



STUDY OF SURFACE EPITHELIAL TUMORS OF OVARY

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*Corresponding Author**ABSTRACT**

INTRODUCTION: Study is done to report the frequency of surface epithelial tumors of ovary and histopathology of 220 ovarian tumors from June 2014 to June 2017. Surface epithelial tumors can be benign or malignant with wide spectrum of clinical and histological patterns.

AIMS & OBJECTIVES: To study the clinico pathological aspects of surface epithelial tumors. To study the pattern of occurrence in relation to age, parity and mode of presentation. To study the histological types of surface epithelial tumors of ovary.

MATERIALS AND METHODS: A retrospective study was carried over three years of period from June 2014 to June 2017. A total of 220 ovarian tumors specimens were received in the Department of Pathology. Clinical details and Histological findings are analyzed.

RESULTS: 220 ovarian tumors were received. Majority of the patients were between 31-40 years. Surface epithelial tumors were the commonest tumors being 132 cases with 60%.

CONCLUSION: Surface epithelial tumors are the commonest tumors of the ovary. Majority being benign tumors. Early histopathology is required to provide evidence of malignancy if any and helps in further early management of the patient.

KEYWORDS : Ovary, Surface epithelial tumors, Adenocarcinoma .**INTRODUCTION**

Ovary is a unique organ in the body which can be a seat of large number of neoplasms, benign, malignant, primary and secondary with wide spectrum of clinical and histological patterns.

Pathology of the ovary is most difficult gynaecologic disease to evaluate clinically¹. Ovarian neoplasm is the most fascinating tumor of the women in terms of its histogenesis, clinical behavior and malignant potentiality. Ovarian tumor accounts for 15 to 25% of all primary malignancies in female genital organs².

Ovarian cancer is the sixth most common cancer in women worldwide and accounts 4% cancer in women and 5% cancer death in women. As ovary is an intra abdominal organ the diagnosis of ovarian malignancy is often late.

Ovaries are subjected to endocrinal and traumatic insult during the ovulatory cycle and prime site for tumorogenesis. Ovarian neoplasm can occur in all age groups and no age is exempted. In young age germ cell tumor is common. Among the older women epithelial tumors are common³. 50% of ovarian tumors are benign. Of malignant 90% are epithelial and remaining 10% are resulting from metastasis. There is higher frequency of carcinoma in unmarried women and married women with low parity.

The common ovarian cancers are surface epithelial tumors (85%). The main factors involved in the etiology are the age, genetic factors and reproductive factors. Ovarian tumors are insidious in onset and usually diagnosed at late stage. They commonly present with abdominal pain, a lump or menstrual irregularity⁴.

In present study an attempt was made to identify the high risk population, the etiological factors. The study was conducted to find out the histopathological types of various surface epithelial tumors of ovary.

MATERIALS AND METHODS

The present study is from June 2009 to June 2012. The study was done in Department of Pathology, Kurnool Medical College, Kurnool. During the above period ovarian tumors are obtained either by total abdominal hysterectomies or by salpingo-oophorectomy and were analyzed of an analysis of 220 cases of ovarian tumors, 132 were found to be surface epithelial tumors.

All the cases were reviewed after Hematoxylin and Eosin staining to diagnose various histological types of the surface epithelial tumors. Special stains and immunohistochemistry was done where ever necessary.

ANALYSIS OF RESULTS

1. The commonest tumors noticed were Serous tumors (96 cases).
2. Among the serous tumors one case of collision tumor Serous cystadenoma with mature teratoma was noted.
3. Mucinous tumors were the second commonest (25 cases).
4. Among the malignant tumors serous cystadenocarcinoma were the commonest (15 cases).
5. Mucinous cystadenocarcinomas were the second common malignant tumors (8 cases).

Table-1: Showing Distribution of All Surface Epithelial Tumors

Type of Tumor	No. of Cases
Serous Tumours	
Serous Cystadenoma	62 (46.96%)
Serous Cystadenoma with Mature Teratoma	1 (0.75%)
Serous PapillaryCystadenoma	10 (7.57%)
CystadenoFibroma	6 (4.54%)
Serous Borderline Papillary Cystic Adenoma	2 (1.51%)
Serous Cystadenocarcinoma	15 (11.36%)
Mucinous Tumours	
Mucinous Cystadenoma	14 (10.60%)
Mucinous Cystic Tumor with Pseudo Myxoma Peritonei	2 (1.51%)
Borderline Intestinal Type Mucinous	1 (0.75%)
Mucinous Cystadenocarcinoma	8 (6.06%)
Benign Endometroid	2 (1.51%)
Malignant Mixed Mullerian Tumor	3 (2.27%)
Benign Clear Cell	3 (2.27%)
Benign Brenner	3 (2.27%)
Total	132

In our present study 96 Serous tumors, 25 Mucinous tumors, two Endometroid, three Mixed Mullerian, three Clear cell and three Brenner tumors were noted.

Table -2. Table Showing Age wise Distribution of All Surfaces Epithelial Tumors

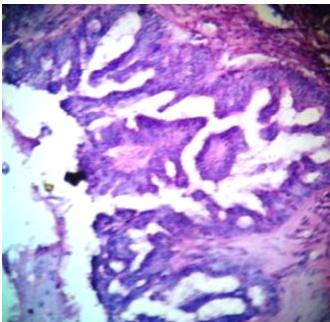
Type of tumor	11-20	21-30	31-40	41-50	51-60	61-70
Serous Cystadenoma	-	18	25	5	11	3
Serous Cystadenoma with Mature Teratoma	-	1	-	-	-	-
Serous PapillaryCystadenoma	-	3	4	2	1	-
CystadenoFibroma	-	1	2	2	1	-
Mucinous Cystadenoma	-	3	6	4	1	-

Type of tumor	11-20	21-30	31-40	41-50	51-60	61-70
Serous Cystadenoma	-	18	25	5	11	3
Serous Cystadenoma with Mature Teratoma	-	1	-	-	-	-
Serous PapillaryCystadenoma	-	3	4	2	1	-
CystadenoFibroma	-	1	2	2	1	-
Mucinous Cystadenoma	-	3	6	4	1	-
Mucinous Cystic Tumor with Pseudo Myxoma Peritonei	-	-	-	1	1	-
Benign Endometroid	-	-	-	1	1	-
Benign Clear Cell	-	-	-	2	1	-
Benign Brenner	-	-	-	2	1	-
Serous Borderline Papillary Cystic Adenoma	-	-	2	-	-	-
Borderline Intestinal Type Mucinous	-	-	-	1	-	-
Serous Cystadenocarcinoma	-	-	-	7	7	1
Mucinous Cystadenocarcinoma	-	-	-	4	3	1
Malignant Mullerian Mixed Tumor	-	-	-	-	1	2
Total	-	26	39	31	29	7

There was wide variation of age noted. Youngest patient was 21yrs and the oldest was 75yrs. Most common Benign tumors were noted in the age group of 21-40yrs - 65 cases (49.24%). Malignant tumors were common in age group of 41-50years- 11 cases (8.33%).



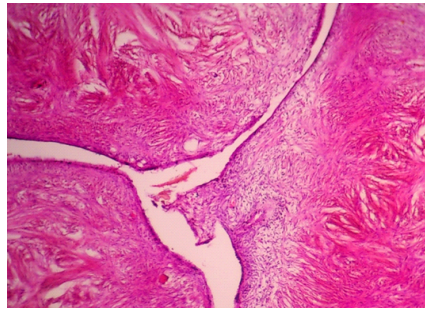
Gross appearance of Papillary serous cystadenoma



Micrograph (H&E) of Papillary serous cystadenoma 40x



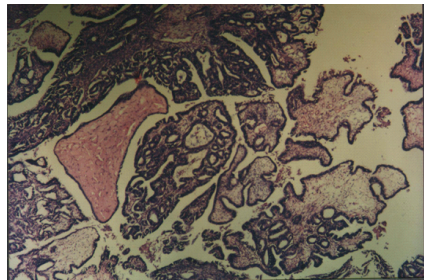
Cutsection of Serous cyst adeno fibroma



Micrograph (H&E) of serous cyst adeno fibroma



Cut section of Serous Cystadeno Cracinoma showing multiple Polypoid excrescences



Micrograph (H&E) of Serous cyst adeno carcinoma 40x

DISCUSSION

The tumors of the ovary present with many problems due to their complex structure and they are biggest diagnostic challenge in the field of Gynaecological Oncology. The benign nature of the tumor to remain silent clinically for a long period of time, tests the Gynaecologist. Though many workers have worked extensively in the field of ovarian tumor pathology, the wide variation in facts and figures, reflect the confusion prevailing in the area of tumor nomenclature and different morphological subtypes. In this study, an attempt has been made to study the histomorphology of tumors and correlate with other studies.

In the present study out of 132 tumors, 103 cases were benign. The study was similar to those reported in other studies.

CONCLUSION

The hormonal status in women is variable. The endocrine system and traumatic injury during ovarian cycles make the ovary a prime site for tumorigenesis. High frequency of carcinomas occur in low parity.

Histopathological classification of ovarian tumors along with clinical staging forms an integral part of evaluation of optimum mode of therapy. Effective therapeutic management of ovarian malignant tumors continue to be a challenge to the oncologist. An accurate histopathological diagnosis combined with clinical staging will help in prompt and appropriate treatment of the patients.

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