

Post Caesarean Caecal Perforation with Fecal Peritonitis

Yadav M¹, Joshi P², Koirala P², Ghimire S², Safi S², Shrestha I², Ojha N², Amatya A², Gurung G², Rana A²

¹Department of Obs/Gyn, Nepalgunj Medical College, ²Department of Obs/Gyn, TU Teaching Hospital Kathmandu

DEAR EDITOR,

Sometimes we get caught in unbelievable situation. One such case was when we reopened a case of caesarean section (CS) complicated with 2L fecal peritonitis from perforated caecum that had burst out secondary to obstruction caused by inadvertently sewn ascending colon perpetuated by floppy caecum; necessitating right sided hemicolectomy and ileocolic anastomosis, as is detailed below.

A primigravida 21yrs of age presented at 42 week period of gestation (POG) in early stage of labour and underwent emergency CS for non progress of labour, surgery being made difficult by distended loops of bowel. Otherwise there were no operative complications and there was minimal maternal blood loss. The total operating time was around 45 minutes and a healthy baby boy weighing 3.2 kg was delivered.

On postoperative Day 2, she complained of abdominal distension and pain even after of passage of flatus and small amount of stool after enema. On examination, abdomen was soft, distended and tender with no clinical evidence of peritonitis. Abdominal girth was measured. Plain radiographs of abdomen were taken that showed widespread colonic dilatation with no free air space. In view of these radiologic features suggestive of sub acute intestinal obstruction, surgical consultation was taken. As per their opinion, by keeping nil per oral, iv fluids and nasogastric tube management was initiated in conservative line. Despite of conservative management for 5 days, there was no improvement that necessitated emergency laparotomy with an indication of closed loop obstruction. During surgery, 2 liters of fecal matter with slough was noted in the peritoneal cavity. Caecal perforation was noted on

its anterior wall perpetuated from inadvertent bites taken at floppy caecum and sewn with vicryl 1 zero. Limited right hemicolectomy with ileocolic anastomoses was done. Post operatively patient was kept in ICU and broad spectrum iv antibiotics were given. She developed wound gaping and resuturing was done on 12th postoperative day. She was discharged on 18th postoperative day and readmitted on 25th postoperative day because of hematemesis from stress gastric ulcer which was taken care by iv proton pump inhibitors. She was finally sent home on 5th day of second hospitalization.

It is generally believed that the initial post-operative paralytic distension in post CS cases is due to anesthetic effect or from declining estrogen level relaying decreased parasympathetic tone that hopefully settles down. That is why conservative approach was chosen in the management of the case in the beginning. Typically after CS, abdominal distension has been noted without any associated pathological lesion as in idiopathic pseudo-obstruction of the colon, condition of a neuro-vegetative nervous system disorder as described in 1948 by Ogilvie.¹ They have favorable prognosis after aspiration or spontaneous colonic decompression at transverse colon level rapidly via colonoscopy with or without epidural anaesthesia. Distention up to or beyond 10 cm diameter has been noted and 41 cases reported.

Whereas surgery is indicated in more refractory cases where clinical sign of obstruction that was non-specific will alter giving true diagnosis following worsening of symptoms and signs like progressive excessive distension of abdomen or disappearance of normally heard bowel sound. The diagnosis is made by x-ray abdomen without any preparation. Acute large bowel obstruction has been noted in second stage CS mainly when the operation is

CORRESPONDENCE

Dr. Monika Yadav, MD
Department of Obstetrics and Gynaecology
Nepalgunj Medical College, Nepal
Phone: 9841499095
Email: drmonu30@rediffmail.com

performed after prolonged labor. This also has led to post CS peritonitis having uncertain etiologies ranging from spillage of vernix caseosa/ meconium, but with a low incidence (0.36% (8/2238) in 10 years study period 1977-1986).

Caecal injuries are rare in obstetrics but may occur when there is anatomical distortion/deviation as in this index case of floppy caecum met in 10% population undergoing barium enema. Here caecum acquires a long redundant mesentery that no longer restricts it to the caecal fossa and allows it to move freely in the peritoneal cavity being hindrance at operative area thereby making it amenable / liable to torsion or susceptible to accidental surgical injuries as in our case.^{3,4} Obstruction created from a suture over the caecum led to the extreme overstretching, avascular necrosis and caecal burst with resultant faecal peritonitis. In Medline 19 cases of caecal perforation were counted to have uncertain diverse reasons, which in our case was iatrogenic surgical trauma due to floppy caecum.

In conclusion exteriorization of uterus wisely practiced during the closure of uterus at caesarean, does prevent accidental sutures being taken, even in the condition of anatomical distortion like floppy caecum culminating in caecal perforation and fecal peritonitis.

REFERENCES

1. Weber P, Heckel S, Hummel M, Dellenbach P. Ogilvie's syndrome after cesarean section: Review of the literature. *J Gynecol Obstet Biol Reprod (Paris)*.1993;22(6):653-8.
2. Pańczyk T, Grudzień M, Kraczkowski J, Oleszczuk J. Clinical aspects of peritonitis after cesarean section. *Wiad Lek*.1989 Jun 1; 42(11):720-4.
3. Strecker JR, Jaluvka V. Spontaneous cecum perforation following cesarean section. *Geburtshilfe Frauenheilkd*.1988 Jul;48(7):489-93.
4. Pratt AT, Donaldson RC, Everson LR. Caecal volvulus in pregnancy. *Obstet Gynaecol*.1981;57:375-405.