International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Girija BS et al. Int J Reprod Contracept Obstet Gynecol. 2025 Jan;14(1):281-283
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: https://dx.doi.org/10.18203/2320-1770.ijrcog20243970

Case Report

Untangling the emergency: fimbrial cyst in pregnancy

Girija B. S.*, Nayanashree V.

Department of Obstetrics and Gynaecology, Hassan institute of Medical Sciences, Hassan, Karnataka, India

Received: 19 November 2024
Accepted: 12 December 2024

***Correspondence:**
Dr. Girija B. S.,
E-mail: girijaprasannaobg@gmail.com

ABSTRACT

Torsion of uterine adnexa is a significant cause of acute pain abdomen, however isolated fimbrial cyst torsion without the involvement of the ipsilateral ovary is rarely reported. It is even rarer to occur during pregnancy, hence making its diagnosis a conundrum. Here is a case report of a 19 year primigravida with 18 weeks of gestation who presented with acute pain abdomen with investigations suspecting an ovarian torsion. However, on laparotomy, isolated right fimbrial cyst torsion was seen for which detorsion followed by right salpingectomy was done. Adnexal torsion is a surgical emergency requiring early intervention to salvage the tissues. An acute abdomen on the background of adnexal mass requires vigilant assessment and evaluation to ensure timely intervention and prevent further complications.

Keywords: Fimbrial cyst, Pain abdomen, Torsion, Laparotomy

INTRODUCTION

Isolated fallopian tube torsion is a rare condition with incidence of about 1 in 1,500,000 women.[1] It occurs more commonly in woman of age 21-40 years.[2] It is even more uncommon in pregnancy, with only one case in 1,20,000 pregnancies being reported over a period of 10 years.[3] Right fallopian tube is more commonly affected. The condition is frequently misdiagnosed with acute appendicitis or ovarian torsion. The exact cause of fallopian tube torsion is unknown; however, several aetiologies have been postulated regarding the same.

Here is a case of a primigravida with 18 weeks gestation who presented with acute pain abdomen and was diagnosed with fimbrial cyst torsion intraoperatively.

CASE REPORT

A 19-year-old primigravida with 4.5 months of amenorrhea presented with complains of pain abdomen and burning micturition for one day associated with 2-3 episode of vomiting. She described it to be a sudden onset of cramp-like pain in the right lower quadrant of the abdomen which gradually aggravated in intensity and did not relieve with analgesics. On examination, she appeared pale, afebrile, with blood pressure of 120/70 mmHg, pulse rate of 106 bpm. Breast, thyroid, spine examinations were normal. Systemic examinations were normal. Per abdomen examination- uterus corresponded 16 weeks size with right iliac fossa tenderness. Laboratory investigations showed haemoglobin of 6.9 g/dl, TLC-14,000 cells/mm^3, platelet-2.96 lakhs, CRP-94 mg/dl, CA-125-0.57 ng/ml, CEA-10.20 U/ml, CA 19-9-7.30 U/ml, urine routine-normal.

Her NT scan at 13th week gestation showed a live foetus of 13 weeks 3 days gestation, NT at 87th centile, right ovary measured 3.4×1.4 cm, with clear cyst of 4.4×2.6 cm in right adnexa separate from the ovary suggestive of a benign para-ovarian cyst (Figure 1).

A follow up pelvic ultrasound post admission revealed a 17 weeks gravid uterus with right adnexa showed a cystic lesion measuring 3.7×3.2 cm with no evidence of peripheral vascularity suggestive of right ovarian torsion. MRI pelvis revealed a gravid uterus, right ovary being normal with a corpus luteal cyst of 32×32 mm, left ovary could not be assessed (Figure 2). Patient was initially started on intravenous antibiotics, 2 pint PRBC transfused and conservative management was given. However, patient's symptoms did not improve and hence consent for

laparotomy was taken. Laparotomy revealed a necrosed right fimbrial cyst of 6×3 cm with two turns of torsion, left fallopian tube was normal, bilateral ovaries were normal, uterus corresponded 16 weeks size (Figure 3). Detorsion followed by right salpingectomy was done (Figure 4). Postoperatively, isoxsuprine intravenous drip was started for 24hours and antibiotics were continued for 3 days. Postoperative period was uneventful and patient was discharged on postoperative day 5. Patient was followed up and the diagnosis of fimbrial cyst was confirmed by histology report with no evidence of malignancy.

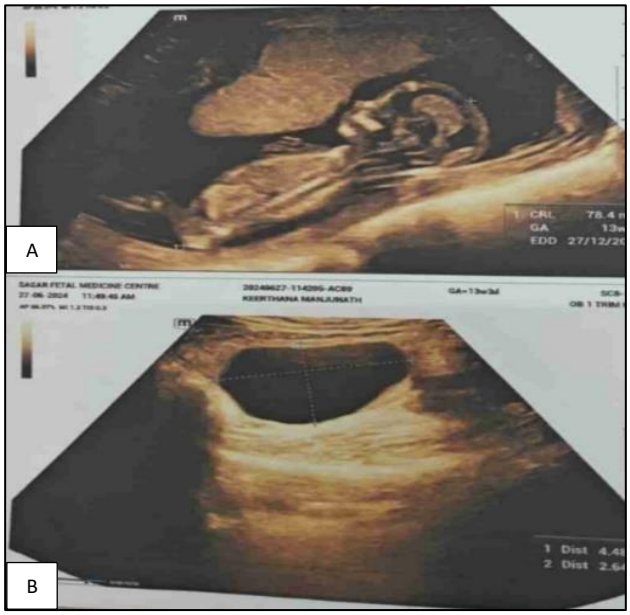

Figure 1 (A and B): NT scan showing 13 weeks 3 days fetus with right para ovarian cyst.

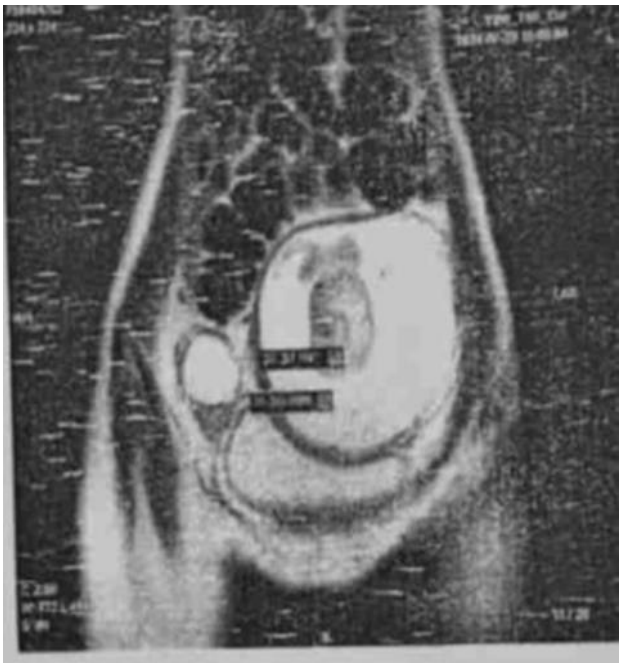

Figure 2: MRI pelvis-gravid uterus with right corpus luteal cyst.

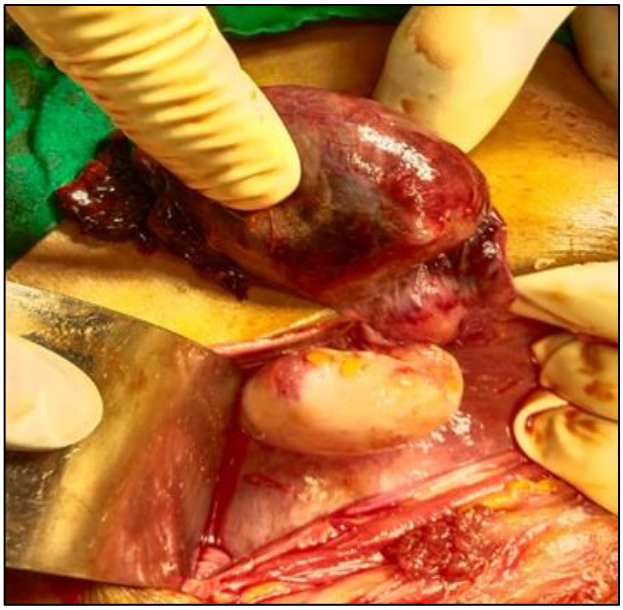

Figure 3: Intraoperative finding of necrosed right fimbrial cyst.

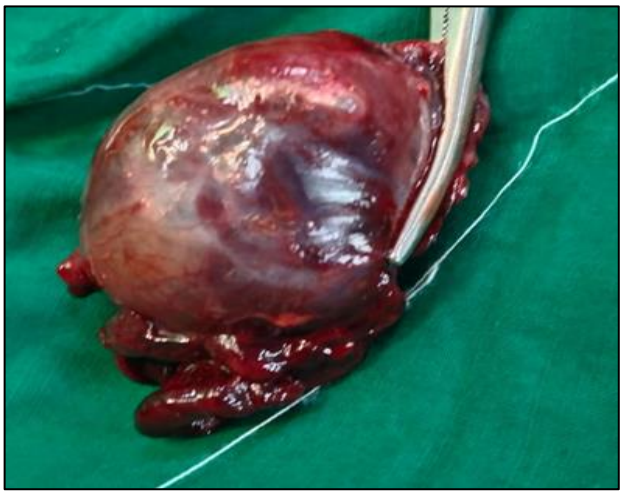

Figure 4: Necrosed fimbrial cyst.

DISCUSSION

Isolated fallopian tube torsion is a rare cause of acute abdominal pain in women. It is primarily seen in adolescent and reproductive age women and is rarely encountered in the postmenopausal period. The exact cause of isolated fallopian tube torsion is yet be known. However, there are a few predisposing intrinsic and extrinsic factors. The intrinsic factors include congenital anomalies like excessive length or spiral course of the tube, acquired pathologies like hydrosalpinx, hematosalpinx, neoplasm or surgeries such as tubal ligation, especially the use of Pomeroy technique, can predispose to fallopian tube torsion and autonomic dysfunction or abnormal peristalsis. The extrinsic factors include changes in the neighbouring organs like neoplasm,

adhesions or pregnancy, mechanical factors, movement or trauma to pelvic organs and pelvic congestion.[4]

Clinical signs of tubal torsion include lower abdominal pain, nausea, vomiting, urinary complaints, susceptible adnexal mass, and uterine bleeding. The most common symptom is pain that begins in the lower abdomen on the affected side and may also spread to the back, thigh, or groin areas. Pain may be continuous and ambiguous, as well as paroxysmal and knifelike. In addition, defence and rebound can be detected on the torsion side. However, none of these are specific properties.[5,6] The differential diagnosis of fimbrial cyst torsion includes acute appendicitis, ectopic pregnancy, pelvic inflammatory disease, twisted ovarian cyst and degenerative leiomyoma.[7] Complications that can occur include fimbrial cyst torsion (2-16%), haemorrhage, rupture, and secondary infection, neoplastic transformation (2.9%)-such as papillary serous cystadenoma, endometroid cystadenocarcinoma, serous cystadenocarcinoma and mucinous cystadenocarcinoma.[8]

However, diagnosis is often difficult especially during pregnancy due to lack of specific investigations which are confirmatory. Hence in majority of cases, the diagnosis is made intraoperatively.

CONCLUSION

Isolated fimbrial cyst torsion is a rare emergency with a common symptom of acute abdomen pain. Preoperative diagnosis is often difficult due to symptoms and physical examination findings not being pathognomonic and lack of specific imaging and laboratory features. Therefore, the correct diagnosis is often made intraoperatively. Early recognition with emergency laparotomy is essential. Also, fimbrial cyst torsion should be considered as a differential diagnosis for acute abdomen pain in females.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Lineberry T, Rodriguez H. Isolated torsion of the Fallopian tube in an adolescent: a case report. J Pediatr Adolesc Gynecol. 2000;13(3):135-8.
2. Phupong V, Intharasakda P. Twisted fallopian tube in pregnancy: A case report. BMC Pregna Childbir. 2001;1(1):5.
3. Yalcin OT, Hassa H, Zeytinoglu S, Isiksoy S. Isolated torsion of fallopian tube during pregnancy: Report of two cases. Eur J Obstet Gynecol Reprod Biol. 1997;74:179-82.
4. Ormasa M, Mahmoud E, Jung J. Isolated fallopian tube torsion with fimbrial cyst in a 10 year-old girl diagnosed by ultrasound: a case report. J Radiol Case Rep. 2015;9(12):29-36.
5. Ho PL, Liang SJ, Su HW, Chang CY, Hsu CS, Ling TH. Isolated torsion of the fallopian tube: a rare diagnosis in an adolescent without sexual experience. Taiwan J Obstet Gynecol. 2008;47(2):235-7.
6. Lim SY, Park JC, Bae JG, Kim JI, Rhee JH. Isolated torsion of bilateral fallopian tubes combined with tubal endometriosis: a case report. Korean J Obstet Gynecol. 2012;55(1):55-8.
7. Krissi H, Shalev J, Bar-Hava I, Langer R, Herman A, Kaplan B. Fallopian tube torsion: laparoscopic evaluation and treatment of a rare gynecological entity. J Am Board Fam Pract. 2001;14:274-7.
8. Rijal P, Pokharel H, Chhetri S, Pradhan T, Agarwal A. Bilateral huge fimbrial cysts with torsion of right fallopian tube. Health Renaissance. 2012;10(2):153-4.

Cite this article as: Girija BS, Nayanashree V. Untangling the emergency: fimbrial cyst in pregnancy. Int J Reprod Contracept Obstet Gynecol 2025;14:281-3.