Original Research Paper

Pathology

SPECTRUM OF VARIOUS LESIONS OF OVARY IN ALL AGE GROUPS – A 3 YEAR RETROSPECTIVE STUDY

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ABSTRACT

Introduction: Ovarian Carcinomas is commonest tumours among females, ranking only below carcinoma Cervix and Breast. It is one of the most common malignancies affecting females in India. Over 70% of ovarian neoplasms are diagnosed when regional or distant involvement has already occurred.

Aim: finding the incidence of Ovarian neoplasms in greater Gwalior region to develop more effective diagnostic tools as well as better therapeutic approaches.

Material & Methods: Our epidemiological study is 3 year retrospective study carried out in Gwalior. All the hysterectomy/ovarian tissue submitted for Histopathology were considered, Diagnosed, and Morphologically classified into Benign and Malignant ones, also considering the age of patients.

Results: Total of 12090 biopsy were done during 3year out of which 1611 were hysterectomy and ovarian tissue. A total of 195 number of ovarian neoplasms were encountered (171)87.7 % were benign (24)12.3 % were malignant.

**KEYWORDS** :

INTRODUCTION

Ovarian tumor is the seventh leading cause of cancer death (age standardized mortality rate: 4/100,000) among women worldwide and in India it is comprising up to 8.7% of cancers in different parts of the country. Important etiological risk factors are increasing age, positive family history, increase age of reproduction, high socio-economic classes and nulliparity[2]. Imaging modalities like USG,CT Scan and MRI can be misleading sometimes and cytology has also its own limitations and challenges. Hence, histopathological diagnosis remains the mainstay in achieving an optimum treatment response.The purpose of this study was to assess the morphological spectrum of ovarian neoplasms, their incidence and prevalence and to decide priorities in ovarian cancer research.

MATERIAL & METHODS

This is a retrospective 3year study done in department of pathology Gajra raja medical college gwalior mp. All the hysterectomy/ovarian tissue submitted for histopathological examination were taken into consideration. All benign & malignant ovarian tumours reported were analysed. Patients age, histological type & grade was summarized.

RESULTS

Total of 12090 biopsy were done during 3year out of which 1611 were hysterectomy and ovarian tissue. A total of 195 number of ovarian neoplasms were encountered (171)87.7 % were benign (24)12.3 % were malignant. Among the malignant: (9)37.5 % serous cystadenocarcinoma, (6)25 %mucinous cysadenocarcinoma, (3)12.5% mixed yolk sac tumours, (3)12.5% dysgerminomas, (3)12.5% transitional carcinoma. Among benign: (108) 61.4 % serous cystadenomas, (30) 17.5 % mucinous cystadenomas, (30) 17.5% dermoid cyst (3) 1.7% fibromas.
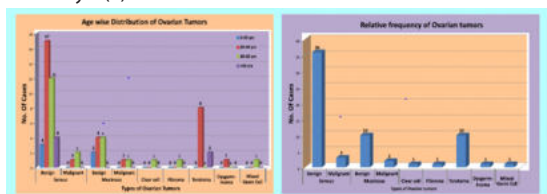
DISCUSSION

The ovary is a complex structure from an embryological, anatomical and functional stand point[2]. Therefore ovarian tumors aroused curiosity and problems to pathologists and clinicians regarding their abnormal contents and genesis. The value of detailed morphological study of ovarian tumors lies not only in systematic diagnosis but also in planning the modality of treatment and assessing the prognosis.A study conducted by Arpita J. Nishal Et al studied 55 cases of ovarian mass out of which 28 cases (51%) were benign, 3 cases (5%) were borderline and 24 cases (44%) were malignant[5]. In our study 87.7 % were benign 12.3 % were malignant. Another study conducted by Vaddattitejeswini Et al. studied 278 ovarian neoplasms and found that 275 were primary (98.92%) and 3 were metastatic tumors (1.08%)[4].Among primary ovarian tumors, the surface epithelial tumors ranked first (85.25%), followed by germ cell tumors (9.71%) and sex cord stromal tumors (3.95%) our study also showed most common ovarian tumours as surface epithelial tumors .Another study conducted by Nirali N. Thakkar Et al. studied 129 cases of ovarian lesions, out of which 109 cases were benign, 17 cases were malignant & 3 were borderline lesions[6]. Commonest benign epithelial tumors were Serous cystadenoma (55.4%).
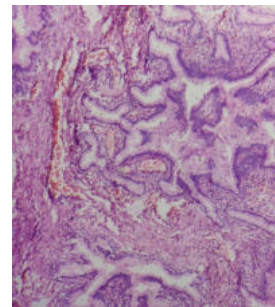
Mucinous Cystadenoma

In our study also61.4 % were serous cystadenomas followed by 17.5 % mucinous cystadenomas, 17.5% dermoid cyst.Another study conducted by NehaGarg Et al. studied 85 cases, out of which majority were benign tumours (81.2%), followed by malignant (17.6%) and borderline tumour (1.2%). In our study majority of cases were benign.Our data needs to be viewed with a few limitations. The data is based on a single institution and may not completely represent cross sectional profile of the entire population. Being a tertiary care centre also introducing confoundinmg factors, such as bias in referred patterns. Another area of concern is that, being a laboratory based study, detailed clinical history including duration of symptoms and in a few cases imaging was also not available for clinicopathologic correlation.Despite a few limitations our data represents comprehensivly the current scenario of ovarian neoplasm in our set up with age diagnosis tumor and histologic

type distribution and has major implication on future research in this particular area.
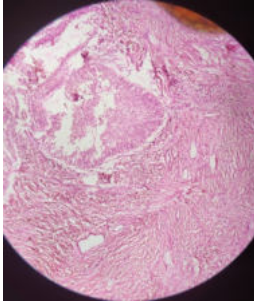
Transitional Carcinoma

CONCLUSION

This study aims at finding the morphological pattern of ovarian neoplasm, the most common ovarian neoplasm reported at our Gwalior region. phological and histological features. benign tumours are far more common than their malignant counterparts with surface epithelial tumours being the commonest followed by germ cell tumours. The research efforts to find early diagnostic and effective screening tools as well as better therapeutic approaches for advance epithelial and other malignant ovarian neoplasm.

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