

# Ogilvie syndrome following Caesarean section: a case report

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A 31-year-old woman with a previous Caesarean section developed distended abdomen 1 day after a repeat Caesarean section. Radiological images showed dilated large bowel with suspicious transition point posterior to the uterus, but without mechanical cause for the obstruction. Colonoscopy showed no stricture or tumour or extrinsic compression, and a diagnosis of acute colonic pseudo-obstruction (Ogilvie syndrome) was made. Endoscopic decompression using a flatus tube was successful.

*Keywords: Cesarean section; Colonic pseudo-obstruction; Intestinal pseudo-obstruction; Postpartum period*

## Case presentation

In January 2018, a 31-year-old woman with a previous Caesarean section underwent an elective lower segment Caesarean section under spinal anaesthesia at 38 weeks of twin pregnancy. There was no complication and the estimated blood loss was 200 mL.

At postoperative day 1, the patient had nausea and vomiting. On physical examination, distended abdomen and hyperactive bowel sounds were noted, with no bowel opening. Abdominal radiograph showed dilated large bowel but no rectal gas (Figure a). Large bowel obstruction<sup>1</sup> was suspected, and contrast computed tomography of the abdomen and pelvis was performed to exclude intestinal obstruction or bowel injury, with a nasogastric tube inserted. Computed tomography confirmed dilated large bowel of up to 6.2 cm at the transverse colon (Figure b), with suspicious transition point at the sigmoid colon posterior to uterus but no stricture or tumour or extrinsic tumour. In view of intestinal obstruction of unknown cause, emergency colonoscopy was performed by a surgeon to identify any mechanical or extrinsic causes of obstruction such as compression by the postpartum uterus. Colonoscopy showed dilated large bowel from caecum with rectum but no stricture or tumour or extrinsic compression. The diagnosis of acute pseudo-obstruction was made, and a flatus tube was inserted for decompression.

At postoperative day 2, distention decreased and nasogastric tube yielded minimal output. Radiographs showed reduced bowel distention, and the flatus tube was removed on day 3. Diet was resumed on day 4, and the patient was discharged on day 5.

## Discussion

Acute colonic pseudo-obstruction (Ogilvie syndrome), characterised by massive dilatation of the colon in the absence of mechanical obstruction, is rare and potentially life-threatening. It often presents with abdominal distention and pain, and is associated with major surgeries, trauma, infection, and sepsis. Up to 5% of cases are associated with Caesarean section or pregnancy<sup>2</sup>, with a reported incidence of up to 1 in 1500 deliveries<sup>3</sup>. Between 2002 and 2016, 66 postpartum cases were reported globally, and 28 (43%) of which resulted in bowel perforation or impending ischemic perforation<sup>4</sup>. To the best of our knowledge, this is the first confirmed postpartum case in Hong Kong<sup>5</sup>.

The precise mechanism by which colonic dilatation occurs remains unknown, and the goal of management is to decompress the colon to minimize the risk of perforation and ischemia. Main modalities of decompression include neostigmine, colonoscopic decompression, percutaneous decompression, and surgical decompression.

In our patient, a suspected transition point posterior to the uterus was suggestive of mechanical obstruction. Emergency colonoscopy was performed by a surgeon to identify any mechanical or extrinsic obstruction. The diagnosis of pseudo-obstruction was made endoscopically, and a flatus tube was inserted for decompression. Medical

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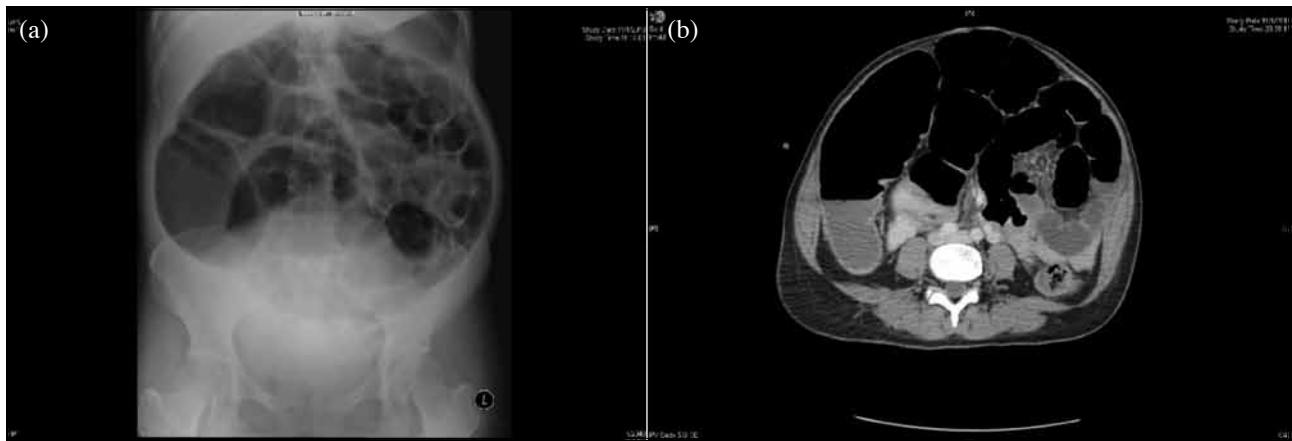


Figure. (a) Radiograph and (b) computed tomography image of the abdomen and pelvis showing dilated large bowel at the transverse colon, with suspected transition point at the sigmoid colon posterior to uterus.

therapy (neostigmine) was not considered, as mechanical obstruction was suspected and had to be ruled out<sup>6</sup>.

Ogilvie syndrome should be considered a differential diagnosis for abdominal pain and distention following Caesarean section. Physical examination and abdominal

radiography are important in early detection.

## Declaration

This case report has been presented as a poster at Hong Kong College of Obstetricians and Gynaecologists 30th Anniversary Symposium in June 2018

## References

1. Jaffe T, Thompson WM. Large-bowel obstruction in the adult: classic radiographic and CT findings, etiology, and mimics. *Radiology* 2015;275:651-63. [Crossref](#)
2. Vanek VW, Al-Salti M. Acute pseudo-obstruction of the colon (Ogilvie's syndrome). An analysis of 400 cases. *Dis Colon Rectum* 1986;29:203-10. [Crossref](#)
3. Ross SW, Oommen B, Wormer BA, et al. Acute colonic pseudo-obstruction: defining the epidemiology, treatment, and adverse outcomes of Ogilvie's syndrome. *Am Surg* 2016;82:102-11. [Crossref](#)
4. Jayaram P, Mohan M, Lindow S, Konje J. Postpartum acute colonic pseudo-obstruction (Ogilvie's syndrome): a systematic review of case reports and case series. *Eur J Obstet Gynecol Reprod Biol* 2017;214:145-9. [Crossref](#)
5. Cho FN, Liu CB, Li JY, Chen SN, Yu KJ. Adynamic ileus and acute colonic pseudo-obstruction occurring after cesarean section in patients with massive peripartum hemorrhage. *J Chin Med Assoc* 2009;72:657-62. [Crossref](#)
6. Ponc R, Saunders MD, Kimmey MB. Neostigmine for the treatment of acute colonic pseudo-obstruction. *N Engl J Med* 1999;341:137-41. [Crossref](#)