

LARGE BOWEL NECROSIS SECONDARY TO MASS EFFECT FROM AN OVARIAN CYST: A CASE REPORT

Farina R

Obstetrics and Gynaecology, Sunshine Coast University Hospital

INTRODUCTION

Ovarian cysts are common, usually benign lesions that may exert mass effect on adjacent pelvic structures. Bowel obstruction and ischaemia secondary to compression by an ovarian cyst are extremely rare. While this phenomenon is recognised in neonates and rarely in volvulus related ovarian torsion, there are no reported cases of large bowel obstruction with necrosis caused solely by mass effect in adults.¹⁻⁵

CASE REPORT

First presentation:

48yo G0 presented with severe left abdominal pain, nausea and vomiting. Medical history: hypoxic brain injury post status epilepticus as a child Gynae history: never sexually active, taking COCP for dysmenorrhoea Surgical history: nil

Examination: normal vital signs, LIF pain, abdomen not peritonitic

Investigations: Hb 125, WCC 15, pelvic ultrasound demonstrated a 9x6cm left adnexal mass (figure 1)

After two days, symptoms resolved and she was discharged home.

Second presentation:

Ten days later, she re-presented with ongoing abdominal pain, vomiting, new profuse watery diarrhoea and fevers.

Investigations:

- T 38.5, HR 107/69, HR 90s
- Hb 105, Platelets 716
- WCC 30, CRP 222
- Albumin 14, Lactate 1.4
- INR 1.6, PT 18, APTT 29, fibrinogen 8.7 – new coagulopathy
- Ca125 48
- Negative blood cultures
- CT abdomen: 10x12cm left adnexal mass with fat stranding (figure 2)

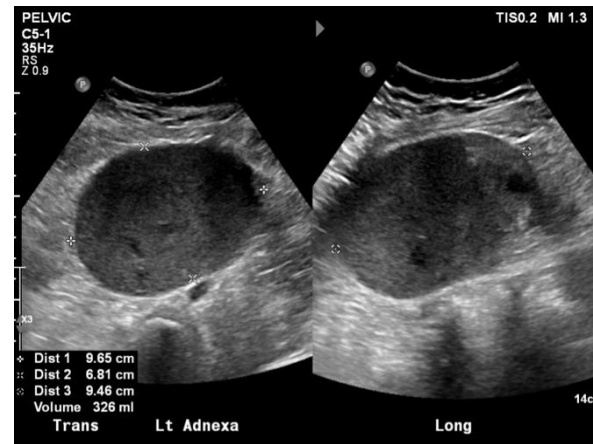


Figure 1: US Pelvis left adnexal ovarian cyst 9x6x9cm



Figure 2: CT abdo + pelvis 10x12cm left adnexal mass with fat stranding

Peri-operative medicine and Haematology were consulted regarding the coagulopathy and hypoalbuminaemia. After 48 hours of IV broad spectrum antibiotics and pre-operative optimisation, she was booked for an emergency laparoscopy for a presumed infected haemorrhagic ovarian cyst.

Intra-operative findings:

- Ovarian cyst adherent to the umbilicus, left pelvic sidewall and rectum with connection through necrotic bowel
- Anterior wall of the rectum ischaemic down to the pelvic floor
- General Surgery attended and contacted patient's EPOA
- Proceeded with a left salpingo-oophorectomy, proctectomy and end colostomy.

Recovery was prolonged with polymicrobial intra-abdominal infection, fluid overload secondary to hypo-albuminaemia and pneumonia. Histology showed no malignancy. Ovarian cyst could not be characterised due to extent of necrosis.

Practice Points

- Adnexal masses with gastrointestinal symptoms should prompt consideration of mass-effect complications
- Persistent systemic inflammation and deviation from expected clinical recovery warrant early re-evaluation and multi-disciplinary involvement
- Timely surgical intervention is critical; delayed recognition of bowel ischaemia can lead to catastrophic outcomes

REFERENCES

1. C Jeanty, et al. Neonatal ovarian torsion complicated by intestinal obstruction and perforation, and review of the literature. *J Pediatr Surg.* June 2010;45(6):5-9. doi:10.1016/j.jpedsurg.2010.02.118.
2. A Lazaridis, et al. A rare case of small bowel obstruction secondary to ovarian torsion in an IVF pregnancy. *BMJ Case Rep.* Feb 2013. doi:10.1136/bcr-2013-008551.
3. S DuBois, et al. Small Bowel Obstruction Secondary to Endometriosis and Hydrosalpinx. *Am Surg.* 2023;89(8):3560-3562. doi:10.1177/00031348231161705.
4. Y Esterson, et al. Ovarian dermoid cyst complicated by small bowel obstruction, entero-ovarian fistula formation, and malignant degeneration. 2019;56:47-51. doi:10.1016/j.clinimag.2019.03.005.
5. K Stevens, T Wasfie, C Haus. Endometrioma Causing Near-Complete Obstruction of the Sigmoid Colon. 2023;89(4):1264-1266. doi:10.1177/0003134821995062.