



## Ovarian Cancer Screening

Authors

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### Introduction

In India, Cancer of ovary is one of the most common cancers in females and occupied third/fourth rank among cancers occurring in women during the year 2004-5 in various Indian registries. Epithelial ovarian cancer is most commonly detected in advanced stage when the overall 5 yrs survival rate is about 20-30%. Detection of early stage ovarian cancer results in improved survival. Only 25% of cancers are detected as stage 1 disease. When diagnosed in stage I, however, the cure rate can approach 90% with modern cytoreductive surgery and combination chemotherapy. Once stage III & IV ovarian cancer is diagnosed. The survival rate decrease to 20-25%.

**There is currently no effective strategy for ovarian cancer screening.**

**But when the patients come to the outpatient department in KMCH. with these symptoms.**

Gynaecologists should be aware of symptoms associated with ovarian cancer that should be investigated.

- Increased abdominal size
- Bloating
- Abdominal or pelvic pain
- Feeling full (early satiety)

— Increase urinary frequency and urgency

— Irritable bowel syndrome

If these symptoms persists or recurs frequently, consider for evaluation. Evaluation of symptomatic patients include. Physical Examination, TVS and measurement of level of serum tumour markers CA 125.

### Screening should be done

Measure serum CA 125 in women with symptoms that suggest ovarian cancer. If serum CA 125- 35 IU/ml or greater, arrange an ultrasound scan of the abdomen and pelvis. For any women who has normal scan CA 125 (less than 35 IU/ml), or CA 125 of 35 IU/ml or greater but a normal ultrasound:

— Assess her carefully for other clinical causes of her symptoms and investigate if appropriate.

— If no other clinical causes is apparent, advise her to return to her GP.

Measure CA 125, if not already measured. If the women is bellow 40 yrs of age with suspected ovarian can measure levels of Alpha fetoprotein (AFP) & -hCG as well as CA 125 to identify non epithelial tumours.

Ultrasound assessment– This will identify a pelvic mass and presence of metastatic disease. The risk of malignant index scoring system can be used to predict whether the mass is malignant or benign.

**The risk of malignancy scoring system (Jacob et al 1990)** - There are four scoring systems. Each of calculate USG features menopausal status and CA 125 level according to the equation.

**RMI = U (Ultrasound features) x M(Menopausal status) x CA 125**

The ultrasound result is scored 1 point for each of the following characteristics: multilocular cysts, solid metastasis, ascites and bilateral lesions. U=0 (for an ultrasound score of 0). U=1 (for an ultrasound score of 3(for an ultrasound score of 2-5).

The menopausal status is score of 1 = pre-menopausal and 3=post menopausal.

The classification of ‘post-menopausal’ is a women who had no period for more than 1 year or a women over 5 has had a hysterectomy.

Serum CA 125 is measured in IU/ml and can vary between 0 and hundreds or even thousands of units.

Women with RMI scoring >200 should be referred fo a centre with experience in ovarian cancer surgery.

#### RMI score

Feature	RMI 1 Score	RMI 2 Score
Ultrasound features	0= none	0= none
— Multilocular cyst	1= one	1= one
— Solid areas	abnormality	abnormality
— Bilateral lesions	3= two or more	3= two or more
— Ascites	abnormalities	abnormalities
— Intra-abdominal metastases		
Premenopausal	1	1
Postmenopausal	3	4
CA 125	U/ml	U/ml
RMI score = ultrasound score x menopausal score x CA125 level in U/ml.		

#### Screening of high risk women

If in a women there is family history of breast & ovarian cancer or women with history of breast cancer, genetic screening for BRCA gene mutation is offered. Periodic screening with CA125 & TVS is recommended by ACOG.

ACOG also recommends that risk reducing salpingu uophorectomy be offered to women who are identified with BRCA gene mutation by the age of 40 yrs (ACOG practice bulletin no 103 obstet gynaecol 2009; 113; 957-966).

#### Key Message

- Most women presenting with ovarian ca have advanced disease. But they have symptoms for months.
- Greater awareness among both women and healthcare professionals is required for earlier diagnosis of ovarian malignancy, leading to better outcome.

#### References

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#### Nice Guidelines Recommendation

This guidance updates and replaces recommendation 1.7 4 in Referral guidelines for suspected cancer (NICE clinical guidelines 2 published June 2005.

June 2015: Recommendations in section 1.1 have been incorporated into section 1.5 suspected ovarian cancer.

To investigate if a women (especially >50) reports having any of the following symptoms as a persistent or frequently basis than 12 times/month.

- Persistent abdominal distension (women often refer to this as bloating)
- Feeling full (early satiety) and/or loss of appetite.
- Pelvic of abdominal pain
- Increased urinary urgency and/or frequency.

In Carry out appropriate tests for ovarian cancer in any women of 50 or over who has experienced symptoms within the last months that suggest irritable bowel syndrome (IBS), because IBS rarely present for the first time in women of this age.