

## Declaration of Competing Interest

The authors report no conflicts of interest.

## Acknowledgements

This study was supported by Guangzhou Institute of Pediatrics/ Guangzhou Women and Children's Medical Center (IP-2019-004) and Health Commission of Guangdong Province (A2019012).

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Received 29 July 2019

## Flexible endoscopic decompression for treatment of sigmoid volvulus in pregnancy



Dear editor,

A 26-year-old healthy gravida 5 para 2 woman at 36 weeks' gestation presented to the emergency department with a 5-days history of abdominal pain followed by constipation, obstipation and urine retention. Despite the use of antispasmodics and laxatives, her pain worsened, and she had become unable to pass stool, flatus or urine. The vital signs were normal. The physical examination revealed a gravid woman with a distended and tender abdomen. Abdominal plain X-ray demonstrated a distended sigmoid loop with an inverted U shape, also known as 'coffee bean sign' with no free intraperitoneal gas. Computed tomography (CT) showed a dilated colon with a transitional zone and swirling of the mesentery, the "whirl sign". The presence of gas was not observed in the distal obstructed region, corresponding to a diagnosis of sigmoid volvulus (Fig. 1).

The mother underwent an urgent flexible sigmoid decompression. The sigmoid was grossly dilated with liquid stool and a twist

was evident 20–35 cm from the rectum. The colon was decompressed with immediate relief of symptoms. The rectal tube was left in place for 24 h. She remained well and was discharged two days later, in good general condition and still pregnant.

Intestinal obstruction in pregnancy is rare with incidence reported from 1 in 1500 to 1 in 66,431 deliveries [1,2]. Differential diagnosis of gestational intestinal obstruction include volvulus, adhesions, intussusceptions, hernia or appendicitis [2]. Volvulus of the sigmoid colon is the most common cause of intestinal obstruction complicating pregnancy, accounting for up to 44 per cent of cases [3].

Sigmoid volvulus in pregnancy is a serious complication associated with significant maternal and fetal mortality; the diagnosis usually delayed by the pregnancy-related similar symptoms and reluctance to use radiologic investigations. Most cases of volvulus occur during the third trimester because of the displaced sigmoid colon out of the pelvis, leading the colon to twist around its fixation points [4].

In the absence of peritonitis or bowel perforation, endoscopic decompression is safe for mother and fetus, despite the uterine enlargement related technical challenge of the third trimester [5].



**Fig. 1.** Abdominal plain X-ray demonstrated a distended sigmoid loop with an inverted U shape, 'coffee bean sign' (A). Computed tomography (CT) showed a dilated colon with a transitional zone and swirling of the mesentery, "whirl sign" (B&C).

## Funding

None of the authors have any direct or indirect financial incentive associated with publishing the article.

## Declaration of Competing Interest

All authors have no conflict of interest or benefit that has arisen from the direct applications this research to disclose.

## Acknowledgements

Patient consent form has been completed and signed by the patient.

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Received 1 September 2019