

Ovarian Torsion- Are ovaries salvageable after torsion?

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Introduction:

- Ovarian torsion occurs when ovary twists over the ligament that support adnexa i.e. suspensory ligament of ovaries(attaches ovaries to pelvic side walls) and utero-ovarian ligament.
- The fallopian tube often twists with the ovary and is then referred to as adnexal torsion.
- Ovary has a dual blood supply from ovarian arteries and uterine arteries. Twisting of Ligaments can lead to the venous congestion, edema, compression of arteries and eventually loss of blood supply of ovary leading to necrosis, peritonitis, loss of ovary and infertility if not identified properly.
- Overall incidence of ovarian torsion is 2% to 15%
- Main risk factors for ovarian torsion are adnexal mass>5cm, long ovarian ligaments, PCOS, and infertility treatment.

Objective:

Main objective is to study the outcome of ovarian conservation in ovarian/adenexal torsion in women of age group 20-40 yrs

Methods:

- Retrospective case review was conducted for women with suspicion of ovarian torsion and later confirmed on laparoscopy, over 2 different tertiary care hospitals in South Punjab.
- The duration of study was 2 years, from Feb 2020 to Feb 2022. Inclusion criteria also included age group 20-40 yrs, presence of pre-op pain lower abdomen, nausea, vomiting and reduced blood flow on Doppler studies. Sample size was 20.

Results:

- 30% women were in age group of 20-30yrs, 70% were in age group of 30- 40 yrs.
- 12.5% were on infertility treatment.
- Onset of symptoms(pain, nausea, vomiting) was<24 hrs in 50 % of patients, 24-48 hrs in 45% and >48 hrs in 5%.
- Adnexal cyst was present in 75% and in 25% there was no adnexal cyst. Intraoperatively ovarian torsion was found in all pts (100%).
- Necrosis was seen in 70% and in 30% patients, there was no apparent macroscopic necrosis. Ovaries were conserved in 85% patients and oophorectomy was done in 15%. Those with conserved ovaries had a 6 months follow up during which adequate blood flow to ovaries was shown in all patients.

Conclusion:

- Laparoscopic conservative management with untwisting and conserving ovaries(follow up for 6 months) showed that macroscopically nonviable ovaries could be recovered.

Demographic studies and clinical characters of study

Age(in yrs.)	20-30 (30%)	30-35 (8%)	35-40 (30%)
Married	Yes (80%)	No (20%)	
Pain abdomen	Yes(100%)	No	
Nausea/vomiting	Yes (100%)	No	
Duration of pain	<24 hrs. (50%)	24-48 hrs. (35%)	>48 hrs. (15%)
Adnexal cyst	Yes (75%)	No (5%)	
Infertility treatment	Yes (12.5%)	No (88.5%)	
Doppler studies (reduced blood flow/enlarged ovaries	Yes (100%)	No	
Intra-op ovarian torsion	Yes (20)	No (0)	
Necrosis	Yes(70%)	No (30%)	
Ovarian conservation	Yes (85%)	No (3%)	

Strength of Study

- Follow-up for 6 months
- Was conducted at 2 hospital.

Limitation of study

- Retrospective data of 2 centers
- Small number of patients (rare emergency)

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