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## To Determine the Incidence of Ovarian Masses in relation to age of patient (in relation to four target symptoms i.e. Abdominal Pain, Abdominal Swelling, Gastrointestinal Symptoms and Pelvic Pain)

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### Abstract

**Method:** All the patients with symptoms suggestive of adnexal mass were taken for the study and among these patients with ovarian pathology were subsequently included in the study. In all about 60 patients suggestive of adnexal mass with ovarian pathology were included for this study.

**Result:** Beside the ovarian mass the incidence of other adnexal masses were ectopic pregnancy (40%), tubercular mass (13.33%), hemorrhagic corpus luteum cyst (13.33%) and remaining cervical leiomyoma, broad ligament cyst, PID, appendicular lump and malignant fibrous histiocytoma constituting 6.67% each.

**Conclusion:** The overall incidence of ovarian tumour among the adnexal masses was 4.28%, but the incidence of histologically proven ovarian tumour was 3.81%. The incidence of benign tumour was 80%. The incidence of malignant tumour was 20%. Among the remaining adnexal masses (15), the percentage of ectopic pregnancy was 40%, tubercular mass (13.33%), hemorrhagic corpus luteum cyst (13.33%) and rest of the masses constituted 6.67% each. The incidence of ovarian tumour associated with pregnancy was 6.67%.

**Keywords:** Ovarian masses, abdominal pain, swelling & gastrointestinal

### Introduction

Ovarian tumours during pregnancy is very rare. Significant number of pregnant women with adnexal mass are symptomatic. The mass is usually found on routine physical examination during ultrasound or at the time of cesarean section. Those who are symptomatic mostly present with acute or chronic abdominal pain others have obstetric complications like obstructed labour. Ovarian germ cell tumour like dysgerminoma is common during pregnancy [1].

Among the adnexal masses, ovarian tumors is the most treatable and challenging. Solid intraovarian masses include benign ovarian tumors, such as cystic teratomas, fibromas, thecomas, malignant ovarian tumors, etc. Complex ovarian masses are usually ovarian in origin and in premenopausal women, most commonly represents hemorrhagic cyst or endometriomas [2].

In the human embryo, the ovary appears as a genital ridge about 1 month after fertilization. The primitive mesoderm gives rise to the mesothelial covering of the ovary and of the peritoneum, the so called germinal epithelium from which epithelial ovarian cancers and primary peritoneal cancers are thought to arise. These cells arise along the medial and ventral borders of the mesonephros from which the mesenchymal tissues of ovary are derived. The mesenchymal tissues give rise to the ovarian stroma. The germ cells originate from the primitive streak and migrate from the yolk sac endoderm towards the developing ovary. The ovarian cortex develops by 8 to 9 weeks [3].

### Material & Method

#### Duration- from

The present study comprised of cases of palpable abdominal and pelvic adnexal masses in women, which were admitted in the Department of Obstetrics & Gynaecology of Grant Govt. Medical College and Sir JJ Group of Hospitals, Mumbai, during a period from Jan 2020 to June 2020.

All the patients with symptoms suggestive of adnexal mass were taken for the study and among these patients with ovarian pathology were subsequently included in the study. In all about 60

patients suggestive of adnexal mass with ovarian pathology were included for this study.

### Inclusion Criteria

All the patients coming with palpable abdominal and pelvic adnexal mass in the Gynecologic OPD were included in the study irrespective of age, parity, symptomatology, marital status, etc.

### Exclusion Criteria

The patients with uterine origin of mass were excluded from the study.

A detailed history of each case was recorded with reference of age, religion, parity, socioeconomic status, symptomatology, marital status, menstrual history, obstetrics history, family history, history of contraceptive method, method adopted and history of present and past, medical and surgical illness. A special attention was given to those patients presenting with the four target symptoms viz. abdominal pain, abdominal mass, GIT symptoms and pelvic pain.

Detailed general, systemic, per abdomen, per speculum, per vaginum, and per rectal examination was done.

Routine blood and urine examination were done in every patient and special investigations like USG (both pelvic and whole abdomen), CT scan, Color Doppler, CA-125 estimation were done as required.

After preoperative evaluation, the patients were taken for surgery and the intraoperative findings about the origin of mass was noted down. Details to size, weight, number of tumors, type of tumor and secondary changes in tumor were studied.

After surgical excision and examination of gross nature of the mass, it was sent for histopathological examination and the biopsy reports were studied and inferences noted down.

### Results

From the above table it is evident that out of 1049 cases admitted in gynaecologic ward from September 2005 to September 2006 there are 60 cases of palpable abdominal and pelvic masses giving the incidence as 5.71%.

**Table 1:** Incidence of Ovarian Tumours

Total number of admissions	Total Number of Ovarian Masses	Incidence
1049	45	4.28%

From the above, it can be seen that the total incidence of ovarian tumours of the total number of admissions comes to 4.28%.

**Table 2:** Incidence of Ovarian Tumours among Adnexal Masses

Total number of admissions	Number of patients with ovarian tumours (histologically proven)	Incidence
1049	40	3.81%

The incidence of histologically proven ovarian tumour is 3.81%.

**Table 3:** Incidence of other adnexal masses

Adnexal Masses	No.	%
Tubercular mass	2	13.33
Cervical leiomyoma	1	6.67
Hemorrhagic corpus luteum cyst	2	13.33
Ectopic pregnancy	6	40.00
Broad ligament cyst	1	6.67
PID	1	6.67
Appendicular lump	1	6.67
Malignant fibrous histiocytoma	1	6.67
Total	15	100.00

Beside the ovarian mass the incidence of other adnexal masses were ectopic pregnancy (40%), tubercular mass (13.33%), hemorrhagic corpus luteum cyst (13.33%) and remaining cervical leiomyoma, broad ligament cyst, PID, appendicular lump and malignant fibrous histiocytoma constituting 6.67% each.

**Table 4:** Distribution of patients in relation to target symptoms

Target symptoms	Number of Patients (N=45)	Percentage
Abdominal pain	26	57.77
Abdominal swelling	20	44.44
GI symptoms	11	24.44
Pelvic pain	2	4.44

From the above table, it is evident that 57.77% patients presented with abdominal pain, 44.44% with abdominal swelling, 24.44% with GI symptoms and 4.44% with pelvic pain.

### Discussion

In the present study after thorough screening of patients presenting as palpable abdominal / pelvic adnexal mass, the incidence of ovarian tumour was 4.28% [4]. Among 45 patients the histopathology of 5 patients could not be done, due to inoperability of the tumour, the incidence of histopathologically

proven tumour turned out to be 3.81% [5].

In my study, there was an increased incidence of ovarian tumours, the reason being that J.J.Group of Hospitals being a tertiary referral center and also being associated with CAMA and Albless hospital with a working Oncology department. Maximum malignant cases are referred here from periphery [6].

The overall incidence of patients presenting with palpable abdominal and pelvic adnexal mass was 5.71%. In the present study the overall incidence of histologically proven benign tumour was found to be 80% and that of malignant was 20%. In Dubey (1984) [4, 7] series the incidence was 81.05% and 18.64% respectively. In series the incidence was 79.8% and 20.2% [8]. According to Novak 80-85% of ovarian tumours are benign.

### Conclusion

The overall incidence of ovarian tumour among the adnexal masses was 4.28%, but the incidence of histologically proven ovarian tumour was 3.81%. The incidence of benign tumour was 80%. The incidence of malignant tumour was 20%. Among the remaining adnexal masses (15), the percentage of ectopic pregnancy was 40%, tubercular mass (13.33%), hemorrhagic corpus luteum cyst (13.33%) and rest of the masses constituted 6.67% each. The incidence of ovarian tumour associated with pregnancy was 6.67%.

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