

Guideline and Systematic Review on the Diagnosis and Management of Ovarian Torsion in Adolescents,



Adults and Pregnant Women

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Background: Ovarian torsion is defined as the partial or complete twisting of the ovary around its own vascular pedicle. It is the fifth most common gynaecological emergency, with average age of affected women being 26. However because of wide differential diagnosis and non-specific symptoms the diagnosis is delayed leading to loss of ovary and subsequent reduced ovarian function and fertility.

Objective: To review the evidence and provide recommendations on the diagnosis and management of adnexal torsion in adolescents, adults and pregnant women.

Outcomes: Elements evaluated include the risk factors in various age groups, diagnostic modalities, management options, and outcomes of adnexal torsion.

Evidence: Published literature was retrieved through searches of CINAHL, EMBASE, EMCARE, MEDLINE, PubMed, MEDLINE, and the Cochrane Library using appropriate key words ("ovarian torsion" "Management").

Summary Of Recommendations:

- ❑ High Index of suspicion of ovarian torsion should be kept in all menarched females presenting with acute abdomen.
- ❑ Clinical and ultrasound criteria should be used to diagnose ovarian torsion. Presence of blood flow should not delay surgery, but absence of blood flow may be more significant for diagnosis
- ❑ Prompt surgery should be performed for adequate outcome.

- ❑ Diagnostic Laparoscopy and Detorsion should be considered as the first line treatment in all women of reproductive age group. No ovary should be removed because of its blue/black appearance or theoretical risk of thromboembolism. The surgical technique should be adapted to adolescents because of different needs. Oophorectomy is a reasonable option in postmenopausal women because of increased risk of malignancy.
- ❑ Adequate preoperative and postoperative counselling is essential to provide good care and enhance patient experience.
- ❑ Laparoscopy is the best approach to deal with ovarian torsion in all the three trimesters. However surgeons experience and skill are vital for a safe procedure.

Conclusion: Ovarian torsion is an acute gynaecological emergency that should be dealt with within timely manner to achieve best outcome. Minimally invasive detorsion of the ovary is the standard that we should try to achieve in all the cases