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Isolated Torsoin Fallopian Tube.

Sharmila C*, and K Saraswathi.

Department of Obstetrics and Gynecology, Sree Balaji Medical College & Hospital, CLC works road, Chromepet, Chennai 600044, Tamil Nadu, India.

ABSTRACT

Isolated fallopian tube torsion is an uncommon cause of acute lower abdominal pain. Diagnosis is mostly difficult because there are no classical pathognomonic symptoms; clinical or lab findings. A preoperative ultrasound showing normal ovaries with dilated fallopian tubes, isolated fallopian tube torsion must be suspected. Along with imaging studies, Laparoscopic surgery is necessary to establish the diagnosis. Unfortunately, surgery often is performed late for tube conservation. Isolated Fallopian tube torsion has to be suspected in case of acute pelvic pain, especially in reproductive age group and prompt intervention is needed.
Keywords: Fallopian Tube Torsion, Hydrosalphinx

Corresponding author

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INTRODUCTION

Isolated torsion of the fallopian tube is an uncommon cause of acute lower abdominal pain. The incidence is estimated to be 1 in 500,000 women [1,2]. It is often found in reproductive age women and is found less in pre pubertal and peri-menopausal women [2,5].

Case Report

Mrs.M. aged 46 years P2L2 , FTNVD , LCB – 20 YRS, Sterilized , LMP -25 days back, came to the casualty with history of acute pelvic pain on right side radiating to the thighs for about 24 hours duration. She had history of vomiting -2 episodes since morning. She did not have urinary symptoms or fever. Her menstrual history was normal. Has history of on and off pelvic pain throughout for past one year

On examination: patient stable with right iliac fossa tenderness there were no signs of peritonitis. P/S – cervix, vagina - healthy. P/V- Bimanual pelvic examination showed tenderness in right adnexa. Her urine b-HCG was negative.

On Endovaginal Sonography, the uterus and ovaries are normal. There was a hydrosalphinx on right side measuring 35 X 17 X 17mm. It was tender. There were internal echoes. There was a small mass of concentric rings in the neck of hydrosalphinx which showed "Whirl Pool" sign [6] on to fro movement of transducer. There was minimal echogenic fluid in Cul-de-sac. A diagnosis of right hydrosalphinx with torsion was given. Patient was taken up for laparoscopy which revealed a tense hydrosalphinx with torsion of 3 rotations with ischemia. The same was excised. Patient had an uneventful recovery.

DISCUSSION

Determining the cause and etiology of acute pelvic pain will be very difficult, due to the variety of presentations and causes. Because of the rarity, the diagnosis of isolated torsion of a fallopian tube is particularly hard and is delayed [1, 2].

The conjectural diagnosis of fallopian tube torsion relied on mostly clinical suspicion and ultrasound findings. Acute severe lower abdominal pain with or without vomiting and fever is always present. The pain mostly unilateral and on right side, radiating to the thigh or groin. Along with history of on and off pain with resolution of symptoms [3, 7]. On clinical examination ,there will be abdominal tenderness with signs of rebound tenderness . On pelvic examination cervical motion tenderness and adnexal tenderness may be present but a mass is not always palpable [1, 3]. Lab findings are usually nonspecific. There might be minimal leukocytosis and elevated C-Reactive Protein [7] .

The normal fallopian tube is not generally visualized on ultrasonography because of its narrow diameter and lack of echogenic features. Sometimes, a fallopian tube can be visualized only if it is encircled by fluid; but if a tube is visible on ultrasonography its mostly abnormal. USG features of selective torsion of the fallopian tube are tubal wall thickening, hematosalpinx, and an adnexal mass with a wide range of echogenicities [3]. The spectrum of ultrasonography findings varied depending on the adnexal pathology, severity, and the duration of the torsion [5, 6].

The exact mechanism of fallopian tube torsion is not well understood; some intrinsic and extrinsic factors have been suggested. It is very rare in normal adnexa and has been associated with ovarian cyst. It has also seen during pregnancy and after tubal ligation. The process is thought to start with blockage of the adnexal veins and lymphatic vessels by an pregnancy, ovarian tumor; postinfection adhesions, hydrosalpinx, or pelvic surgery. This obstruction leads to pelvic congestion and edema, with subsequent enlargement of adnexa. This predisposes to the tube to partial / complete torsion [2].

Our patient had hydrosalpinx and pelvic adhesions, expected after previous PID. The history of pelvic pain during last year suggests the history of chronicity. The Undiagnosed torsion may sometimes undergo alternative states of mild torsion and detorsion that finally bring the condition to chronicity [2].

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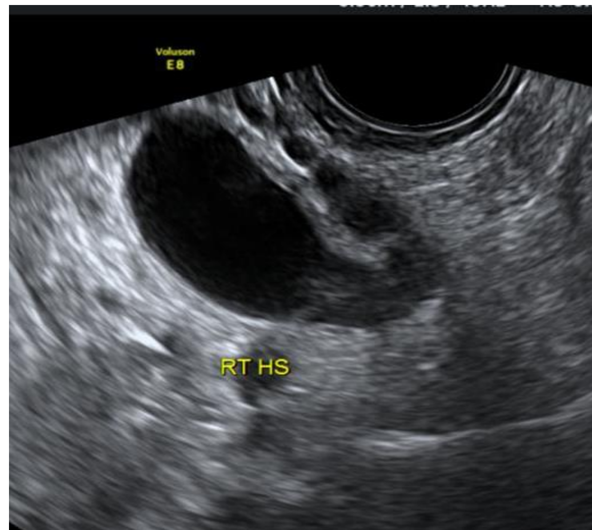
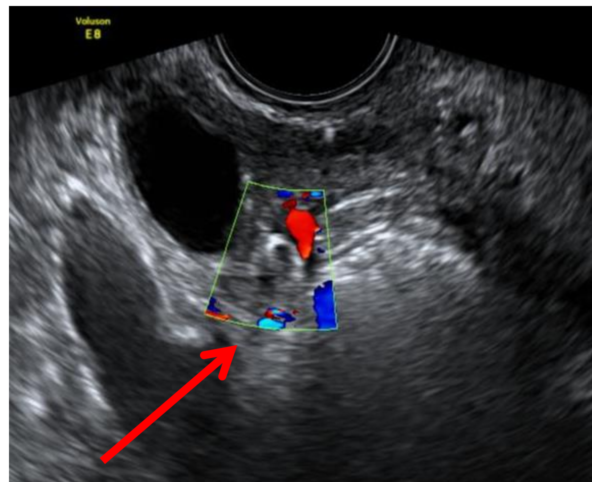
Even though it is rare, it is important to identify the possibility of this diagnosis with a USG finding of hydrosalpinx with a normal ovary in a patient with acute abdominal pain, because delay in the diagnosis and treatment may result in increased morbidity. An isolated tubal torsion to be considered when a Doppler flow ultrasound shows a normal ovary [5, 6]. Reported primary CT findings of isolated tubal torsion include an adnexal mass ,twisted appearance to the fallopian tube with dilated tube greater than 15 mm ,thickened and enhancing tubal wall and luminal CT attenuation greater than 50 HU units, compatible with haemorrhage.

The diagnosis is generally made at time of surgical exploration. A quick consideration of this diagnosis and surgical detorsion may prevent from the irreversible vascular changes [3, 7].





USG showing whirlpool sign

Treatment

Laparoscopic tubal detorsion is the most preferred surgery than salpingectomy in patients of reproductive age with an absence of ischaemic changes and suspicion of malignancy. Laparoscopic salpingectomy is the treatment of choice if the tube is gangrenous, and also if there is a suspected adnexal malignancy and the tube is diseased as in this case or the patient has completed her family [1,4].

Differential Diagnosis

Ovarian torsion, pelvic inflammatory disease, ruptured ovarian cyst, Ectopic pregnancy, endometriosis, acute appendicitis, degenerative leiomyoma and gastrointestinal and urinary conditions [2,3, 8-11]].

CONCLUSION

Although fallopian tube torsion is uncommon, it should be included in differential diagnosis of acute lower abdominal pain in women. Due to the lack of data and non specificity of imaging results, which lead to a retrospective diagnosis of this condition. Diagnostic laparoscopy remains the reference standard in diagnosis and treatment.

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