Can we improve diagnostic accuracy and ovarian salvage rates for suspected adnexal torsion?

A two-year retrospective observational study.

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Introduction and Background:

Ovarian torsion accounts for less than 3% of all gynaecological emergencies and can be a diagnostic challenge. We found this to be the commonest gynaecological emergency for non-pregnant patients requiring emergency surgery in our unit.

Prompt diagnosis and surgical intervention is vital in women with suspected adnexal torsion to allow ovarian conservation surgery. We introduced a modified pathway by which all women with clinical suspicion of torsion were triaged and prioritized to be seen and scanned by consultants trained in this area.

Objectives:

To assess whether diagnostic accuracy for ovarian torsion on transvaginal ultrasound scan is improved if it is carried out by a gynaecologist trained specifically in this area and whether ovarian salvage rates at surgery are improved if clinical assessment, ultrasound scan and management decision are undertaken all at the same time by an experienced Gynaecologist.

Results:

A total of nineteen women had confirmed adnexal torsion at surgery during study period. Seventy-nine percent of women with (retrospectively confirmed) adnexal torsion underwent ultrasound by the Gynaecologists. The rest had CT, MRI or no imagining pre op period. Most of these women were initially admitted under specialties other than gynaecology. Of all women had clinical assessment and management decision made at the same time by the same Gynaecologist the diagnostic accuracy was improved to an average of 88% over the two years period compared to 46% prior to implementation of modified pathway. Mean waiting time for ultrasound was also reduced from 19.5 hours to 5 hours. Ovarian salvage rates at surgery increased to an average of 53% compared to 38% previously.

Conclusion:

Ovarian salvage rates (in women undergoing surgery for suspected torsion) are better when clinical assessment, ultrasound scan and management decision are carried out by an experienced gynaecologist at a single point owing to more diagnostic accuracy and reduced waiting time for definitive management.

Outcome Measures:

To review the impact of the modified pathway on time to imaging, time to theatre and the outcomes of surgery.