

# Ogilvie syndrome - an acute pseudo-colonic obstruction one week following caesarean section: a case report

## Abstract

Ogilvie syndrome or acute pseudo-obstruction of the colon is a rare condition characterized by progressive dilatation of the proximal colon in the absence of any mechanical obstruction. We present an interesting case of an acute pseudo-colonic obstruction one week following Caesarean section. The condition mainly affects the caecum and right colon, and can lead to life-threatening perforation. In 50-60% of cases the preceding cause is trauma or surgical procedure, most commonly caesarean section. Despite numerous subsequent clinical reports and accurate description of the syndrome, the diagnosis of Ogilvie's syndrome remains a challenge and it is still associated with significant morbidity and mortality. Although the diagnosis Ogilvie syndrome is not common, an awareness of this condition can aid clinicians to consider Ogilvie syndrome as one of the differential diagnoses when assessing patients with lower abdominal pain, distension, pyrexia with or without vomiting following caesarean section.

**Keywords:** ogilvie syndrome, caesarean section

Volume 2 Issue 3 - 2017

Angela Yulia,<sup>1,2</sup> Mamdouh Guirguis<sup>1</sup>

<sup>1</sup>Department of Obstetrics and Gynaecology, North Tyneside General Hospital, UK

<sup>2</sup>Department of Obstetrics and Gynaecology, University College Hospitals London, UK

**Correspondence:** Angela Yulia, Subspecialty Trainee in Maternal and Fetal Medicine, Department of Obstetrics and Gynaecology, University College Hospitals London, Elizabeth Garrett Anderson Wing, 25 Grafton Way, Bloomsbury, London WC1E 6BD, UK, Tel: 07738931078; Email ayulia@doctors.org.uk

**Received:** April 09, 2017 | **Published:** May 01, 2017

## Introduction

Ogilvie syndrome or acute pseudo-obstruction of the colon is a rare condition characterised by progressive dilatation of the proximal colon in the absence of any mechanical obstruction.<sup>1</sup> The condition mainly affects the caecum and right colon<sup>1-3</sup> It is more common in the elderly and those with systemic illnesses.<sup>2,4</sup> In 50-60% of cases the preceding cause is trauma or surgical procedure, most commonly caesarean section.<sup>3-5</sup> We report a rare case of Ogilvie syndrome one week following an emergency caesarean section.

## Case report

A healthy 36-year-old primigravida with an uneventful antenatal period presented in spontaneous labour at term. She had an emergency lower segment caesarean section for fetal distress at full cervical dilatation. The operation was uneventful and the baby was delivered in good condition. She subsequently developed an E-coli septicaemia and bilateral hydronephrosis post-operatively. One week following her caesarean section, she had an exploratory laparotomy due to suspected bowel obstruction. Laparotomy finding was unremarkable and no evidence of bowel obstruction was noted. A diagnosis of Ogilvie syndrome was made. She was managed conservatively and spent three weeks in the hospital before she was discharged. She was reviewed in the clinic at her six weeks post natal check and she has made a good recovery.

## Discussion

Ogilvie syndrome was first described in 1948 by Sir William Ogilvie, an English surgeon who reported patients with abdominal pain, vomiting, constipation, and colonic distension due to destruction of the nerve plexus by a retroperitoneal malignancy.<sup>1</sup> Ogilvie hypothesized that the aetiology of their conditions was due to an imbalance in the autonomic nervous system with sympathetic

deprivation to the colon, leading to unopposed parasympathetic tone and regional contraction, resulting in functional obstruction.<sup>1</sup> Treatment is mainly conservative, however, the colon may become massively dilated and if not decompressed, the patient is at risks of perforation, peritonitis and death.<sup>1,3,5,6</sup>

It is a relatively rare clinical condition, thus making it difficult to gather solid epidemiological studies, particularly with regards to its frequency. Until 1986 only 400 cases had been reported. Males are more commonly affected than females. It is more common in the elderly and those with other systemic illnesses, particularly renal failure and myocardial infarction. 50-60% of the conditions develop after surgery, especially orthopaedic, thoracic, or caesarean section procedures.<sup>2,6,7</sup>

The characteristic feature of Ogilvie syndrome includes severe abdominal distension, which differs from, for example, a postoperative illness. In which there is minimal abdominal distension. Passage of stool or gas is usually absent, but may still occur in up to 40% of patients. Some patients may experience diarrhoea. Nausea or vomiting may be present but are not constant features. Bowel sounds may be absent, normal or hyperactive and are generally not useful for diagnostic purposes. Although abdominal discomfort is common, severe pain or tenderness is non-specific and may indicate ischemia or perforation. Frequent clinical assessment, serial abdominal X-rays, and white cell counts monitoring should detect these complications early.<sup>8,4</sup>

Ogilvie syndrome usually resolves with conservative therapy, which includes stopping oral intake and inserting nasogastric tube. Colonic decompression is successful in 70% of the cases. Neostigmine has been shown to be a potent drug in helping to decompress the colon. This should be considered prior to colonoscopic decompression.<sup>9</sup> If these measures are not successful after 48 to 72 hours, if the caecal diameter is greater than 12 cm, or if the patient has developed right iliac fossa tenderness, other options need to be considered. These

include pharmacologic or endoscopic decompression, percutaneous caecostomy, or surgery. The development of peritoneal signs is an indication for surgery.<sup>3</sup>

The prognosis of Ogilvie syndrome varies with the underlying medical condition. Poor outcome is associated with old age, multiple co morbidities, and surgical intervention for acute pseudo-obstruction. Intestinal ischemia or perforation occurs in approximately 15% of patients with Ogilvie syndrome and is associated with a mortality rate of 50%. Generally, a caecal diameter of 12cm is considered to be the threshold for high risk of perforation and thus, necessitates intervention. In addition, the duration of distension also appears to be an important risk factor in predicting the risk of perforation, with the risk being the lowest in patients who undergo decompression within less than four days of onset of symptoms.<sup>10,3</sup>

Our patient had two risks factor of developing Ogilvie syndrome, which were recent surgery and systemic illness with *E.Coli* septicaemia. The decision for doing laparotomy in this case was made by the surgical team and the main benefit was to rule out intestinal obstruction. One can argue that given the risk factors present above, conservative management alone would probably be more appropriate rather than laparotomy. She was subsequently managed conservatively and achieved a good outcome.

## Conclusion

The diagnosis of Ogilvie syndrome following caesarean section is difficult and still faces a big challenge.<sup>5,6,3</sup> The presentation of lower abdominal pain, pyrexia, with or without vomiting following Caesarean section should alert the obstetricians to the possibility of Ogilvie syndrome. It is not uncommon for this condition to be mistaken for paralytic ileus because of the similarity of the symptoms. The diagnosis of Ogilvie syndrome following caesarean section is difficult and still faces a big challenge. This case report is an interest to the specialty of Obstetrics and Gynaecology and it highlights the importance for a greater awareness amongst the obstetricians to consider Ogilvie syndrome as a differential diagnosis whenever appropriate.

## Acknowledgements

None.

## Conflict of interest

Author declares that there is no conflict of interest.

## References

1. Ogilvie H. Large intestine colic due to sympathetic deprivation: a new clinical syndrome. *Bri Med J*. 1948;2(4579):671–673.
2. Vane KV, Al Salti M. Acute colonic pseudo-obstruction (Ogilvie's syndrome). An analysis of 400 cases. *Dis Colon Rectum*. 1986;29(3):203–210.
3. Peter TM, Brain TC, Michel Sommerville. Ogilvie syndrome with Caecal perforation in the Post caesarean Patient. *Australian and New Zealand Journal of Obstetrics and Gynaecology*. 1995;35(1):104–106.
4. Tenofsky PL, Beamer L, Smith RS. Ogilvie syndrome as a postoperative complication. *Arch Surg*. 2000;135(6):682–687.
5. Reece EA, Petrie RH. Colonic pseudo-obstruction following obstetrical surgery. A review. *Diagn Gynaecol sObstet*. 1982;4(4):275–280.
6. Moore JG, Gladstone LS, Lucas GW, et al. Successful management of post-caesarean-section acute pseudo obstruction of the colon (Ogilvie's syndrome) with colonic decompression: A case report. *Journal of Reprod Med*. 1986;31(10):1001–1004.
7. Hamed AD, Dare FO. Ogilvie's syndrome. *Int J Gynecol Obstet*. 1991;37(1):47–50.
8. Mitchell M, Byrne M. Ogilvie's syndrome. *Emerg Med*. 2004;36(4):27–30.
9. Ponc RJ, Saunders MD, Kimmey MB. Neostigimine for the treatment of acute colonic pseudo-obstruction. *N Engl J Med*. 1999;341(3):137–141
10. Mac Coll C, Mac Cannell KL, Baylis B, et al. Treatment of acute colonic pseudoobstruction (Ogilvie's syndrome) with cisapride. *Gastroenterology*. 1990;98(3):773–776.