Case Report

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Surgery Section

Spontaneous Caecal Perforation Associated with Ogilvie's Syndrome Following Vaginal Delivery – A Case Report

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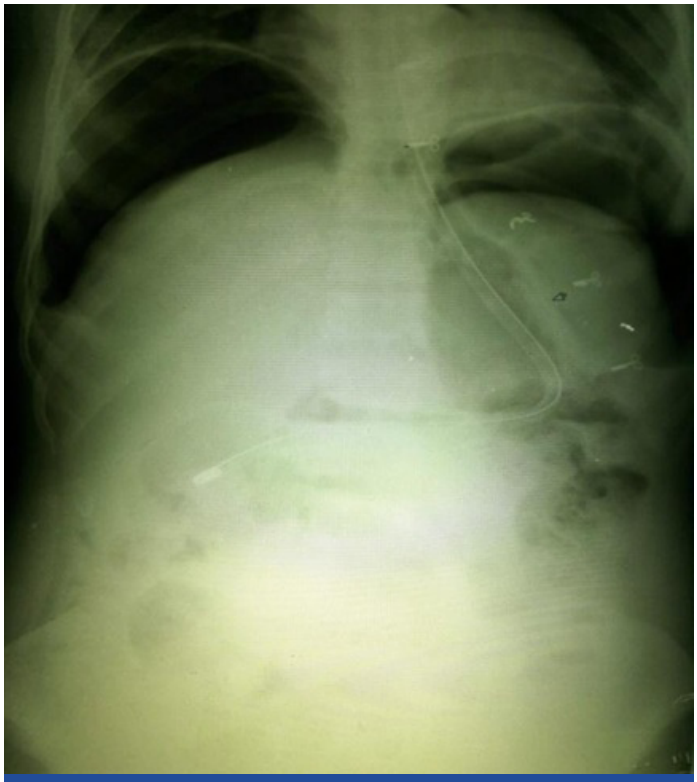
ABSTRACT

Acute pseudo-obstruction of the large bowel, Ogilvie's syndrome, can occur in the postpartum period following caesarean section which can result in caecal dilatation and may progress to perforation. This is quiet rare following normal vaginal delivery. Only two previous reports have been found in the English literature. We report a case of Ogilvie's syndrome with caecal perforation following normal vaginal delivery.

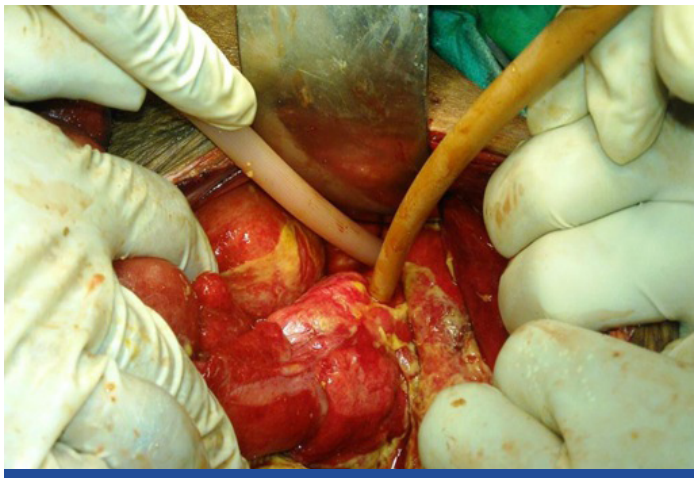
Keywords: Ogilvie's syndrome, Postpartum, Caecal perforation

CASE REPORT

A 22-year-old woman presented on 8th postpartum day with history of abdominal pain and distension of three days duration, constipation of two days, vomiting and fever of one day duration following a vaginal delivery of full term still born child. On examination patient was in shock and had features of generalised peritonitis. There was no evidence of perpeural sepsis or foul discharge per vaginum. Abdominal X-ray showed air under diaphragm [Table/Fig-1]. Patient was resuscitated and taken for exploratory laparotomy. At laparotomy 1×1 cm perforation in the caecum was found. There was no evidence of distal obstruction. Biopsy was taken from the edge of perforation [Table/Fig-2]. All the contaminated peritoneal fluid was drained and tube caecostomy done by passing the tube through the perforation and abdomen closed after thorough peritoneal lavage. Patient had stormy postoperative period. Patient developed sepsis and pneumonia on 3rd postoperative period and was forced to be put on ventilator for about three weeks during which tracheostomy was also done. Patient was weaned off ventilator and extubated on 25th post-operative day. The tracheostomy was decannulated over a week's period before being discharged. Histopathological examination of the freshened caecal edge was nonspecific.



[Table/Fig-1]: Abdominal x-ray showing gas under diaphragm



[Table/Fig-2]: Tube caecostomy through perforation in place (arrow)

DISCUSSION AND CONCLUSION

Ogilvie's syndrome [1,2] can occur after caesarean section which can progress to caecal perforation, in the postpartum period. This is extremely rare phenomenon following normal vaginal delivery, especially the progression to caecal perforation [3,4]. The exact aetiology of Ogilvie's syndrome is unknown, but it has been associated with severe trauma, abdominal and/or pelvic surgery, and sepsis. Bed rest and abnormal electrolytes are listed as factors associated with the development of the syndrome and Strecker et al., [5] reported the association of Ogilvie's syndrome and vaginal delivery could be due to the declining serum oestrogen levels in the postpartum period. The mechanism of the condition is thought to involve loss of tone in the parasympathetic nerves S2 to S4. This, in turn, results in an atonic distal colon and pseudo obstruction. A cut-off sign relating to an area of dilated and collapsed bowel around the splenic flexure corresponds to the transition zone between the vagal and sacral parasympathetic nerve supply. The cut-off sign is used to support the hypothesis of parasympathetic inhibition causing Ogilvie's syndrome. The diagnosis of Ogilvie's syndrome is widely reported to be troublesome due to the nonspecific clinical features. Abdominal distension is considered to be the common symptom. Jetmore et al., [6] reported no known cases of Ogilvie's syndrome to have presented without distension of the abdomen. As with any case of suspected ileus or obstruction, electrolyte levels are an essential investigation and in the 48 cases of Ogilvie's syndrome

reported by Jetmore et al., 83% demonstrated at least one electrolyte disturbance with hypocalcaemia being the most common [6]. Abdominal radiography is standard first-line investigation, and Keswani et al., reported that caecal diameter of nine cm or more is the only definitive sign of imminent perforation [5]. Several sources have discussed non-surgical management options which include decompression of the bowel and intravenous fluid support. Jetmore et al., advocate for colonoscopic decompression as a successful method of avoiding surgical management, unless signs of peritonism are evident. Stephenson et al., [7] have shown that the use of prokinetic, parasympathomimetic drugs such as neostigmine can be successful in the management of Ogilvie's syndrome, although the benefit in cases of idiopathic Ogilvie's syndrome is not certain. With regard to postpartum patients, Strecker et al., support the use of laxatives in the postpartum period and stress the importance of early diagnosis [5]. In the reported cases of Ogilvie's syndrome following normal vaginal delivery in the English literature, the histological findings of the caecum after right hemicolectomy showed no specific pathology.

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