# ■ Case Report

# Bilateral huge fimbrial cysts with torsion of right fallopian tube

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#### **Abstract**

A case of bilateral fimbrial cyst with torsion of right side is presented, occurring in a 32 year old female. She presented in outpatient department with pain abdomen and feeling of mass in lower abdomen since six months. Initial assessment of ovarian cyst was made. Ultrasound showed cystic structures in left adnexa and complex cyst in right adnexa. Laprotomy was performed and bilateral fimbrial cysts in fallopian tubes were identified with torsion on right side which was subsequently confirmed on histopathology. Although huge fimbrial cysts with torsion of fallopian tube is rare, it should be considered in differential diagnosis of abdominal mass with pain in females.

## Introduction

Fimbrial (Paraovarian) cysts represent approximately 10% of adnexal masses. 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. Fimbrial cysts usually arise in the broad ligament and are thin walled and unilocular. Multilocular cysts may resemble ovarian serous cystadenomas. It may be difficult to reliably differentiate a fimbrial cyst from an ovarian cyst by imaging; therefore they are often discovered intraoperatively during laprotomy for other indications.

#### Case report

A 32 year old woman, P1L1 presented with history of feeling of lump in lower abdomen since 6 months and lower abdominal pain of 2 weeks duration. On examination she was hemodynamically stable, abdominal examination revealed a abdominopelvic mass 20x 15 cm with free mobility, regular margin, mildly tender on deep palpation. Bimanual examination was suggestive of a pelvic mass probably ovarian cyst. Ultrasonogram showed uterus of

normal size, right adnexal complex cystic mass 15x10cm, left adnexal simple cyst 8x8 cm, bilateral ovaries not visualized separately, suggestive of bilateral ovarian cyst. During laprotomy right fimbrial cyst 15x10 cm with torted and necrotic fallopian tube and left fimbrial cyst 7x8 cm with clear fluid, stretched fallopian tube and normal sized both ovaries was found. (Fig:1) Right salpingectomy along with removal of cyst and left cystectomy was performed as right tube was torted 3 times and necrotic, left tube was conserved considering her parity status. Post operative period was uneventful; she was doing well on her follow up. The diagnosis of fimbrial cyst was confirmed by histology report and no evidence of malignancy was reported.



Fig: 1 showing the bilateral fimbrial cysts with torted right fallopian tube and stretched left fallopian tube

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## **Discussion**

Paraovarian cysts (POCs) are rarely diagnosed by radiologists. They can occur in patients who have had bilateral tubal ligation as reported<sup>4</sup>. 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 covering the peritoneum (mesothelium cyst) but also from para mesonephric tissues (paramesonephric cysts or Mullerian cyst) and rarely mesonephric remnants (mesonephric cyst or Wolffian cyst)<sup>5</sup>. 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. Paraovarian cysts are usually single, but bilateral lesions have been reported as in our case. Our patient had a pelvic mass for some time but to us she presented with abdominal pain, a similar situation has been reported where an additional MRI was done as well and preoperative diagnosis of fimbrial cyst was made<sup>6</sup>. 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.7 Fallopian tube torsion of fimbrial cyst is rare, therefore diagnosis may be delayed.

Complications that can occur include paraovarian cyst torsion (2-16 %), hemorrhage, rupture, and secondary infection, neoplastic transformation (2.9%)-such as papillary serous cystadenoma, endometriod cystadenocarcinoma, cystadenocarcinoma and mucinous cystadenocarcinoma9. 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<sup>10</sup>. 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<sup>11</sup>. Gynecologists need to maintain a high index of suspicion for this uncommon and often difficult to diagnose cause of abdominal pain.

## References

- 1. Barloon TJ, Brown BP, Abu-Yusuf MM, Warnock NG. Paraovarian and paratubal cysts: Preoperative diagnosis using trans-abdominal and trans-vaginal sonography. J Clin Ultrasound 1996; 24:117-22.
- Grant EC. Benign conditions of the ovaries. In: Nyberg DA, Hill LM, Bohm-Velez M, Mendelson EB, editors. Transvaginal ultrasound. St Louis, MO: Mosby-Year Book, 1992:199
- 3. Kishimoto K, Ito K, Awaya H, et al. Paraovarian cyst: MR imaging features. Abdom Imaging 2002; 27:685–9.
- 4. Masroor I, Khan N. Torsion of fallopian tube, fimbrial cyst. J Pak Med Assoc 2008; 58:571-3.
- Steinback F, Kauppila A. Development and classification of paraovarian cysts: an ultrastructural Study. Gynecol Obstet Invest 1981; 12:1-16
- Gopal K, Lim Y, Dobson M, Keating P, Stringfellow H. A case of torted parafimbrial Cyst on MRI: case report and review of literature. Br J Radiol 2006; 79:e208-e210.
- Barloon TJ, Brown BP, Abu-Yusuf MM, Warnock NG. Paraovarian and paratubal cysts: Preoperative diagnosis using trans-abdominal and transvaginal sonography. J Clin Ultrasound 1996; 24:117-22
- 8. Kim JS, Woo SK, Suh SJ, Morett LB.Sonographic diagnosis of paraovarian cysts: Value of detecting a separate ipsilateral ovary. Am J Roentgenol 1995; 164:1441-4.
- 9. Honore LH, O'Hara KE. Serous papillary neoplasms arising in paramesonephric Paraovarian cysts. A report of 8 cases. Acta Obstet Gynecol Scand 1980; 59:525-8.
- Genardy R, Parmley T, Woodruff JD. The original and clinical behaviour of the paraovarian tumour. Am J Obstet Gynecol 1977; 129:873-80.
- 11. Puri M, Jain K, Negi K. Torsion of para-ovarian cyst: a cause of acute abdomen. Indian J Med Sci 2003; 57:361-2.