



# Indian Menopause Society

## Guideline Number 8 : February 2011

### Ovarian Cysts in Post Menopausal Women

**Introduction** : Ovarian cysts are common in post menopausal women, although the prevalence is lower than in premenopausal women.

Of 20,000 healthy postmenopausal women screened in the Prostate, Lung, Colon & Ovarian Cancer Screening Trial, 2% had abnormal ovarian morphology, either simple or complex. The greater use of ultrasound and other radiological investigations means that an increasing proportion of these cysts will come to the attention of gynaecologists.<sup>1</sup>

Ovarian cysts may be discovered either as a result of screening, as a result of investigations performed for a suspected pelvic mass or incidentally following investigations carried out for other reasons.

**Investigations** : It is recommended that ovarian cysts in post menopausal women should be assessed using transvaginal sonography and CA125. There is no routine role yet for Doppler, MRI, CT or PET.<sup>2</sup>

Ultrasound is well established as a diagnostic modality achieving a sensitivity of 89% and specificity of 75%. Transvaginal ultrasound provides greater sensitivity than the Trans abdominal method. Large cysts may also need to be assessed Trans abdominally. There is not yet a clearly established role for colour flow Doppler in assessing ovarian cysts in postmenopausal women.

The roles of other imaging modalities, such as magnetic resonance imaging (MRI), computed tomography (CT) & positron emission tomography (PET), in the diagnosis of ovarian cancer have yet to be clearly established. A study found that ultrasound had greater sensitivity than either MRI or PET in distinguishing benign from malignant disease, at the expense of some specificity, although combining the imaging technique may provide some overall improvement.<sup>3</sup>

Serum CA125 is well established, being raised in over 80% of ovarian cancer cases and, if a cut off of 30 units/ml is used, the test has a sensitivity of 81% and specificity of 75%.<sup>4</sup>

**Management:** The best prognosis for women with ovarian cancer is offered if a laparotomy and full staging procedure is carried out by a trained gynecological oncologist.

No currently available tests are perfect, offering 100% specificity & sensitivity. Ultrasound often fails to differentiate between benign & malignant lesion, and serum CA 125 levels, although raised in over 80% of ovarian cancer, is raised in only 50% of stage 1 cases. In addition, levels can be raised in many other malignancies and in benign conditions, including benign cysts and endometriosis.<sup>2</sup>

It is recommended that a 'Risk of Malignancy Index' should be used to select those women who require primary surgery in a cancer centre by a gynecological oncologist.<sup>2</sup>

$$RMI = U \times M \times CA125$$

$U = 0$  (for ultrasound score of 0);  $U = 1$  (for ultrasound score of 1);  $U = 3$  (for ultrasound score of 2–5)

Ultrasound scans are scored one point for each of the following characteristics: multilocular cyst; evidence of solid areas; evidence of metastases; presence of ascites; bilateral lesions.

$M = 3$  for all postmenopausal women dealt with by this guideline

**CA125** is serum CA125 measurement in u/ml

The risk is low if RMI is < 25 which occurs in 40% of women and the risk of cancer is < 3%.

The risk is Moderate if RMI is 25 – 250 which occurs in 30% of women and the risk of cancer is 20%.

The risk is high if RMI is > 250 which occurs in 30% of the women and the risk of cancer is 75%.

A gynecological oncologist in a cancer centre should operate on those at high risk of having ovarian cancer, a trained gynecologist in a cancer unit operates on those at moderate risk, while those at low risk may be operated on by a general gynecologist or offered conservative management.

## 1. Conservative Management

Simple, unilateral, unilocular ovarian cysts less than 5cm in diameter have a low risk of malignancy. In the presence of normal serum CA125 levels they may be managed conservatively. A follow up ultrasound scan for cysts of 2-5cm should be performed four monthly for a year. a. If the cyst resolves, reduces in size or there is no change in the cyst for one year and three scans have been performed, no surgery is required.

If the cyst increases in size or develops suspicious features, RMI should be re-calculated and managed according to the new score.

## 2. Surgical Management

Those women who do not fit into the above criteria for conservative management should be offered surgical management in the most suitable location, and by the most suitable surgeon as determined by the risk of malignancy index. Initial surgical management that has been assessed includes aspiration of the cyst, laparoscopy and laparotomy.

### (i) Aspiration

Aspiration is not recommended for the management of ovarian cysts in post menopausal women. Cytological examination of ovarian cyst fluid is poor at distinguishing between benign and malignant tumours with sensitivities in most studies of around 25%.<sup>5</sup>

### (ii) Laparoscopy

The laparoscopic approach should be reserved for those women who are not eligible for conservative management but still have a low risk of malignancy. Those at moderate risk may also be considered for laparoscopic management by a qualified gynecologist in a cancer centre. It is recommended that laparoscopic management of ovarian cyst in postmenopausal women should involve oophorectomy (usually bilateral) rather than cystectomy.<sup>2</sup>

If a malignancy is revealed during laparoscopy and subsequent histology, it is recommended that the woman is referred rapidly to a cancer centre for further management where a full staging procedure should be performed as quickly as feasible.

### (iii) Laparotomy

All ovarian cysts that are suspicious of malignancy in a postmenopausal woman, as indicated by a high risk of malignancy index or clinical suspicion of findings at laparoscopy require a full laparotomy and staging procedure. This should be performed by an appropriate surgeon, working as part of a multidisciplinary team in a cancer centre, through an extended midline incision, and should include: cytology of ascites or washings, Laparotomy with biopsies from adhesions and suspicious areas, TAH, BSO and Infracolic omentectomy. The laparotomy and staging procedure may include bilateral selective pelvic and para-aorta lymphadenectomy.<sup>6</sup>

## References:

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