ORIGINAL RESEARCH

Study of Clinicopathological Examination of Ovarian Lesions in a Teaching Hospital

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ABSTRACT

Background: Ovary is the commonest site of physiological and pathological lesions which can present in any age group and are common gynaecological problems encountered by gynaecologists in their daily practice. Aim of the study: To study Clinical, Radiological and Histopathological examination of ovarian lesions ina teaching hospital .

Materials and Methods: Prospective observational study was done in the Departmentof Obstetrics and Gynaecology, ShadanInstitute of Medical Sciences, Teaching hospital and Research Centrefor duration of 01 year ie, from January 2021 to December 2021 on 100 ovarian specimens.

Results: Non neoplastic ovarian lesions constituted 84% and follicular cyst constituted 51.1%,next common was Corpus luteal cyst comprised 19%. Among 16 neoplastic cases Surface epithelial tumours occupied 75%. Germ cell tumors constituted 18.7% and sex cord stromal tumors constituted 6.2%.

Conclusion: Weanalyzed 100 ovarian lesions with respect to their clinical and histopathological profile. Abdominal discomfort was the most common clinical presentation. Benign tumours were more common than malignant ones across all age groups. On histopathological examination, tumours originating from the surface epithelium were the most common variant.

Keywords: Ovarian tumors, non-neoplastic lesions.

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INTRODUCTION

Ovarian masses are commonly found neoplasms in women; these constitute some of the most challenging cases in gynaecology. Most of the ovarian tumors presenting during the reproductive age group are benign; whereas, approximately 30% in the post-menopausal age group are found to be malignant.[1]Ovarian tumors present in a wide spectrum of histopathological patterns. In the early stages, several ovarian tumors are asymptomatic and diagnosed in the advanced state.About 90% of the adnexal masses are detected by pelvic ultrasound (USG).[2] Early diagnosis is difficult due to its asymptomatic nature, inaccessible site and the limited use of various new techniques likeimprint section cytology and biopsy. Thus, ovarian neoplasm offers a good field for research.[3]Peak incidence of invasive

epithelial ovarian cancer is at 50-60 year of age. About 30% of ovarian neoplasms in postmenopausal women are malignant, whereas only about 7% of ovarian epithelial tumours in the premenopausal patient are frankly malignant. Prognosis of ovarian tumours in women under 40yr of age have greater a chance of recovery than older patient.[4]Ovarian tumour and non-neoplastic lesions present a great challenge to gynecological oncologist. Certain non-neoplastic lesions of the ovary frequently form a pelvic mass and potentially mimic an ovarian neoplasm. Their proper recognition and classification are therefore important to allow appropriate therapy.[5]

They can be seen in all age groups and can be physiological or pathological cysts. Physiological cysts are mainly follicular and luteal cysts and need no treatment unless cysts are complicated. Pathological cysts can be benign or malignant. Benign tumors are more common in young females while malignant ones are common in elderly females.[6]

According to World Health Organization histological classification, ovarian tumors are subdivided into 9 main categories as per tissue of origin -surface epithelial tumors, sex cord stromal tumors, lipid cell tumors, germ cell tumors, gonadoblastomas, soft tissue tumors not specific to the ovary, unclassified tumours, metastatic tumors and tumour like conditions. 7 About 70 to 80% of primary ovarian tumors are of epithelial origin, 10% of stromal origin and 5% of germ cell origin, while remainder fall in other categories.[7]

Epithelial tumors can be split into 5basic histological groups - serous (80%), mucinous (5%), endometroid (10%), clear cell (5%) and brenners tumors.[4] In the first two decades of life, almost 70% of ovarian tumors are of germ cell origin, and one third of these are malignant.[8]

The most common type of malignant germ cell tumours are dysgerminomas, immature teratomas, and endodermal sinus tumours. Sex cord stromal tumours include granulosa, theca, sertoli or leydig cell tumours.

Serous cystadenoma is the most common benign tumour followed by mucinous cystadenoma and mature cystic teratoma. Metastatic tumours to the ovaries are most frequently from the breast and gastrointestinal tract.[9]

The aim of the study:

To study Clinical and Histopathological examination of ovarian lesions ina teaching hospital.

MATERIALS & METHODS

Ethical institutional permission was taken.

Prospective observational study was done in the department of OBG at Shadan medical college and Hospital for duration of 01 year ie, from January 2021 to December 2021 on100 ovarian specimens.

Inclusion criteria

- Age 10-70 years
- Women who underwent surgery for ovariotomy alone or along with hysterectomy.
- Conservatively managed cases

Exclusion criteria

- Age more than 70 years.

Methodology

Prospectiveobservational study was done on 100 cases anddemographic details of patients attending gynaecology OPD with the ovarian tumorsincluding patientsage, age at menarche, post-menopausal status, obstetric history, presentingclinical symptoms, and surgery detailsand follow up were collected in the clinical proforma Details of histopathological

examinations of the excised specimenswere noted from the department ofPathologyof our hospital by using stains (Hematoxylin and Eosin).. In case of malignancy, the stage of the disease and treatment details were noted. The histopathological reports (HPR) were based on WHO classification of ovarian tumours (2010). The patients who underwent surgery for ovariotomy alone or along with hysterectomy were included in the study.

Statistical analysis:

The data were entered in MS EXCEL spreadsheet and expressed in SPSS Version 16.0 (SPSS Inc., Chicago, Illinois, USA). and tables were generated. The data entered Categorical variables were presented in number and percentage (%) and continuous variables as mean ± SD and median. Frequency distribution tables, bar diagram was used for data presentation.
Clinical features, Radiological features and Histopathological features were compared and Sensitivity, Specificity, Positive predictive value and Negative predictive value werecalculated.

RESULTS

In our study age distribution ranged from 10 to 70 years majority of the cases noted among 31-40 years constituting 37%(37/100) and next common age group was among 21-30 years constituting 26% (26/100), 17% among 41-50 years and 2%(02/100) among 61-70 years.
6%(06/100) 10-20 years .12% (12/100) among 51-60 years.
Multiparous women constituted 75%, primiparous 20%,and nulliparous women 5%.

Table 1: Presenting Complaints and Clinical Features

Clinical features	No. of cases	%
Abdominal Pain	15	15%
Abdominal Discomfort	22	22%
Urinary Symptoms	06	06%
Weight Loss	01	01%
Dysmenorrhea	11	11%
Mass per abdomen	08	08%
Amenorrhea	12	12%
Asymptomatic	19	19%
Heavy Menstrual Bleeding	06	06%
Total	100	100%

In our study Abdominal discomfort constituted 22%,Abdominal pain 15%, urinary symptoms 6%,history of weight loss in one patient, Dysmenorrhea in 11%, Mass per abdomen in 8%, Amenorrhea 12%, Heavy Menstrual Bleeding 6% and 10% cases were Asymptomatic.
Bilateral ovarian involvement was seen in 20% cases, right ovary was involved in 60 cases (60 %) and left ovary was involved in 20 cases (20%).

Table 2: USG findings of Non-Neoplastic Ovarian Lesions

SN	USG findings of ovarianlesions	Non-Specific Oophoritis (02)	Follicular Cyst (43)	Simple Serous Cyst (11)	Corpus Luteal Cyst (16)	Haemorrhagic Cyst (07)	Endometriosis & Chocolate Cyst (05)	Total (84)
1	a.Unilocular b.Multilocular	02 (2.3%) -	43 (51.1%) -	06 (7.1%) 05 (5.9%)	16 (19%) -	- 07 (8.3%)	05 (5.9%) -	72 (85.7%) 12 (14.2%)
2	Margin a. Well defined	02 (2.3%)	43	11	16	07 (8.3%) -	-	84

	b. Ill defined	-	(51.1%)-	(13%) -	(19%) -		-	(100%) -
3	Echotexture a.Hyperechoiec b.Hypoechoiec c.Echogenic	- - 02 (2.3%)	- - 43 (51.1%)	- - 11 (13%)	- - 16 (19%)	- - 07 (8.3%)	- 05 (5.9%) -	- 05 (5.9%) 79 (94 %)
4	Calcification /Calculi Present Absent	- -	- -	- -	- -	- -	- -	- -
7	Vascularity Present Absent	- 02 (2.3%)	- 43 (51.1%)	- 11(13%)	- 16 (19%)	- 07 (8.3%)	- 05 (5.9%)	- 84 (100%)

On USG abdomen the nonneoplastic ovarian lesions were Unilocular in 72(85.7%) and multilocular in 12(14.2%),margins were well defined 84(100%) and hypoechoic in79 (94%) and hyperechoic in 5(5.9%).

Table 2: USG findings of Neoplastic Ovarian Lesions

SN	USG findings of neoplastic ovarian lesions	Benign (15)	Malignant (01)	Total (16)
1	a.Unilocular b.Multilocular c.Solid	06(37.5%) 08 (50%) 01 (6.2%)	- - 01(6.2 %)	06(37.5%) 08 (50%) 01 (6.2%)
2	Margin a. Well defined b. Ill defined	 15(93.5%) -	 - 01(6.2 %)	 15(93.5%) 01(6.2 %)
3	Echotexture a.Echogenic b.hyperechoic c.Hypoechoic	 10(62.5%) 05(31.2%) -	 01(6.2 %)- -	 11(%) 05(31.2 %) -
4	Calcification/Calculi Present Absent	 01(6.2 %) 14(7.58 %)	 - 01(6.2 %)	 01(6.2%) 15(93.5 %)
7	Vascularity Present Absent	 - 15(93.5%)	 01(6.2 %) -	 01(6.2 %) 15(93.5%)

On USG abdomen Benign ovarian lesions were 08 (50% multilocular, 06(37.5%) unilocular and 01 (6.2%) were solid, margins were well defined in 15(93.5%) cases, and Hyperechoiec in 10 (62.5%) and hypoecheic in 5 (31.2%) cases.

One Malignant ovarian lesion was identified as solid with ill-defined margins and Hyperechoiec. Calcification were noted.

Among ovarian lesionsnon neoplastic ovarian lesions constituted 84% (84/100)and neoplastic ovarian lesions constituted 16% (16/100).

Table 4: Histopathological findings of Non neoplastic ovarian lesions

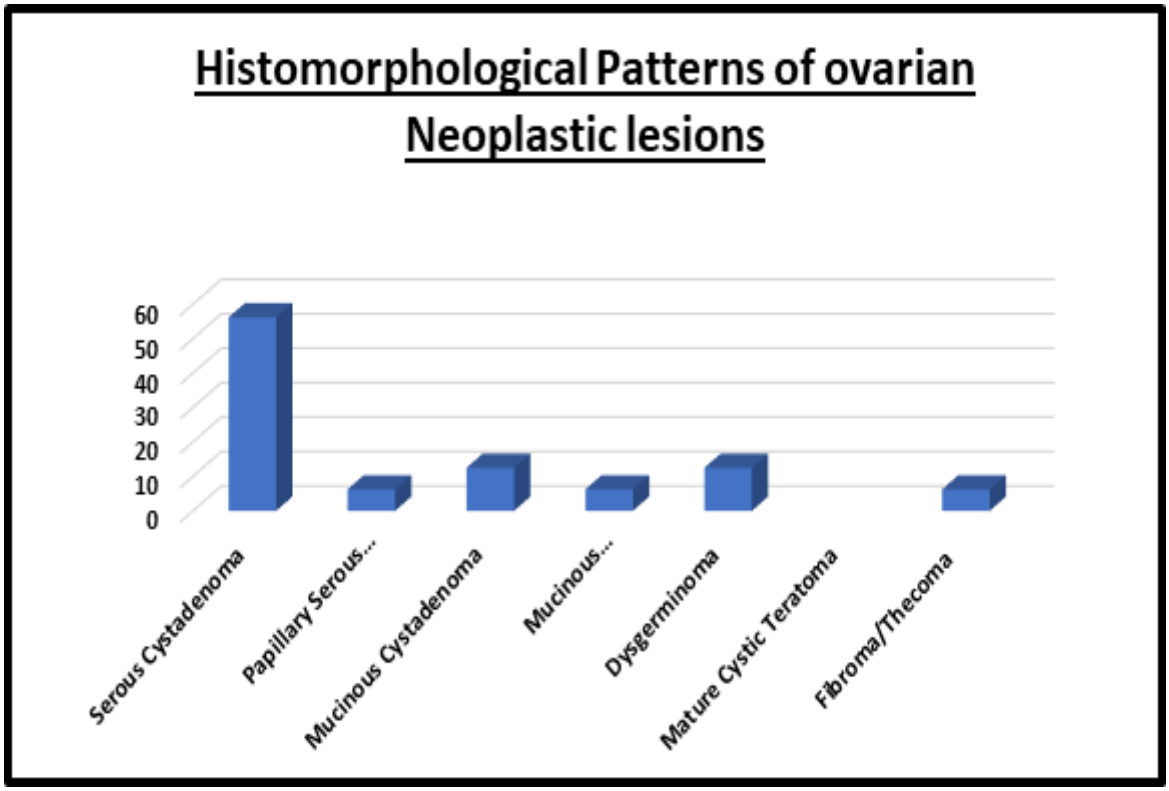
Non neoplastic lesions	No. of cases	%
Non-Specific Oophoritis	02	2.3%
Follicular Cyst	43	51.1%
Simple Serous Cyst	11	13.0%
Corpus Luteal Cyst	16	19.0%
Haemorrhagic Cyst	07	8.3%

Endometriosis & Chocolate Cyst	05	5.9%
Total	84	

Among non-neoplastic ovarian lesions Follicular Cyst constituted 51.1% (43/84), next common was Corpus luteal cyst compromised 19% (16/84).

Table 5: Histopathological Patterns of ovarian Neoplastic lesions

Ovarian Tumours (16)	**No. of cases**	**%**
Surface epithelial tumours (12) 75%		
Serous Cystadenoma	09	56.2%
Papillary Serous Carcinoma	01	6.25%
Mucinous Cystadenoma	02	12.5%
Mucinous Cystadenocarcinoma	0	
Germ Cell Tumours (03) (18.7%)		
Dysgerminoma	01	6.25%
Mature Cystic Teratoma	02	12.5%
Sex Cord Stromal Tumours (01) (6.25%)		
Fibroma/Thecoma	01	6.25%
Total	16	99.5%



In our study among 16 neoplastic cases 87.5% (14) were benign and 12.5% (2) were malignant. Surface epithelial tumours tumours occupied 75% (12/16). Germ cell tumors constituted 18.7% (03/16) and sex cord stromal tumors constituted 6.2%(01/16).
Among surface epithelial tumors Serous Cystadenoma comprised 56.2% (09/16), Papillary Serous Carcinoma 6.25% (01/16), Mucinous Cystadenoma 12.5% (02/16).
Among germ cell tumors Dysgerminoma comprised 6.25% (01/16) and Mature Cystic Teratoma 12.5% (02/16).

Table 6: Statistical comparison between USG, Clinical diagnosis and HPE on Non neoplastic ovarian lesions.

USG findings of non-neoplastic ovarian lesions	**Clinical diagnosis**	**HPE**	**Remarks**
Non-Specific Oophoritis (02)	Non-Specific Oophoritis (02)	Non-Specific Oophoritis (02)	True negatives
Follicular Cyst (43)	Follicular Cyst (43)	Follicular Cyst (43)	True negatives
Simple Serous Cyst (11)	Simple Serous Cyst (11)	Simple serous cyst (9) Simple Serous Cystadenoma (2)	True negatives False positives
Corpus Luteal Cyst (16)	Corpus Luteal Cyst (16)	Corpus Luteal Cyst (16)	True negatives
Haemorrhagic Cyst (07)	Haemorrhagic Cyst (07)	Haemorrhagic Cyst (07)	True negatives
Endometriosis & Chocolate Cyst (05)	Endometriosis & Chocolate Cyst (05)	Endometriosis & Chocolate Cyst (05)	True negatives

In our study Specificity for non-neoplastic ovarian lesions is 97.6%

Table 7: Statistical comparison betweenUSG, Clinical diagnosis and HPE on Neoplastic ovarian lesions.

USG of ovarian Tumours (16)	**Clinical diagnosis**	**HPE (16)**	**Remarks**
Benign (15)	Benign (15)	Serous Cystadenoma- 09	True positives
		Papillary Serous Carcinoma-01	False negative
		Mucinous Cystadenoma -02	True positives
		Mature Cystic Teratoma-02	True positives
		Fibroma/Thecoma-01	True positives
Malignant (01)	Malignant (01)	Dysgerminoma-01	True positives

Sensitivity – TP= 93.75%
TP+ FN
Specificity – TN= 97.6%
TN+ FP
PPV– TP= 88.2%
TP+ FP
NPV – TP= 93.75%
TP+ FN
In our study clinical and USG findings of neoplastic ovarian lesions with HPE shows sensitivity of 93.75%.

DISCUSSION

In our study age distributionranged from 10 to 70 years majority of the cases noted among 31-40 years constituting 37%and next common age group was among 21-30 years constituting 26%. In Purnima et al,[10]study age of the patients ranged from 11 years to 71 years, median age being 50 years. Both benign and malignant ovarian tumours were found in all age groups. Overall, ovarian tumour was most prevalent in the age group of 21- 40 years Incidence of malignant ovarian was most frequent in 51-60 years age group. In Rizwana et al,[11] study the mean age of the patients was 33.9±12.24 years. The age range was from 15 years to 70 years. Ovarian cysts were commonly seen in age group between 30 - 39 years. In Shradda et al,[12] study mean age for non-neo-plastic, benign, and malignant masses were 35, 39, and 41 years, respectively. Maximum number of benign cases (44/123) was noted in the 31–40 years age group, and the malignant cases were more common (10/14) in the 31–50 years age group. In Purti Agrawal et al,[13]study the peak incidence of ovarian tumors was seen in the third- and fifth-decades accounting for 22.6% (51 cases/226 cases) and 26.5% (60/226), respectively. In Poonam Sharma et al,[14] studymajority of the patients were seen in 5 th decade of life with age range of 21-76 years.InPriyanka D Dhende et al,[15] study, the women affected were in the age range of 9 to 80 years with the mean of 38.6 years. Overall, the peak was seen at 31-40 years of age. The benign ovarian tumors were most common in the age group of 31-40yrs, borderline 41 -60yrs and malignant 11-20yrs. The youngest patient, 9yrs old female child was diagnosed as Yolk sac tumor of the ovary and the eldest patient, 80yrs old female was diagnosed as benign mixed epithelial tumor (benign mucinous cystadenoma with Brenner component in mural nodule). In Kathikar et al,[16] study most of the benign tumour were observed in the age group of 20- 40yr, while most of the malignant tumours cases were common in elderly (>40 years) age group. In Vinitha et al,[17]study among the neoplastic lesions, 91.1% (51/56) were benign, 7.1% (4/56) were malignant and there was only 1.8% (1/56) with borderline malignant histopathology. Maximum number of benign ovarian tumors was in the 21–40-year age group and a similar number in the 41–60-year age group. All the malignant tumors [100% (4/4)] were in the 41–60-year age group.

In the Present study multiparous women constituted75%,primiparous 20%, and nulliparous women 5%. In Rizwana et al,[11]study the number of nulliparous patients were 53 out of 160 (33.12%) while as the number of parous (para 1, para 2, para 3) patients were 107 out of 160 (66.9%).

In our study most common clinical presentation was abdominal discomfort whichconstituted 22%,Abdominal pain 15%, urinary symtoms 6%,history of weight loss in one patient, Dysmenorrhea in 11%, Mass per abdomen in 8%, Amenorrhea 12%, Heavy Menstrual Bleeding 6% and 10% cases were Asymptomatic. In Purnima et al,[10] study the most common clinical presentation was pain abdomen. In Purti Agrawalet al,[13]study the most common presenting complaint was pain in abdomen (115 cases, 50.9%) followed by the lump n abdomen (66 cases, 29.2%) irrespective of the nature of the tumor. Ascites, anorexia, and weight loss were more commonly observed in borderline and malignant tumors. Menstrual irregularities, excessive bleeding, and postmenopausal bleeding were the presenting complaints in the 27 cases (11.9%). In Rizwana et al,[11] study39.4% of patients presented with pain lower abdomen, 25 % of patients presented with pain and swelling, 10.6% with polymenorrhagia, 10.0% with abdominal lump, 6.3% patients with amenorrhoea, 4.4 % with retention of urine, 2.5% patients with postmenopausal bleeding and 1.9 % with menorrhagia.InPriyanka D Dhende study,[15]the most common presentation in benign and malignant ovarian tumors was abdominal pain seen in 76 (64.4%) and 10(45.4%) cases respectively whereas most common presentation in borderline ovarian tumors was abdominal distension in 4 (44.4%) cases.

In ourstudy bilateral ovarian involvement was seen in 20% cases, right ovary was involved in 60 cases (60 %) and left ovary was involved in 20 cases (20%).In Rizwana et al,[11]study bilateral ovarian involvement was seen 64 (13.1%), Right ovary was involved in 64 cases (40 %) and left ovary was involved in 75 cases (46.8%).
In ourstudy benign tumors (87.5%) andmalignant tumors (12.5%). In Rizwana et al,[11]the incidence of benign tumour was 71.87%, borderline tumour was 1.9% and malignant tumour was 28.12% in our study which was comparable to study conducted by Purnima et al,[10]where she found that benign tumors (82.6%) were the most common; followed by malignant tumors (12.8%) and borderline tumors (4.6%).

Table 8: Comparative studiesrelated to Ovarian tumors

Ovarian tumors	**Purnima et al,[10]**	**In Rizwana et al study,[11]**	**Poonam Sharma et al,[14]**	**Priyanka D Dhende et al,[15]**	**Present study**
Surface epithelial cell tumors	60.6%	65%	69.6%	40.9%	75%
Germ cell tumors	36.6%	7.5%	25.8	36.3%	18.7%
Sex cord stromal tumors	-	2.5%	4.1%)	-	6.25%

In our study among 16 neoplastic cases Surface epithelial tumours tumours occupied 75% (12/16). Germ cell tumors constituted 18.7% (03/16) and sex cord stromal tumors constituted 6.2% (01/16). In study conducted by Purnima et al10surface epithelial tumour was the commonest type of tumour (60.6%) followed by germ cell tumour (36.6%). Out of 106 epithelial tumours, 86 (81.1%) were benign, 8(7.5%) were borderline and 12(11.3%) were malignant.InPriyanka D Dhende,[15] study the most common category of malignant ovarian tumor was surface epithelial tumor seen in 40.9% cases followed by germ cell tumors seen in 36.36% cases. The most common malignant ovarian tumor was primary mucinous carcinoma seen in 7 (31.8%) cases out of 22 malignant ovarian tumors. In Poonam Sharma et al,[14] studyOnHistopathological evaluation, out of 194 cases, 86.6% were benign, 3.6% borderline and 9.8% malignant. Surface Epithelial tumours were the commonest tumour (69.6%) followed by germ cell tumours (GCT) (25.8) and sex cord stromal tumours (4.1%). In Purti Agrawalet al13studymost common histological type was SETs in our study. Benign tumors were the most common accounting for 61.1% (138 cases/226 cases). Among these, mucinous cystadenoma (42 cases/138 cases, 30.4%) was the most common. A total 16 cases (7.1%) of borderline category and 72 cases (31.9%) of malignant ovarian tumors out of total 226 cases were diagnosed. In Rizwana et al study,[11]commonest type of tumour as per WHO classification was surface epithelial tumours (65%) followed by germ cell tumour (7.5%) followed by sex cord stromal tumours (2.5%). Metastasis was seen in 3.1% of cases. Benign tumours were common in all age groups as compared to malignant tumours. A higher incidence of malignancy was found in the age group 30-39 years.

Table 9: Comparative studiesrelated to Classification of Ovarian tumours

Classification of Ovarian tumours	**Purnima et al,[10]study**	**Purti Agrawal et al,[13]study**	**Poonam Sharma et al,[14] study**	**Priyanka D Dhende et al,[15] study**	**Present study**
Serous Cystadenoma	50 (47.1 %)	53	82	-	09(56.2%)
Borderline serous tumour	-	2	12	-	-
Papillary Serous	8 (7.5%)	31	12	-	01(6.25%)

Carcinoma					
Mucinous Cystadenoma	34 (32%)	4	15	1	02(12.5%)
Mucinous Cystadenoma fibroma	8 (7.5%)	14	1	1	-
Mucinous Cystadenocarcinoma	2 (1.9%)	16	3	7	-
Mature Teratoma	52 (92.8%)	34	47	-	02(12,5%)
Immature teratoma	2 (3.6%)	1	1	1	-
Dysgerminoma	2 (3.6%)	3	1	3	01(6.25%)
Fibroma	2 (20%)	5	2		01(6.25%)
Sex cord tumour with annular tubules	2 (20%)	-	-	-	-
Granulosa cell tumour	6 (60%)	9	4	3	-

In our studyamong 16 neoplastic casesSurface epithelial tumours tumours occupied 75%(12/16). Germ cell tumors constituted 18.7% (03/16) and sex cord stromal tumors constituted 6.2%(01/16).Among surface epithelial tumors Serous Cystadenoma comprised 56.2% (09/16), Papillary Serous Carcinoma6.25% (01/16), Mucinous Cystadenoma 12.5% (02/16).

Among germ cell tumors Dysgerminoma comprised 6.25% (01/16)and Mature Cystic Teratoma 12.5% (02/16). In Purnima et al,[13] study among surface epithelial tumours, serous tumours were more common (54.7%) than mucinous tumours (41.5%). Serous cystadenoma (47.1%) was the most common benign epithelial tumour followed by mucinous cystadenoma (32%). Among malignant tumours, serous cyst adenocarcinoma was the most common malignant epithelial tumour (7.5%). Among the germ cell tumors, mature teratoma was the commonest histopathological type Among the sex cord stromal tumors, Granulosa cell tumor was the commonest histopathological type. In In Vinitha et al,[17] study Serous cyst adenomas (44.6%), followed by Germ Cell tumors (23.2%) and mucinous cyst adenoma (17.8%) were the most common benign tumors. The rest were 2 cases of Fibroma and 1 case of granulosa cell tumor. Of the 4 malignant tumors, 2 were mucinous cyst adenocarcinoma, 1 each of Serous cystadenocarcinoma and endometrioid adenocarcinoma. The borderline tumor belonged to the Mucinous group.InSumaira Yasminet al18studycommonest histological pattern was epithelial tumours (76.5%) including both benign and malignant tumours. The commonest benign tumour was serous cyst adenoma (24%) followed by mature cystic teratoma (18%). Common malignant ovarian tumours were granulosa cell tumours and Endometriod carcinoma (each 28.5%).In Rizwana et al study,[11]ovarian cyst was serous cystadenoma type in 22.5%, mucinous cystadenoma type in 19.4%, mucinous cystadenocarcinoma (10.6%), haemorrhagic corpus luteal cyst type in 15.1%, serous cystadenocarcinoma 8.1%, mature cystic teratoma 5%.In Poonam Sharma et al study,[14]Among surface Epithelial Tumours (ET), Serous tumours (82.2%) were commonest followed by Mucinous tumours (14.1%). Serous cystadenoma was the commonest epithelial tumour followed by Mucinous cystadenoma and Serous cystadenocarcinoma and Serous cyst adenofibroma. Among Germ cell tumours (GCT), mature cystic teratoma was the commonest tumour. Single case each of immature teratoma, dysgerminoma and yolk sac tumour were also seen. Eight cases of sex-cord stromal tumours (SST) were seen, including 4 cases of granulosa cell tumour and 2 cases each of fibroma and fibrothecoma. All the sex cord tumours were benign.

Vinitha et al,[17]Among the non-neoplastic masses, commonest was endometriotic cyst 34.5% (29/84), followed by inclusion cysts 28.5% (24/84). Abnormal menstrual patterns followed

by abdominal pain were the major presenting symptoms in these patients. Purti Agrawalet al,[13] The most common surgical specimen in benign and borderline ovarian tumors was cystectomy constituting 57.3% (79/138) and 43.8% (7/16), respectively, whereas in malignant ovarian tumors, the most common surgical specimen was transabdominal hysterectomy with bilateral salpingo-oophorectomy (TAH + BSO) with or without omentum constituting 80.6% (58/72).

CONCLUSION

Weanalysed 100 ovarian lesions with respect to their clinical and histopathological profile. Abdominal discomfortwas the most common clinical presentation. Benign tumours were more common than malignant ones across all age groups. On histopathological examination, tumours originating from the surface epithelium were the most common variant. Radiology has less specificity and but is complementary for diagnosing few malignant cases. Biochemical markers were contributory to distinguish benign and malignant cases. The size of the tumor is not related to the nature of the tumor but presence solid elements makes malignancy more likely.

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