed early and managed successfully.

**Keyword :** Intestinal obstruction, Postpartum, Adhesions, volvulus

### INTRODUCTION:

Incidence of Intestinal Obstruction in pregnancy ranges from 1 in 1500 to 1 in 66431 deliveries<sup>1,5</sup>. Mortality rate is around 20% due to delay in diagnosis<sup>1,4</sup>. Most cases of Intestinal obstruction during pregnancy results from pressure of growing uterus on intestinal adhesions. 60% cases are due to adhesions of which 25% presents in postpartum period. Intestinal adhesions occur most commonly due to previous abdominal surgery. Non surgical causes of Intestinal adhesions are rare and one such case is reported here.

### CASE REPORT:

A 38 year old elderly primigravida, married for 1 year with EDD on 21.07.2015, a case of Gestational Hypertension was admitted through casualty on 10.07.2015 @ 1 PM with presenting complaints of lower abdominal pain. She was not in labour. In view of Gestational Hypertension with Term Gestation, Induction of labour done with PGE2 gel. In view of Fetal Distress, Emergency LSCS done on 11.07.2015 @ 1:58 PM, delivered an alive, healthy girl baby of 3.3kg. On 2nd Postoperative day, patient had few episodes of Billious vomiting and Abdominal distension. Bowel sounds were sluggish. Suspected Postoperative Ileus and in concordance with surgeon the patient was managed conservatively for 3 days. On 5th postoperative day, Patient developed fever, tachycardia, dehydration, high coloured urine with increase in abdominal girth of 5cm. Since the patient condition was deteriorating with X-Ray Abdomen erect (Fig 1) and CT scan finding of grossly dilated small bowel loops with Multiple Air fluid levels suggesting of Small Bowel Obstruction planned for laparotomy.



Fig 1 showing grossly dilated bowel loops with multiple air-fluid levels

Exploratory Laparotomy was done with surgeon and obstetrician team on 16.07.2015 @ 1 AM which revealed a Fibrous Band at the level of D3-D4. Ileum and Ileocaecal junction was found to be twisted on its own and kinked due to band (Fig 2 and 3).



Figure 2 showing fibrous band causing intestinal obstruction



Figure 3 showing a closer view of the fibrous band intra-operatively

Fibrous Bands were released. With serial warm packs, motility and colour of small bowel regained. Decompression of small bowel done. Uterus and adnexa was found to be normal except for evidence of PID. Patient postoperative recovery was good. HPE Report of band and ascitic fluid showed only inflammatory changes and there was **no evidence of Koch tubercle in the material.**

#### **DISCUSSION:**

Adhesions leading to small bowel obstruction was second most common cause of Acute Abdomen in pregnancy following Appendicitis. Among the causes of Intestinal obstruction during pregnancy and puerperium, Adhesions accounts to 60% of cases, of which 30% occur in 1st and 2nd trimester, 5% in 3rd trimester and 25% during Postpartum period. Volvulus accounts to 25% cases of which Caecal being 5%, Midgut 2% and Sigmoid 10%. Other causes like Intussusception, hernia, carcinoma contributes 5%. As per Ludwig(1913) & Mikulicz(1926), Intestinal obstruction in pregnancy occurs more commonly during Mid pregnancy when uterus becomes an abdominal organ, In 3rd Trimester when fetal head descends and Immediate Postpartum when there is acute change in uterine size<sup>3,4</sup>. Non surgical causes of Intestinal adhesions are less common such as blunt trauma, chronic inflammatory bowel disease like Crohn's, ulcerative colitis, diverticulitis, tumours, endometriosis. In this patient on enquiry, there was no history of previous surgery, Tuberculosis except for complaints of nausea and vomiting along with Bowel disturbances on and off for which she had not evaluated. History of White discharge and abdominal pain was present. Due to some chronic subclinical inflammation, Fibrous Bands must have been developed and caused occasional bowel disturbances in this patient. Bowel distension due to postoperative ileus and sudden change in uterine size during postpartum made the fibrous bands to cause obstruction and twisting of bowel loops and resulted in Acute Intestinal Obstruction.

A Case of Peripartum Intestinal obstruction reported in 2006 @ Kasturba medical college, Manipal had a previous history of Appendicectomy and revealed Adhesive band with gangrenous terminal ileum on laparotomy. Release of band with resection of gangrenous segment and end to end anastomosis done. A case series of Sigmoid Volvulus causing Intestinal obstruction in pregnancy published in 2009 @ Turkey. Out of 4 cases, 3 cases had developed gangrenous bowel for which resection and anastomosis done and 1 case died in postop period.<sup>2</sup> Major reviews were reported by Goldthorp in 1966(150 cases), Perdue et al(64 cases). 50% cases had previous history of appendicectomy. In one series of 66 pregnant patients with bowel obstruction, 23% required bowel resection with a fetal death rate of 26% and four maternal deaths<sup>6</sup>.

#### **CONCLUSION:**

Intestinal obstruction during pregnancy and puerperium is difficult to diagnose. Intestinal obstruction during pregnancy due to fibrous band adhesions without previous abdominal surgeries is much less common. It requires high index of suspicion to diagnose and prompt intervention is necessary to decrease maternal and fetal morbidity and mortality.

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