Letter to the Editor

Ovarian Torsion: Diagnostic Dilemmas and its Implications

Madam, Adnexal torsion is reported to be the fifth most common gynaecologic emergency in women of reproductive age with a prevalence of 2.7%.It was mentioned in a recent study by Arab M et al[1] that adnexal torsion is underdiagnosed and also that Gray-scale sonographic findings like simple cyst (52.5% cases), serous cystadenoma (18% cases), mucinous cystadenoma (11% cases) and dermoid cysts (11% cases) are valuable besides clinical findings to suspect adnexal torsion. Its a challenging working diagnosis for clinicians and the diagnostic dilemmas from the initial clinical assessment to final diagnosis are discussed in Table.

Delayed diagnosis may lead to eventual loss of ovary and tube, and this can have detrimental effect on the woman's life both physically and psychologically especially if she has not completed her family. In the developed world; missed or delayed diagnosis carries a risk of litigation and medico legal challenges for doctors. This short review of diagnostic dilemmas highlights the fact that ovarian torsion presentation can be misleading (blood and radiological findings can be normal), therefore clinicians should think broadly as

Table-1: Diagnostic Dilemmas in Ovarian Torsion.

Diagnostic workup and ovarian torsion evaluation step by step	Diagnostic Dilemmas
1) Presentation variation: Age	Ovarian torsion can occur at any age, but most cases occur in the early reproductive years. Although ovarian torsion in very young children is rare, a case of ovarian cyst torsion was reported in a 2-year-old.[2]
2) Symptomology a) Pain	Torsion manifests as gradual pain or sudden onset of pain, which mimic other acute abdominal conditions like acute appendicitis, ectopic pregnancy, ureteric colic, diverticulitis, pelvic inflammatory disease and tubo ovarian abscess. However, complaint of mild pain that follows a more prolonged time course can be misleading in minority of patients.
b) Others symptoms	Nausea and vomiting occur in approximately 70% of patients; mimicking a gastrointestinal source of pain and further obscuring the diagnosis. Fever may not occur initially but can occur lately if ovary becomes necrotic.
3) Signs	Peritoneal findings are infrequent until the later stages where ischaemia leads to necrotic ovary. Tenderness to palpation is common; however, it is mild in approximately 30% and absent in another 30% of patients.[3] Therefore, the absence of tenderness cannot be used to rule out torsion.
4) Investigations: a) Routine blood tests	There are no specific blood test to confirm the diagnosis however routine full blood count, CRP (C-reactive protein), Beta -HCG, can be helpful in differential diagnosis excluding other causes.
b) Ultrasonography	Pelvic and Doppler ultrasonography are often incapable of revealing this pathology. In a recent study by Bar-On S et al[4] found that preoperative diagnosis of ovarian torsion was confirmed in only 46% patients. The classic sonographic finding of peripheral follicles in an enlarged ovary is seen in a small percentage (12% on sonography) of patients with torsion.[5] However, the interpretation of Doppler sonography is inconsistent due to dual ovarian blood supply from the uterine artery and the ovarian artery. Additionally, if the scan is performed during a transient period of detorsing of the ovary a normal Doppler flow may falsely suggest a normal ovary. Again, if the scan is performed during a transient period of detorsing of the ovary a normal Doppler flow may falsely suggest a normal ovary.Although absence of arterial blood flow may be diagnostic, early in the progression of disease arterial perfusion may be preserved with only obstruction of venous and lymphatic flow.[6]

early conservative treatment with laparoscopy can save the ovary.

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