

Management of ovarian cysts

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Guidelines Definition

Clinical guidelines are systemically developed statements that assist clinicians and patients in making decisions about appropriate treatments for specific conditions.

They allow deviation from a prescribed pathway according to the individual circumstances and where reasons can be clearly demonstrated and documented.

Minor Amendments

If a minor change is required to the document, which does not require a full review please identify the change below and update the version number.

Type of change	Why change made	Page number	Date of change	Version 1 to 1.1	Name of responsible person
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1. Introduction:

- Ovarian cysts are very common and pre-menopause (including childhood and adolescence) are often physiological.
- Any ovarian cyst (>1cm) in a post-menopausal patient needs to be followed up / needs assessment with Ca 125.
- This guideline is covering the management of ovarian cysts in premenopausal, postmenopausal, children and adolescents.

2. Exclusions:

- This guideline does not cover the management of other types of adnexal cyst (for example those originating from the fallopian tubes), which should be managed under the gynaecology team advice.

3. Documentation:

- Reporting of the ovarian cyst should be in conjunction with this guideline.
- The follow up plan is the responsibility of both the sonographer and the person requesting the ultrasound scan, usually clinician.

4. Definitions and guidance:

- cyst > 1cm in postmenopausal patient is considered abnormal, while in premenopausal patients only cysts >3cm should be investigated.
- In children before menarche all cysts should be investigated with caution, and should be considered as abnormal finding. However in children who reached menarche simple cysts <5cm are usually physiological and require no follow-up.
- Regardless of age; all complex cysts of any size should be investigated with suspicion and followed up by the gynaecology team.

4.1 Postmenopausal Ovarian cysts:

- Cysts up to 1 cm should be documented in the report, but does not need follow-up.
- Cysts >1cm and <5cm prompt obtaining CA125 and calculating the RMI regardless of the cyst features. Urgent gynaecology referral is required.
- If CA125 is normal (Low RMI), cysts 1-5cm can be followed up with 4-6 months USS for 12 months. They can be discharged after 12 months if cyst remains the same or shrink with normal CA125.
- Cysts > 5cm require urgent gynaecology referral, as surgery is usually indicated in these situation - CA125 and RMI is required to plan the place for surgery (Local vs Regional).

- Complex cysts of any size should be investigated with high suspicion compared to simple cysts. RMI should be calculated after obtaining the CA125. Urgent Gynaecology referral is indicated. CEA should be obtained if ovarian cancer is suspected.

4.2 Premenopausal Ovarian cysts:

- Simple cysts up to 3cm should not be reported as cyst (but follicles), and does not require follow-up.
- Simple cysts 3cm - 5cm should be documented on the ultrasound report, but does not require follow-up either.
- Simple cysts >5cm - <7cm are usually physiological in young patients and most likely to resolve within 3 months. RCOG (gtg no 62) suggest annual follow-up for these cysts. However consider a repeat ultrasound scan in 3 months to confirm resolution of the cyst.
- Simple cysts >7cm prompts referral to the gynaecology team for consideration of surgery. Given the size of the cyst, often ultrasound might not give adequate assessment of the entire cyst, hence MRI can be considered for full assessment of the cyst.
- Laparoscopic cystectomy / oophorectomy / salpingo-oophorectomy should be considered the first line management if surgery is felt appropriate and the cyst deemed benign.
- Complex cysts of any size should be investigated with higher suspicion. RMI should be calculated after obtaining the CA125. If the patient is <40 years old; HCG, AFP, LDH should be obtained. Urgent Gynaecology referral is indicated. If ovarian cancer is suspected, CEA should be obtained as well.

- Dermoid cysts and Endometrioma are often noted on ultrasound in this age group, and require referral to the gynaecology team for further management. MRI can be considered for detailed characterisation of the cyst.

4.3 Ovarian cysts in Children and Adolescents:

4.3.1 Ovarian cysts before menarche:

- Any cyst of any size before menarche should prompt referral to a gynaecologist (ideally with special interest in paediatrics and adolescents gynaecology).
- Follow-up is usually individualised and arranged by the responsible gynaecologist.

4.3.2 Ovarian cysts beyond menarche:

- Simple cysts <5cm require no follow-up or further input.
- Simple cysts 5cm-7cm require annual follow-up with ultrasound.
- Simple cysts >7cm require urgent referral to the gynaecology team for consideration of surgery. If the cyst was not fully assessed with the ultrasound, MRI should be considered to complete the assessment.
- If surgery is considered, laparoscopic route should be the first line treatment.

5. Calculation of the RMI I:

- The RMI I combines three pre-surgical features. It is a product of the serum CA125 level (iu/ml); the menopausal status (M); and an ultrasound score (U) as follows:

$$\text{RMI} = \text{U} \times \text{M} \times \text{CA125}.$$

- The ultrasound result is scored 1 point for each of the following characteristics: multilocular cysts, solid areas, metastases, ascites and bilateral lesions. U = 0 (for an ultrasound score of 0), U = 1 (for an ultrasound score of 1), U = 3 (for an ultrasound score of 2–5).
- The menopausal status is scored as 1 = premenopausal and 3 = postmenopausal.
- Serum CA125 is measured in iu/ml and can vary between zero and hundreds or even thousands of units.
- **If the RMI is > or = to 200** – the patient needs a staging CT (CAP) and referral to Cancer MDT locally, where onward referral (**If RMI > or = 250**) to regional oncology unit can be determined.
- **If the RMI is < 200 and Cyst has any of the following features**: Non-simple features, >5cm (postmenopausal) >7cm (premenopausal), Multi-locular, or Bilateral; For discussion at Local MDT prior to considering further imaging CT CAP / MRI prior to consideration of Surgery.

6. References

1- The Management of Ovarian Cysts in Postmenopausal Women

Green-top Guideline No. 34 (July 2016).

2- Management of Suspected Ovarian Masses in Premenopausal Women

Green-top Guideline No. 62 (November 2011).

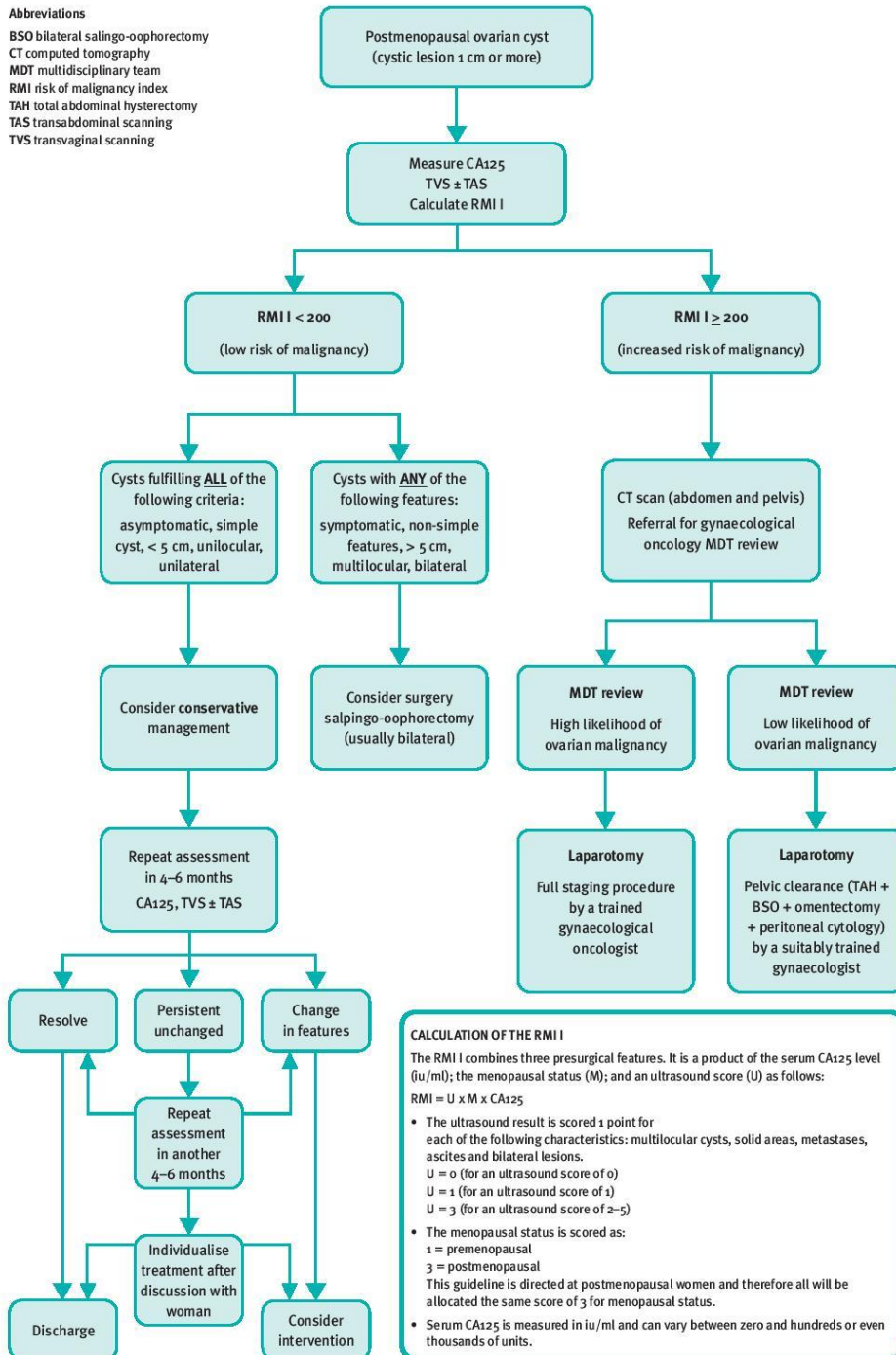
3- Guideline for the management of ovarian cysts in children and adolescents, British Society for Paediatric & Adolescent Gynaecology, (June 2017).

Appendix A -

Appendix II: Clinical algorithm for the management of postmenopausal women with ovarian cysts

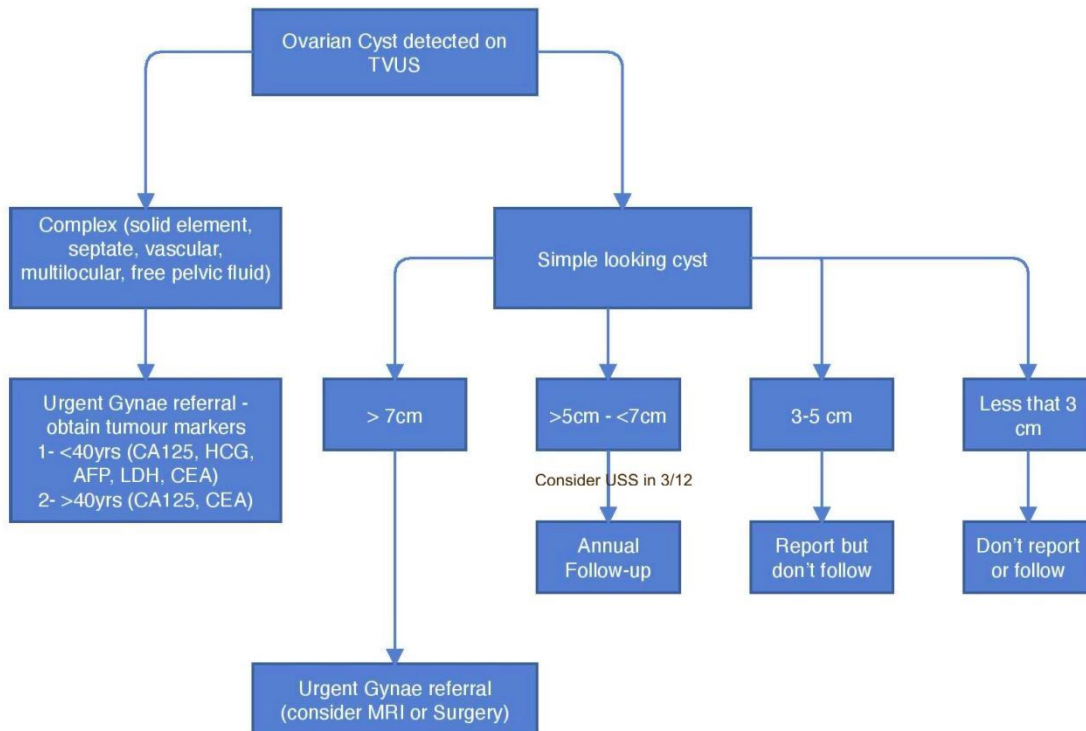
Abbreviations

- BSO bilateral salpingo-oophorectomy
- CT computed tomography
- MDT multidisciplinary team
- RMI risk of malignancy index
- TAH total abdominal hysterectomy
- TAS transabdominal scanning
- TVS transvaginal scanning



Appendix B -

Premenopausal Cysts Management:



Dermoid cysts and Endometriomas should be referred directly to the gynaecology team

Appendix C -

Children and Adolescents Cysts Management

