

## Case Presentation

# The Post Partum Uterus –A Rare Cause of Mechanical Large Bowel Obstruction

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Received: December 04, 2017; Accepted: January 15, 2018; Published: February 08, 2018

## Abstract

Large bowel obstruction in the immediate post-partum period is rare. Reported mechanical causes include compression by extrinsic masses such as uterine growths or foreign bodies, which usually require operative intervention. We report a case of a 43-year-old woman with mechanical large bowel obstruction secondary to a post-partum uterus. This was diagnosed clinically, confirmed on computed tomography scan and successfully managed conservatively. This is the reported first case of large bowel obstruction caused by a post-partum uterus in the literature and demonstrates that this unusual presentation may be managed conservatively in the clinically well patient.

**Keywords:** Uterus; Large bowel obstruction; X-ray

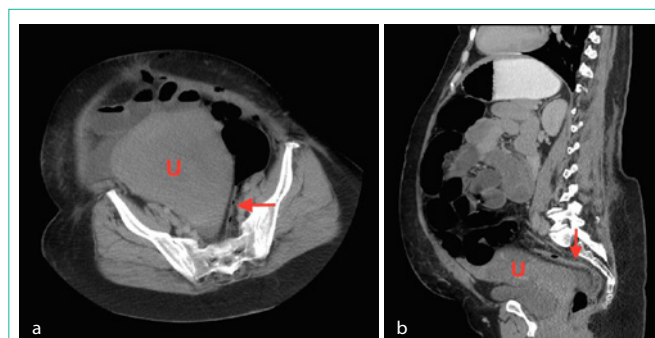
## Case Presentation

We present a case of a 43 year old woman, who was referred to the general surgery team two days post emergency Caesarean section. She had an uncomplicated lower uterine segment Caesarean section for failure to progress post induction of labour. She gave birth to a healthy, full term neonate.

The patient described 24 hours of worsening central colicky abdominal pain, distension, nausea and vomiting. She had not opened her bowels since the surgery, but was still passing small amounts of flatus, albeit infrequently. The obstetrics team initially treated her for presumed post-operative ileus and had given her oral and per rectal aperients. Prior to this Caesarean section, she had had four vaginal deliveries but no previous surgeries. There is no other significant past medical history and she did not take any regular medications.

On initial examination, she looked well but in discomfort. Her blood pressure was 130/80, heart rate 90, SaO<sub>2</sub> 99% on room air, respiratory rate 16, temperature 37.3, GCS 15. Her abdomen was grossly distended with mild generalised tenderness but no peritonism. Bowel sounds were completely absent and her caesarean wound was unremarkable. Erect and supine abdominal X-rays demonstrated moderately distended loops of large and small bowel with multiple air fluid levels and no gas in the rectum. Due to concern about a large bowel obstruction, a CT abdomen with intravenous and nasogastric contrast was performed. This scan revealed a partial mechanical large bowel obstruction with the transition point at the sigmoid colon. The obstruction appeared to be due to extrinsic compression from the adjacent enlarged, post partum uterus (Figure 1).

The patient remained clinically stable, continued to pass flatus and did not wish for any invasive procedure to be performed unless there was an absolute indication. From the images, it can be seen that the compressed segment of sigmoid colon is to the left of the uterus. In light of this clinical scenario and the anatomical relationship, the surgical team advised the patient to lie in the right lateral decubitus position in an attempt to allow gravity to assist in relieving the extrinsic compression. No external manual force was applied. The



**Figure 1:** Computed tomography images of the abdomen and pelvis with intravenous and oral contrast showing axial (a), sagittal (b) views of partial large bowel obstruction caused by a post-partum uterus (U), demonstrating a clear transition point at the sigmoid colon (red arrow).

patient remained in the right lateral position overnight, as instructed. On review the following morning, her pain and distension had significantly improved. That same day, her bowels opened twice and repeat abdominal X-ray showed that the large bowel distention had significantly improved. She continued to improve clinically over the next few days and was discharged on post operative day six by the obstetrics team.

## Discussion

To our knowledge, this is the first reported case in the literature of a post-partum uterus causing a mechanical large bowel obstruction. Certainly, colonic pseudo-obstruction (Ogilvie's syndrome) is a recognised entity in pregnancy and the post-partum period [1]. There are also reports of uterine masses and foreign bodies, such as actinomycoses and leiomyomas, causing large bowel obstruction [2,3]. Intestinal or colonic obstruction due to a gravid uterus in the third trimester, although rare, has also been documented [4]. However, there is no precedent for how to manage large bowel obstruction secondary to a post-partum uterus. We would advise clinical judgment be implemented on a case-by-case basis. Should the obstruction not resolve with conservative measures and the patient

deteriorates, operative management may be indicated. However, this case demonstrates that conservative management may work and should be attempted prior to invasive procedures, in a clinically well patient.

## References

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