

A CASES OF ACUTE COLONIC PSEUDO-OBSTRUCTION LEADING TO CECAL PERFORATION POST LSCS CASE.

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ABSTRACT

Acute colonic pseudo-obstruction is rare but not very un-common to find post LSCS, if diagnosed late can cause severe maternal morbidity and mortality. Surgical intervention is must if diagnosed late, and is associated with long term morbidity to the patient. In this case, signs of bowel perforation were noted and laparotomy performed, findings suggestive of cecal perforation were seen. Although uncommon after a Caesarean section but diagnosis of Ogilvie's syndrome should be kept in mind.

KEYWORDS : Ogilvie's syndrome, acute colonic pseudo-obstruction, complication of LSCS, Bowel perforation

INTRODUCTION:

Bowel complications post Lower segment cesarean section although not very common but when it occurs it is associated with great maternal morbidity and mortality. Most common cause of bowel complications are injury to bowel intra operatively, this is very common in cases of previous cesarean pregnancies, previous myomectomy, Pelvic infections, pelvic radiations, and any other previously operated cases. Most common site for injury in this type of cases is the small bowel injury. Next common site for injury is sigmoid colon. Cecal injury during cesarean section is quite uncommon, but it can also occur post operatively. Ogilvie's syndrome is acute colonic pseudo-obstruction and is characterized by massive dilatation of the cecum, in the absence of physical obstruction. Sometimes cecal rupture can occur leading to severe peritonitis and other features of bowel rupture. Here we are presenting a case study of cecal perforation post lower segment caesarean section.

Case:

29 y/o P3L3 (all 3 LSCS) was referred case on Post-op day 7 of Emergency LSCS with complaints of abdominal distension, pain in abdomen and fever. She had marked distention of abdomen from post-operative day 7.

On general examination, her pulse was 136bpm, Blood Pressure was 90/60mmhg, respiratory rate of 26/minute was there. Her temperature was 102F, Saturation by finger probe was 99% on room air. Patient was agitated and crying of pain, pain was high in intensity, increasing with movements, started 2 days back from right iliac fossa to all over the abdomen. She was started on fluid therapy with wide bore cannula and further history was taken, Suggestive of no complication during last caesarean section, she tolerated diet well initially but started noticing abdominal distention from day 3 of caesarean section.

On Abdominal examination, tenderness, rebound tenderness, and guarding were present along with tympanic note on percussion. Urgent Abdominal Xray and CECT abdomen was sought, Abdominal X-ray showed gas under diaphragm. CECT abdomen also showed massive pneumoperitoneum.

Her Hb was 11gm/dl, TLC was 34,000 and platelet was 2.5lacs.

Other investigations were within normal limits.

Patient was taken for exploratory laparotomy immediately. Extensive intra-abdominal adhesions with around 1.5 liters of purulent and fecal material were found, with Cecal perforation.

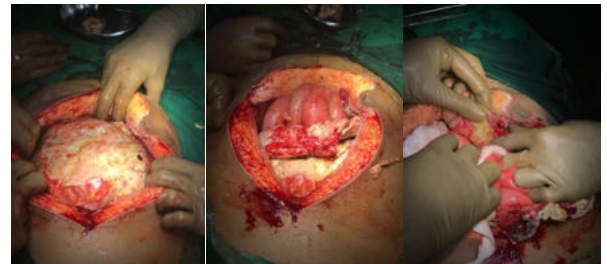


Fig 1- extensive fecal material.

Fig 2- intraperitoneal adhesions.

Fig 3- Cecal perforation.

Normal saline wash was given of around 6 liters and primary closure of perforation done. Ileostomy was done.

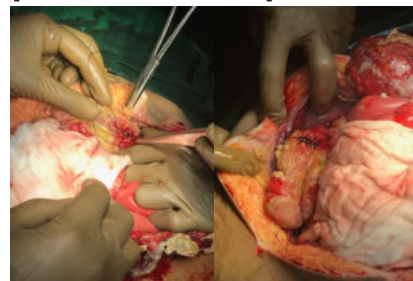


Fig 4,5- Primary closure of perforation being done.

Patient was observed post operatively, and was discharged of 7th post-operative day. Re-anastomosing surgery performed after 3 months. Patient discharged successfully on regular diet.

DISCUSSION:

Ogilvie's Syndrome is not an uncommon condition, which may result in significant mortality and morbidity. It can occur at any age, but frequency has been reported higher in sixth decade

of life. There is slightly higher incidence in males as compared with females (1.5:1), which is surprising because cesarean section has been reported the leading cause associated with Ogilvie's Syndrome [1, 2]. Injury to bowel during C-section occurs especially during adhesiolysis or when distended bowel loops are seen intraoperatively can occur.

Rarely Some degree of adynamic ileus results from all intraabdominal procedures. Acute colonic pseudo-obstruction is characterized by massive dilatation of the cecum. If cecal dilation exceeds 10 to 12cm, the risk of perforation increases significantly. If the patient has not passed flatus within 4 to 5 days or does not respond to conservative measures, then the possibility of a mechanical small bowel obstruction should be considered. Intraperitoneal adhesions are the most common etiology of intestinal obstruction.

The exact pathophysiology of OS is still unclear and is said to be multifactorial. The colonic motility requires integration of myogenic, neural and hormonal influences.

The parasympathetic system promotes, while the sympathetic stimuli inhibit the gut motility. The neurons in the enteric plexuses release factors that stimulate inter-neurons which transmit excitatory signals proximally, causing contraction and inhibitory signals distally that in turn cause relaxation by neurotransmitters, acetylcholine and serotonin. [3]

Acute colonic dilation in OS is claimed to be due to an imbalance between sympathetic and parasympathetic innervation to the colon, with an overall excess in sympathetic activity leading to reduced colonic motility and functional bowel obstruction. The temporary neuropraxia of the sacral nerves lying in close proximity to the structure at risk during CS, including the cervix and the vagina before supplying the colon could be injured during surgery or trauma to this area. [4]

With competent ileocecal valve, the caecum and colon dilate enormously, causing compression of the vessels in the wall leading to ischemic necrosis and perforation [6]. If not treated early, mortality may be as high as 36–50% [1].

Clinical presentation of OS is similar to mechanical obstruction of bowel. Abdominal distension is usually painless unless there is an established colonic wall ischemia leading to perforation [5]. Abdominal X-ray is the most important diagnostic modality showing the features consistent with bowel obstruction, that is, dilated colon.

Management of OS can be classified into conservative and surgical treatment although arguably diagnosis and recognition are the most important aspects of care. The initial treatment for OS includes placement of a nasogastric tube, enemas, fluid restoration, and correction of electrolyte abnormalities. Antibiotics can be added to provide some coverage for patients who are suspected to have bowel ischemia or perforation. [7] Although surgical management is required in almost all cases due to late diagnosis.

In this case, there was no documentation about bowel trauma in operation notes of patient's caesarean section. Surgical management was considered after resuscitative measures, because of signs of perforation and hemodynamic instability of the patient. Conservative management could have been considered in cases where perforation has not already taken place.

Similar cases managed by conservative measures are by Munzr Z et al. reported in 2013. [8]

Similar cases reported to have surgical intervention are by Saha K et al. in 2019 [9], M. Khajehnoori et al. in 2016 [10], case series of 3 cases by Shakir Ali J. et al. in 2010 [11] and K. Geethadevi et al. in 2018 [12].

CONCLUSION:

Although uncommon after a Caesarean section, bowel perforation should be suspected if a patient presents with symptoms of a bowel obstruction.

Early identification and prompt imaging are the mainstays of treatment for these patients. Adhesions are the most common cause of mechanical obstruction and must be separated with care intraoperatively. And in cases of Ogilvie's syndrome early diagnosis can prevent surgical intervention.

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