

Incidence of Benign Ovarian Tumors in Rural Areas: A 10 Years Study in a Tertiary Care Hospital Nawabshah

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ABSTRACT

Objective: To determine the frequency of benign ovarian tumors attending the tertiary care hospital Nawabshah.

Study Design: Descriptive cross-sectional study.

Place and Duration of Study: This study was carried out in Department of Gynaecology & Obstetrics, at Peoples University Hospital Nawabshah, from Jan 2011 to the Dec 2011.

Materials and Methods: This study consisted of 419 patients of benign ovarian tumours admitted through the outpatient department, as well as from casualty department of Peoples University Hospital Nawabshah.

Detailed history of duration of complain and clinical examination of the patient was done. All patients underwent for base line and specific investigations especially ultrasonography and biopsy sampling for assessment of histopathological examination. All patients in the reproductive age group between 15 to 60 years with any one or more presenting complains of ovarian tumors like abdominal mass, bloating, discomfort, pain or pelvic swelling were included. Exclusion criteria were patients more than 60 years of age, previous history of ovarian tumor and non-consenting women. Results were prepared with help of tables and graphs. Data was analyzed through SPSS software No.16.

Results: 419 patients included in this study. There was wide variation of age ranging from a minimum of 10 years to 60 years. The mean age was 31.68 ± 5.45 years. In this study incidence of ovarian neoplasm slowly increase per year. Clinical examination of patients revealed that pain in abdomen was the commonest presenting symptom 396(94.5%) followed by mass per abdomen seen in 297(70.88%), bloating in 146(34.88%) and abdominal swelling in 167(39.85%). Histopathology findings revealed was serous cystadenocarcinoma in 182(43.4%) cases, mucinous cystadenoma 116 (27.7%) cases, mature teratoma 98(23.4%) cases, thecoma 16(3.8%) cases, fibroma in 05(1.2%) cases and brenner tumor 02 (0.5%) cases.

Conclusion: In conclusion our study revealed that histopathologically most common type is serous cystadenoma followed by mucinous cystadenoma. The peak incidence of benign tumors was seen in the 3rd and 4th decades of the life.

Key Words: Ovarian Tumor, Benign, Rural Area, Different Age Group.

INTRODUCTION

Ovarian tumors of the genital tract are not a single problem but a complex wide spectrum of tumors involving a different variety of histological tissues like epithelial tissues, connective tissues, specialized hormone secreting cells to germinal and embryonal cells¹. Ovarian cancer accounts for almost 90% of malignancies in Western world² while in Pakistan accurate incidence is not conform due to not proper organized patients data but ovarian cancer is the 4th most common cancer among Pakistani females³. In eastern India, the fourth most frequent reported malignancy in females was ovarian⁴. Asian countries and Japan reported incidence of cancer is slowly increasing increased approximately 2 to 6.5 new cases of ovarian malignancy per 100,000 women every year⁵. Mostly ovarian tumors occur in perimenopausal and post menopausal women, rarely in children. The risk for developing ovarian tumors peaks in fifth decade of life⁶. Ovarian tumors in children and teenagers are not frequently encountered in clinical practice. The rarity of

the condition, asymptomatic nature in the earlier stage, variation in clinical presentation and lack of knowledge among the girls and parents sometimes makes diagnosis delayed and difficult⁷.

This study was conducted to determine the frequency of common types of benign ovarian tumors in different age groups reported at Peoples university Hospital Nawabshah.

MATERIALS AND METHODS

This study was conducted at the department of Obs & Gynae of Peoples University Hospital Nawabshah, from Jan 2011 to the Dec 2011. Ten years case records retrieved from ward file, who were admitted with the diagnosis of Benign ovarian lesion. Detailed history of duration of complain and clinical examination of the every patient was done. The diagnosis of ovarian tumour is based on especially ultrasonography and biopsy sampling for assessment of histopathological examination. All patients in the reproductive age group between 15 to 60 years with any one or more presenting

complains of ovarian tumors like abdominal mass, bloating, discomfort, pain or pelvic swelling were included. Exclusion criteria were patients more than 60 years of age, previous history of ovarian tumor and non-consenting women.

RESULTS

This study was conducted on 419 patients in Department of Gynaecology & Obstetrics at Peoples University of Medical Health Science Hospital Nawabshah.

There was wide variation of age ranging from a minimum of 10 years to 60 years. The mean age was 31.68 ± 5.45 years. In this study incidence of ovarian neoplasm slowly increase per year (Chart No.1).

In this study clinical examination of patients revealed that pain in abdomen was the commonest presenting symptom 396(94.5%) followed by mass per abdomen seen in 297(70.88%), bloating in 146(34.88%) and abdominal swelling in 167(39.85%) (Chart No.2).

Histopathology findings revealed was serous cystadenocarcinoma in 182(43.4%) cases, mucinous cystadenoma 116 (27.7%) cases, mature teratoma 98(23.4%) cases, thecoma 16(3.8%) cases, fibroma in 05(1.2%) cases and brenner tumor 02 (0.5%) cases.

There was a wide variation in age was noted. The youngest patient was 10 years old and the oldest patient was 60 years old. The tumors were most common in 20-30 years age group 168(40.1%) and 31-40 years of age group 139(33.2%) cases, followed by 41-50 years of age group 48(11.4%) (Table No.1).

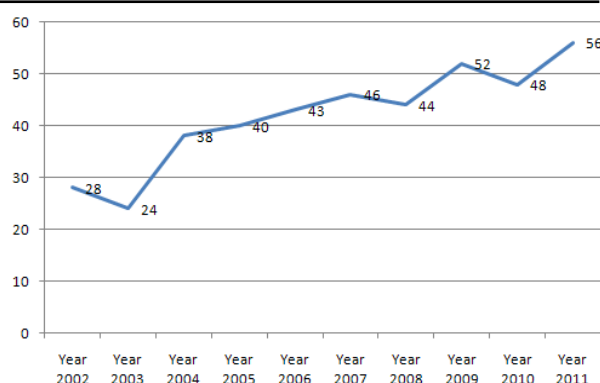


Chart No.1: Number and incidence of ovarian neoplasm per year

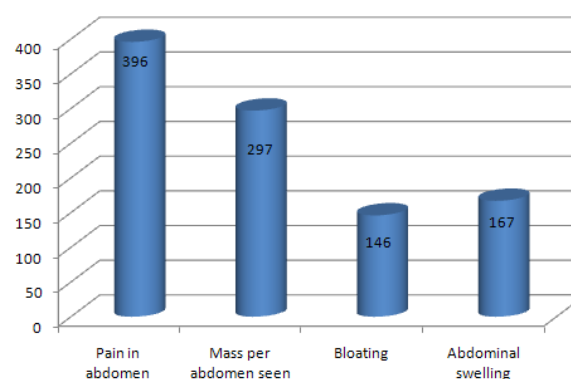


Chart No.2: Symptoms of Patients

Table. No.1: Age wise distribution of histological types of benign ovarian neoplasms

Age group	Benign histological types No (%)						Total
	Mature Teratoma	Serous cystadenoma	Mucinous cystadenoma	Thecoma	Fibroma	Brenner tumor	
10-19	12	09	07	-	-	-	28
21-30	28	86	46	02	04	02	168
31-40	34	58	42	04	01	-	139
41-50	16	15	10	07	-	-	48
51-60	8	14	11	03	-	-	46
Total no.	98(23.4%)	182(43.4%)	116(27.7%)	16(3.8%)	05(1.2%)	02(0.5%)	419(100%)

DISCUSSION

Tumors of the ovary create many problems due to their high complication rate and they are biggest diagnostic challenge in field of gynecological oncology. The benign character of the tumor to remain silent clinically for a long period of time tests the gynecologist. Though many workers have worked extensively in the field of ovarian tumor pathology, the wide variation in facts and figures reflects the confusion prevailing in the area of tumor nomenclatures and different morphological subtypes of tumor.

The ovarian tumors can occur at any age but their peak incidence is in the reproductive age group. The peak

incidence of the ovarian tumors in the present study were in the 3rd and 4th decades, 168(40.1%) and 139(33.2%) tumors were seen in these age groups respectively. In an earlier study of Pilli G reported, the peak incidence was in 3rd decade which accounted for 28.72% of total number of cases⁸. Thus the ovarian tumors were more common in the reproductive age group.

The Ovarian tumors manifest with wide variety of clinical manifestation and mass per abdomen is the usual complaint. In our study all patients presented with pain in abdomen was the commonest presenting symptom 396(94.5%) followed by mass per abdomen seen in 297(70.88%), bloating in 146(34.88%) and

abdominal swelling in 167(39.85%). These results were correlated with the study of Pilli G and reported 93.16% of patients had mass per abdomen and 64.90% of cases had pain abdomen associated with mass per abdomen⁸. Another study conducted by Sumaira Yasmin at Peshawar region and reported the clinical symptoms were pain abdomen 48(70.59%), Mass abdomen 10(14.71%), Gastrointestinal disturbances 5(7.35%), menstrual 3(4.41%) and Urinary 2(2.94%)⁹.

Germ cell tumor is the most common tumor of teenage group. They arise from primordial germ cell that becomes malignant and if it remains undifferentiated then lead into Dysgerminoma. It may result in mature and immature teratoma. Among benign tumors, teratomas are the commonest variety as reported by De Silva et al .In our study frequency of different histopathological types of benign ovarian tumour showed that the commonest tumour was serous cystadenocarcinoma in 182(43.4%) followed by mucinous cystadenoma 116 (27.7%) cases, mature teratoma 98(23.4%) cases, thecoma 16(3.8%) cases, fibroma in 05(1.2%) cases and brenner tumor 02 (0.5%) cases. However study reported by Swamy GG ,that epithelial tumors were commonest variety of ovarian tumors followed by germ cell tumors¹¹ . A group of workers reported that the most common type of ovarian cyst was serous cystadenoma (40.2%) followed by mature cystic teratoma (15.7%)¹².

CONCLUSION

Serous cystadenoma is the commonest benign tumour. Germ cell tumours were next to epithelial ovarian tumours. The peak incidence of benign tumors was seen in the 3rd and 4th decades of the life. Amongst benign ovarian tumours patients commonly present late and patients frequently present with advanced stages of the disease.

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