

Isolated Fallopian Tube Torsion in Nonpregnant Elderly Female: A Case Report

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Received on: 01 September 2021; Accepted on: 26 October 2021; Published on: 31 August 2022

ABSTRACT

Isolated fallopian tube torsion is a rarely encountered gynecological condition during acute pelvic pain in a female of reproductive age. Its clinical diagnosis is very difficult or almost impossible. On preoperative ultrasound suspicion of isolated fallopian tube, torsion can be given. Magnetic resonance imaging (MRI) may further improve confidence for diagnosis if MRI findings correlate with ultrasonography findings. Laparoscopy is necessary to establish the diagnosis. Isolated fallopian tube torsion should be suspected when a female presents with acute pelvic pain. Isolated fallopian tube torsion requires prompt intervention to save the adnexa.

Keywords: Fallopian tube, Magnetic resonance imaging, Torsion, Ultrasonography.

Journal of Mahatma Gandhi University of Medical Sciences and Technology (2022); 10.5005/jp-journals-10057-0191

INTRODUCTION

Females with acute pelvic pain are referred for sonographic evaluation of adnexa, especially for identification of ovarian torsion, which requires early surgical intervention. Ovarian torsion is a fairly common cause of acute lower abdominal pain in women; however, isolated fallopian tube torsion is rarely encountered. Both the conditions present with same clinical symptoms, it is almost impossible to diagnose it on clinical observation alone. We encountered a case of isolated unilateral fallopian tube torsion with normal bilateral ovaries; more commonly fallopian tube torsion is seen in association with ovarian torsion, and the overall incidence of isolated fallopian tube torsion is approximately 1 in 1.5 million women.^{1,2}

CASE DESCRIPTION

A 47-year-old woman presented with severe acute lower abdominal pain for 2–3 days which was diffuse. The patient was P3L3. She complained of a single episode of vomiting in the morning, that is, on the day of ultrasonography. No significant menstrual complaints were given by the patient.

On physical examination, tenderness was present in the lower abdomen, below the umbilicus. Per speculum thick curdy discharge was seen. Cervix was down, congested, and hypertrophied. Per vaginal examination cervix was firm, a cystic mass of 14 weeks size was present with restricted mobility. Uterus felt posterior to the mass.

Ultrasonography (USG) revealed a large cystic lesion of approximately 80 × 64 mm in size in the midline of the pelvis anterior to the uterine fundus. This lesion showed the presence of incomplete peripheral thin septations, which are characteristically seen in the fallopian tube. The lesion was continuous with a non-dilated cystic tubular structure on the left side. No peripheral on internal vascularity was seen in the lesion. Both the ovaries were clearly visualized separately from the lesion; therefore, on USG focal hydrosalpinx with the possibility of tubal torsion was given. Mild free fluid was seen in POD. Uterus was mildly enlarged. Magnetic resonance imaging (MRI) was advised for confirmation of USG findings (Fig. 1).

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How to cite this article: Dadhich N, Choudhary A, Mishra HK, et al. Isolated Fallopian Tube Torsion in Nonpregnant Elderly Female: A Case Report. *J Mahatma Gandhi Univ Med Sci Tech* 2022;7(1):35–37.

Source of support: Nil

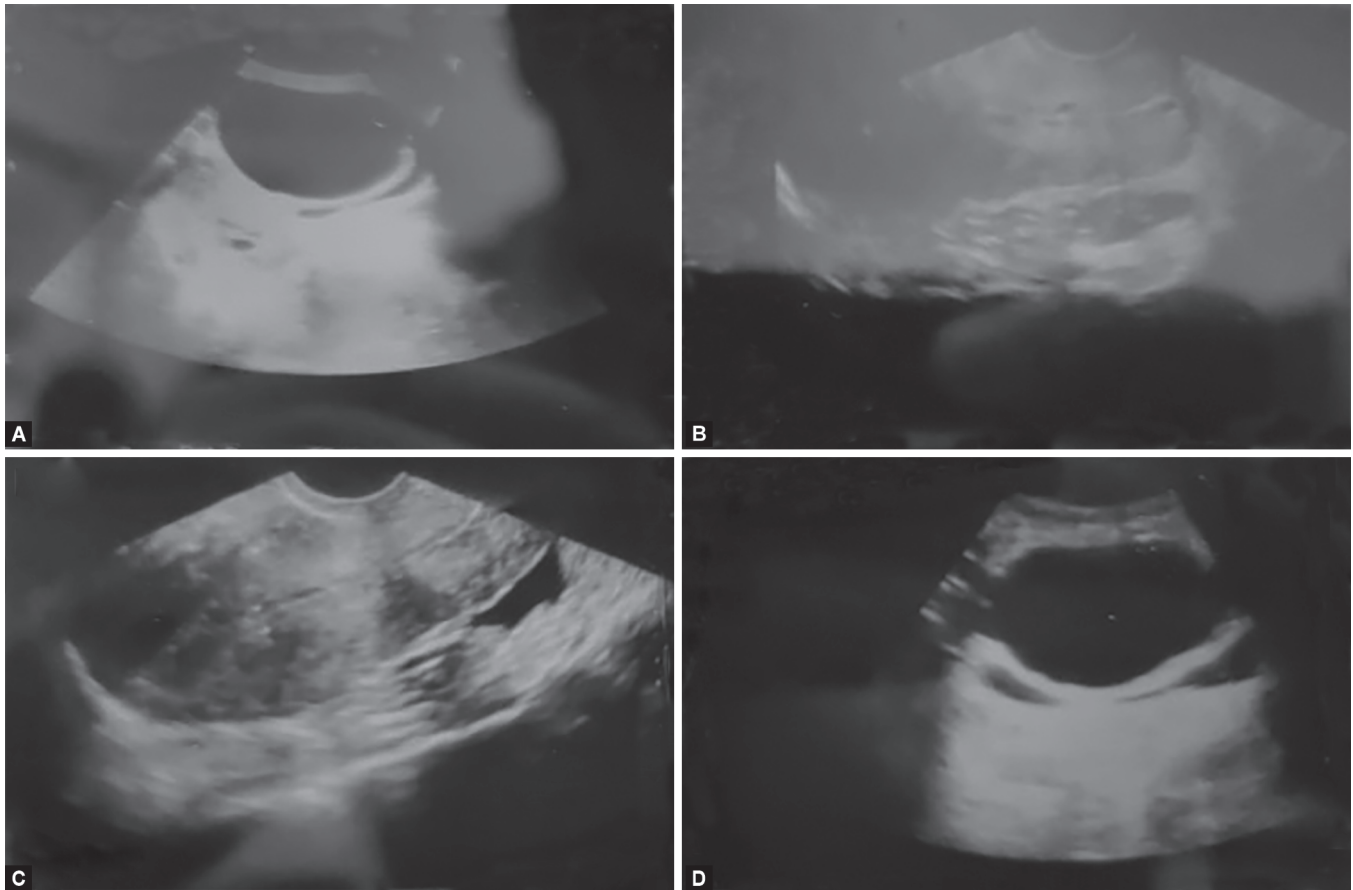
Conflict of interest: None

MRI revealed motion artifacts during MRI imaging as the patient was not able to cooperate fully due to severe acute pelvic pain. Large fluid intensity tortuous tubular lesion was seen anterior to the uterus and superior to the urinary bladder. T2 hypointensity was seen along the walls of the lesion indicating ischemic changes. In view of tortuosity of the left tube with focal hydrosalpinx and T2 hypointensities along the walls of the lesion and clearly visualized normal ovaries diagnosis of left fallopian tube torsion leading to ischemic changes in fallopian tube wall was considered. Mild pelvic ascites were also seen which was also supporting the diagnosis (Fig. 2).

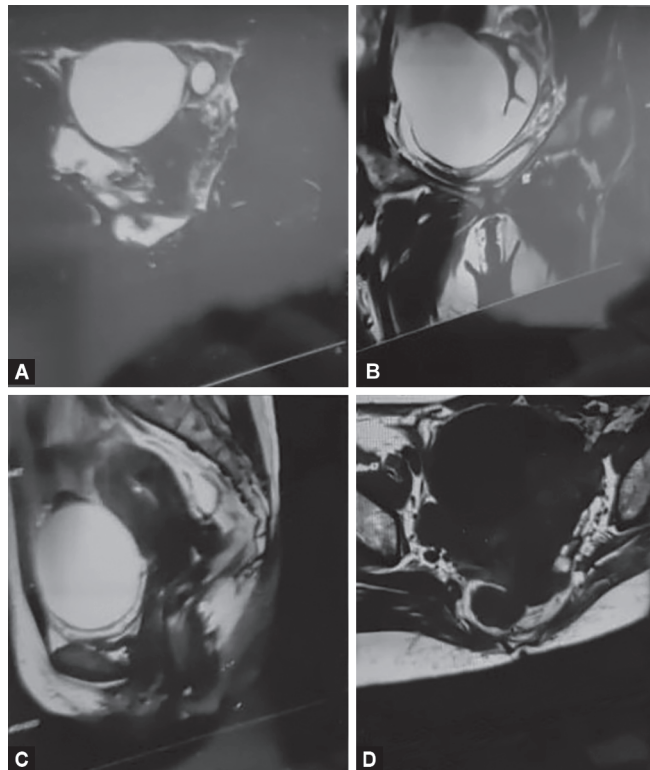
The uterus was enlarged with few subendometrial cysts and a poorly defined junctional zone suggesting adenomyotic changes.

DISCUSSION

Isolated fallopian tube torsion was first described by Bland-Sutton in 1890, and it has a prevalence of 1 in 1.5 million women. Risk factors for isolated fallopian tube torsion commonly include PID and hydrosalpinx.^{3,4} Acute lower abdominal/pelvic pain in a woman requires adequate clinical and analytical examination, which helps the radiologist to guide exploration. On clinical examination alone it is difficult to diagnose it as this condition is not associated with a specific clinical picture; the patient usually has acute infraumbilical pain, usually unilaterally, without fever, no alteration in micturition,



Figs 1A to D: USG reveals a large cystic lesion of approximately 80×64 mm size in midline of pelvis anterior to the uterine fundus



Figs 2A to D: MRI reveals large fluid intensity tortuous tubular lesion was seen anterior to the uterus and superior to the urinary bladder. T2 hypointensity was seen along the walls of the lesion indicating ischemic changes

and intestinal habits with normal menstrual pattern and laboratory analysis.⁵ The presence of dilatation of the fallopian tube and a normal ipsilateral ovary should make us think in this direction. Vascular supply to the fallopian tubes and ovaries is from both ovarian and uterine vessels, resulting in the possibility of isolated fallopian tube torsion without vascular compromise to the ovary. Sonographic findings show normal-appearing uterus and ovaries with normal flow, free fluid, dilated tube with the thickened echogenic wall, internal debris or convoluted echogenic mass thought to represent torsed tube. In our patient, no obvious risk factors for torsion were identified at the time of presentation. Cystic mass seen in our case showed breaking and continuity with the left tube with no vascularity suggested left side Fallopian tube torsion. On MRI T2 hypointensity of the focally dilated left fallopian tube in our case suggested ischemic changes as a result postcontrast study was not done. In some cases where fallopian tube wall T2 hypointensity is not evident postcontrast studies may help further in supporting the diagnosis. Recognition of fallopian tube torsion with prompt consideration of this diagnosis on imaging warrants surgical intervention without delay and prevents irreversible vascular changes.

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