

TWISTED RIGHT FIMBRIAL (PARAOVARIAN) CYST

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ABSTRACT

A 30-year old woman presented with lower abdominal pain and a feeling of fullness in the same region. Ultrasound pelvis was suggestive of an ovarian cyst. At laparotomy a twisted right fimbrial (paraovarian) cyst was found and cystectomy performed.

Key words Fimbrial cyst, Paraovarian cyst, Acute abdomen, Fallopian tube torsion.

INTRODUCTION:

Paraovarian cysts (POC) represent approximately 10% of adnexal masses.¹ They are more common in women aged 30-40 years. Most of the time they are small and asymptomatic, although are occasionally large, resulting in pelvic pain.² POCs usually arise in the broad ligament and are thin walled and unilocular. It may be difficult to reliably differentiate a POC from an ovarian cyst by imaging, therefore they are often removed surgically, especially if a solid component is present. We present here a case of a fimbrial cyst which presented as an adnexal mass suggestive of a twisted ovarian cyst causing acute abdomen.

CASE REPORT:

A 30 year old woman presented with acute abdomen. She had an one year history of a feeling of a mass in the abdomen and lower abdominal pain along with difficulty in micturition. Patient had been diagnosed with diabetes mellitus 5 months ago. She had 3 caesarean sections in the past. During the last caesarean section 5 years ago, she had bilateral tubal ligation by the Pomeroy method. Clinically the patient was haemodynamically stable and her haematology and biochemistry results were within normal limits. Clinical examination revealed a freely mobile abdomino-pelvic mass measuring approximately 10cm x 8cm with regular margins. Vaginal examination suggested a right adnexal mass. Pelvic ultrasound suggested a right ovarian cyst.

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Patient was started on insulin and then underwent a laparotomy. At operation lot of adhesions were noted between the anterior abdominal wall and the uterus. There was a large twisted cyst arising from the fimbrial end of the right fallopian tube. The cyst had a tight twist around its pedicle and was buried deep in the right iliac fossa. Right fimbrial end cystectomy was performed (figure 1). Both ovaries and the left fallopian tube were normal. The cyst was sent for histopathology. The report was consistent with the fimbrial cyst. Patient had an uneventful post-operative recovery and discharged home on the 3rd post-operative day.

DISCUSSION:

Paraovarian cysts are rarely diagnosed by radiologists. They can occur in patients who have had bilateral tubal ligation as in our patient and reported by others.³ They should be considered in the differential diagnosis of acute abdomen in females. POCs arise from the tissues of the broad ligaments, predominantly from mesothelium



Figure 1: Excised Fimbrial Cyst

covering the peritoneum (mesothelial cyst) but also from para mesonephric tissue (paramesonephric cysts or Mullerian cyst) and rarely mesonephric remnants (mesonephric cyst or Wolffian cyst).⁴ They are usually incidentally discovered during surgery and prophylactic excision is performed due to increased incidence of torsion as well as their propensity to undergo rapid enlargement. Our patient may have had a pelvic mass for some time but to us she presented as an acute abdomen. A similar situation has been reported where an additional MRI was done as well.⁵

The twisted fimbrial cyst was diagnosed only at laparotomy. This is consistent with the findings of others who reported that in only one of their 15 patients was a paraovarian or paratubal cyst suggested before surgery.¹ Fallopian tube torsion or fimbrial cyst torsion is rare, therefore diagnosis may be delayed. In our patient fallopian tube torsion was considered in the differential diagnosis as this patient had had bilateral tubal ligation during her last caesarean section. Tubal ligation especially if done by Pomeroy method, is considered to be an aetiological factor in the formation of tubal cysts and if the cyst is in the fimbrial end, it may lead to torsion and present like an acute abdomen. Complications that can occur include paraovarian cyst torsion (2-16 %),² haemorrhage,³ rupture,⁴ secondary infection,⁵ neoplastic transformation (2.9%)-such as papillary serous cystadenoma, endometriod cyst adenocarcinoma, serous cystadenocarcinoma and mucinous cystadenocarcinoma.⁶

Torsion of the paraovarian cyst is 3 times more common in pregnant women probably due to the rapid growth spurt. POCs are usually small, although they may vary in size. Larger cysts are found in younger patients and are usually of mesothelial origin.⁷ Paraovarian cysts are usually single, but bilateral lesions have been reported.⁸ Torsion of fallopian tube and para ovarian cyst are usually seen in the reproductive age group especially in women having tubal ligation by Pomeroy method as in our case. Physicians need to maintain a high index of suspicion for this uncommon and often difficult to diagnose cause of abdominal pain.⁹

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