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Original Research Paper

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HISTOLOGIC PATTERN,LATERALITY AND CLINICAL PRESENTATION OF EPITHELIAL OVARIAN TUMORS; A TWO YEAR STUDY IN CANCER INSTITUTE, KOLKATA.

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ABSTRACT

Aim of this study was to study the distribution of bilaterality, clinical presentation and morphological pattern of malignant epithelial neoplasm in Eastern India.

Material and Methods : Study was carried out on 60 histologically diagnosed epithelial ovarian tumour cases over a period of 2years.

Results: Total 60 cases were observed. Age of presentation range from 35-62 years(mean 48.5 years).28 patients(46%) belong to group I and 32 patients belong to group II,III and IV(54%). Most of the patients presented with pain abdomen along with distension (56.0%). Most of the patients had high grade serous carcinoma (50.0%) followed by Endometrioid Carcinoma (14.0%) which was significantly higher($p<0.0001$). 50% of serous carcinoma were found to be bilateral followed by borderline serous (28.6%).

Conclusion : We found late presentation of malignant tumours with most common presenting symptom of pain abdomen and distension. Serous carcinoma was found to be most common epithelial tumour with involvement of both of ovaries at time of presentation.

KEYWORDS :

Introduction

Ovarian cancer is seventh most commonly diagnosed cancer among women in world. There is wide spectrum of variation in histology. Epithelial Ovarian cancer is the most predominant pathologic subtype. An attractive scheme recently proposed by Kurman et al is the following: 1) type 1 tumors: slow growing, generally confined to ovary at the time of diagnosis and developing from well established precursor lesion known as borderline tumors, it makes up significant percentage of epithelial ovarian cancers(up to 10%). They do not appear cancerous but still labeled as tumors of low grade malignant potential or even borderline because of the fact that metastases to lymph node and other sites are rarely seen and recurrences are not uncommon and that persistent disease as well as death occurs. Yet prognosis is still good even in presence of micro invasion, involvement of peritoneal cavity etc.2)type 2 tumors: rapidly growing highly aggressive neoplasm from which well defined precursor lesions have not been identified which includes high grade serous carcinoma, undifferentiated carcinoma and malignant mixed mullerian tumors. We have studied the age at presentation, clinical presentation and histologic spectrum of ovarian tumour in Cancer Hospital of Eastern India.

Materials and Methods

In this prospective observational study total of 60 cases were studied from the histopathology section of Cancer Hospital , Kolkata. Detailed clinical and radiological information were collected from case files. Surgically resected tumor samples like oophorectomy and hysterectomy with unilateral or bilateral salpingoophorectomy specimens from patients with surface epithelial Ovarian tumor were sent to pathology department for gross and microscopic evaluation. Patient were followed up for 2 years(Dec 2017-Nov2019).

Result and analysis

Total 60 cases were studied. Age of presentation range from 35 to 62 years (mean is 48.5years).

TABLE-1-Symptomatic Presentation

Symptomatic presentation	Number	%
Asymptomatic	8	14.0%
Pain abdomen	13	22.0%
Pain abdomen + distention	34	56.0%
Pain abdomen +Lump	5	8.0%
Total	60	100.0%

Most of the patients presented with pain abdomen along with distension (56.0%) which was significantly higher than other symptoms ($Z= 3.69$; $p<0.0001$).

TABLE-2-Histologic subtypes of epithelial ovarian tumour and their bilaterality

Histopathology	Total number (%)	Bilateral cases (%)
Borderline serous	7(12%)	2(28.6%)
Serous carcinoma	30(50%)	15(50%)
Borderline mucinous	7(12%)	1((14.3%)
Mucinous carcinoma	5(8%)	1(20%)
Endometriod carcinoma	9(14%)	2(22%)
Clear cell carcinoma	1(2%)	0(0%)
Malignant Brenner	1(2%)	0(0%)
Total	60(100%)	21(35%)

Most of the patients had high grade serous carcinoma (50.0%) followed by Endometrioid Carcinoma (14.0%) which was significantly higher ($Z=5.45$;$p<0.0001$).50% of serous carcinoma were found to be bilateral followed by borderline serous (28.6%).

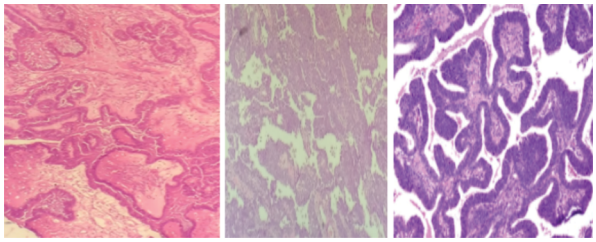

Image-1-Borderline serous tumour Image-2- mucinous carcinoma Image-3-Endometrioid carcinoma

Discussion

Table-3-Comparison of present study with other studies:- age wise distribution and symptomatic presentation

	Present Study	Chandan wale et al	Modepalli etal	Mankar et al
Age wise distribution	35-62	51-60	41-60	41-60
Mode of presentation	Pain abdomen + abdominal distention	Pain abdomen + mass in abdomen	Pain abdomen + mass in abdomen	Pain abdomen

In the present study the most common histological type of ovarian surface epithelial neoplasms was high grade serous carcinoma (50.0%) .(Z=5.45;p<0.0001), which is comparable to other studies like Chandanwala et al 56, Modepalli et al , Mankar et al , Agarwal et al and Yogambal et al which showed that among ovarian surface epithelial neoplasms the most common histological type was high grade serous carcinoma(serous cystadenocarcinoma). Distribution of grade of tumor In the present study 46 (76.7% of the patients) had high grade tumors which was significantly higher than that of borderline tumors 14 cases(23.3%) (Z=7.35;p<0.0001) ,with absence of benign tumors whereas studies byModepalli et al , Mankar et al andSaha et al incidence of benign tumors was more than malignant tumors. This is probably because these studies were undertaken in a general hospital where malignant tumors when diagnosed before surgery get referred to speciality oncology centers.50% of serous carcinoma presented with involvement of bilateral ovaries followed by borderline serous carcinoma(28.6%) comparable with study of Mondal S K et al.

Conclusion

It has varied clinico-pathological features with different diagnostic, prognostic and therapeutic implications. So study of these parameters is required prior to setting a diagnosis or prognosis. The age of patients ranged from 28-78 years, with a mean age of 51.48±7.88 yrs. Median age was 52 years. Most common symptomatic presentation was pain abdomen along with abdominal distension. Right sided tumours were slightly preponderant than left side. Incidence of high grade tumors was more than borderline tumors. High Grade Serous Carcinoma (50%), was the most common histopathological subtype of ovarian surface epithelial neoplasms .In our study a correlation was noted between age and histopathological subtype.Total 50 patients were studied.Majority of patients were in the age group of 50-59 years (58.0%) with a median age of 52years. Right sided tumours were marginally preponderant than left side. 50% patients had high grade serous carcinoma.

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