



## Study of CA 125 level in Ovarian Tumours at M.Y. Hospital, Indore

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### Abstract

**Aim:** Study of CA 125 level in Ovarian Tumours at M.Y. Hospital, Indore.

**Material and Method:** The Study was conducted at M. Y. Hospital, Indore from duration between Nov 2017 to Nov 2018 with total no. of patients 55 whose samples are received in histopathological section. The detailed clinical history with relevant investigations were taken.

**Result:** In our study, ca125 level above 35 u/ml is found in 32 malignant tumours and 09 benign tumour while ca125 level below 35 u/ml is found in 03 malignant tumours and 11 benign tumours.

**Conclusion:** CA125 is a biomarker that has potential utility for the spectrum: risk, early detection, diagnosis, prognosis, monitoring and therapy.

**Keywords:** CA 125, Ovarian tumour.

### Introduction

Ovarian cancer is the one of the most common cancer among women worldwide. The most widely used tumor marker in ovarian cancer, often considered the 'gold standard' is CA125<sup>[1]</sup>. CA125 is expressed as a membrane-bound protein at the surface of cells that undergo metaplastic differentiation into a Müllerian-type epithelium<sup>[2,3]</sup>, or released in soluble form in body fluids.

### Material & Method

The Study was conducted at M. Y. Hospital, Indore from duration between Nov 2017 to Nov 2018 with total no. of patients 55 whose samples are received in histopathological section. The detailed clinical history with relevant investigations were taken.

### Results

**Table 01:** Distribution of ovarian tumors according to age

	11-20	21-30	31-40	41-50	51-60	>60
Benign	3	6	7	4	4	1
Borderline	0	1	0	0	0	1
Malignant	1	1	5	6	10	5
Total	4	8	12	10	14	7

**Table 02:** Distribution of ovarian surface epithelial tumors by using CA-125 value >35 U/ml as a cut off.

Type of tumor	Malignant*	Benign	Total
CA-125:>35U/ml	32	3	35
CA-125:<35U/ml	9	11	20
Total	41	14	55

In our study, ca125 level above 35 u/ml is found in 32 malignant tumours and 09 benign tumour while ca125 level below 35 u/ml is found in 03 malignant tumours and 11 benign tumours.

### Discussion

In this study benign tumors are more common in the age range 21-40 yrs and malignant tumors are more common above 40 yrs of age. The similar results were also reported by vora et.al.<sup>[4]</sup> and Bhuvanesh et al<sup>[5]</sup>. In our study, ca125 level above 35 u/ml is found in 32 malignant tumours and 09 benign tumour while ca125 level below 35 u/ml is found in 03 malignant tumours and 11 benign tumours. Several other studies done by Bast et al.<sup>[6]</sup> and Malkasian et al<sup>[7]</sup> showed that higher levels of CA 125 are associated with malignant tumours of ovary.

### Conclusion

CA125 is useful for calculating the risk, early detection, diagnosis, prognosis, monitoring and therapy. Serum CA125 level is a strong prognostic factor for overall survival and long term survival in ovarian cancer. There is an inverse relationship between serum CA125 levels and survival in ovarian cancer. The higher the value of ca 125, the lower the survival of the patient.

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