

Reference Number: Version Number:	Date of Next Review: January 2023 Previous Trust/LHB Reference Number:
Title: Management of Ovarian Torsion Guideline	
Introduction and Aim	
<p>This guideline will outline the medical management of patients admitted to Emergency Gynae with acute abdominal pain.</p> <p><i>Is the document supporting a policy? No</i></p> <p><i>What will it achieve?</i> Improve management of patients with acute abdominal pain caused by ovarian torsion</p>	
Objectives	
<ul style="list-style-type: none"> To increase awareness that sudden abdominal pain in a woman with an ovarian cyst is likely to be due to torsion and immediate management prevents loss of an ovary and potential reduction in fertility. 	
Scope	
This policy applies to all healthcare professionals in all locations including those with honorary contracts	
Equality Health Impact Assessment	<i>An Equality Health Impact Assessment (EHIA) has not been completed.</i>
Documents to read alongside this Procedure	
Approved by	<i>Gynaecology Professional Forum</i>

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<p><u>Disclaimer</u></p> <p>If the review date of this document has passed please ensure that the version you are using is the most up to date either by contacting the document author or the Governance Directorate.</p>	

Summary of reviews/amendments

Version Number	Date of Review Approved	Date Published	Summary of Amendments

Guideline for management of Acute Abdominal Pain with special emphasis on ovarian torsion

Introduction:

Acute abdominal pain in an otherwise fit and healthy woman is often due to ovarian cyst accident, with ovarian torsion being the commonest. It is responsible for 2.7-4.7% of all gynaecological emergencies

Torsion of ovary is a diagnostic challenge. Diagnosis is difficult and a high index of suspicion is needed for an early diagnosis in order to save the ovary. Ovarian torsion should be suspected if a patient presents with a history of acute abdominal pain and an ovarian mass is found on imaging.

Abdominal pain, nausea and vomiting are the most common symptoms. It is difficult to diagnose ovarian torsion based on symptoms alone as they are nonspecific and mimic other conditions. No specific blood test can confirm torsion of ovary. White blood cells and C-reactive protein may be raised in up to 50% of ovarian torsion.

Aim:

This guideline will outline the medical management of patients admitted to Emergency Gynae with acute abdominal pain.

Referral criteria:

Patients can be referred by the General Practitioner, Surgical assessment unit, Medical assessment unit, A& E department.

Inclusion criteria:

Women older than 16 yrs of age
 Women referred by GP and A&E department can be referred on the basis of history alone.

Women referred from SAU and MAU should have a baseline ultrasound scan

Exclusion criteria:

All girls under 16 years of age who present with acute abdominal pain should be reviewed by paediatricians and admitted under their care. The consultant on call for Gynae should review them.

Differential diagnosis:

Please correlate with the clinical history –

Ovarian cyst accident – ovarian torsion, haemorrhage in an ovarian cyst, rarely, rupture of an ovarian cyst

Pelvic inflammatory disease

Tubo-ovarian abscess (especially in presence of an intrauterine device)

Urinary tract infection

Renal colic

Appendicitis

Inflammatory bowel disease

*Adnexal torsion in young prepubescent children

Initial Assessment of patients admitted with Acute Abdomen:

- Take a detailed history
- Measurement of vital signs – T,P,RR, B.P, O₂ saturation
- Investigations:
 - Urinalysis + (MSU if nitrates on dipstick).
 - FBC, U+E, CRP
 - Pregnancy test – approximately 20% of cases occur during pregnancy.
 - USS* – presence of an adnexal mass is highly suggestive of an ovarian cyst accident.

Ultrasound can be carried out in the EGU urgently by an appropriately trained person or an **URGENT ultrasound needs to be arranged in the radiology department.*

Features suggestive of ovarian torsion on Ultrasound scan:

This is not conclusive but should help in the clinical management. Having a high index of suspicion is important.

1. Enlarged hypo or hyperechoic ovary
2. Unilateral ovarian enlargement and oedema with peripherally arranged follicles, more common in pre-pubescent ovaries.

3. Ovarian mass may become more anterior and uterus may be deviated towards the ovarian mass.
4. Pelvic fluid in up to 80%.
5. Doppler
 - Little or no intra-ovarian venous flow (common)
 - Absent arterial flow (less common)
 - Absent or reversed diastolic flow
 - **Normal Doppler flow does not exclude torsion.** It may be due to intermittent torsion or due to dual blood supply.
6. Whirlpool sign of twisted vascular pedicle is characteristic but rarely demonstrated.
7. a long-standing infarcted ovary may have a more complex appearance with cystic degeneration

The ovary will be tender to transducer pressure.

Delayed diagnosis of an ovarian torsion is an important issue in clinical setting. Urgent surgical intervention is needed to preserve ovarian and tubal function and to decrease associated morbidity. There is also a concern that the ovarian mass could be malignant. Malignant ovarian masses are unlikely to tort. Earlier the patient is taken for surgical intervention; possibility of saving ovary is higher. There is no absolute cut off to ensure viability. Some studies indicate that best outcome is achieved if ovary is detorted within 8 hours.

All such cases should be booked on the **CEPOD** list as **category 1** so as to maximise chances for ovarian salvage. This should be considered especially in young nulliparous women where ovarian salvage is going to be of maximal benefit. De-escalating to **Category 2A (within 6 hours)** may be suitable for certain women depending on the clinical situation.