

Original Research Article

To study the incidence of malignant lesion in ovary and their classification so as to help in management of the patient.

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Abstract:

Background & Method: The aim of the study is to study the incidence of malignant lesion in ovary and their classification so as to help in management of the patient. The gross specimens received were fixed in 10 percent formalin for 24 hours. Gross examination was done carefully examining the outer surface and on-cut surface of ovary, looking for any cyst with its content and type of fluid filled inside, any solid area, papillary projections and growth.

Result: After histopathological examination of ovarian lesion, various associated pathological findings are also found. As uterus, cervix, fallopian tube and other tissue are also received along with ovarian tissue (depending upon the operation done). Of these hydrosalpinx is most common finding followed by intramural leiomyoma, salpingitis, chronic cervicitis, adenomyosis, endometrial hyperplasia, ascites, GIT problem, submucosal leiomyoma, subserosal leiomyoma, carcinoma cervix, prolapsed uterus, paraovarian carcinoma and endometrial carcinoma (in sequence).

Conclusion: Effective therapeutic management of ovarian malignant tumours continues to be a challenge to the oncologist. An accurate histopathological diagnosis combined with clinical staging will help in rendering prompt and appropriate treatment to the patient.

Keywords: incidence, malignant, lesion & ovary.

Study Designed: Observational Study.

1. Introduction

Knowledge of the ovary and the gradual evolution of use of this word to be used as female gonad have been reviewed by Gruhn (1), but it is only with the legendary Morgagni that the story really begins. In his work 'The Seats and Causes of Diseases' he refers to 'vesicles filled with grumous material' and a tumour that was 'evidently bony' hinting that he would have encountered dermoid cysts. Matthew Baillie, also recognized dermoid cysts, having a section in his 'Morbidity Anatomy of the Human Body' on 'the ovaria changed into a fatty substance with hair and teeth' (2). The early history of ovarian tumours is expertly summarized by Dr CG Ritchie in 1865(3).

In 19th century different contributions were made by several workers. Dr Thomas Hodgkin described to what we now recognize as serous cysts of the ovaries. Description on abdomen, including ovarian tumour, but he did not recognize that this type of ovarian tumour represented spread from extra-ovarian neoplasms.

The neoplasm arising from ovaries inherit a spectrum of histogenetic background, much more varied than any other organ. This pathological complexity had led to a number of classifications(4).

Novak's classification (1967) has advantage of being simple but has certain obvious drawbacks, since it depends primarily on two fundamental factors; benign or malignant and solid or cystic. Thus the borderline tumours, solid tumours with cystic degeneration and predominantly cystic tumours with solid areas fall into grey zone. This demanded a better system of classification for proper placements of gray zone tumours(5).

2. Material & Method

Present study was conducted at Index Medical College Hospital & Research Centre, Indore from June 2021 to May 2022. Due importance was paid to record inpatient number, age, parity, family history, menstrual status,

clinical history including presenting symptoms and signs, operation done, operative findings, radiological findings. Thorough gross examination was carried out and salient features were noted down.

The gross specimens received were fixed in 10 percent formalin for 24 hours. Gross examination was done carefully examining the outer surface and on-cut surface of ovary, looking for any cyst with its content and type of fluid filled inside, any solid area, papillary projections and growth. Associated tissue piece if received were also carefully examined and grossed. Multiple sections from each specimen were taken to include the representative area for histological examination. Sections were processed by routine paraffin method and blocks were cut at five micron thickness.

3. Results

Table 1: Incidence Of Ovarian Lesions:-

	Number of cases	Percentage
Gynecological cases	930	100%
Ovarian lesions	107	11.5%

Out of total gynecological specimens received at department of Pathology, ovarian lesions were 107 accounting for 11.2% of total gynecological cases.

Table 2: Incidence of Malignancy In Neoplastic Lesions:-

NATURE OF LESION	NUMBER OF CASES	PERCENTAGE	PERCENTAGE OF TOTAL CASES
BENIGN	23	58%	21.9%
BORDERLINE	02	04%	1.4%
MALIGNANT	15	38%	14.4%
TOTAL	40	100%	37.7%

Of 40 neoplastic cases, benign diagnosis were found in 23 patients (58%) followed by 15 malignant cases (in 38%) and 02 borderline cases (4.0%). These lesions constitute respectively 21.9%, 14.4% and 1.4% of total number of cases studied.

Table 3: Incidence of Various Associated Findings

S. No	Associated finding	No. of cases	Percentage (%)
1	Adenomyosis	10	9.4%
2	Ascitis	05	4.7%
3	Carcinoma Cervix	03	1.8%
4	Carcinoma Endometrium	01	0.4%
5	Chronic Cervicitis	13	12.2%
6	Endometrial Hyperplasia	10	9.3%
7	GIT Problem	04	3.2%
8	Hydrosalpinx	21	20.2%
9	Intramural Leiomyoma	17	17.3%
10	Paraovarian Carcinoma	01	0.4%
11	Prolapse Uterus	02	1.8%
12	Salpingitis	15	14.2%
13	Submucosal Leiomyoma	03	2.8%

14	Subserosal Leiomyoma	02	2.3%
	Total	107	100%

After histopathological examination of ovarian lesion, various associated pathological findings are also found. As uterus, cervix, fallopian tube and other tissue are also received along with ovarian tissue (depending upon the operation done). Of these hydrosalpinx is most common finding followed by intramural leiomyoma, salpingitis, chronic cervicitis, adenomyosis, endometrial hyperplasia, ascites, GIT problem, submucosal leiomyoma, subserosal leiomyoma, carcinoma cervix, prolapsed uterus, paraovarian carcinoma and endometrial carcinoma (in sequence).

4. Discussion

Even after all the advancements made in the fields of cancer screening and diagnosis, carcinoma of ovary remains the leading cause of mortality. In present study 214 were studied, out of these cases 133 cases (63%) were non neoplastic lesion and 81 cases (37%) were found to be neoplastic(6). Of these neoplastic lesions 47 cases were benign (58%), 04 cases (05%) were borderline and 30 were malignant tumours (37%) were recorded. A Study showed 66% benign and 34 % malignant tumours. Approximately similar results which showed that 75.2% ovarian tumours were benign, however this figure was only 59.2% (7).

Among benign tumours serous cystadenoma was most common finding (38.3%) followed by mature teratoma (29.8%) and mucinous cystadenoma (27.6%). Benign serous tumours including serous cystadenoma as commonest benign tumour constituting 42.85% followed by mucinous cystadenoma (31.42%) and mature teratoma (22.14%). Teratoma is the commonest benign ovarian neoplasm(8). Benign serous and mucinous tumours are common but benign endometrioid tumours are very rare(9). Similar results were reported in which serous tumours were the commonest followed by mucinous tumours.

5. Conclusion

Effective therapeutic management of ovarian malignant tumours continues to be a challenge to the oncologist. An accurate histopathological diagnosis combined with clinical staging will help in rendering prompt and appropriate treatment to the patient.

6. References

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