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## Case Report

# Non-obstructive cecal perforation in post-partum period: a rare case report

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## ABSTRACT

A primi-para patient presented in emergency, ten days after normal vaginal delivery, with acute abdominal pain, low grade fever and constipation. Clinical examination revealed poor general condition, signs of dehydration, tachycardia, hypotension, guarding and rigidity all over the abdomen. Investigations were suggestive of perforation and peritonitis. Contrast enhanced CT confirmed the presence of around 800 ml of free fluid. After initial resuscitative measures, patient is taken up for laparotomy in view of acute abdomen. Intra-operatively around 1 l of purulent fluid drained. Exploration of the bowel revealed a large cecal perforation. Repair was carried out with rescue colostomy. Her post-operative period was un-eventful, she showed steady improvement and was discharged in a stable condition with colostomy in situ. The colostomy was closed after 12 weeks.

**Keywords:** Cecal perforation, Post-partum, Ogilvie's syndrome

## INTRODUCTION

Acute pseudo-obstruction of the large bowel, also known as Ogilvie's syndrome, can occur in the post-partum period following a cesarean section.

This condition was first described by Sir William Heneage Ogilvie in 1948.<sup>1</sup> However, it is an extremely rare presentation after vaginal delivery.

Only three cases of Ogilvie's syndrome after vaginal delivery are reported in the medical literature, to the best of our knowledge. The condition is a surgical emergency and a delay in diagnosis can have devastating consequences. It is also important to rule out the common causes of cecal perforation before arriving at the diagnosis of Ogilvie's syndrome. The exact etiopathogenesis is not known. It is very rare in a young patient and usually seen after cesarean section.<sup>2</sup>

## CASE REPORT

A 26 year old lady reported to the emergency with complaint of severe abdominal pain of acute onset, abdominal distention, few episodes of vomiting, low grade fever and constipation. She had full term vaginal delivery ten days back. On examination, she had signs of dehydration, tachycardia, hypotension. Abdomen was distended with guarding and rigidity. Bowel sounds were absent. Internal examination revealed normal lochia. Investigations showed a normal hematocrit and leukocytosis. Biochemistry panel was normal. Whole abdomen sonography revealed significant free fluid and X-ray erect abdomen showed gas under the diaphragm. A contrast enhanced CT confirmed the above findings. Serology for enteric fever was negative. Blood, urine and vaginal cultures were sterile.

In view of these findings, a provisional diagnosis of perforation peritonitis made and after initial resuscitative

measures, patient taken up for laparotomy. Intra-operatively, around 1 l of purulent fluid was drained (Figure 1). Exploration of bowel revealed a 2 by 1 cm perforation over the cecum (Figure 2). Repair with rescue colostomy carried out. Patient improved steadily in the post-operative period and was discharged in a stable condition. Colostomy reversal was carried out after 3 months. Patient is regular on follow-up and is doing well.



**Figure 1: Purulent collection in peritoneal cavity.**



**Figure 2: Perforation.**

## DISCUSSION

Ogilvie's syndrome or acute colonic pseudo-obstruction is a rare condition characterized by massive dilatation of colon in the absence of mechanical obstruction. Ogilvie's syndrome can occur after cesarean section in the post-partum period. This is extremely rare phenomenon after vaginal delivery, especially progression to cecal perforation. Only three cases are reported so far. Strecker et al reported that the association of Ogilvie's syndrome and vaginal delivery may be due to declining estrogen

levels in post-partum period.<sup>4</sup> The mechanism of action is the loss of tone in parasympathetic nerves in S2 to S4 resulting in atonic distal colon and pseudo-obstruction. Abdominal distension is the most common symptom.<sup>5</sup> Keswani et al reported that a cecal diameter of 9 cm or more is the only definitive sign of imminent perforation.<sup>4</sup> Stephenson et al reported that use of pro-kinetic drugs like neostigmine may be beneficial in selected cases.<sup>6</sup>

## CONCLUSION

The diagnosis of Ogilvie's syndrome is troublesome due to non-specific clinical features. Ogilvie's syndrome following vaginal delivery is an extremely rare but serious condition that requires early recognition and treatment to prevent potentially fatal complications. Health care providers must be aware of the non-specific features and exercise high degree of suspicion of otherwise unexplained abdominal distension in the post-partum period.

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## REFERENCES

1. Eisen GM, Baron TH, Dominitz JA, Faigel DO, Goldstein JL, Johanson JF, et al. Acute colonic pseudo-obstruction. *Gastrointest Endosc.* 2002;56(6):789-92.
2. Rex DK. Colonoscopy and acute colonic pseudo-obstruction. *Gastrointest Endosc Clin N Am.* 1997;7(3):499-508.
3. Vks S, Kola SK, Kg DK. Spontaneous Caecal Perforation Associated with Ogilvie's Syndrome Following Vaginal Delivery - A Case Report. *J Clin Diagn Res.* 2014;8(6):ND08-9.
4. Strecker JR, Jaluvka V. Spontaneous cecum perforation following cesarean section. *Geburtshilfe Frauenheilkd.* 1988;48(7):489-93.
5. Jetmore AB, Timmcke AE, Gathright JB, Hicks TC, Ray JE, Baker JW. Ogilvie's syndrome: colonoscopic decompression and analysis of predisposing factors. *Dis Colon Rectum.* 1992;35(12):1135-42.
6. Stephenson BM, Morgan AR, Salaman JR, Wheeler MH. Ogilvie's syndrome: a new approach to an old problem. *Dis Colon Rectum.* 1995;38(4):424-7.
7. Keswani RK, Singh RB, Banga BB, Seth KK, Tandon AK, et al. Non-obstructive caecal perforation (Ogilvie's syndrome) after normal vaginal delivery. *Indian J Gastroenterol.* 1989;8(2):121-2.

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