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Original Research Article

To study relation between size of ovary and various histomorphological patterns at SRMSIMS

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ABSTRACT

Background & Methods : A study which assess the relation between size of ovary and various histomorphological patterns. 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.
Result: Radiologically, of total 66 non neoplastic cases, 51 are reported as benign ovarian cyst, 05 as complex ovarian cyst, 04 as hemorrhagic cyst, 03 as bulky uterus and 02 as adenexal mass. 03 out of 05 cases of non-specific oophoritis are reported as benign ovarian cyst, all 01 cases of tuberculosis are reported as complex ovarian cyst. Of 07 follicular cysts, 05 are reported as benign ovarian cyst, 01 as complex ovarian cyst and one each as hemorrhagic cyst and bulky uterus. Of 24 cases diagnosed as simple serous cyst histologically, 20 are reported as benign ovarian cyst, 02 as bulky uterus and 02 as adenexal mass. 04 out of 04 cases of endometriosis are reported as benign ovarian cyst.
Study Designed: Observational Study.
Conclusion: Viable therapeutic administration of ovarian dangerous tumors keeps on being a test to the oncologist. A precise histopathological determination joined with clinical organizing will help in delivering expeditious and fitting treatment to the patient. The ovary is a successive site for essential malignancy. Because of various cell types and its unpredictable design, essential ovarian neoplasms are of different histological types.

1. Introduction

Morphological variety of ovarian tumors presents numerous difficulties. Consciousness of event and recurrence of these examples and cell types in different tumor and tumor like injuries is of fundamental indicative significance. At long last, clinical information, usable discoveries and gross highlights of the injuries may give significant and on occasion definitive analytic clues.[1]

The principal meeting of the WHO ovarian gathering without FIGO interest was held in St Petersburg in 1965.[2] Material was circled among the different members and talked about at a progression of gatherings that occurred somewhere in the range of 1967 and 1971. At last, the arrangement (and chose cases) was explored by a second gathering of pathologists, and the last characterization was received and distributed in 1973 as one of the natural 'blue books' of the International Histological Classification of tumor distributions of that era.[3]

A critical step toward a histogenesis-based characterization framework was made in 1973 with the distribution of the World Health Organization (WHO) Classification of Ovarian Tumours[4].

This characterization framework was refreshed in 1999 second time and 2003 third time and was affirmed by the International Society of Gynecological Pathologists.[5]. Two coding frameworks, the WHO International Classification of Diseases for Oncology and the College of American Pathologists Systematized Nomenclature of Medicine, are normally used to code the histology/morphology of

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Table 1: Co-relation of radiological findings with non neoplastic histopathological diagnosis

Histoogical Types	Benign Ovarian Cyst	Complex Ovarian Cyst	Adnexal Mass	Hemorrhagic Cyst Ovary	Bulky Uterus	Total
Non specific oopheritis	03	02	0	0	0	05
Tuberculous	00	01	0	0	0	01
Follicular cyst	05	01	0	01	01	07
Simple serous cyst	20	00	02	00	02	24
Luteal cyst	15	00	01	00	01	16
Hemorrhagic cyst	05	01	00	03	00	09
Endometriosis	03	01	00	00	00	04
Total	51	06	03	04	04	66

Table 2: Correlation of Radiological Findingswith Neoplastic Histopathological Diagnosis

Histoogical types	Adnexal mass	Benign ovarian cyst	Dermoid cyst	Neoplastic ovarian mass	Total
Benign	02	06	06	10	24
Borderline	00	00	00	01	01
Malignant	03	01	01	13	18
Total	05	07	07	24	43

tumours.[6]

This framework is superior to other past arrangement of characterization as all angle of tumors can be put in a portion of the class. Additionally as it depends on the cell of beginning, so frequency and age related changes could be better understood.[7]

2. Materials and Methods

The present study is based on histomorphological evaluation in 107 cases of Ovarian neoplastic and non-neoplastic lesions received at the department of Pathology of 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.

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

Radiologically, of total 66 non neoplastic cases, 51 are reported as benign ovarian cyst, 05 as complex ovarian cyst, 04 as hemorrhagic cyst, 03 as bulky uterus and 02 as adenexal mass. 03 out of 05 cases of non specific oophoritis are reported as benign ovarian cyst, all 01 cases of tuberculosis are reported as complex ovarian cyst. Of 07 follicular cysts, 05 are reported as benign ovarian cyst, 01 as complex ovarian cyst and one each as hemorrhagic cyst and bulky uterus. Of 24 cases diagnosed as simple serous cyst histologically, 20 are reported as benign ovarian cyst, 02 as bulky uterus and 02 as adenexal mass. 04 out of 04 cases of endometriosis are reported as benign ovarian cyst.

Out of 24 benign tumours, 10 are reported as neoplastic ovarian mass, 06 as dermoid cyst, 06 as benign ovarian cyst and 02 as adenexal mass. Of 18 pathologically diagnosed malignant tumours, 13 are reported as neoplastic ovarian mass, 01 as adenexal mass,one each as dermoid cyst and as benign ovarian cyst. 01 out 01 borderline tumours are reported as neoplastic ovarian mass radiologically.

4. Discussion

Ovarian tumors in the pediatric age bunch are not infrequent,[8] the occurrence to be six percent of every single ovarian tumor. Sawai and Sirsat recorded the rate as 11.2% (Sawai MM et al, 1973).[9]

Of non neoplastic injuries most basic finding in our investigation is basic serous pimple (36%) trailed by luteal growth (25%). R Jha et al[10] discovered 30.3% basic serous growth and 22.7% luteal sore. In their investigation vague oophoritis was found in 9.0% of cases while we found in 7.5% of the cases. In R Jha.et al study, 78.9% of serous tumors were amiable and 21.1% were dangerous, comparably 77.8% of mucinous tumors were kind neoplasms while 22.2% were malignancies similar to introduce study, in serous 93% were favorable and 7% were harmful. In Nital.et al[11] concentrate the same of our examination among mucinous tumors 12(80%) were generous, 1(6.7%) fringe and 2(13.3%) harmful. In present

investigation, out of 12 mucinous tumors, 10 (83.3%) were favorable, 1(8.3%) fringe and 1(8.3%) was dangerous.

Ovarian tumors are the most engaging neoplasms regarding root, clinical introduction and harmful potentiality.[12] Accordingly, it excited interest and challenges to pathologists and clinicians in regards to their unusual substance and histogenesis. So a definite investigation of morphological examples of ovarian tumors is required for arranging the treatment methodology and to survey the anticipation.

5. Conclusion

Viable therapeutic administration of ovarian dangerous tumors keeps on being a test to the oncologist. A precise histopathological determination joined with clinical organizing will help in delivering expeditious and fitting treatment to the patient. The ovary is a successive site for essential malignancy. Because of various cell types and its unpredictable design, essential ovarian neoplasms are of different histological types.

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7. Conflict of Interest

The authors declare that they have no conflict of interest.

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