10.5005/jp-journals-10006-1123

CASE REPORT

Postcesarean Colonic Obstruction due to Sigmoid Volvulus

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ABSTRACT

Sigmoid volvulus causing intestinal obstruction in immediate postcesarean period is extremely rare, commonest being adhesions and adynamic ileus. The presenting features of this complication are mistaken for usual postoperative signs and symptoms causing delayed diagnosis. Thus, a case of intestinal obstruction due to sigmoid volvulus in immediate postcesarean period is presented. Detorsion of sigmoid and decompression of bowel was done. Intestines were viable because of early detection and prompt intervention. Therefore, high index of suspicion and prompt surgical interventions are required to minimize maternal morbidity and mortality.

Keywords: Sigmoid volvulus, Postcesarean, Long mesocolon.

INTRODUCTION

Sigmoid volvulus causing intestinal obstruction in immediate postcesarean period is extremely rare, commonest being adhesions and adynamic ileus. Less than 15 cases of colonic volvulus following cesarean[1] and only 76 cases of sigmoid volvulus complicating pregnancy have been reported.[2,3] The presenting features of this complication are mistaken for usual postoperative signs and symptoms causing delayed diagnosis.[4] Therefore, high index of suspicion and prompt surgical interventions are required to minimize maternal morbidity and mortality (around 20%).[1]

CASE REPORT

A 22-year-old primigravida was admitted at term in labor on 31 July 2010. Two hours later emergency cesarean was performed for persistent fetal heart deceleration and grade three meconium stained liquor. A healthy female neonate weighing 2.8 kg with Apgar score of 6 and 8 at 1 and 5 minutes respectively, was delivered.

Thirteen hours postcesarean, she complained of generalized abdominal pain and distension, inability to pass flatus and two episodes of bilious vomiting. She was tachycardic, pulse rate was 110/min, blood pressure was 150/100 mm Hg, urine output was adequate. Abdomen was distended, tender, tympanic with increased bowel sounds. All relevant investigations were normal except raised WBC count (18,700 cells/mm^3, 80% neutrophils).

Surgical consultation was taken and joint decision was made to manage her conservatively, considering postcesarean adynamic ileus.

On second postoperative day, her general condition deteriorated. She looked toxic, febrile dehydrated inspite of conservative management. Visible peristalsis seen. Surgical team advised to review with abdominal ultrasound and plain erect radiograph (Fig. 1). Considering results of these investigations and deteriorating clinical condition, provisional diagnosis of proximal sigmoid obstruction was made.

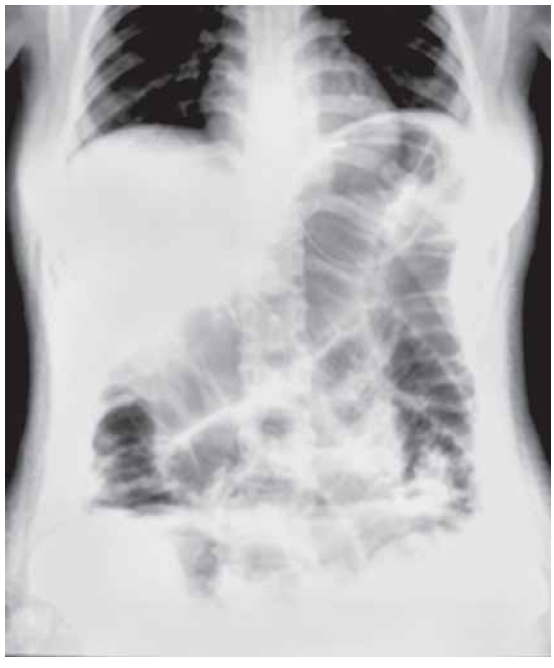

Fig. 1: Erect abdominal X-ray showing gaseous distension of small and large bowel with few air fluid levels. Abrupt cut-off at proximal sigmoid

Emergency laparotomy revealed grossly distended small and large bowel due to sigmoid volvulus (Fig. 2) caused by long mesocolon (Fig. 3). Viable sigmoid was derotated and bowel was decompressed with rectal tube. There was no other pelvic pathology.

Postoperative management was same as for any laparotomy with rectal tube *in situ* for three days. She had uneventful recovery, and discharged on 7th day.

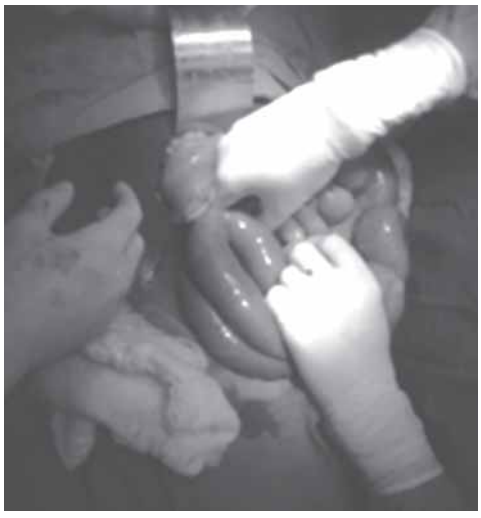

Fig. 2: Distended large and small intestines

DISCUSSION

During pregnancy, enlarging uterus pushes long redundant sigmoid out of pelvis.[2] Increased intra-abdominal space and change in position of abdominal organs following cesarean lead to rotation of sigmoid around its point of fixation—volvulus.[1] Postcesarean bulky uterus prevents its spontaneous derotation, resulting in kinking and intestinal obstruction. Classical features of intestinal obstruction like constipation, pain and distension of abdomen, dilated bowel in X-ray, will be mistaken for features of postoperative paralytic ileus[4] to be relieved conservatively. Conservative decompression via rectum will be unsuccessful because of impediment by postpartum bulky uterus to detorsion.[2] Without prompt detorsion, vascular compromise[4] leads to ischemia, gangrene, perforation of bowel and peritonitis that may require intestinal resection and colostomy.

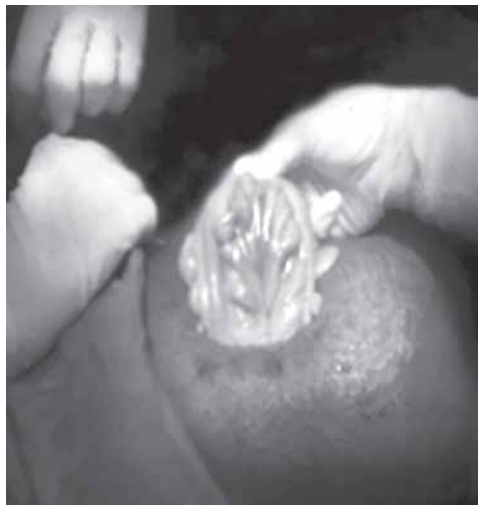

Fig. 3: Long sigmoid mesocolon

Therefore, the deteriorating condition and failure of conservative management should be the only guide for prompt surgical intervention to prevent severe morbidity and mortality.

CONCLUSION

Diagnosis of sigmoid volvulus in pregnancy or postcesarean requires high degree of suspicion when patient complains of features suggestive of bowel obstruction. Prompt surgical interventions are necessary to minimize fetomaternal morbidity and mortality.

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