Internal bowel herniation through a peritoneal defect between the right fallopian tube and right ovarian vessels

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DESCRIPTION

A 43-year-old woman presented to the emergency ward with nausea, abdominal pain and failure to pass gas and stool for 3 days. Medical and surgical history was unremarkable. Physical examination showed diffuse abdominal tenderness and reduced bowel sounds. Laboratory tests were normal. A high-resolution CT scan was performed immediately on admission ([figure 1](#)). The CT-scan showed signs interpreted as volvulus of the colon. The uterus was rotated and displaced alongside a rotated ovary, with no obvious explanation. It was decided to perform an acute colonoscopic deflation of the colon. However, the procedure was unsuccessful and an exploratory laparotomy was performed. We identified mechanical obstruction of the bowel due to an internal herniation of the transverse colon, the whole right colon and the terminal ileum, through a peritoneal defect under the right fallopian tube and over the right ovarian vein and artery ([figure 2](#)). A unilateral salpingo-oophorectomy was performed, a small necrotic segment of the transverse colon with perforation was resected and a stoma of the transverse colon was placed. The postoperative course was uneventful.

Figure 1 CT scan showing closed loop obstruction due to internal herniation at the right fallopian site (white arrow).

Figure 2 During surgery, a peritoneal defect between the right fallopian tube and right ovarian vessels was identified as the cause of internal herniation (index finger).

This type of internal herniation is extremely rare, and we have only identified two similar reported cases in the literature.^{1 2} In both cases, acute surgical intervention was performed. Internal herniation of the bowel is a very serious condition which may cause mechanical bowel obstruction and lead to bowel ischaemia, necrosis and perforation. Acute surgical intervention is a necessity to solve the problem. Early diagnosis and treatment reduces morbidity and mortality.

Learning points

- ▶ Internal herniation of the intestine is an extremely rare event in patients who have not undergone abdominal surgery.
- ▶ The condition can cause mechanical bowel obstruction and may lead to bowel ischaemia, necrosis and perforation.
- ▶ Acute surgical intervention is required for patients with mechanical bowel obstruction caused by internal herniation.

Contributors All editors have contributed sufficiently to the manuscript. CBD, EB-P, WF and LP had the idea. CBD and EB-P collected the data and prepared the manuscript. WF and LP critically revised the manuscript. All authors accepted the final version of the manuscript.

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