

# Clinical Presentation of Ovarian Tumors

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## ABSTRACT

*Objective* To determine the frequency and various clinical presentations of ovarian tumors.

*Study design* Descriptive study.

*Place & Duration of study* Department of Obstetrics & Gynaecology Sandeman Provincial Teaching Hospital Quetta, from January 2010 to December 2010.

*Methodology* All patients with ovarian cysts and / tumors suspected on clinical grounds and investigations and later underwent laparotomy were included. The symptoms were grouped into various categories like gastrointestinal, constitutional, urinary etc.

*Results* The study included 65 patients. There were 50 (76%) benign and 15 (23%) malignant tumors. Seven patients with benign tumors were asymptomatic, while 90% had abdominal pain. Abdominal mass was present in 24% of the patients with benign tumors and in 66% with malignant tumors. Gastrointestinal symptoms were present in both the groups but frequency was higher in malignant tumors.

Constitutional symptoms like loss of weight and appetite were reported in malignant group only. More than 75% of the malignant tumors presented in advanced stage of the disease (stages III and IV). On histopathology benign cysts were mostly functional follicular/luteal cysts in nature (25%). On the other hand histopathology of malignant tumors revealed that in majority of the patients tumors originated from epithelial surface (serous carcinoma 45% and mucinous carcinoma 25 %).

*Conclusions* Women presented mostly in the advanced stages of malignancy. Symptoms were mostly nonspecific and vague.

*Key words* Ovarian tumor, Benign ovarian tumors, Malignant ovarian tumors.

## INTRODUCTION:

A women presenting with an adnexal mass is a common clinical problem and a common reason for referral to hospital. The differentiation between benign and malignant tumors is an important step in the clinical diagnosis of such cases, as 20-30 % of all ovarian tumors are malignant.<sup>1</sup> Ovarian cancer is often called the "silent killer" because disease is usually not detected until in an advanced stage. All over the world more than 200,000 women are

estimated to develop ovarian tumors.<sup>2</sup> Every year 100,000 women die from ovarian cancer. Overall the estimated life time risk is 1:70 women which is 1.4% life time risk.<sup>3</sup>

The high mortality rate is due to late diagnosis of the disease. Proper diagnosis of ovarian lesions at an early stage is extremely important. The diagnosis of benign or malignant lesion can be made by history and bimanual examination. Ultrasound is the standard investigation for identifying ovarian pathology as it gives information regarding the origin, consistency, etc but definitive diagnosis can only be made by a tissue biopsy.<sup>4,5</sup> The purpose of this study was to enlist and identify symptoms that could lead to early diagnosis of ovarian tumors.

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**METHODOLOGY:**

This study was conducted at Obstetrics & Gynaecology Unit III, Sandeman Provincial Teaching Hospital Quetta, from January 2010 to December 2010. All patients attending the clinics or brought in emergency room who on abdominal or bimanual examination and later on ultrasound, were found to have ovarian cyst or tumor, were included. Further investigations like hematological, biochemical and radiological like CT scan, MRI and tumor markers like Ca 125, were done where indicated. All patients underwent laparotomy and specimen were sent for histopathology.

At laparotomy staging of tumor was done according to FIGO classification. Ovarian tumors managed conservatively were excluded. The symptoms were grouped into abdominal symptoms which included abdominal pain, abdominal mass and abdominal enlargement. Gastrointestinal symptoms recorded were nausea, vomiting and constipation. Constitutional symptoms included loss of appetite and weight. Urinary symptoms were increase in urinary frequency and chest symptoms like dyspnea. With ultrasound tumor details were noted like extent, nature (solid or cystic). If cystic lesions found then characteristics like cyst wall thickness, presence of septae, papillations, locularity, etc. Outcome measures were symptoms of the patients, stage and histopathology of the tumor. All the data were analyzed on SPSS version 20. Frequency of benign and malignant tumors and of presenting symptoms was calculated.

**RESULTS:**

A total of 65 laparotomies were done for ovarian

tumors during the study period. There were 50 (76%) benign and 15 (24%) malignant tumors according to histopathology. Mean age of the patients with malignant tumors was 57.73±4.41 year and in benign group 35.94 ± 6.32 year. Seven patients with benign tumors were asymptomatic.

Presentation of patients with benign and malignant tumors was alike but frequency was different in benign and malignant groups. Frequency of abdominal pain was more in malignant cases (93%) as compared to benign lesions (90%). Frequency of abdominal mass was higher in malignant tumors (66.6%). Gastrointestinal symptoms like nausea and vomiting were present in both the groups but frequency was more (80%) in malignant cases. Constitutional symptoms were observed more in malignant cases (table I).

**DISCUSSION:**

Insidious onset and progression of ovarian tumors is the outcome of usually vague and non specific symptoms that often go unrecognized for a long period of time. Diagnosis at early stage is extremely important. Early stage disease which is limited to ovary and pelvis (stages I and II) have 5 years survival rate of 80-95%, while late stages (III and IV - involving upper abdomen and beyond) have survival rate of only 20-30%.<sup>2,3</sup> Therefore importance of early stage detection of disease is important. In this regard various screening programs and trials have been conducted. Current screening programs, including CA-125 tumor markers and transvaginal ultrasound have no impact either on the morbidity or mortality due to ovarian carcinomas.<sup>5</sup>

**Table I: Clinical Features of Benign and Malignant Ovarian Tumors**

Symptoms	Benign Tumors (n=50)		Malignant Tumors (n=15)		Total (n=65)	
	No.	(%)	No.	(%)	No.	(%)
Asymptomatic	07	(14)	0	(0.0)	7	(10.7)
Abdominal enlargement	23	(46)	15	(100)	38	(58.4)
Abdominal pain	45	(90)	14	(93)	59	(90)
Abdominal Mass	12	(24)	10	(66.6)	22	(33)
Nausea and vomiting	20	(40)	12	(80)	32	(49)
Constipation	10	(20)	13	(86)	23	(35.3)
Loss of appetite	0	(0)	14	(93)	14	(21.5)
Weight loss	0	(0)	15	(100)	15	(23)
Dyspnea	10	(20)	12	(80)	22	(33.8)
Increased urinary frequency	17	(34)	06	(40)	23	(35.3)

Thus it is becoming increasingly important to call attention to the symptoms associated with ovarian tumors through the trajectory of the disease.

Seven patients in this series were asymptomatic and diagnosed on ultrasound for other problems. All these patients belonged to benign group. None of the malignant group patients were asymptomatic in our study but other studies showed 9% patients being asymptomatic in early stages of the cancer. A study done stated that abdominal and gastrointestinal tract symptoms were the predominant complaints in women with ovarian cancer.<sup>8</sup> Our study has similar results showing, abdominal, gastrointestinal and constitutional symptoms to be more marked in patients with malignant tumors. Abdominal pain was the most common presentation in both the groups in our study, but more common in late stages of malignant group.

The mean age for benign group was 35.9 + 6.37 year in our study, similar to other studies.<sup>9,10</sup> The majority of the patients with malignancy were in the older age group. Their mean age was 57.73 + 4.41 year. Similar results have been shown in other studies.<sup>11,12</sup> Most women with ovarian cancer suffer from nonspecific constitutional abdominal, pelvic, urinary symptoms prior to the diagnosis. Therefore, the women suffering from these nonspecific symptoms are an important population to target for ovarian tumors screening. In several studies symptoms of ovarian tumors are examined.<sup>6</sup> These studies suggest that nearly all the patients who have ovarian cancers, regardless of stage are symptomatic and the predominant symptoms are gastrointestinal and constitutional. A study showed that patients with ovarian cancers were more likely to have symptoms of mass effect (urinary frequency, constipation, palpable mass and pelvic pressure, 67% in malignant cases as compared to benign ovarian tumors - 15%) but there was no difference in gastrointestinal symptoms like nausea and vomiting.<sup>7</sup> Our study showed that urinary frequency was not significant in both malignant and benign groups. Constipation was significant in both the groups as compared to above study. Constitutional symptoms like loss of weight and appetite were present only in malignant groups. Pain was noted in both malignant and benign groups. Similar result were shown by other researchers.<sup>11-14</sup>

It is therefore important that in women aged 50 year and above the nonspecific symptoms related to gastrointestinal system or abdominal involvement should be assessed carefully. Bimanual pelvic examination and ultrasound should be done early

in these patients, so that ovarian cancer diagnosis may not be missed.

#### CONCLUSIONS:

Presentation of ovarian cancers was mostly vague and nonspecific, but the symptoms were definitely present. The recognition of these symptoms is therefore stressed for early diagnosis of ovarian tumors.

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