

Appropriate referral of women with suspected ovarian cancer



Symptoms of ovarian cancer

Most women with ovarian cancer experience at least one symptom in the year prior to their diagnosis. Symptoms of ovarian cancer are often vague, generalised and non-gynaecological.

- abdominal bloating/feeling full
- appetite loss
- unexplained weight loss
- constipation, heartburn
- back pain
- frequent urination
- abdominal/pelvic pain
- fatigue.

If symptoms persist for more than one month consider ovarian cancer and undertake further assessment.

Assessing symptoms that may be ovarian cancer

If findings are suspicious on clinical examination refer for a transvaginal ultrasound and a serum CA125.

Why a transvaginal ultrasound?

A transvaginal ultrasound (TVUS) has a greater sensitivity for the detection of ovarian masses than transabdominal studies.

Features that suggest malignancy include:

- septation
- papillary projections
- solid areas
- ascites

TVUS results can be used in combination with a woman's CA125 level and menopausal status to calculate the **Risk of Malignancy Index (RMI)** (see over) to help identify those women who should be referred to a **gynaecological oncologist**.

Why not use a CA125 test by itself?

CA125 alone should not be used to determine if a patient has ovarian cancer. While a very high value may assist in confirming the diagnosis, a low value does not exclude ovarian cancer due to the non-specific nature of the test.

Why refer to a gynaecological oncologist?

A woman with a suspicious or persistent complex adnexal mass needs surgical exploration. Survival for women with ovarian cancer has been shown to be improved when all or most of the tumour is removed at surgery. Optimal surgical cytoreduction and appropriate staging is more frequently achieved by a gynaecological oncologist.¹

¹Clinical practice guidelines for the management of women with epithelial ovarian cancer: 2004. National Breast Cancer Centre.

Use of Risk of Malignancy Index



Risk of Malignancy Index²

The Risk of Malignancy Index (RMI) when used in the presence of a pelvic mass is a useful triage tool to determine those women who should be referred to a gynaecological oncologist.

² Jacobs I, Oram D, Fairbanks J, Turner J, et al. A risk of malignancy index incorporating CA125, ultrasound and menopausal status for the accurate preoperative diagnosis of ovarian cancer. Br J Obstet Gynaecol 1990; 97: 922-9.

Criteria	Scoring system	Score
Menopausal status Premenopausal Postmenopausal	1 3	A (1 or 3)
Ultrasonic features Multiloculated Solid areas Bilaterality Ascites Metastasis	No feature = 0 One feature = 1 > 1 feature = 3	B (0, 1 or 3)
Serum CA125	Absolute level (U/ml)	C
Risk of Malignancy Index (RMI)		A X B X C
A cut off value of 200 is used to discriminate benign from malignant ovarian masses, with a sensitivity of 87% and a specificity of 97%.		

RMI Calculation Example

Geraldine is a 53 year old woman. While taking her blood pressure she tells you that for the past month she has noticed urinary frequency and has put on some weight. You order a transvaginal ultrasound and serum CA125. The ultrasound shows a complex abdominal mass and her CA125 is not elevated at 30U/ml. You calculate her RMI: **30 (CA125) x 3 (post menopausal) x 3 (transvaginal ultrasound result) = 270.**

The result determines Geraldine needs a referral to a gynaecological oncologist.