



A case report on peritoneal inclusion cyst with entrapped ovarian syndrome

Dr. Asma Ali Depar, Dr. Rozilla Sadia Khan, Dr. Anny Dhanwani, Dr. Fauzia Akhund, Dr. Anum Aziz



INTRODUCTION/BACKGROUND

Peritoneal inclusion cysts (PIC) also known as peritoneal pseudocysts, entrapped ovarian cysts or peritoneal inflammatory cysts occur as a result of the interference of abdominal adhesions with an active ovary. Inflammatory conditions, infection or previous surgery can impair the absorptive capacity of the peritoneum, allowing exudative fluid from the ovary to become trapped between the ovary and adhesions post-ovulation. Symptoms may include abdomino-pelvic pain, backache, tenesmus, urinary incontinence or frequency, anorexia, abnormal uterine bleeding and umbilical hernia

CASE PRESENTATION

A 42-year-old, P5 with intermittent, non-radiating bilateral flank pain for the last one month. Walking aggravated the pain. Surgical history included five abdominal scars, and she had a total abdominal hysterectomy with bilateral salpingectomy for fibroid uterus.

Clinical examination was unremarkable.

Ultrasound revealed 3x4 cm bilateral ovarian cysts

INVESTIGATIONS

CA-125 was 6.1 IU/mL

CT scan: large left adnexal cyst measuring 100 x 79 x 114 mm with a pelvic extension to the vaginal stump extending into the cul-de-sac between rectum and vaginal stump, likely representative of peritoneal inclusion cyst with an additional right ovarian cyst



MANAGEMENT

She was prescribed tablet Famila for two months. A few months later she was reviewed again, repeat CT scan demonstrated the presence of inclusion cyst.

She underwent a laparotomy and bilateral oophorectomy on 29/7/2024

INTRAOPERATIVE FINDINGS

The right ovary was adherent to the lateral pelvic wall and the left ovary was adhered in the back side of urinary bladder as a part of peritoneal inclusion cyst (PIC) with Entrapped Ovary Syndrome.

Right adnexal triangle was opened, ureter identified, then right infundibulopelvic ligament clamped cut and ligated. Right ovary was mobilized from the right lateral wall. The left adnexal triangle was similarly opened, with clamping, cutting of the left infundibulopelvic ligament. The right ovary was removed and the peritoneal inclusion cyst was also drained.

OUTCOME

Patient remained stable postoperatively, discharged on the third postoperative day.

Wound staples were removed on 14th postoperative day.

Histopathology: Benign findings

DISCUSSION

PICs are a rare non-ovarian source of pelvic cysts that develop from the peritoneal mesothelium. Research indicates that they are reactive proliferation due to peritoneal shock caused by, pelvic inflammatory illness, endometriosis and abdominal surgery. The patient, in this case, presents pelvic inflammatory disease and past LSCS.

Peritoneal inclusion cysts have been known to shrink after menopause and also with the use of COCPs.

Pelvic pain is the typical presenting symptom of PIC. PICs are mostly not palpable on the clinical examination like in our patient and hence imaging helps in the evaluation of these patients who usually present with abdominal or pelvic pain.

Asymptomatic cysts, especially those that are detected incidentally, do not need immediate intervention and can be managed conservatively.

Options for management include hormonal therapy, drainage, or surgical excision

Laparoscopic surgery may offer benefits in terms of recovery and lower postoperative complications compared to open surgery, but in cases where extensive adhesions are present, laparotomy may be the preferred option.

CONCLUSION

This case emphasizes careful clinical assessment, role of advanced imaging techniques, and approach to treatment that may need tailoring based on the symptoms and cyst size. Optimization of diagnostic and therapeutic strategies for managing PICs remains an area to be explored, especially in those patients with complex surgical history and atypical presentations.

References:

1. Jones SA, Salicco JM, Byers MS, editors. Pelvic pain and history of previous pelvic surgery. Baylor University Medical Center Proceedings; 2003: Taylor & Francis.
2. Kim JS, Lee HJ, Woo SK, Lee TS. Peritoneal inclusion cysts and their relationship to the ovaries: evaluation with sonography. Radiology. 1997;204(2):481-4.
3. Jain KA. Imaging of peritoneal inclusion cysts. American Journal of Roentgenology. 2000;174(6):1559-63.
4. Amesse LS, Gibbs P, Hardy J, Jones KR, Pfaff-Amesse T. Peritoneal inclusion cysts in adolescent females: a clinicopathological characterization of four cases. Journal of Pediatric and Adolescent Gynecology. 2009;22(1):41-8.
5. Natkanska A, Bizon-Szpernalowska MA, Milek T, Sawicki W. Peritoneal inclusion cysts as a diagnostic and treatment challenge. Ginekologia Polska. 2021;92(8):583-6.
6. Pereira N. Postsurgical peritoneal inclusion cyst masquerading as a large pelvic mass. BMJ Case Reports. 2019;12(4).