Guideline for Hospital Admission

Ministry of Public Health - Lebanon

Ovarian cysts management

Purpose:

The aim of this guideline is to prevent unnecessary interventions (laparoscopy) related to benign functional ovarian pathology.
The listed criteria are not exclusive, and in certain cases exceptions are permitted when justified, but then a detailed report for the reasons should be required, so the criteria can be updated.

Background

- Most ovarian functional cysts found incidentally do not require treatment. They usually disappear on their own within 60 days.
- Pelvic US (transvaginal or transabdominal) remains the primary, and in most cases the preferred, imaging modality to evaluate adnexal cysts. The whole cyst must be visualized.
- Doppler ultrasound may be required in some cases to ensure that no solid lements are present (that might appear hypoechoic on gray-scale images and not be recognized as solid.
- The treatment varies with age: pre or post menauposal.
- In the reproductive age group different cyst may occur at different phases of the menstrual cycle.
- Even in late menopause where ovulation is unlikely to occur, small simple cysts up to 1 cm may be seen in up to 21% of women. Therefore, these small simple cysts do not require follow-up.
- Symptomatic treatment to alleviate pain includes NSAID to hormonal treatment.
- ***The goal of sonographic assessment of an adnexal mass is to determine if it is likely benign or if it is indeterminate or malignant.***

Summary of ovarian cysts

Benign Cysts

Simple adnexal cysts:

In women of reproductive age:
1. Cysts <= 3 cm: Normal physiologic findings; do not need follow-up.
2. Cysts > 3 and <= 5 cm: described as benign; do not need follow-up.
3. Cysts > 5 and <= 7 cm: described as benign; require yearly follow-up with US
4. Cysts > 7 cm: Since these may be difficult to assess completely with US, further imaging with magnetic resonance (MR) or surgical evaluation should be considered.

In postmenopausal women:
1. Cysts<= 1 cm: Are clinically inconsequential; do not need follow-up.
2. Cysts> 1 and <=_ 7 cm: described as benign; yearly follow-up, at least initially, with US recommended.
3. Cysts>7 cm: Since these may be difficult to assess completely with US, further imaging with MR or surgical evaluation should be considered.

Hemorrhagic cysts

Hemorrhagic cysts typically resolve within 8 weeks.

In women of reproductive age:
1. Cysts < 3 cm: do not need follow-up.
2. Cysts.> 3 and < =5 cm: do not need follow-up.
3. Cysts >5 cm: short-interval follow-up (6–12 weeks) with US recommended, in order to ensure complete resolution.

Early postmenopausal women
Short-interval follow-up (6–12 weeks) with US recommended to ensure resolution.

Late postmenopausal women:
Should never have a hemorrhagic cyst, any cyst with such an appearance should be considered neoplastic and surgical evaluation should be considered.

Dermoid cysts:

Malignant transformation though rare, might occur and usually in large tumors and in women over 50 years of age. However, malignant transformation has been reported in small tumors as small as 3 cm.
The treatment options from follow up to excision should be evaluated individually.

Teratomas:

The nature of a teratoma depends on the flow detected by Doppler ultrasound, and the malignant potential may be difficult to assess.

Cysts of undetermined nature

The presence and nature of septations inside the cyst may be a sign of malignancy, so the diagnosis depends on detailed ultrasonographic evaluation.

Single thin septation (< 3 mm) or a small calcification in the wall are signs of a benign nature, and can be followed up at 6 weeks interval in premenauposal women to make sure that they have resolved, but for postmenauposal women or for cysts with thick sepatations surgery should be considered.

Cysts with suspicious characteristics

Thick septations (> 3 mm), with solid elements, and focal areas of wall thickening (> 3 mm) are very worrisome for a malignant neoplasm, particularly when seen in association with omental or peritoneal masses or a moderate or large amount of ascitis fluid in the pelvis. For these lesions, surgery is indicated.

In general small benign ovarian cysts don't require surgery, and some may be followed up by ultrasound, but in cases of doubt as to the nature of the cyst, additional investigation and surgery may be indicated.

Surgery is not the first line of symptomatic treatment (pain), and different lines of analgesics are indicated.

References:

Helm, William C. "Ovarian Cysts." *eMedicine*. Eds. Michel E. Riven, et al. 19 Mar. 2008. Medscape. 28 Jul. 2009

"Gynecologic Problems: Ovarian Cysts." *ACOG: The American College of Obstetricians and Gynecologists*. Nov. 2005. American College of Obstetricians and Gynecologists. 14 Aug. 2009

Asymptomatic Ovarian and Other Adnexal Cysts Imaged at US. *Radiology:* Volume 256: Number 3—September 2010 n *radiology.rsna.org*

Checklist:

Admission for surgery		
	Yes	No
Age >50		
Symptoms:		
Heavy menstruation		
Pain		
Ultrasound description		
Simple adnexal cysts:		
Hemorrhagic cysts		
Dermoid cysts:		
Teratomas:		
Suspicious		
Not described as to nature		

The above described checklist helps in future analysis of admitted patient with ovarian pathology, correlated with pathology reports.