

**EVALUATION OF ADNEXAL MASS IN REPRODUCTIVE  
AND  
PERIMENOPAUSAL AGE GROUP**

*Dissertation submitted to*

**THE TAMILNADU  
Dr. M.G.R. MEDICAL UNIVERSITY**

*In partial fulfillment of the requirements  
For the award of*

**M.S. DEGREE – BRANCH – II  
OBSTETRICS AND GYNAECOLOGY**

**Reg No: 221716009**



**THE TAMILNADU Dr. M.G.R. MEDICAL UNIVERSITY  
MADRAS MEDICAL COLLEGE, CHENNAI.**

**MAY - 2020**

## **BONAFIDE CERTIFICATE**

This is to certify that the dissertation entitled “**EVALUATION OF ADNEXAL MASS IN REPRODUCTIVE AND PERIMENOPAUSAL AGE GROUP**” is a bonafide record of original work done by **Dr. S.PREETI PUSHPAM**, under the guidance of **Dr.DEVIKA, MD, OG**, Professor, Madras Medical College and Hospital, Chennai, in partial fulfillment of the requirements for MS Degree in Obstetrics and Gynecology branch II examination of the Tamil Nadu Dr.MGR Medical university to be held in MAY 2020. The period of post graduate study and training from MAY 2017 to MAY 2020.

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## DECLARATION

I hereby declare that the dissertation entitled **“EVALUATION OF ADNEXAL MASS IN REPRODUCTIVE AND PERIMENOPAUSAL AGE GROUP”** is a bonafide research work done by me at **Madras Medical College and Hospital, Chennai** during the period from June 2018- May2019 under the guidance and supervision of **Dr.DEVIKA, MD, OG**, Professor, Madras Medical College and Hospital, Chennai. This dissertation is submitted to **The Tamilnadu Dr.M.G.R. Medical University**, towards partial fulfillment of the requirement for the award of **M.S. Degree (BRANCH-II) in OBSTETRICS & GYNAECOLOGY**

I have not submitted this dissertation on any previous occasion to any University for the award of any Degree.

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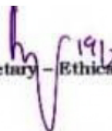
The Institutional Ethics Committee has considered your request and approved your study title **“EVALUATION OF ADNEXAL MASS IN REPRODUCTIVE AND PERIMENOPAUSAL AGE GROUP” – No. 23032018**

The following members of Ethics Committee were present in the meeting held on **13.03.2018** conducted at Madras Medical College, Chennai 3

- |  |                      |
|--|----------------------|
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| 13. Tmt.Arnold Saulina, MA., MSW.,   | : Social Scientist   |
| 14. Thiru.K.Ranjith, Ch-91   | : Lay Person         |

We approve the proposal to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.

  
Member Secretary – Ethics Committee

## CONTENTS

<b>SL. No.</b>	<b>TITLE</b>	<b>PAGE No.</b>
1.	INTRODUCTION	1
2.	AIMS OF STUDY	3
3.	REVIEW OF LITERATURE	7
4.	RESULTS	31
5.	DISCUSSION	71
6.	SUMMARY AND CONCLUSION	77
7.	ANNEXURES	79
	PLAGIARISM BIBLIOGRAPHY ABBREVIATIONS MASTER CHART	

## LIST OF TABLES

<b>SL. No.</b>	<b>TITLE</b>	<b>PAGE No.</b>
1.	AGE DISTRIBUTION	32
2.	AGE OF MENARCHE	33
3.	PARITY	35
4.	LIVE BIRTHS	36
5.	MODE OF DELIVERY	38
6.	ST	39
7.	SYMPTOMS	40
8.	CLINICAL FINDINGS	42
9.	PER SPECULUM FINDINGS	44
10.	PER VAGINUM FINDINGS	45
11.	PER ABDOMEN FINDINGS	47
12.	CLINICAL DIAGNOSIS	49
13.	UGS	51
14.	UTERINE LENGTH	53
15.	UTERINE BREADTH	54
16.	UTERINE WALL THICKNESS	55
17.	LOCULI IN THE CYST	56

18.	PRESENCE OF COMPONENTS	57
19.	PAPILLARY PROJECTIONS	58
20.	CA-125	59
21.	INTRA OPERATIVE FINDINGS	61
22.	SURGICAL PROCEDURE PERFORMED	63
23.	HPE REPORT	65
24.	AGE AND MALIGNANCY	67
25.	TUMOR MARKERS AND MALIGNANCY	69



## LIST OF ABBREVIATIONS

NVD	-	Normal vaginal delivery
LSCS	-	Lower segment caesarian section
ST	-	Sterilization
P	-	Parity
L	-	Live
D	-	Done
ND	-	Not done
RF-F	-	Right forniceal fullness
LF-F	-	Left forniceal fullness
AF-F	-	Anterior forniceal fullness
FF	-	Fornix free
AV	-	Anteverted
RV	-	Retroverted
NS	-	Normal size
C, V-H	-	Cervix,vagina-healthy
TAH	-	Total abdominal hysterectomy
BSO	-	Bilateral salphingo-oophorectomy
ROC	-	Right ovarian cystectomy
LOC	-	Left ovarian cystectomy
NDVH	-	Non decent vaginal hysterectomy
S	-	Septations
M	-	Multilocular

# **EVALUATION OF ADNEXAL MASS IN REPRODUCTIVE AND PERIMENOPAUSAL AGE GROUP**

## **ABSTRACT**

### **INTRODUCTION:**

The ovaries are the organs which can give rise to both benign and malignant tumors through the life of women. The ovarian cancer remains to hold the sixth leading cause of cancer related deaths. The most important is the family history as 10% of patients have inherited genetic predisposition. Ovarian masses are a frequent finding in general gynecology and most are cystic. Histologically ovarian cysts are often divided into neoplastic growth (ovarian cystic neoplasms) and those created by disruption of normal ovulation (functional ovarian cysts). Angiogenesis is an essential component of both the follicular and luteal phases of ovarian cycles. It is also a component of various pathologic ovarian cycles. It is also a component of various pathologic ovarian processes including follicular cyst formation, PCOS, ovarian hyperstimulation syndrome, benign and malignant ovarian neoplasms. Functional ovarian cysts make up a large proportion. Neoplasms fill the remaining category which are predominantly benign.

For differentiation between benign and malignant adnexal masses the RMI calculation method is usually done.

$$\text{RMI} = \text{U} \times \text{M} \times \text{Ca} \times 125$$

U = ultrasonographic index

M = menopausal status

The patients are divided into three groups according to RMI values

< 25 - low risk

25-200 - intermediate risk

> 200 - high risk

### **IOTA (INTERNATIONAL OVARIAN TUMOR ANALYSIS)**

#### **Simple Rules:**

Rule 1: If one or more M features are present in absence of B feature(s), the mass is classified as malignant.

Rule 2: If one or more B features are present in absence of M feature(s), the mass is classified as benign.

Rule 3: If both M features and B features are present, or if no B or M features present, the result is inconclusive.

M-RULES

B-RULES

## **M-RULES**

M1 – Irregular solid tumor

M2 – Presence of ascites

M3 – Atleast four papillary structures

M4 – Irregular multilocular solid tumor with largest diameter  $\geq 100$  mm

M5 – Very strong blood flow (color score 4)

## **B-RULES**

B1 – Unilocular

B2 – Presence of solid components where the largest solid component has a largest diameter  $< 7$ mm

B3 – Presence of acoustic shadows

B4 – Smooth multilocular tumor with largest diameter  $< 100$  mm

B5 – No blood flow (color score 1)

## **AIMS & OBJECTIVE:**

Primary Objective: The primary objective of my study is to evaluate the ADNEXAL MASS in reproductive and perimenopausal age

group in view of analyzing the percentage of malignant adnexal tumors in this age group.

### **METHODOLOGY:**

The study included patients in the reproductive and perimenopausal age group admitted in ISOKGH for evaluation in 1 year duration.

From all patients basic data (age, occupation, education and address) and gynaecological data (menarche age, parity, last menstrual cycle, symptoms and family history) were obtained.

Further more the blood analysis, tumor marker, clinical and ultrasonography, CT findings of pelvic organs and hpe reports were performed.

The risk of malignancy index (RMI) for all patients was calculated.

IOTA – Simple rules. Reliable triage test to differentiate between benign and malignant masses.

The outcome for all patients assessed.

### **Inclusion Criteria:**

All reproductive and perimenopausal age group admitted in ISOKGH.

**Exclusion Criteria:**

The patients below 15 and above 50

The patients treated as outpatients.

**RESULTS AND CONCLUSION:**

- Adnexal mass presentation was found to be more common in the middle age females particularly in the perimenopausal women and the usual presentation was with symptoms of abdominal pain and distension along with dysfunctional uterine bleeding.
- Parity and sterilization procedures did not have any association with the occurrence of adnexal mass
- Adnexal mass did not have any associated pathology in cervix, vagina or uterus
- Per vagina findings shows forniceal fullness in most of the patients with adnexal mass
- Right sided ovarian mass found to be more common than left side or bilateral
- Right adnexal mass was the most common clinical diagnosis
- Right sided ovarian cyst was the most common USG finding

- Mean uterine length and breadth was almost in normal size
- Multi-loculated septa was seen in 30% of the patients in the mass lesion
- Solid components was present in 14% of the lesions
- Papillary projections was seen in 12% of the lesions
- Of all the adnexal mass 15% were malignant lesion, 6% were borderline lesions and the remaining were benign lesions

Simple Ovarian cyst and mucinous cystadenoma were the most common benign lesions and the most common malignant lesion was cystadenocarcinoma.

## **REVIEW OF LITERATURE**

Adnexal uteri, the appendage of the uterus, which are structurally and functionally related to such as fallopian tube, ovaries and the ligaments of the uterus, which suspends it in pelvic cavity. Adnexal masses present as wide range of conditions varying from gynaecological and non- gynaecological sources the initial detection and evaluation of adnexal masses requires thorough history, physical examination, laboratory tests, radiographic studies in detail. Patients presenting with adnexal mass have spectrum of symptoms a women with abdominal or pelvic pain, vaginal bleeding and positive pregnancy test indicates towards the ectopic pregnancy that warrants an immediate attention and intervention.

A patient with severe abdominal or pelvic pain, intermittent in nature, mostly unilateral associated with nausea and vomiting points towards ovarian torsion, which again is an surgical emergency. Patients presenting with nausea, vomiting, fever, abdominal pain, purulent vaginal discharge may indicates pelvic inflammatory disease or tubo-ovarian abscess. Patients presenting with amenorrhea or oligomenorrhea or menorrhagia with obesity and features of hirsutism may have polycystic ovarian syndrome(PCOS).



Abnormal uterine bleeding, dysperunia, worsening with menses suggest of endometrioma, leiomyoma presenting as dysmenorrhea, menorrhagia.

Malignant ovarian tumor presenting in later stages with varying symptoms like abdominal features like bloating, constipation, fatigue, indigestion, abdominal pain or pelvic pain, urinary frequency or urgency or incontinence, weight loss, upon examining, abdominal or adnexal mass, lymphadenopathy, ascitis, pleura l effusion can be noticed.

Extensive investigation required for ovarian tumors such as ultrasonography preferentially transvaginal and abdominal USG, magnetic resonance imaging(MRI),CT of head, abdominal, pelvis to rule out metastasis.

Detailed medical history should be elicited about tubal ligation or other tubal surgeries, pelvic inflammatory disease or use of any intrauterine contraceptive devices, since these are the factors which increase the chances of ectopic pregnancy.

Family history of breast, ovarian, endometrium or colon cancer should be enquired, hereditary non-polyposis colorectal cancer,an autosomal dominant disorder, which increase the gasrointestinal, ovarian, endometrial, urological cancers.

Certain heritage of population, such as ashkenazi jews are diagnosed more with bilateral breast cancer, ovarian cancer.

The examination should include, cervical, supraclavicular, axillary and inguinal lymph nodes, respiratory system examined to evaluate pleural effusion in detail examination of per abdomen done to assess for masses, as cistes, tenderness, hepatospl enomegaly.

Pelvic examination needs speculam examination, bimanual examination done to assess the location, size, consistency, mobility and tenderness of uterus and both adnexa. A rectovaginal examination is must in the cases of adnexal mass to elicit tenderness or nodularity of the uterosacral ligaments. The differential diagnosis of adnexal masses is extensive, an adnexal masses can be of gynaecological or non-gynaecological origin, and to keep other possibilities in the differential.

Benign adnexal masses

Gynaecological origin

Functional cyst

Uterine fibroid

Endometriosis

Tubo-ovarian abscess

Hydrosalpinx

Mucinous cystadenoma

Serous cystadenoma

Mature cystic teratoma

Ectopic gestation

### Non-gynaecological origin

Paratubal cysts

Diverticular abscess

Nerve sheath tumor

Urinary tract diverticula

Pelvic kidney

Inclusion cyst

Appendiceal abscess

## MALIGANNT ADNEXAL MASSES

### Gynaecological origin

- Ovarian cancer
- Fallopian tube cancer
- Endometrial cancer
- Uterine sarcoma

### Non-gynaecological origin

- Colorectal cancer
- Appendiceal cancer
- Retroperitoneal sarcoma
- Metastatic cancer

The primary modality of evaluation of adnexal masses is an ultrasound, both transabdominal and transvaginal USG performed. TVS gives better resolution because of its close proximity to the tissue mass, better description, better image quality, detailed anatomy, better visualization of the pelvic structures and more information about the internal texture of masses, large pelvic masses require TAS for better mapping.

Certain goals can be set for diagnostic ultrasound of the adnexal masses

- To identify hemorrhagic corpus luteum, functional cysts, hydrosalpinges and peritoneal adhesive disease and avoid operative intervention for them if possible
- To differentiate benign from malignant tumor of ovary and fallopian tube.
- Also to differentiate uterine and gastrointestinal pathology from ovary and fallopian tube.

## GRAY SCALE ULTRASOUND

Many scoring systems are used to discriminate benign from malignant tumors, elements included are solid elements, cyst wall thickness, number, septations, presence of ascites.

Numerical scores are applied and masses that score higher than a certain cutoff are considered potentially malignant.

A septum is defined as thin strand of tissue running across the cyst cavity from one internal surface to the other side, a cyst without septum is classified as unilocular.

Solid refers to an object that exhibits a higher echogenicity that adjacent myometrium and blood flow to the solid tissue can be detected in color doppler ultrasonography.

Any solid projections into cyst cavity from cyst wall with a length greater than or equal to 3mm,if there is at least are solid papillary projections, the wall is defined as irregular or the wall is defined as smooth.

All ovarian masses can be categorised into 5 classes based on presence of septa and solid component.

- ❖ Unilocular cyst,cyst without septa or solid component
- ❖ Unilocular cyst with solid component
- ❖ Multilocular cyst with atleast one septum but no solid component
- ❖ Multilocular solid cyst, multiloculated cyst with solid component
- ❖ Solid tumor, a tumor where 80% or more of the components are solid. Unilocular cyst are mostly follicular cysts, hemorrhagic corpus luteum cyst, benign serous tumor, endometrioma and cystic teratoma, have low risk for

malignancy at 0.96% Corpus luteum cyst, endometrioma and mature cystic teratoma have typical complex cyst, in which cyst contains non-viable components.

Bleeding corpus luteum leads to hemorrhagic corpus luteal cyst in acute cases clotted blood magnifies as intensely echogenic, homogenous material, avascular in chronic phase clot retracts with fibrin strands results in pattern of reticular, honeycomb, cobweb, lacy, fish net and sponge.

Endometriosis in ovary gives characteristic USG findings of “ground glass’ appearance, which indicates of chronic repetitive hemorrhage within the cyst. certain endometriosis have atypical presentation of calcification, fluid fluid level, hyperechoic mural irregularity, heterogeneity endometriomas in elder patients have malignant transformation to endometrioid or clear cell carcinoma, thus patients should be carefully evaluated in order to exclude malignancy.

Dermoid or dermoid cyst often referred as mature cystic teratoma, shows typical focal high echogenic nodules, heterogenous internal echoes in the cyst with acoustic shadows, and multiple hyperechoic fine lines and dots, which are due to reflection of clumps of hair, sebum or fat component within the mass.

Few atypical presentation like fluid fluid level, anechoic cyst and multiple floating globules can be detected.

Most of the serous cystadenocarcinoma, endometrioid adenocarcinoma, clear cell carcinoma, serous borderline malignancy and cystadenofibroma are often categorized as unilocular solid cysts, according to simple IOTA, identification of PPV for malignancy of 37%, sensitivity of 16% and specificity of 90%.

Multilocular cyst are mostly mucinous cystadenoma, endometrioma, theca luteal cyst, mature cystic teratoma, polycystic ovarian syndrome, ovarian hyperstimulation syndrome and mucinous borderline malignancies.

Mucinous cystadenoma usually appears as multilocular cysts containing different echogenic materials, fine anechoes to diffuse low echogenic with floating echogenic foci that suggestive of variety of mucin component.

Theca lutein cysts are mostly bilateral, reflects a form of ovarian hyperstimulation resulting from abnormally elevated levels of serum b-hCG, hormonal stimulation of assisted reproductive techniques.

Most sex cord tumours such as granulosa cell tumor, fibroma, fibrothecoma, sclerosis, stromal tumour, surface epithelial tumours such



as brenner tumour, serous papillary carcinoma, malignant germ cell tumours such as dysgerminoma, endodermal sinus tumour, lymphoma, metastatic tumour are categorized as solid tumor.

Fibroma and fibrothecoma are typical benign tumor, appears as solid masses, characteristic ultrasonography features are round, oval or lobulated hypoechoic mass with mild to moderate vascularity. Brenner tumour has similar USG finding as fibroma and fibrothecoma, sclerosing stromal tumor is a type of rare benign tumor, with USG features of presence of solid or multilocular solid mass with marked peripheral vascularity.

Serous papillary carcinoma present as irregular solid mass spreading along the surface of the ovary or peritoneum.

Dysgerminoma and endodermal sinus tumor are malignant germ cell tumor with large solid component in particular dysgerminoma appear as large lobulated solid tumor with prominent fibrovascular core.

Krukenberg tumor is traditionally defined as ovarian metastatic tumour composed of mucin-filled signet cells associated with the proliferation of cellular non-neoplastic stroma originating from stomach, colon, caecum, appendix or breast, those with primary tumor in colon,

rectum, appendix or biliary tract are mostly multilocular or multilocular solid masses with some amount of necrosis.

The accurate characterization of ovarian masses is a common challenge in clinical practice to simplyfy and classify the benign and malignant masses, similar pattern recognition approach to ultrasound is required, if diagnosed as unilocular cysts, unilocular solid cyst, multilocular cyst, multilocular solid cyst and solid tumour.

**IOTA study (International Ovarian Tumour Analysis)** is a multicentre collaborative project for the pre-operative characterisation of ovarian tumours.

**IOTA phase 1:** The **first phase** of IOTA was conducted between 1999 and 2002. Several new mathematical models were developed based on the prospectively collected data of 1066 patients with a persisting adnexal tumour from 9 European centres (1). Between 2002 and 2005 three centres continued the prospective collection in order to be able to perform an internal validation of mathematical models developed in IOTA phase 1. In this so-called IOTA **phase 1b** study a dataset of 507 new patients was prospectively collected in 3 out of the 9 original IOTA centres (2). All models proved to perform excellently with areas under the ROC curves of more than 0.94.

**IOTA phase 2:** The **second phase** of IOTA consisted of an external validation of the models and this was conducted between 2005 and 2007. The diagnostic algorithms were prospectively validated on 1938 patients with adnexal tumours in 19 centres in Belgium, Italy, UK, Sweden, Poland, Czech Republic, Canada, and China (3). A first analysis showed that overall performance of the logistic regression models was excellent (area under the ROC curve 0.94). We concluded that a subgroup of “uncertain” tumours needs a reliable second stage test in order to help even experienced ultrasound examiners.

**IOTA phase 3:** The **third phase** of the IOTA study started in 2010.

The aim was to validate the added value of mathematical models as new diagnostic tool in the prediction of ovarian cancer in clinical practice in centres that were involved in IOTA phase 1 or 2. It is a temporal validation of IOTA mathematical models as a first stage examination. However in cases where the prediction is unreliable, we aim to further improve the predictive performance of this diagnostic tool with second stage tests, such as new sets of tumor markers, proteomics and three-dimensional Power Doppler ultrasonography.

**IOTA phase 4:** Randomised controlled trial in 7 London hospitals. Clinical implementation of IOTA logistic regression models LR2 vs. the

routinely used Risk of Malignancy Index. Assessment of efficacy, referral pattern and costs.

## **ULTRASOUND EXAMINATION**

A standardized ultrasound examination following the IOTA protocol is carried out.

All ultrasound variables are included in the dedicated software. In the database 0 always means NO and 1 always means YES.

The adnexal lesion is that part of an ovary or of an adnexal mass that is judged by ultrasonography to be not consistent with normal physiology. This can be a persistent unilocular cyst, surrounded by normal looking ovarian stroma with some follicles. In this case the whole ovary containing the cyst is the 'ovary', whereas the unilocular cyst is the 'lesion'. Both are measured and the cyst is described as being 'unilocular' and not 'unilocular-solid'. In other cases the lesion is separate from the ovary (e.g. hydrosalpinx). Again, both ovary and lesion are measured separately. In other cases no normal ovarian stroma is seen. In these cases the lesion and the ovary are undistinguishable and the measurement of lesion and ovary will be the same.

## Unilocular cyst



Measurements (in mm): The ovary in two perpendicular planes

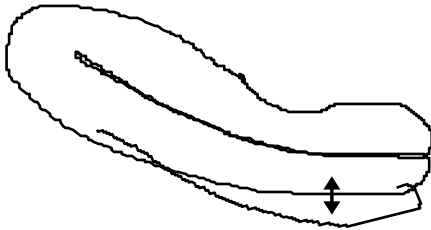
The lesion in two perpendicular planes

The volume of the tumor is calculated from the three diameters in two perpendicular planes

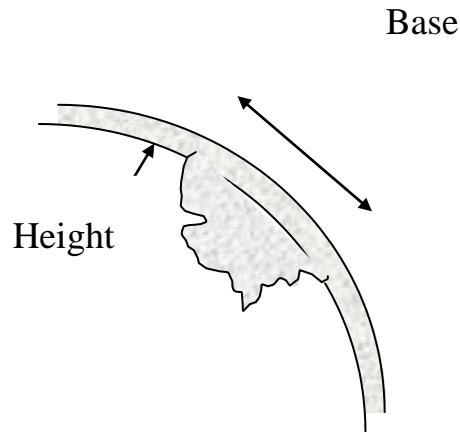
- The presence of ascites (*i.e. fluid outside the pouch of Douglas*) is noted (yes/no).

- Fluid in the pouch of Douglas is measured in the sagittal plane (the largest anteroposterior diameter is given).

(see Figure)



- An incomplete septum (as seen in hydrosalpinges) is defined as a thin strand of tissue running across the cyst cavity from one internal surface to the contralateral side, but is not complete in some scanning planes. If a cyst only has incomplete septa, it is unilocular, despite the fact that in certain sections the cyst appears to be multilocular.
- Solid means echogenicity suggesting the presence of tissue (e.g. the myometrium, the ovarian stroma, myomas, fibromas). Blood clots and the presence of solid tissue can be distinguished by looking for internal movement when gently pushing the structure with the transducer. The presence of blood flow (with the appropriate color Doppler settings) is diagnostic for solid tissue. The absence of flow is not definitive. In cases of doubt the lesion should be classified as solid.
- Solid papillary projections are defined as any solid projections into the cyst cavity from the cyst wall greater than or equal to 3 mm in height. Base



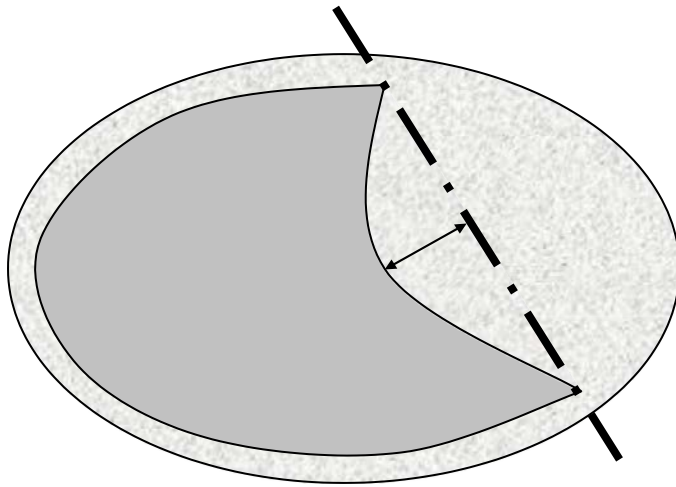
If it is unsure whether solid papillary projections or an incomplete septum are present, the ‘worse case scenario’ is used. E.g. ‘cogwheel excrescences’ and ‘beads-on-a-string’ (as seen in hydrosalpinges) should be classified as papillary excrescences if their height is greater than or equal to 3 mm. The ‘white ball’ in a dermoid (i.e. Rokitansky node), should not be classified as a solid papillary projection.

*The ‘sludge’ on the internal walls of endometriotic cysts is not regarded as a papillary projection. In*

*these cases the internal walls are usually ‘irregular’.*

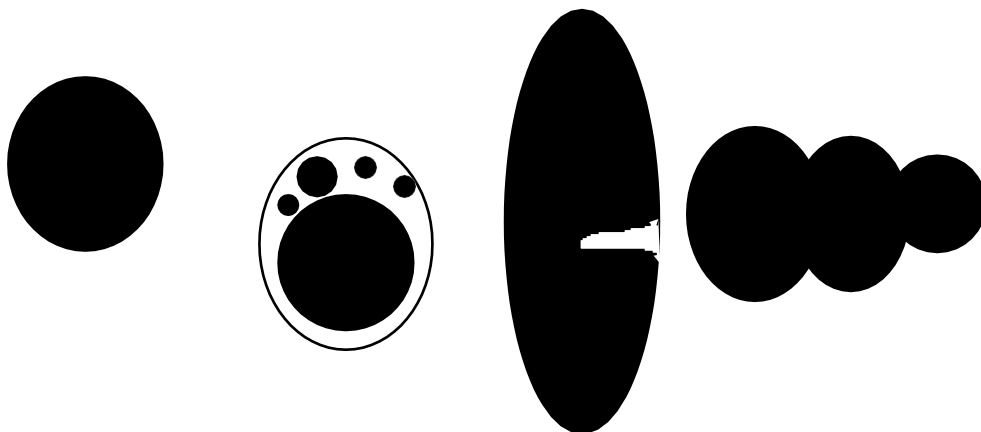
- The number of separate papillary projections is noted(1/2/3/more).
- The presence of flow within some of these projections is noted(yes/no).
- Solid papillary projections are described as being ‘smooth’ or ‘irregular’ (e.g. cauliflower-like). In some cases it is difficult to judge whether it is a papillary projection and from which point to measure the

projection. In these cases it may be helpful to use an imaginary line as shown in the following schematic drawing:



All lesions are qualitatively classified into one of 5 categories:

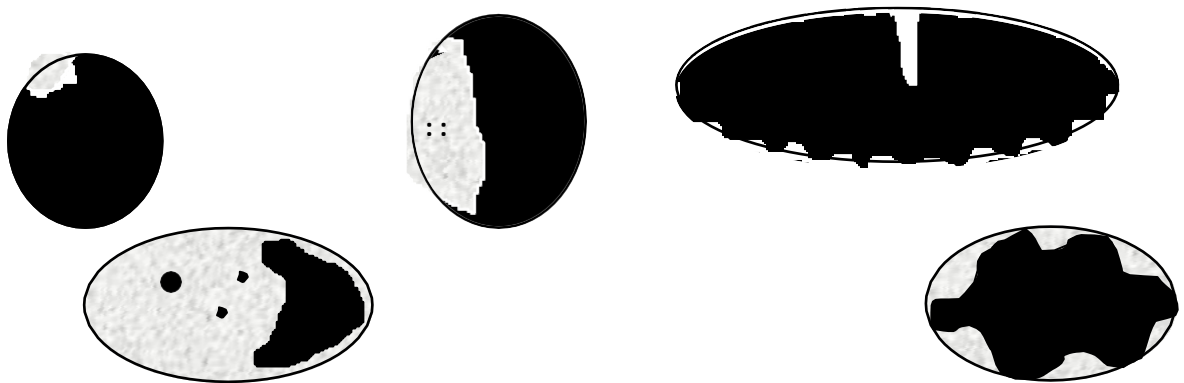
1. unilocular (a unilocular cyst without septa and without solid parts or papillary structures). Normal ovarian stroma is not regarded as 'solid' (e.g. a peritoneal cyst, containing a normal ovary, is unilocular and not unilocular-solid).



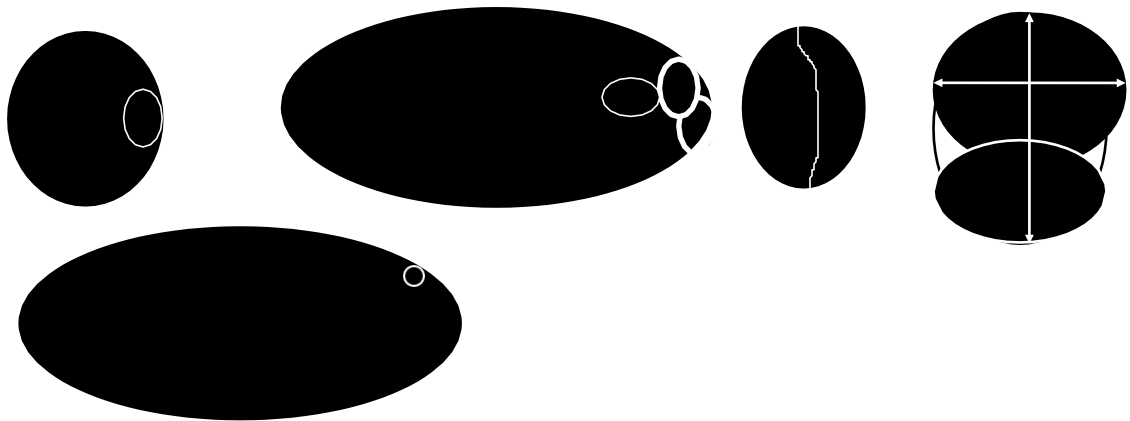
incomplete septum; e.g. in hydrosalpinx



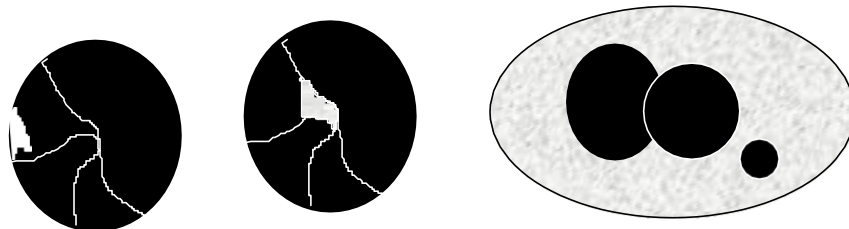
2 unilocular cyst with solid component (a unilocular cyst with a measurable solid component or at least one papillary structure). This category may include pyo- or hydrosalpinges with the so-called ‘beads-on-a-string’ or ‘cogwheel’ appearance if  $\geq 3$  mm. If the solid part contains very small cysts the mass might be unilocular-solid (see below).



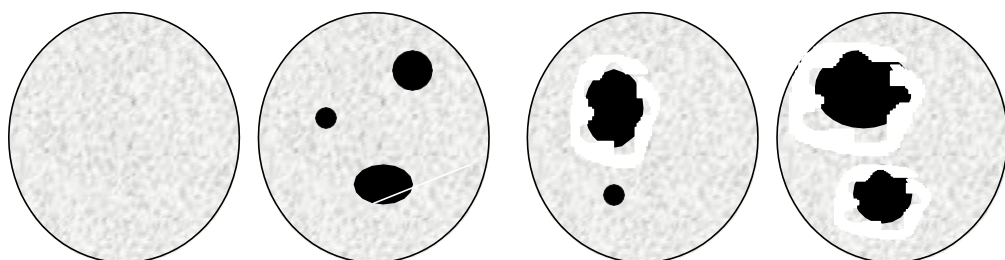
multilocular (a cyst with at least one septum but no measurable solid components or papillary projections). The ‘lesion’ is measured as indicated by the arrows.



3. multilocular with solid component (a multilocular cyst with a measurable solid component or at least one papillary structure)



4. solid (a tumour where the solid components comprise 80% or more of the tumour when assessed in a two-dimensional section).



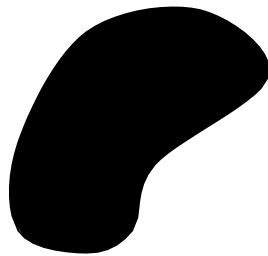
(solid tumour with an irregular cyst wall) A solid tumour may contain papillary projections protruding into the small cysts.

### **Quantitative assessment of morphology**

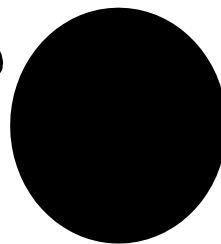
- In cystic-solid tumours the largest solid component is measured separately (in three perpendicular planes). The solid component is noted as being smooth or irregular (e.g. cauliflower-like). In some cases a solid papillary projection is the largest solid component and thus the papillary projection is recorded both as papillary projection and as solid component.
- The internal wall is also noted as being smooth or irregular.



Smooth



Smooth

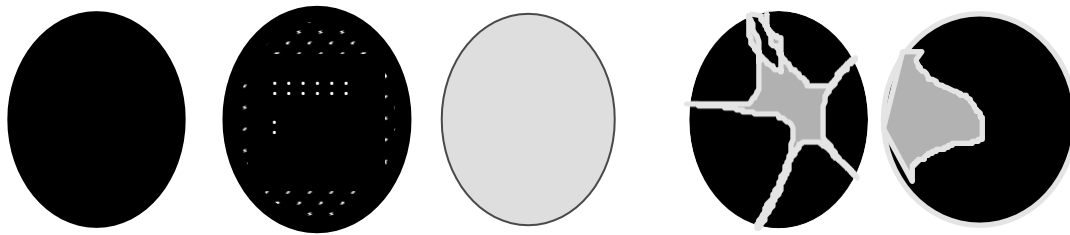


Irregular

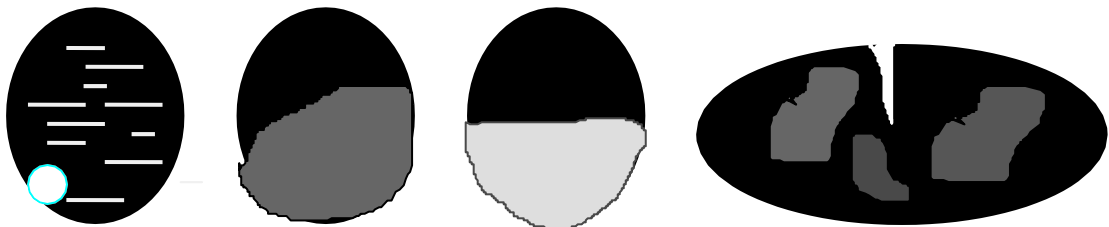
If there is a solid papillary projection, then the wall is irregular by definition.

- The external wall of tumors are not examined unless they are solid.
- In cases of solid tumours the description of the internal wall being smooth or irregular is usually not applicable but the outline of the tumour is described as smooth or irregular.
- If there is any irregularity in either the inner wall of any cyst or in the outer wall of a solid tumour or on the surface or echogenicity of a solid component, the lesion is described as 'irregular'.

- The dominant feature of the cystic contents is described as anechoic (black), low-level echogenic (homogeneous low level echogenic as seen in mucinous tumours), 'ground glass' appearance (homogeneously dispersed echogenic cystic contents, as often seen in endometriotic cysts), hemorrhagic (with internal thread-like structures, representing fibrin strands; it is possible to describe the echogenicity as star-shaped, cobweb-like or jelly-like) or mixed echogenic (as often seen in teratomas) (see images attached).



*Anechoic    Lowlevel    Groundglass    Hemorrhagic    Hemorrhagic*



Mixed

Mixed (old blood-fluid level  
or fat-fluid level)

Mixed (e.g. abscess)

- The presence of acoustic shadows, defined as loss of acoustic echo behind a sound-absorbing structure, is noted as well. Solid tumours are identified by the appearance of the internal texture, by the absence of internal movement when moving the transducer or by colour Doppler imaging (presence of central flow).
- In solid tumours the dominant feature of any cystic contents is described only if it can be assessed.
- ‘Ovarian crescent sign’, defined as the presence of normal ovarian tissue adjacent to an adnexal tumour. (“absent” or “present”, mandatory new variable for phase 3 and 5)

- Ultrasound evidence of metastases (e.g. “omental cake” or peritoneal tumoural implants). (“absent” or “present”, mandatory new variable for phase 3 and 5)

### **Colour Doppler imaging and blood flow indices**

Subsequently, the entire tumor is surveyed by CDI. The power, gain and pulse repetition frequency are initially adjusted for maximum sensitivity of low blood flow states. The lowest velocity signals are filtered out by gradually increasing the pulse repetition frequency and flow analysis is concentrated on the highest velocity signals. A subjective semiquantitative assessment of the amount of blood flow (area and colour scale) within the septa, cyst walls, or solid tumor areas is made: a score of 1 is given when no blood flow can be found in the lesion; a score of 2 is given when only a small amount of flow can be detected; 3 is given when moderate flow is present and 4 is given when the adnexal mass appears highly vascular with marked blood flow using colour Doppler (abundant flow). This colour score refers only to the colour Doppler image and not to Doppler shift spectrum. It is given for the tumour as a whole (not for a solid part or a septum only, but for the whole tumour). Multiple photographic prints are made of relevant structures and Doppler signals.

## **Quality control**

Several informative images or volumes of all adnexal masses should be made. Preferably, these are stored digitally. Photographs or video are acceptable as well.

## **RESULTS**

### **Inclusion Criteria:**

All reproductive and perimenopausal age group admitted in ISOKGH.

### **Exclusion Criteria:**

The patients below 15 and above 50

The patients treated as outpatients.

**Sample Size:** 200

**Procedure:** PROSPECTIVE COHORT STUDY

### **Data Collection and Methods:**

- 1.Data collection-age, hospital inpatient number, occupation, education, address, age of menarche, parity, last menstrual cycle, symptoms, blood analysis, tumor markers, ultrasonography, CT and hpe reports.
2. The data will be analysed.

**Analysis Plan:** Statistical analysis.

**Study Centre:** Institute of Social Obstetrics Kasturba Gandhi Hospital Triplicane.

**Study Design:** Prospective Cohort Study.

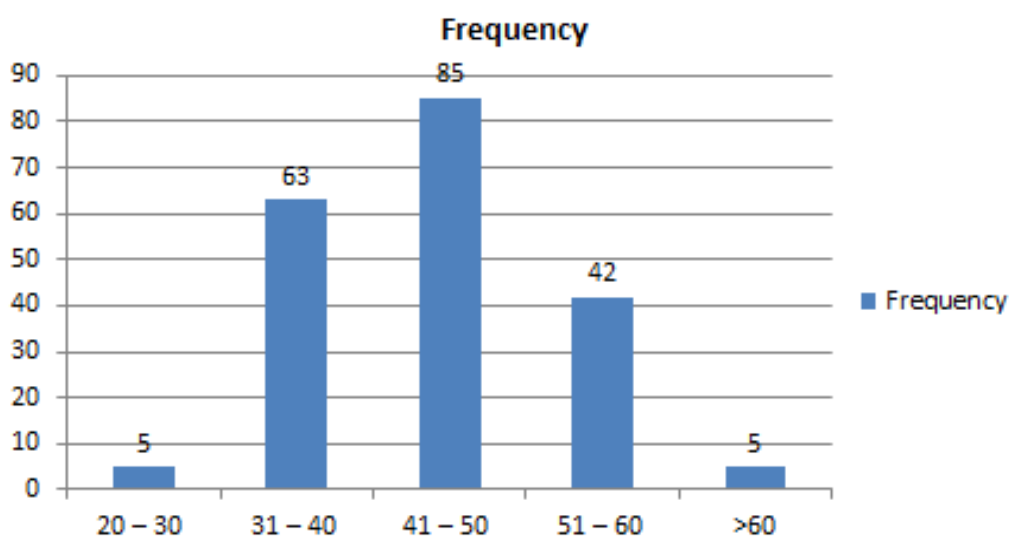


**Table 1: Age wise distribution of the study subjects**

Age group	Frequency	Percentage	Mean	SD
20 – 30	5	2.5%	43.5	8.2
31 – 40	63	31.5%		
41 – 50	85	42.5%		
51 – 60	42	21%		
>60	5	2.5%		
<b>Total</b>	200	100%		

Table 1 shows the age wise distribution of the study subjects. It is seen from the table that the majority of the study subjects were in the age group between 40 and 50 years with a mean age of 43.5 years and only 2.5% of the study subjects were aged more than 65 years

**Fig 1: Age wise distribution of the study subjects**

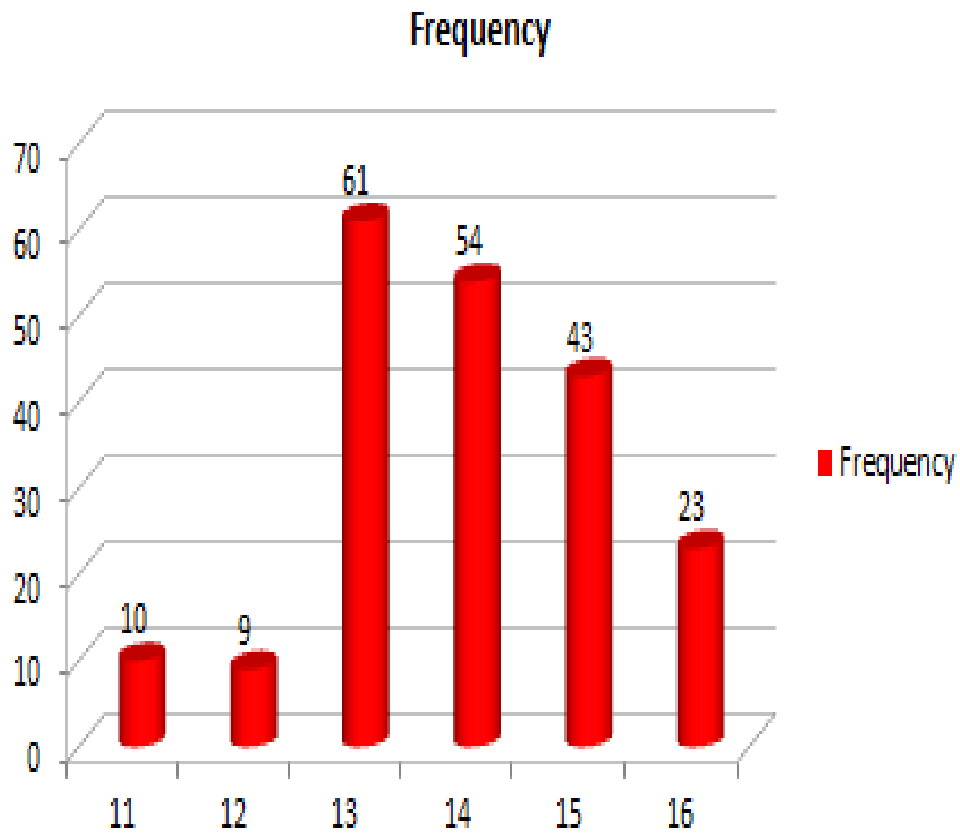


**Table 2: Distribution of the study subjects based on the age of menarche**

Age of menarche	Frequency	Percentage	Mean	SD
<b>11</b>	10	5%	13.9	1.2
<b>12</b>	9	4.5%		
<b>13</b>	61	30.5%		
<b>14</b>	54	27%		
<b>15</b>	43	21.5%		
<b>16</b>	23	11.5%		
<b>Total</b>	200	100%		

Table 2 shows the distribution of the study subjects based on the age of menarche. It is seen from the table that majority of the study subjects attained menarche in the age of between 13 and 14 years with a mean age of 13.9 years and only 11.5% of the subjects attained menarche at the age of 16 years.

**Fig 2: Distribution of the study subjects based on the age of menarche**

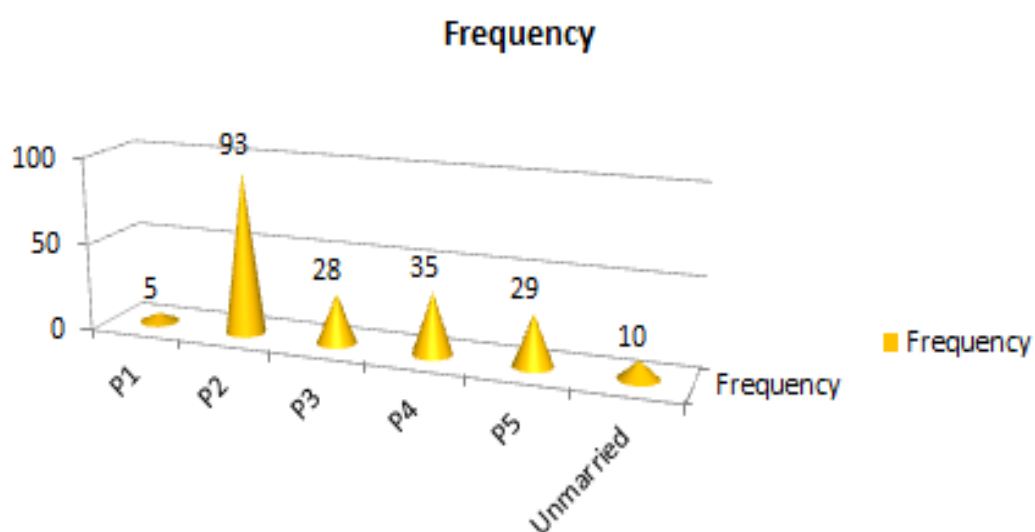


**Table 3: Distribution of the study subjects based on the parity**

Parity	Frequency	Percentage	Mean	SD
P1	5	2.5	2.75	0.98
P2	93	46.5		
P3	28	14		
P4	35	17.5		
P5	29	14.5		
Unmarried	10	5		
Total	200	100		

Table 3 shows the distribution of the study subjects based on the parity. 46.5% of the study subjects had parity 2 and 5% were unmarried and 14.5% had the maximum parity of five.

**Fig 3: Distribution of the study subjects based on the parity**

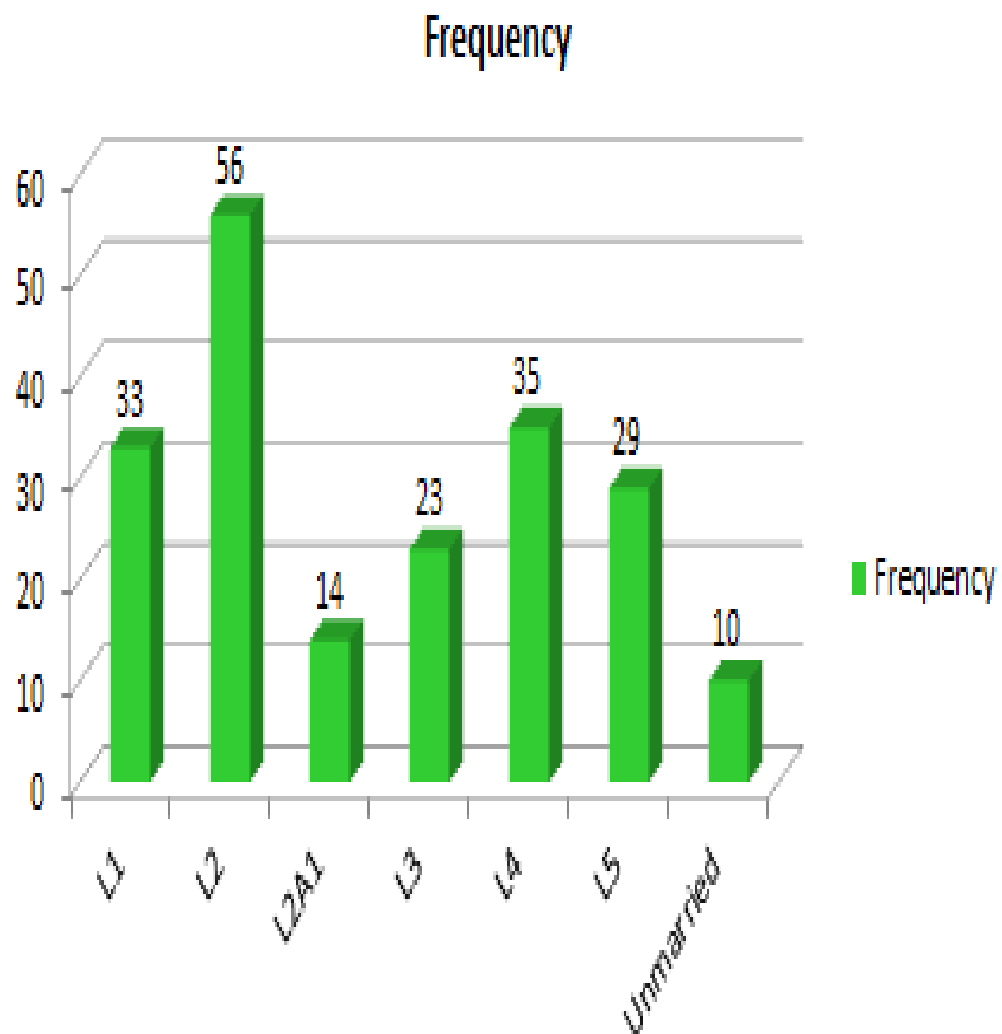


**Table 4: Distribution of the study subjects based on their live births**

<b>Live births</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Mean</b>	<b>SD</b>
<b>L1</b>	33	16.5	2.2	1.08
<b>L2</b>	56	28		
<b>L2A1</b>	14	7		
<b>L3</b>	23	11.5		
<b>L4</b>	35	17.5		
<b>L5</b>	29	14.5		
<b>Unmarried</b>	10	5		
<b>Total</b>	200	100		

Table 4 shows the distribution of the study subjects based on their live births. Majority of the study subjects had the live births of two and 14.5% had 5 live births with a mean of 2.2

**Fig 4: Distribution of the study subjects based on their live births**

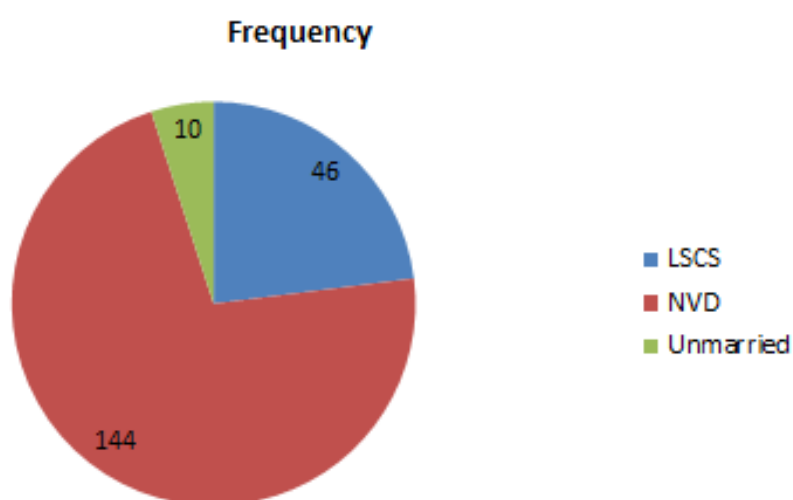


**Table 5: Distribution of the study subjects based on the mode of delivery**

Mode of delivery	Frequency	Percentage
LSCS	46	23
NVD	144	72
Unmarried	10	5
Total	200	100

Table 5 shows the distribution of the study subjects based on the mode of delivery. It is seen from the table that more than 70% of the delivery was by normal vaginal delivery and only 23% of the subjects had the history of LSCS.

**Fig 5: Distribution of the study subjects based on the mode of delivery**

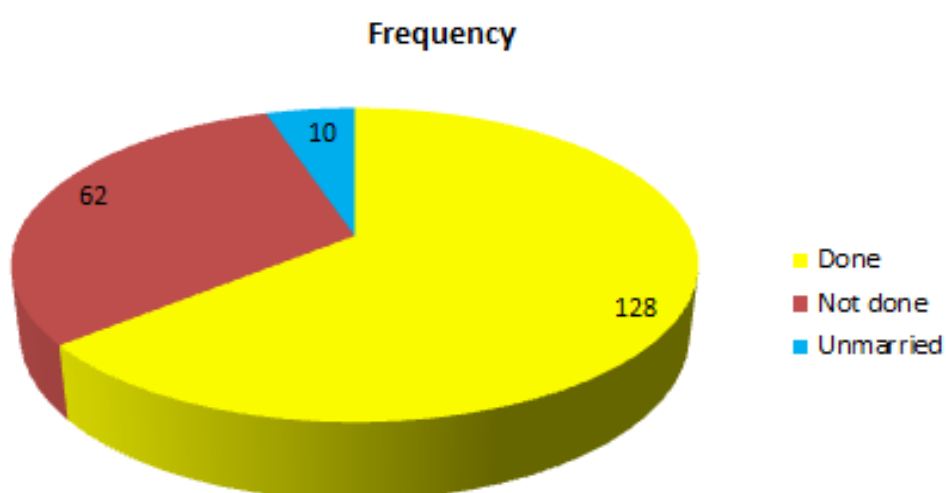


**Table 6: Distribution of the study subjects based on their sterilization status**

Sterilisation	Frequency	Percentage
Done	128	64
Not done	62	31
Unmarried	10	5
Total	200	100

Table 6 shows the distribution of the study subjects based on their sterilization status. It is depicted from the table that 64% of the study subjects had undergone sterilization and had completed the family.

**Fig 6: Distribution of the study subjects based on their sterilization status**



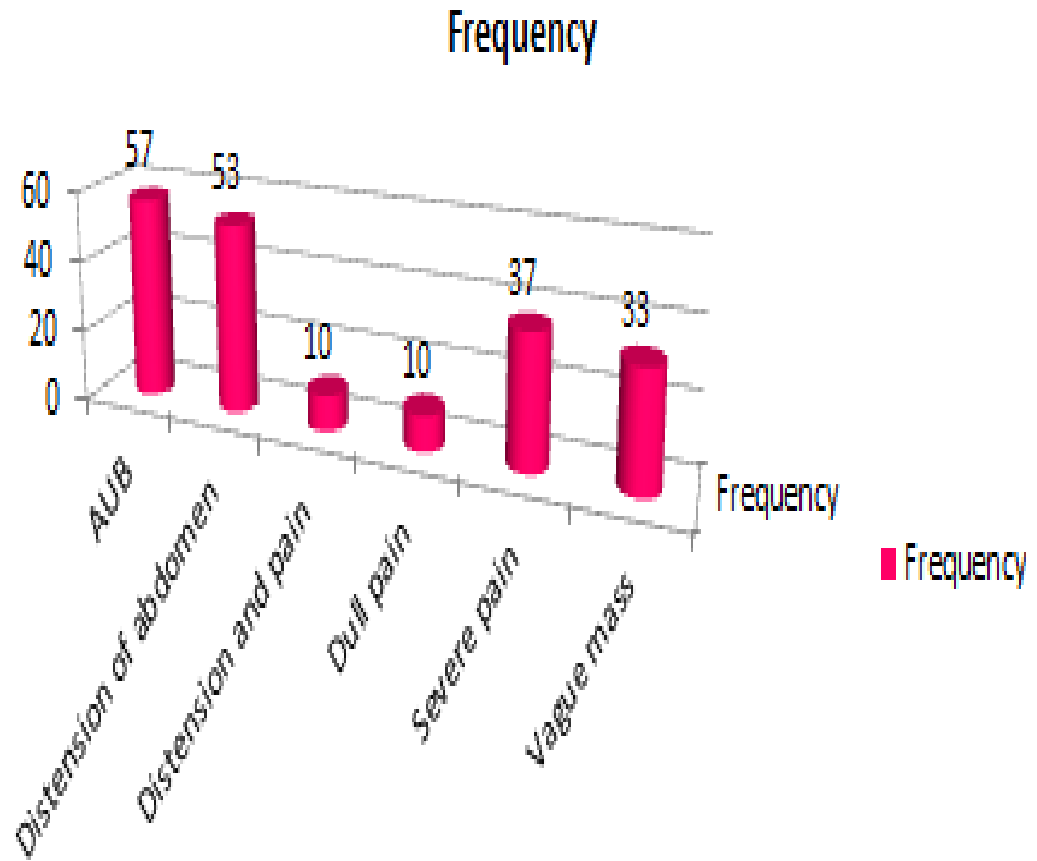


**Table 7: Distribution based on the symptoms presented by the study subjects at the time of admission**

<b>Symptoms</b>	<b>Frequency</b>	<b>Percentage</b>
<b>AUB</b>	57	28.5
<b>Distension of abdomen</b>	53	26.5
<b>Distension and pain</b>	10	5
<b>Dull pain</b>	10	5
<b>Severe pain</b>	37	18.5
<b>Vague mass</b>	33	16.5
<b>Total</b>	200	100

Table 7 shows the distribution based on the symptoms presented by the study subjects at the time of admission. It is depicted from the table that the most common symptom presented by the subjects was abnormal uterine bleeding followed abdominal distension and severe pain.

**Fig 7: Distribution based on the symptoms presented by the study subjects at the time of admission**



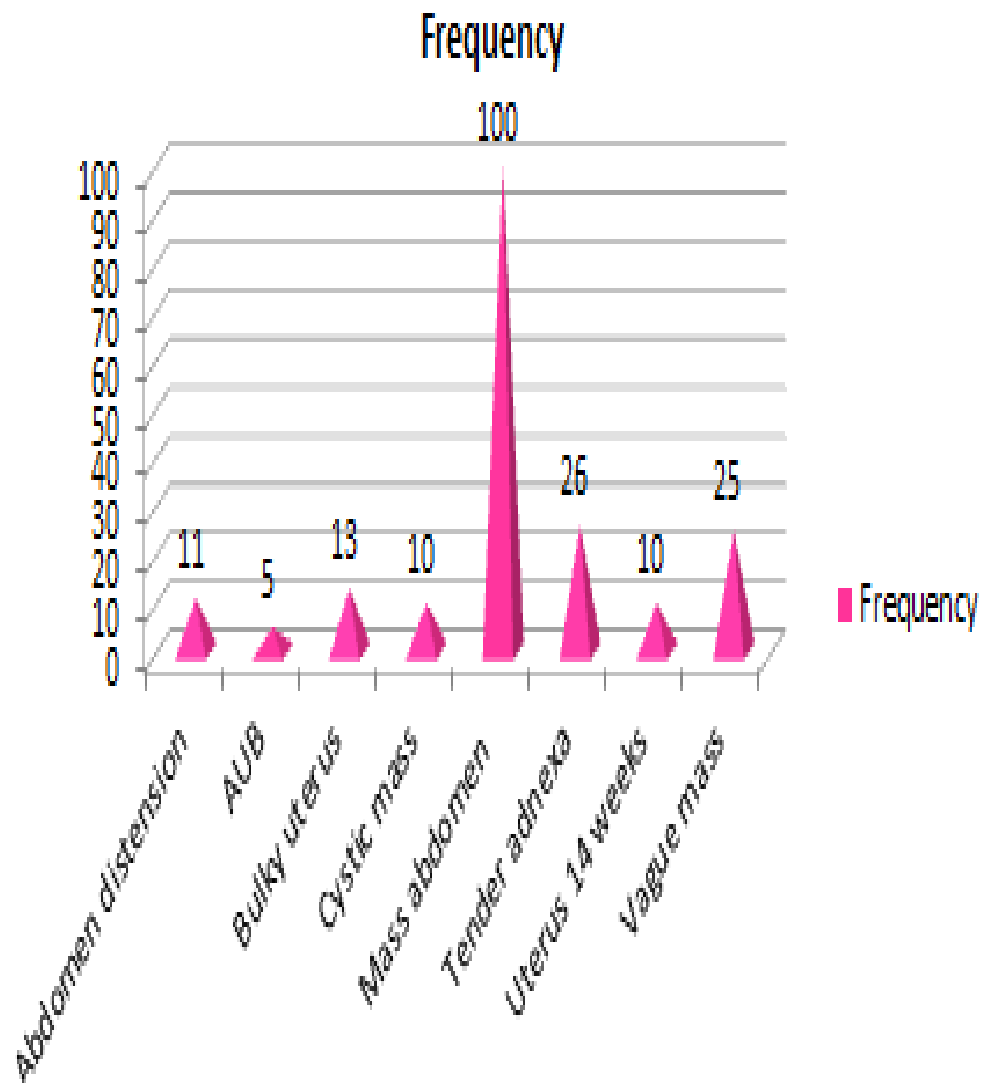
**Table 8: Distribution based on the clinical finding of the study**

**subjects**

<b>Per Abdomen</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Abdomen distension</b>	11	5.5
<b>AUB</b>	5	2.5
<b>Bulky uterus</b>	13	6.5
<b>Cystic mass</b>	10	5
<b>Mass abdomen</b>	100	50
<b>Tender adnexa</b>	26	13
<b>Uterus 14 weeks</b>	10	5
<b>Vague mass</b>	25	12.5
<b>Total</b>	200	100

Table 8 shows the distribution based on the clinical finding of the study subjects. It is depicted from the table that the most common (50%) clinical finding was mass abdomen and the mass were varying in measurements ranging from 10 x 10 to 15 x 10 cms.

**Fig 8: Distribution based on the clinical finding of the study subjects**

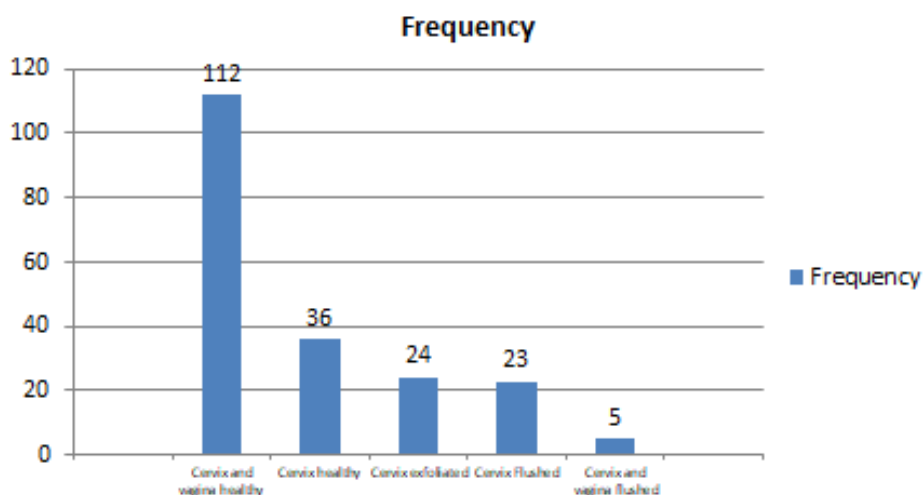


**Table 9: Distribution of the study subjects based on their per speculum findings**

Per Speculum	Frequency	Percentage
Cervix and vagina healthy	112	56
Cervix healthy	36	18
Cervix exfoliated	24	12
Cervix Flushed	23	11.5
Cervix and vagina flushed	5	2.5
<b>Total</b>	<b>200</b>	<b>100</b>

Table 9 shows the distribution of the study subjects based on their per speculum findings. In more than 50% of the subjects the cervix and vagina was found to be healthy, cervix was exfoliated or flushed only in 24.5% of the subjects

**Fig 9: Distribution of the study subjects based on their per speculum findings**

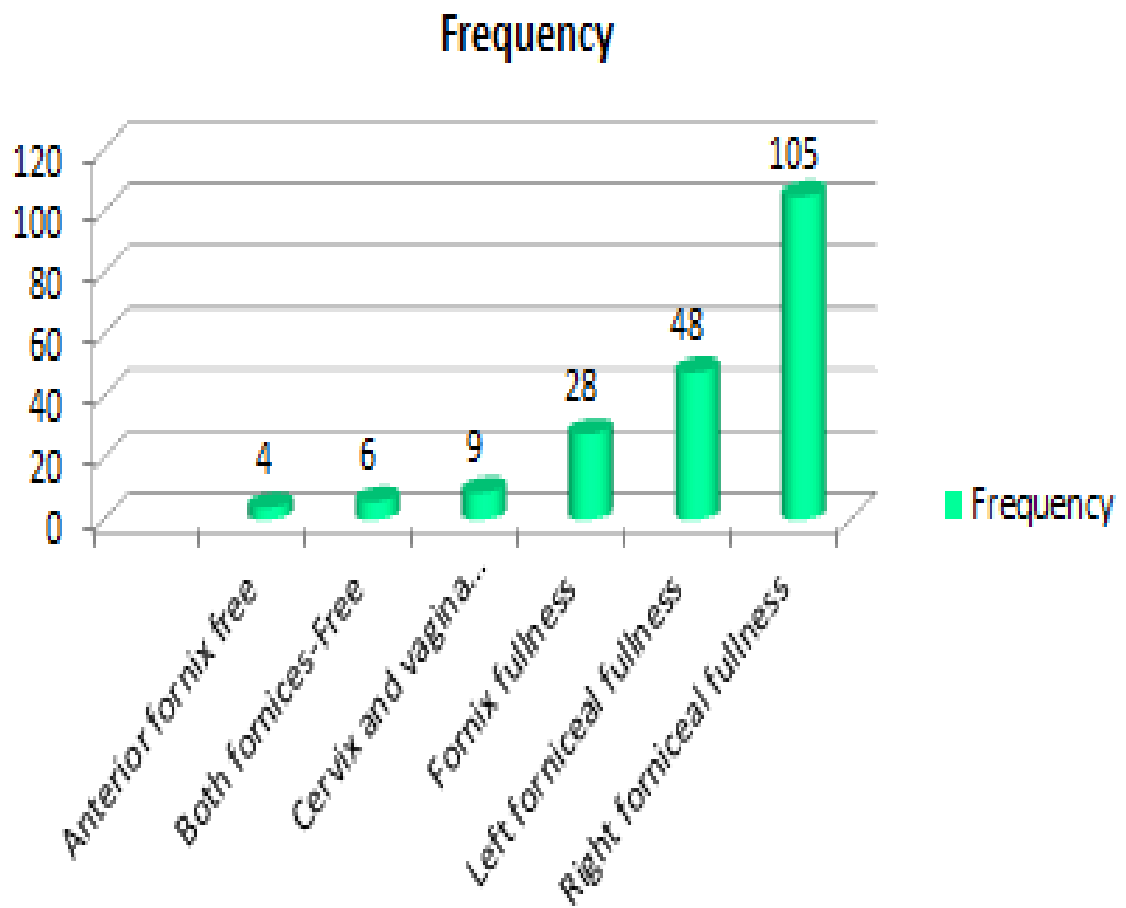


**Table 10: Distribution of the study subjects based on the per vagina findings**

<b>Per vagina</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Anterior fornix free</b>	4	2
<b>Both fornices-Free</b>	6	3
<b>Cervix and vagina healthy</b>	9	4.5
<b>Fornix fullness</b>	28	14
<b>Left forniceal fullness</b>	48	24
<b>Right forniceal fullness</b>	105	52.5
<b>Total</b>	200	100

Table 10 shows the distribution of the study subjects based on the per vagina findings. The most common per vagina examination finding was right forniceal fullness (52.5%) followed by left forniceal fullness (24%) and bilateral forniceal fullness was seen in 14% of the study subjects.

**Fig 10: Distribution of the study subjects based on the per vagina findings**



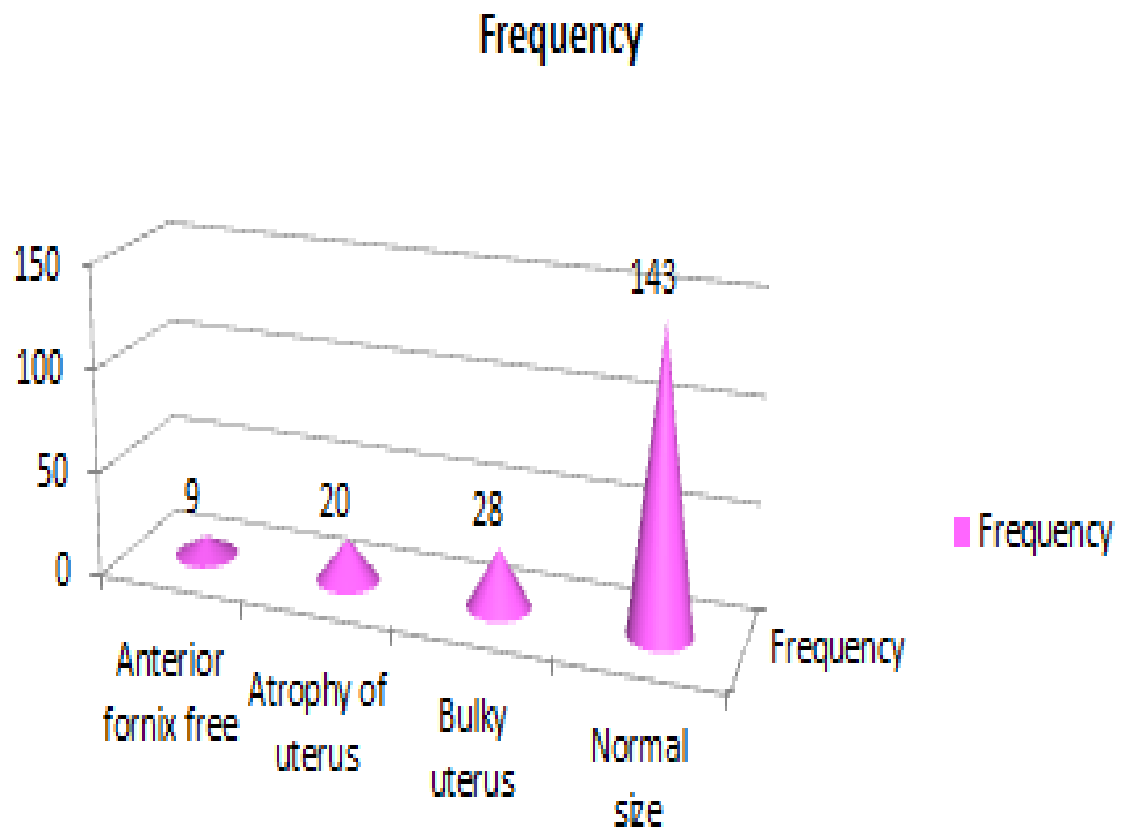
**Table 11: Distribution of the study subjects based on the per abdomen findings**

<b>Per abdomen</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Anterior fornix free</b>	9	4.5
<b>Atrophy of uterus</b>	20	10
<b>Bulky uterus</b>	28	14
<b>Normal size</b>	143	71.5
<b>Total</b>	200	100

Table 11 shows the distribution of the study subjects based on the per abdomen findings. It is seen from the table that more than 70% of the study subjects had normal size uterus and only 14% presents with bulky uterus.



**Fig 11: Distribution of the study subjects based on the per abdomen findings**

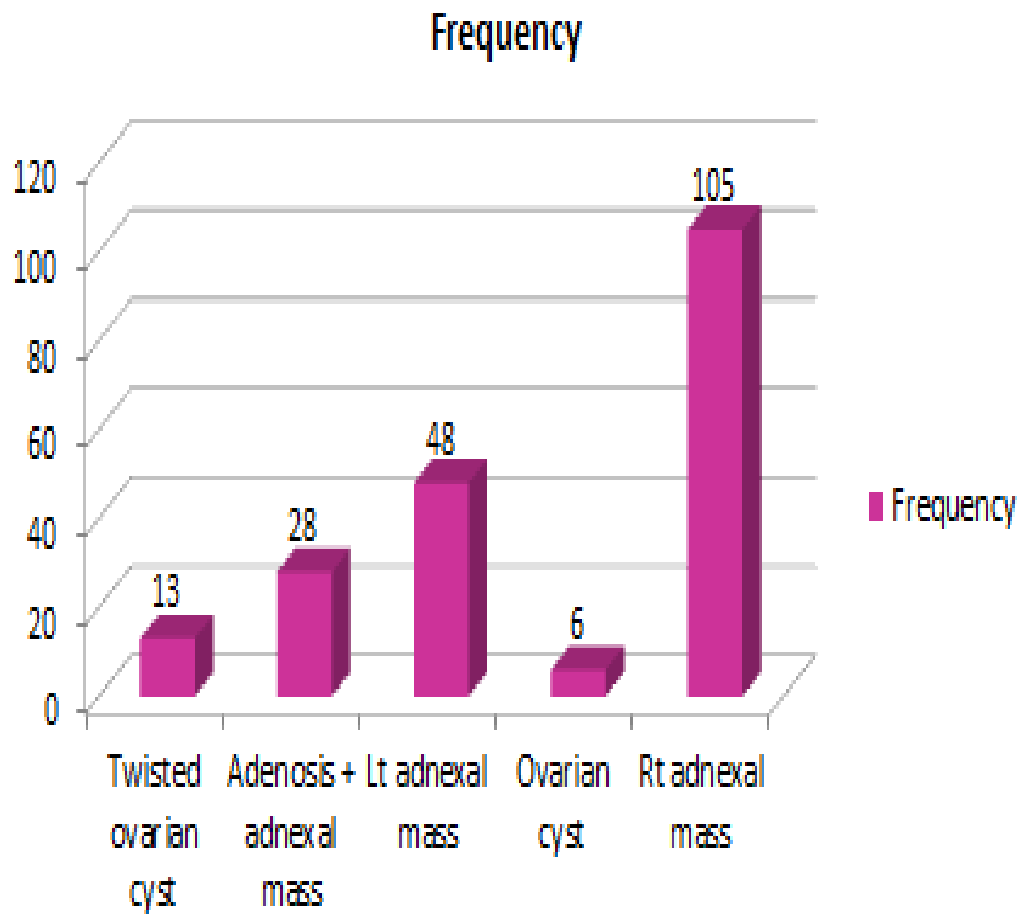


**Table 12: Distribution of the study subjects based on their clinical diagnosis**

<b>Diagnosis</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Twisted ovarian cyst</b>	13	6.5
<b>Adenosis + adnexal mass</b>	28	14
<b>Lt adnexal mass</b>	48	24
<b>Ovarian cyst</b>	6	3
<b>Rt adnexal mass</b>	105	52.5
<b>Total</b>	200	100

Table 12 shows the distribution of the study subjects based on their clinical diagnosis. It is seen from the table that the most common clinical diagnosis was right adnexal mass which constitute 52.5% followed by left adnexal mass of 24%, ovarian cyst was diagnosed in only 3% of the study subjects, adenosis was seen in 14% and 6.5% had twisted ovarian cyst.

**Fig 12: Distribution of the study subjects based on their clinical diagnosis**

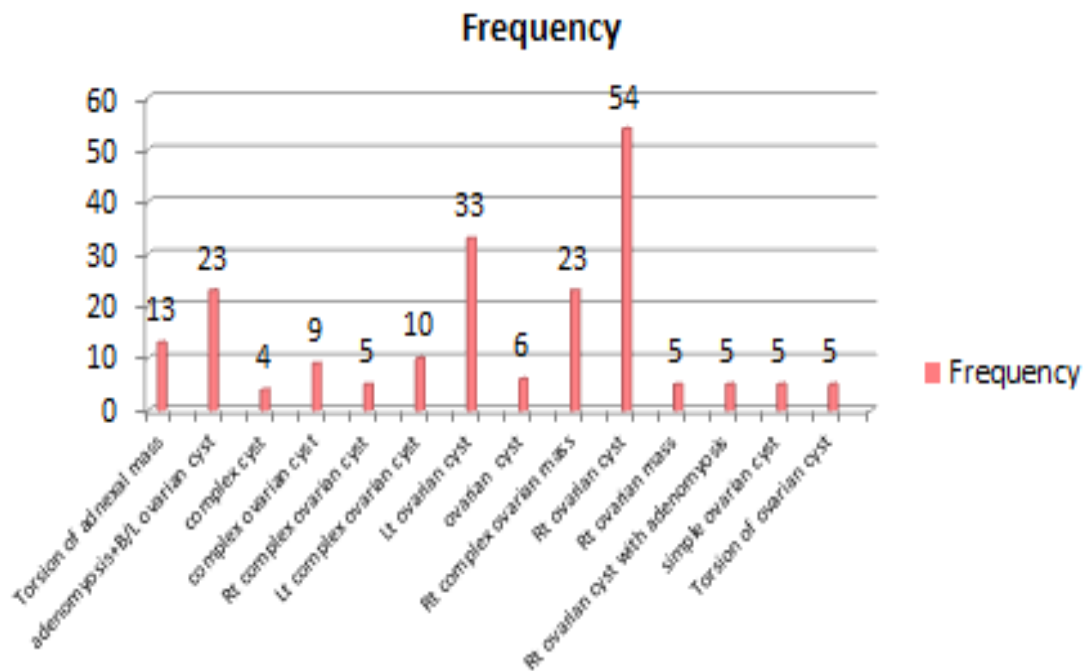


**Table 13: Distribution of the study subjects based on the ultrasonogram diagnosis**

<b>USG</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Torsion of adnexal mass</b>	13	6.5
<b>adenomyosis+B/L ovarian cyst</b>	23	11.5
<b>complex cyst</b>	4	2
<b>complex ovarian cyst</b>	9	4.5
<b>Rt complex ovarian cyst</b>	5	2.5
<b>Lt complex ovarian cyst</b>	10	5
<b>Lt ovarian cyst</b>	33	16.5
<b>ovarian cyst</b>	6	3
<b>Rt complex ovarian mass</b>	23	11.5
<b>Rt ovarian cyst</b>	54	27
<b>Rt ovarian mass</b>	5	2.5
<b>Rt ovarian cyst with adenomyosis</b>	5	2.5
<b>simple ovarian cyst</b>	5	2.5
<b>Torsion of ovarian cyst</b>	5	2.5
<b>Total</b>	200	100

Table 13 shows the distribution of the study subjects based on the ultrasonogram diagnosis. It is depicted from the table that ovarian cyst or ovarian mass of either right or left side of the adnexa was the most common finding observed in ultrasonogram and among the entire observation right ovarian cyst (27%) was found to be the most common ultrasonogram diagnosis

**Fig 13: Distribution of the study subjects based on the ultrasonogram diagnosis**

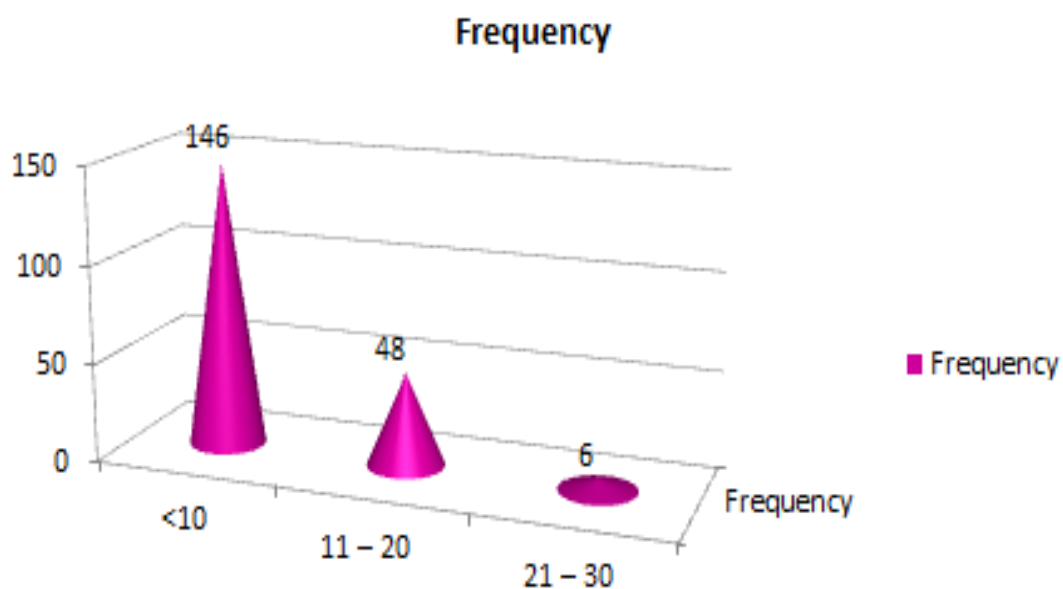


**Table 14: Distribution of the study subjects based on the uterine length**

Size (length cm)	Frequency	Percentage	Mean	SD
<10	146	73	8.5	5.5
11 – 20	48	24		
21 – 30	6	3		
<b>Total</b>	200	100		

Table 14 shows the distribution of the study subjects based on the uterine length. The mean uterine length measured by ultrasonogram was 8.5 cms.

**Fig 14: Distribution of the study subjects based on the uterine length**

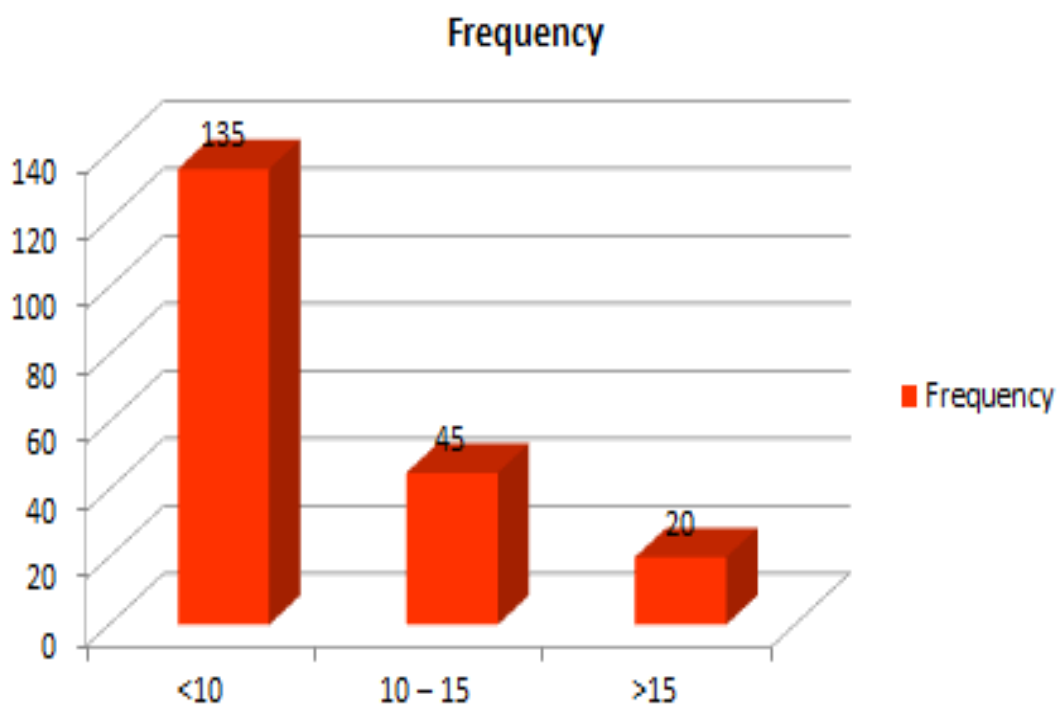


**Table 15: Distribution of the study subjects based on uterine breadth**

Size (Breadth cm)	Frequency	Percentage	Mean	SD
<10	135	67.5	7.4	4.6
10 – 15	45	22.5		
>15	20	10		
<b>Total</b>	200	100		

Table 15 shows the distribution of the study subjects based on uterine breadth. The mean uterine breadth measured by ultrasonogram was 7.4 cms.

**Fig 15: Distribution of the study subjects based on uterine breadth**

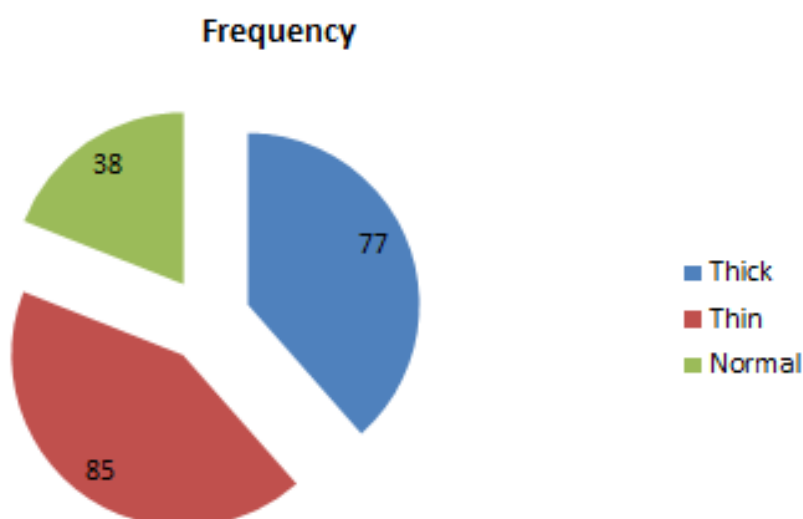


**Table 16: Distribution of the study subjects based on the thickness of the wall of the lesion**

Wall of the lesion	Frequency	Percentage
Thick	77	38.5
Thin	85	42.5
Normal	38	19
Total	200	100

Table 16 shows the distribution of the study subjects based on the thickness of uterine wall. It is seen from the table in most of the patients the wall of the mass was found to be thin and the wall was normal in thickness in 19% of the study subjects and for the remaining it is found to be thick.

**Fig 16: Distribution of the study subjects based on the thickness of uterine wall**



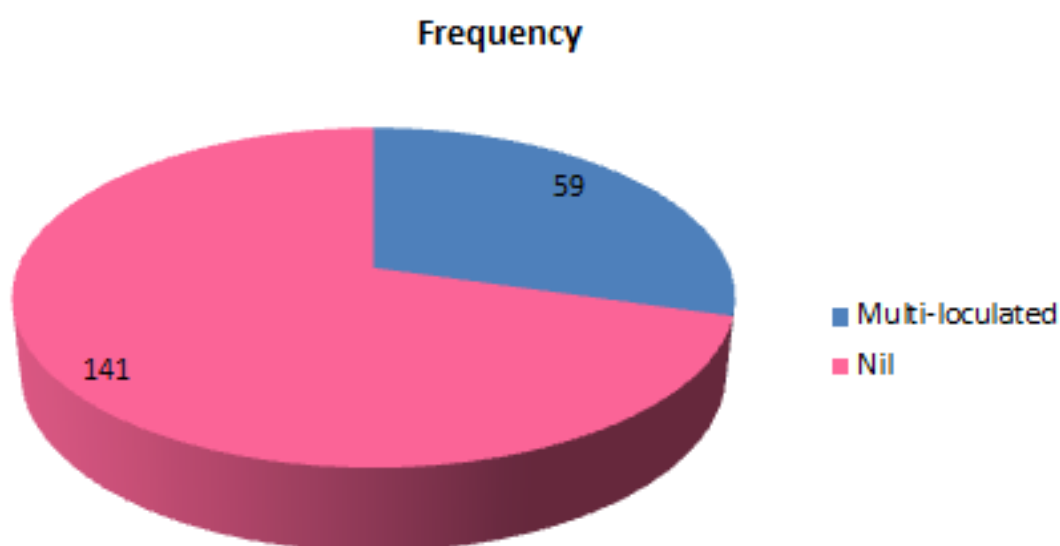


**Table 17: Distribution of the study subjects based on the loculi or septa findings**

Loculi/septa	Frequency	Percentage
Multi-loculated	59	29.5
Nil	141	70.5
<b>Total</b>	<b>200</b>	<b>100</b>

Table 17 shows the distribution of the study subjects based on the loculi or septa findings. 29.5% of the patients had multi-loculated mass

**Fig 17: Distribution of the study subjects based on the loculi or septa findings**

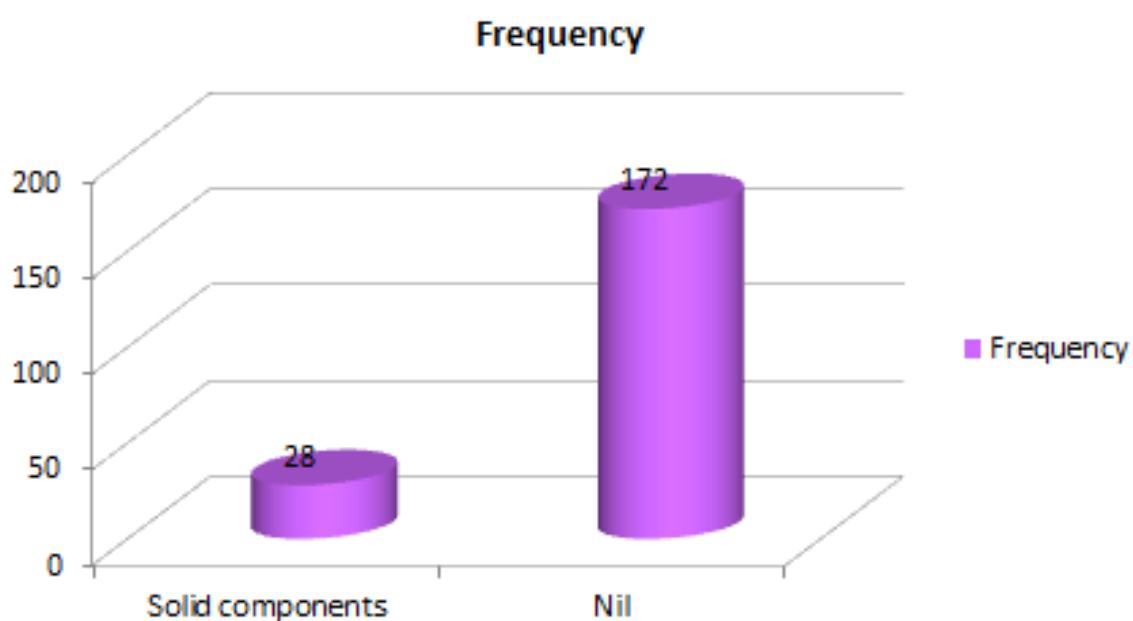


**Table 18: Distribution of the study subjects based on the presence of components in the lesions**

Components	Frequency	Percentage
Solid components	28	14
Nil	172	86
Total	200	100

Table 18 shows the distribution of the study subjects based on the presence of components in the lesions. It is seen from the table that 14% had solid components in the lesion or the mass removed.

**Fig 18: Distribution of the study subjects based on the presence of components in the lesions**

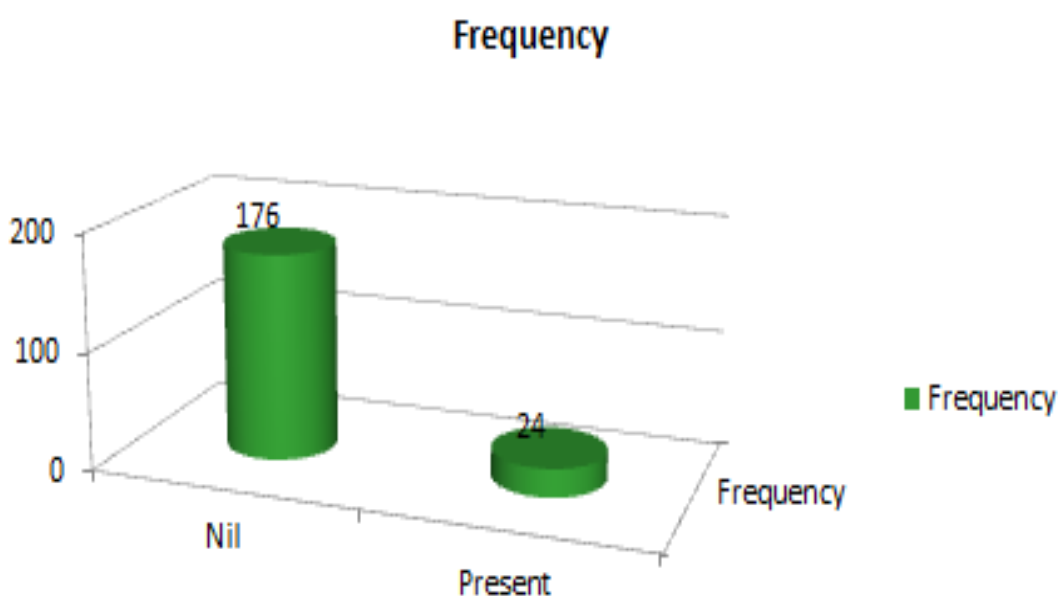


**Table 19: Distribution of the study subjects based on the presence of papillary projections in the lesion**

Papillary projections	Frequency	Percentage
Nil	176	88
Present	24	12
<b>Total</b>	<b>200</b>	<b>100</b>

Table 19 shows the distribution of the study subjects based on the presence of papillary projections in the lesion. 12% of the patients had papillary projections in the mass which was removed.

**Fig 19: Distribution of the study subjects based on the presence of papillary projections in the lesion**



**Table 20: Distribution of the study subjects based on the values of**

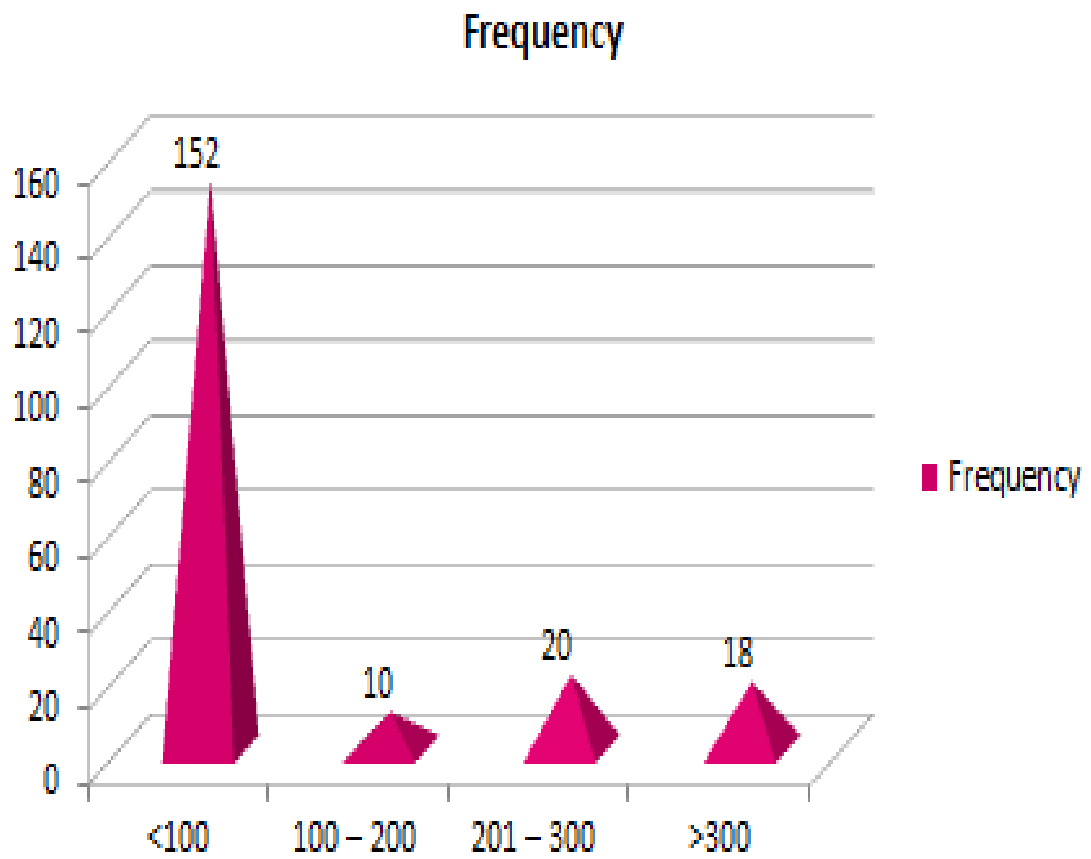
**CA-125**

<b>Ca-125</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Mean</b>	<b>SD</b>
<b>&lt;100</b>	152	76	87.4	109.3
<b>100 – 200</b>	10	5		
<b>201 – 300</b>	20	10		
<b>&gt;300</b>	18	9		
<b>Total</b>	200	100		

Table 20 shows the distribution of the study subjects based on the values of CA-125. It is inferred from the table that 76% of the patients had the CA-125 levels less than 100 and for the remaining it was more than 100 and specifically for 9% of the patients it was more than 300 with a mean value of 87.4.

**Fig 20: Distribution of the study subjects based on the values of CA-**

**125**

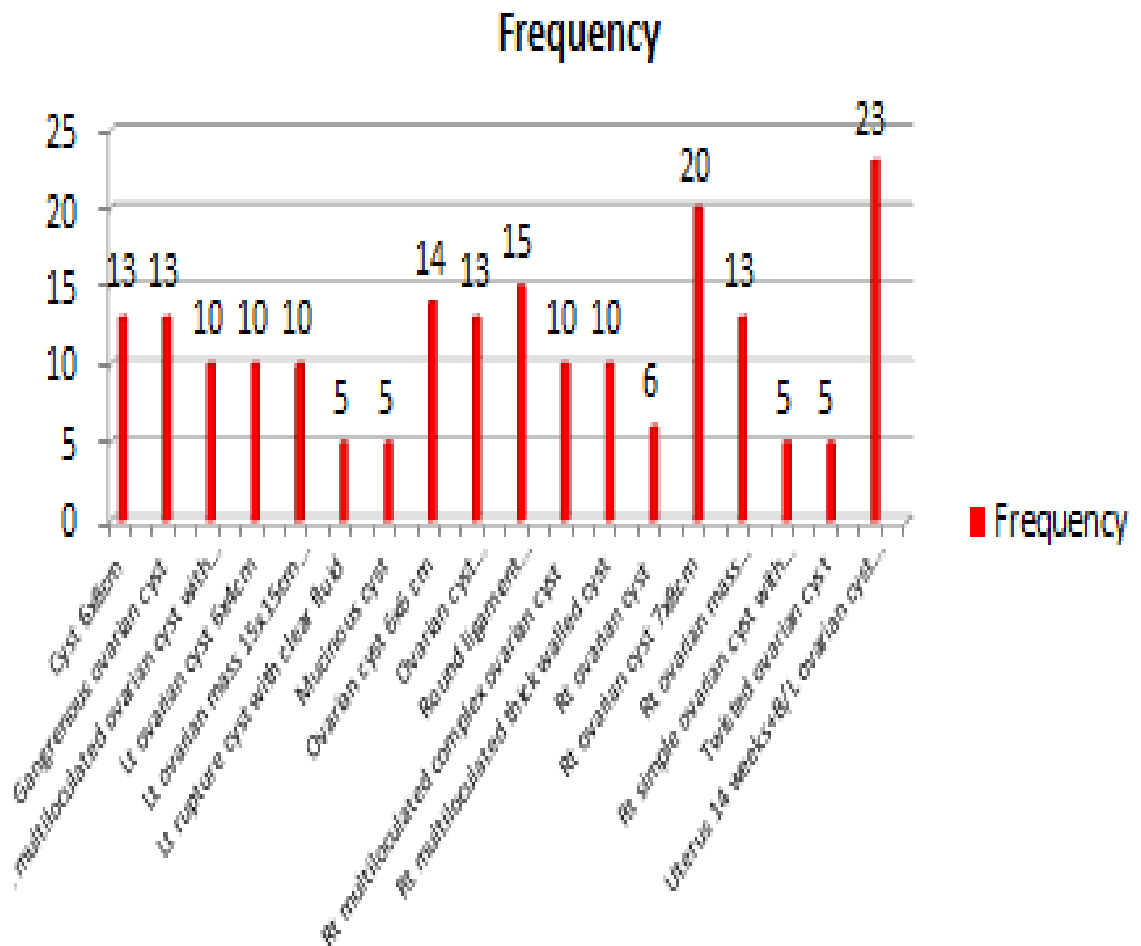


**Table 21: Distribution of the study subjects based on the intra-operative findings**

<b>Intra-operative findings</b>	<b>Frequency</b>	<b>percentage</b>
<b>Cyst 6x8cm</b>	13	6.5
<b>Gangrenous ovarian cyst</b>	13	6.5
<b>Lt multiloculated ovarian cyst with papillary excrescences</b>	10	5
<b>Lt ovarian cyst 6x4cm</b>	10	5
<b>Lt ovarian mass 15x15cm multiloculated,solid components with papillary excrescences</b>	10	5
<b>Lt rupture cyst with clear fluid</b>	5	2.5
<b>Mucinous cyst</b>	5	2.5
<b>Ovarian cyst 6x6 cm</b>	14	7
<b>Ovarian cyst 8x8cm/multilobulates,solid cystic areas</b>	13	6.5
<b>Round ligament fibroid(1x1cm)Retroperitoneal fibroid 6x6cm</b>	15	7.5
<b>Rtmultiloculated complex ovarian cyst</b>	10	5
<b>Rtmultiloculated thick walled cyst</b>	10	5
<b>Rt ovarian cyst</b>	6	3
<b>Rt ovarian cyst 7x8cm</b>	20	10
<b>Rt ovarian mass 12x10cm,multiloculated,solid components</b>	13	6.5
<b>Rt simple ovarian cyst with adenomyososis</b>	5	2.5
<b>Twisted ovarian cyst</b>	5	2.5
<b>Uterus 14 weeks+B/L ovarian cyst 6X4cm</b>	23	11.5
<b>Total</b>	200	100

Intra-operative findings were listed out in table no. 21. It is almost similar to the findings observed by the ultrasonogram except for findings such as gangrenous lesions and multiloculated lesions and for identifying the components in the lesions.

**Fig 21: Distribution of the study subjects based on the intra-operative findings**



**Table 22: Distribution of the study subjects based on the surgical procedure performed**

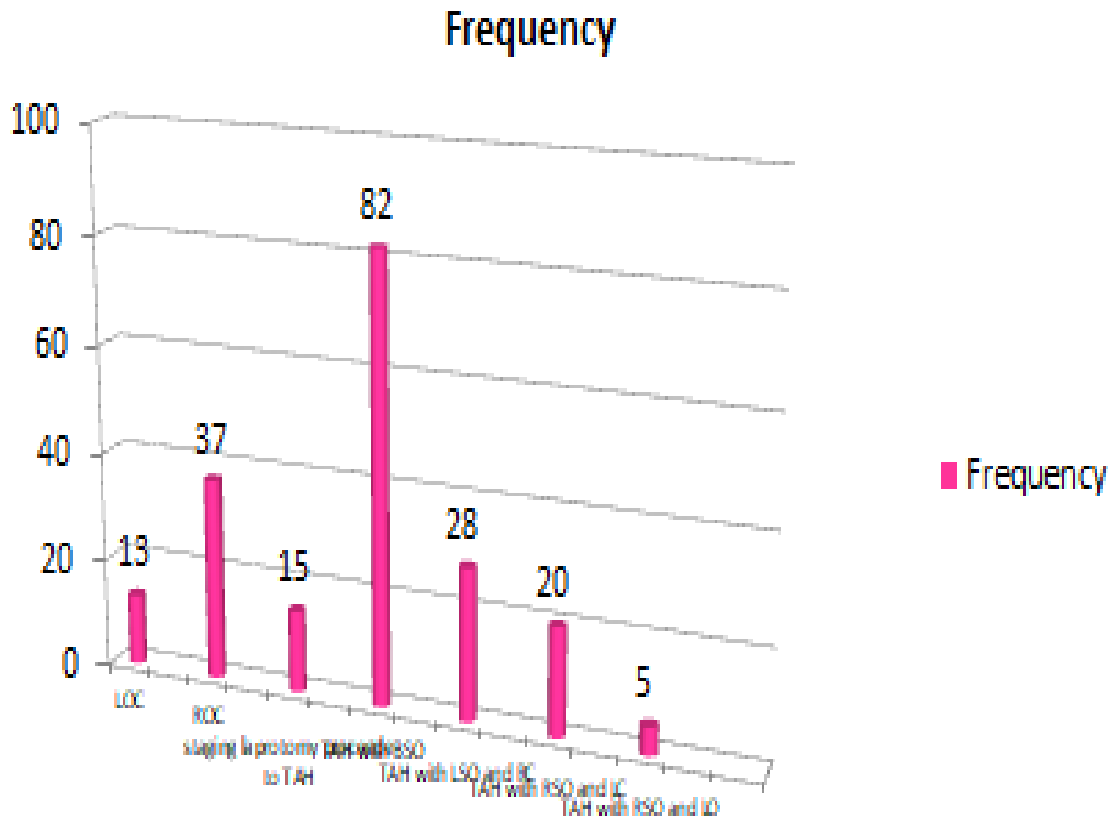
<b>Procedure</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Left ovarian cystectomy</b>	13	6.5
<b>Right ovarian cystectomy</b>	37	18.5
<b>staging laprotomyproceede to TAH</b>	15	7.5
<b>Total abdominal hysterectomy with bilateral salpingo-oophorectomy</b>	82	41
<b>Total abdominal hysterectomy with Left salpingo-oophorectomy and right cystectomy</b>	28	2.5
<b>Total abdominal hysterectomy with right salpingo-oophorectomy and left cystectomy</b>	20	5
<b>Total abdominal hysterectomy with right salpingo-oophorectomy and left oophorectomy</b>	5	2.5
<b>Total</b>	200	

Table 22 shows the distribution of the study subjects based on the surgical procedure performed. It is depicted from the table that the most common operative procedure performed for the patients was total



abdominal hysterectomy with bilateral salpingo-oophorectomy(41%) and for 18.5% of the subjects right ovarian cystectomy was performed and as such for nearly 50% of the subjects total abdominal hysterectomy was performed.

**Fig 22: Distribution of the study subjects based on the surgical procedure performed**

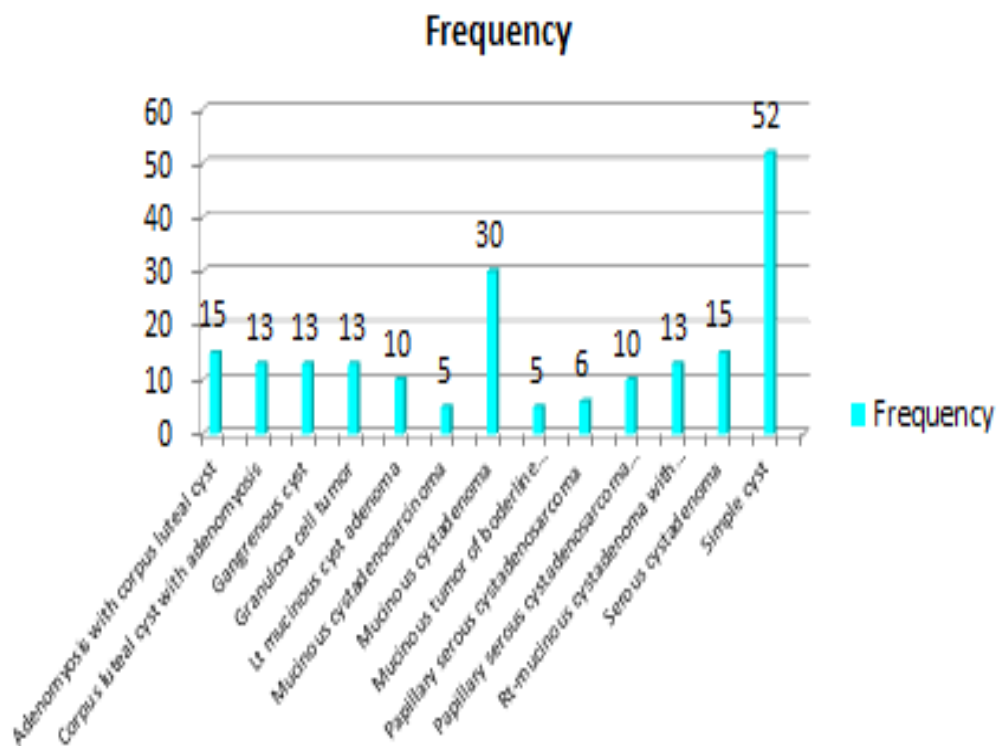


**Table 23: Distribution of the study subjects based on the HPE report**

<b>HPE Report</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Adenomyosis with corpus luteal cyst</b>	15	7.5
<b>Corpus luteal cyst with adenomyosis</b>	13	6.5
<b>Gangrenous cyst</b>	13	6.5
<b>Granulosa cell tumor</b>	13	6.5
<b>Lt mucinous cyst adenoma</b>	10	5
<b>Mucinous cystadenocarcinoma</b>	5	2.5
<b>Mucinous cystadenoma</b>	30	15
<b>Mucinous tumor of boderline malignancy</b>	5	2.5
<b>Papillary serous cystadenosarcoma</b>	6	3
<b>Papillary serous cystadenosarcoma with omentalmets</b>	10	5
<b>Rt-mucinous cystadenoma with borderline malignancy</b>	13	6.5
<b>Serous cystadenoma</b>	15	7.5
<b>Simple cyst</b>	52	26
<b>Total</b>	200	100

Table 23 shows the distribution of the study subjects based on the HPE report. The most common finding of the HPE report was simple cyst followed by mucinous cystadenoma which shows that the benign lesions were found to be more common and among the entire study subjects 15% had malignant lesions such as cystadenocarcinoma and 6% had borderline lesions.

**Fig 23: Distribution of the study subjects based on the HPE report**

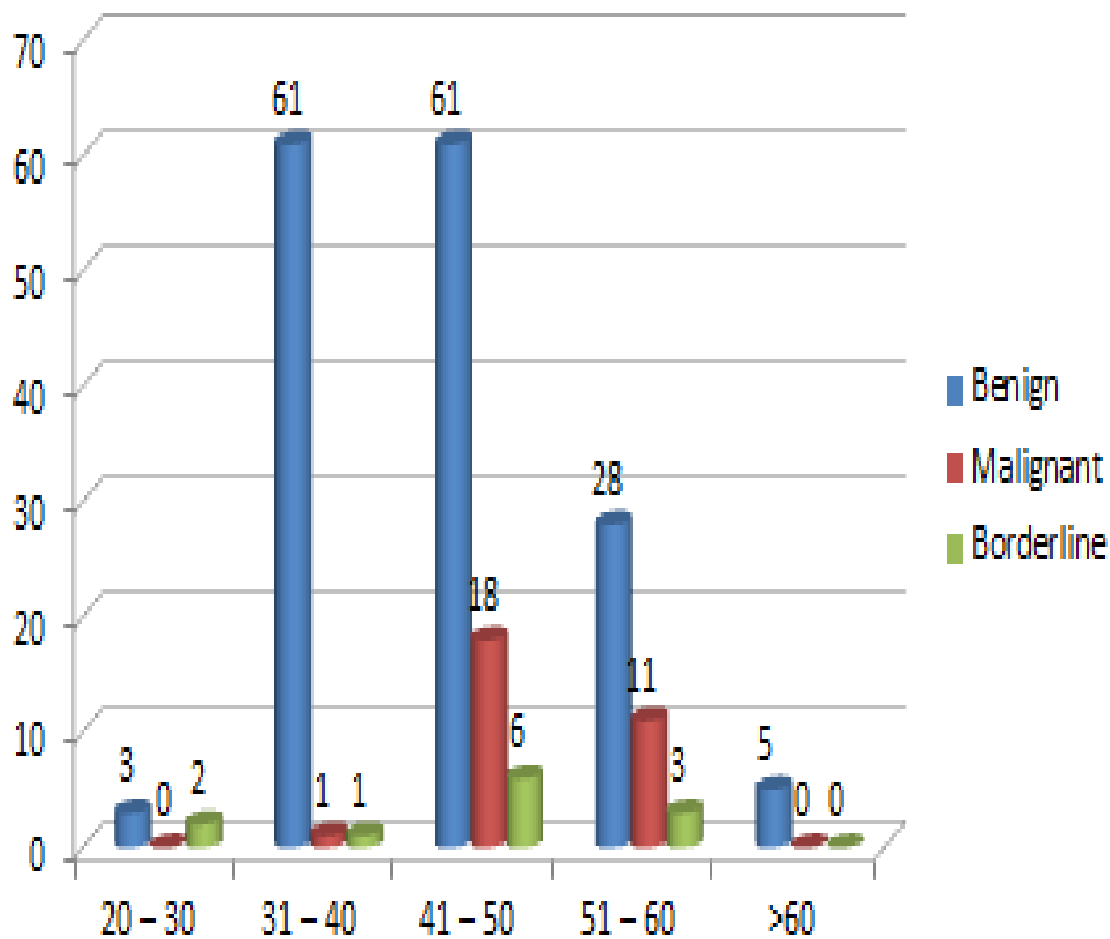


**Table 24: Association between age and malignancy of adnexal mass**

<b>Age group</b>	<b>Benign/simple cyst</b>	<b>Malignant</b>	<b>Borderline</b>	<b>P value</b>
<b>20 – 30</b>	3	0	2	<b>&lt;.001</b>
<b>31 – 40</b>	61	1	1	
<b>41 – 50</b>	61	18	6	
<b>51 – 60</b>	28	11	3	
<b>&gt;60</b>	5	0	0	
<b>Total</b>	158	30	12	

Table 24 shows the association between age and malignancy of adnexal mass. It is inferred from the table that malignant lesions of the adnexal mass was more common in the age group between 40 and 60 years whereas benign lesions/simple cyst were seen particularly in younger age and in age more than 60 years and this association was found to be statistically significant.

**Fig 24: Association between age and malignancy of adnexal mass**



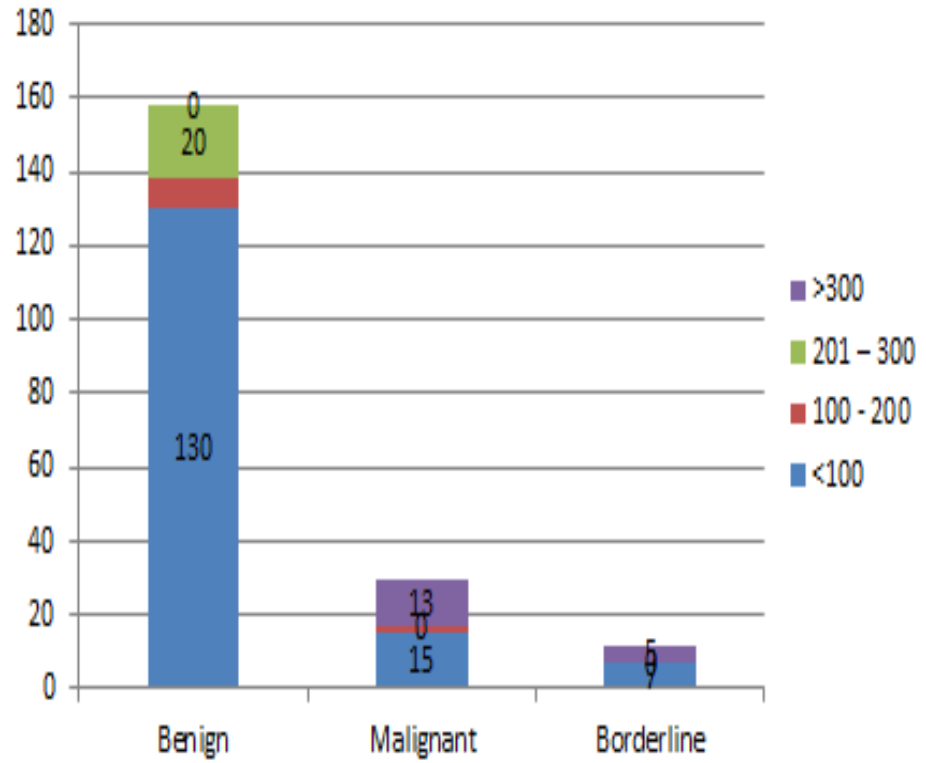
**Table 25:**

**Association between tumor markers and malignancy of adnexal mass**

<b>Adnexal mass</b>	<b>CA-125</b>				<b>Total</b>	<b>P value</b>
	<b>&lt;100</b>	<b>100 - 200</b>	<b>201 – 300</b>	<b>&gt;300</b>		
<b>Benign/simple cyst</b>	130	8	20	0	158	<b>&lt;.001</b>
<b>Malignant</b>	15	2	0	13	30	
<b>Borderline</b>	7	0	0	5	12	
<b>Total</b>	152	10	20	18	200	

Table 25 shows the association between tumor markers and malignancy of adnexal mass. It is inferred from the table that for the malignant lesions the value of CA-125 was found to be more than 300 and for benign lesions the value of CA-125 was less than 100 and this association was found to be statistically significant.

**Fig 25: Association between tumor markers and malignancy of adnexal mass**



## **DISCUSSION:**

The present study was conducted with the objective of evaluating the clinical profile of adnexal masses presenting in women with reproductive age group and perimenopausal women. It was conducted on 200 women presenting to our department with the complaints of symptoms related to adnexal mass. All the women were clinical examines and later ultrasonogram assessment was done along with measurement of specific tumor marker (CA-125) and they were operated as per the ultrasonogram report and the specimen (mass) was sent for histopathological examination to check for the malignancy status. In our study of 200 women only 10 women were unmarried and all others were married women.

Today assessing for mass in adnexa is a part of routine gynaecologic examination as because most of the adnexal mass in the early stage remains asymptomatic and so a primary screening of adnexa both by clinical examination and imaging can identify the adnexa mass much early and appropriate intervention can be made in such a way disease progression can be prevented. In particular for the postmenopausal and perimenopausal women the most common mass in the adnexa is usually an ovarian cancer which most often presents without any signs and symptoms in the early stage.



In the present study the mean age of the women presented with adnexal mass was 43.5 years and it is almost similar to the other studies done by Suhshansharmaetal, AnandDipaketal and MukutJyothi Das where they had mentioned the mean age as 42.8, 39.7 and 38.9 years respectively and most of the studies had shown that the most common age group for the incidence of adnexal mass was in the menopausal or perimenopausal period.

In our study the mean age of menarche was 13.9 years among the study subjects and most of the studies done previously did not show any association between the age of menarche and the occurrence of adnexal mass and similarly the parity status and the number of live births do not have any association over the incidence of adnexal mass and in our study the mean of both parity and live births was 2.2.

The commonest symptom in the present study was abdominal distension and severe pain and it was found to be present in 57% of the patients with adnexal mass and it was comparatively lower when compared to previous studies done by Al shukri et al, Bhagde AD et al and Radhamani S et al, where they found it to be in 98%, 92% and 82% of cases respectively.<sup>6,11,12</sup> Second most common symptom found in the present study was abnormal uterine bleeding which was seen in 28.5% of the subjects and the previous studies reported the incidence of AUB as 30

– 35%. None of our patients were asymptomatic while few other studies have reported 8-16% of patients with adnexa mass was found to be asymptomatic.

Although sensitivity of clinical examination for distinguishing a malignant mass from a benign one is somewhat better, these results need to be interpreted with caution. Based on the available literature bimanual examination does not appear to be a sensitive test for detecting the presence of adnexal masses and appears to have limited ability to discriminate benign from malignant masses which is similar to the results of the present study where we were able to feel for the mass either in the right or left fornix by doing a bimanual examination but it is was not possible to differentiate the various pathological lesions.

In our study 80% of adnexal lesions found on sonography, were reported as ovarian cysts and it was almost similar to the study done by AnandDipaketal which showed the sonography assessment for ovarian cyst as 78%.<sup>6</sup> Despite its universal use, some authors have projected that pelvic examination is inadequate in diagnosing adnexal masses and so the primary care physicians have concerns about pelvic examination because they regard their training is inadequate to avoid any misdiagnosis they required a regular use of ancillary diagnostic procedures. Previous studies had shown that ultrasonogram has a high sensitivity and specificity values along with very high negative predictive value in diagnosing adnexal

masses but the positive predictive value is low. Although ultrasound is considered the primary diagnostic modality for ovarian imaging, there are numerous false-positive and false negative findings.

Uterine anomalies along with adnexa mass is not uncommon and in our study nearly 70% of the patients uterus was normal and for the remaining it was either bulky uterus or atrophic uterus and few studies done early majority of them did not find any associated uterine anomalies with adnexa mass.

Our study shows a higher incidence of adnexa masses in either confined to left or right ovary compared to bilateral origin. In the present study we found a higher prevalence of adnexa masses in the right ovary compared to left ovary. A prospective cohort study done by Louis A on 140 women showed a higher incidence of adnexal masses in the left ovary as compared to the right ovary (49 vs 33%) which is contrary to our study.

The prevalence of malignancy/borderline tumor was comparable to the report by Balci *et al.* The intra-operative diagnosis of adnexal necrosis upon failure of reperfusion correlates well with the pathological diagnosis similar to other studies.

In the present study the most common finding of the HPE report was simple cyst followed by mucinous cystadenoma which shows that the benign lesions were found to be more common and among the entire

study subjects 15% had malignant lesions such as cystadenocarcinoma and 6% had borderline lesions and the results are almost in par with the studies done by Radhamanietal and Ahmed etal.

The most important goal in the analysis of adnexal masses is an attempt to identify non-malignant entities, such as simple cysts, tubal and pelvic inflammatory diseases, or endometriosis, as because these non-neoplastic entities are usually smaller in size and can easily be picked up by USG and was labelled as pathognomonic. However, each of these entities can mimic malignant neoplasm. So it is important to make a preoperative classification of an ovarian mass as benign or malignant atleast to an extent so a proper patient triage, referral, and management can be planned. Although it is not going to decide on whether to operate or not it can throw a light on deciding which operative procedure to be carried out whether open laparotomy and proceed or to go for a laproscopy procedure and also helps us to know about the requirement of a gynaecologic oncologists. It is recommended that a 'risk of malignancy index' should be assessed during the laproscopy procedure and if the surgeon suspects a malignancy during the time of the procedure than staging and debulking procedure can be performed without any postponement and this type of procedure is ideally performed by a gynaecologic oncologist.

In the present study we found the benign ovarian lesions to be more common in the younger reproductive age group females whereas the malignant ovarian lesions were more common in the perimenopausal age group females and this association was found to be statistically significant ( $p < .05$ ) and few of the studies done earlier had also proven the same finding as said in the literature ovarian malignancies is more common in menopausal age.

The current study showed a statistical significant association between the tumor marker level (CA-125) and the ovarian malignancy and there was a perfect correlation between these two whereas the levels are significantly lower in the benign ovarian lesions and the study done by few of the other authors had also proven the same finding.

In our study more than 50% of the patients had total abdominal hysterectomy along with oophorectomy which was either bilateral or confined to a particular side based on the presence of lesion and most of the previous studies which were done earlier had also performed open laparotomy which included total abdominal hysterectomy along with the removal of the ovaries.

## **SUMMARY AND CONCLUSION:**

- Adnexal mass presentation was found to be more common in the middle age females particularly in the perimenopausal women and the usual presentation was with symptoms of abdominal pain and distension along with dysfunctional uterine bleeding.
- Parity and sterilization procedures did not have any association with the occurrence of adnexal mass
- Adnexal mass did not have any associated pathology in cervix, vagina or uterus
- Per vagina findings shows forniceal fullness in most of the patients with adnexal mass
- Right sided ovarian mass found to be more common than left side or bilateral
- Right adnexal mass was the most common clinical diagnosis
- Right sided ovarian cyst was the most common USG finding
- Mean uterine length and breadth was almost in normal size
- Multi-loculated septa was seen in 30% of the patients in the mass lesion
- Solid components was present in 14% of the lesions
- Papillary projections was seen in 12% of the lesions

- Of all the adnexal mass 15% were malignant lesion, 6% were borderline lesions and the remaining were benign lesions
- Simple Ovarian cyst and mucinous cystadenoma were the most common benign lesions and the most common malignant lesion was cystadenocarcinoma.

## URKUND ANALYSIS RESULT:



### Urkund Analysis Result

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[https://www.researchgate.net/figure/Distribution-of-the-study-subjects-based-on-age-and-year-of-study\\_tbl1\\_307913136](https://www.researchgate.net/figure/Distribution-of-the-study-subjects-based-on-age-and-year-of-study_tbl1_307913136)

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## **PLAGIARISM CERTIFICATE**

This is to certify that this dissertation work titled “**EVALUATION OF ADNEXAL MASS IN REPRODUCTIVE AND PERIMENOPAUSAL AGE GROUP**” of the candidate **Dr.S.PREETI PUSHPAM** with **Reg.No.221716009** for the award of M.S in the branch of **OBSTETRICS AND GYNAECOLOGY**. I personally verified the urkund.com website for the purpose of plagiarism check. I found that the uploaded thesis file contains from introduction to conclusion pages and the result shows eleven percentage of plagiarism in the dissertation (D58555179).

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## MASTER CHART

S.NO	NAME	AGE	IP NO	AGE OF MENARCHE	PARITY	ST	SYMPTOMS	Per Abdomen	Per-Speculum	Per vagina	P/A	Diagnosis	USG	SIZE	WALL	LOCULI	SEPTA	COMP	PAPILLARY	CA-125	INTRA-OP	PROCEDURE	HPE REPORT
1	Sumathy	34	31121	15	P2L2/LSCS	ND	S.P	mass abd 13x15	Cx -H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	S	-	363	Rt ovarian mass 12x10cm, multiloculated, solid components	TAH+LSO+R C	Rt-mucinous cystadenoma with borderline malignancy
2	Muthumari	53	31045	13	P5L5/NVD	D	D	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst
3	Rajeswari	31	31106	16	P2L1/NVD	D	AUB	bulky uterus	C,V -H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x4cm	-	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	corpus luteal cyst with adenomyosis
4	Pushpam	45	30212	13	P2L2/LSCS	D	D	mass abd 20x15cm	Cx-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst	8x8cm	thick	-	M	S	-	89	Ovarian cyst 8x8cm/multilobulated, solid cystic areas	TAH BSO	granulosa cell tumor
5	Muniyammal	35	32111	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	C,V-H	AF-F	Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	-	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst
6	Mariyammal	38	29901	13	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	-	-	12	ovarian cyst 6x6cm	ROC	Simple cyst
7	Sornavadiyu	62	28761	15	P4L4/NVD	ND	D	mass abd 15x12cm	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt complex ovarian cyst	15x15cm	thick	M	-	S	P	243	Lt ovarian mass 15x15cm multiloculated, solid components with papillary excurrences	TAH RSO LC	Lt mucinous cystadenoma
8	Maheshwari	44	34212	13	unmarried	-	AUB	uterus 14 weeks	C,V-H	FF	bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x6cm	-	-	-	-	-	16	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	adenomyosis with corpus luteal cyst
9	Ananditha	38	29897	15	P4L4/NVD	D	AUB	mass abdomen	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	-	-	-	-	-	21	rt ovarian cyst 7x8cm	TAH BSO	serous cystadenoma
10	Amrutha	42	31187	14	P2L1/NVD	ND	P	vague mass	C,V-H	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x4cm	thin	-	-	-	-	13	Lt ovarian cyst 6x4cm	TAH BSO	simple cyst
11	Jagadeshwari	46	31231	14	P2L2/LSCS	D	abd distension	vague mass	C-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	15x10cm	thick	M	-	-	-	98	Rt multiloculated complex ovarian cyst	TAH BSO	Mucinous cystadenoma
12	Jamuna	35	29891	15	P2L2/NVD	D	AUB	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	thin	-	-	-	-	24	rt ovarian cyst 7x8cm	ROC	Simple cyst



13	Yamuna	39	29008	16	P5L5/NVD	D	vague mass	mass abd	C,V-H	LF-F	atrophy	Lt adnexal mass	Lt ovarian cyst	20x15cm	thick	M	M		P	234	Lt multiloculated ovarian cyst with papillary excrescences	TAH+RSO+LC	Mucinous cystadenoma
14	Paapayi	65	29875	13	P4L4/NVD	D	D,P	cystic mass	C,V-H	RF-F	atrophy	Rt adnexal mass	Rt ovarian cyst	8x7cm	thick	M	M	-	-	113	Rt multiloculated thick walled cyst	TAH+LSO+RC	Mucinous cystadenoma
15	Maheshwari	47	32213	14	P3L3/NVD	D	S,P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	4x5cm	thin	-	M	-	-	46	Round ligament fibroid(1x1cm)Retr operitoneal fibroid 6x6cm	staging laprotomy proceede to TAH	papillary serous cystadenosarcoma with omental mets
16	Sandhya	55	23412	15	P2L2/LSCS	ND	S,P	mass abd 13x15	Cx-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	S	-	363	Rt ovarian mass 12x10cm,multiloculated,solid components	TAH+LSO+RC	Rt-mucinous cystadenoma with borderline malignancy
17	Saroja	32	23456	13	P5L5/NVD	D	D	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst
18	Muthammal	34	27867	16	P2L1/NVD	D	AUB	bulky uterus	C,V-H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x4cm	-	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	corpus luteal cyst with adanomyosis
19	Krishnaveni	45	32415	13	P2L2/LSCS	D	D	mass abd 20x15cm	Cx-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst	8x8cm	thick	-	M	S	-	89	Ovarian cyst 8x8cm/multilobulated,solid cystic areas	TAH BSO	granulosa cell tumor
20	lalitha	45	32432	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	C,V-H	AF-F	Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	-	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst
21	Muthulakshmi	34	23332	13	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	-	-	12	ovarian cyst 6x6cm	ROC	Simple cyst
22	kuppamall	55	35468	15	P4L4/NVD	ND	D	mass abd 15x12cm	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt complex ovarian cyst	15x15cm	thick	M	-	S	P	243	Lt ovarian mass 15x15cm multiloculated,solid components with papillary excrescences	TAH RSO LC	Lt mucinous cystadenoma
23	Jeyalakshmi	35	31123	13	unmarried	-	AUB	uterus 14 weeks	C,V-H	FF	bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x6cm	-	-	-	-	-	16	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	adenomyosis with corpus luteal cyst
24	Indrani	48	45987	15	P4L4/NVD	D	AUB	mass abdomen	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	-	-	-	-	-	21	rt ovarian cyst 7x8cm	TAH BSO	serous cystadenoma
25	Muniyammal	34	41123	14	P2L1/NVD	ND	P	vague mass	C,V-H	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x4cm	thin	-	-	-	-	13	Lt ovarian cyst 6x4cm	TAH BSO	simple cyst
26	Lakshmi	33	43871	14	P2L2/LSCS	D	abd distension	vague mass	C-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	15x10cm	thick	M	-	-	-	98	Rt multiloculated complex ovarian cyst	TAH BSO	Mucinous cystadenoma
27	Priyadarshini	41	31009	15	P2L2/NVD	D	AUB	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	thin	-	-	-	-	24	rt ovarian cyst 7x8cm	ROC	Simple cyst

28	Mary	65	39812	16	P5L5/NVD	D	vague mass	mass abd	C,V-H	LF-F	atrophy	Lt adnexal mass	Lt ovarian cyst	20x15cm	thick	M	M		P	234	Lt multiloculated ovarian cyst with papillary excrescences	TAH+RSO+LC	Mucinous cystadenoma
29	Veerammal	34	30099	13	P4L4/NVD	D	D,P	cystic mass	C,V-H	RF-F	atrophy	Rt adnexal mass	Rt ovarian cyst	8x7cm	thick	M	M	-	-	113	Rt multiloculated thick walled cyst	TAH+LSO+RC	Mucinous cystadenoma
30	Farahna	45	39812	14	P3L3/NVD	D	S,P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	4x5cm	thin	-	M	-	-	46	Round ligament fibroid(1x1cm)Retr operitoneal fibroid 6x6cm	staging laprotomy proceede to TAH	papillary serous cystadenosarcoma with omental mets
31	Rani	32	32214	11	P2L2/LSCS	D	D	AUB	C,V-H	FF	bulky	adenosis+adnexal mass	Rt ovarian cyst with adenomyosis	5x6cm	thin	-	-	-	-	23	Rt simple ovarian cyst with adenomyos	TAH LSO RC	adenomyosis with corpus luteal cyst
32	Devikala	28	31156	14	P2L2/NVD	D	S,P	vague mass	C,V-H	RF-F	NS	Rt adnexal mass	Torsion of ovarian cyst	8x6cm	thick	-	M	-	-	15	mucinous cyst	TAH BSO	Mucinous tumor of borderline malignancy
33	Usha	34	31121	13	P3L1/NVD	D	D	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian mass	6x4cm	thin	-	M	-	-	46	Round ligament fibroid(2x1cm)Retr operitoneal fibroid 5x7cm	staging laprotomy proceeded to TAH	serous cystadenoma
34	Panchali	45	23412	11	P4L4/NVD	ND	S,P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst Rt	4x5cm	thin	-	M	-	-	363	Lt rupture cyst with clear fluid	TAH BSO	Mucinous cystadenocarcinoma
35	Hemavathy	34	34321	12	P1L1/LSCS	ND	D	abd distension	C,V-flushed	LF-F	NS	Lt adnexal mass	simple ovarian cyst	11X9X7cm	thin	-	-	-	-	15	twisted ovarian cyst	TAH+RSO+LO	simple cyst
36	Gunasundari	52	45312	14	P5L5/NVD	ND	vague mass	abd distension	C,V-H	both Fornices-F	NS	ovarian cyst	ovarian cyst	30x20x20cm	thick	M	M	-	-	8.4	rt ovarian cyst	TAH BSO	papillary serous cystadenosarcoma
37	Meenakshi	34	31121	15	P2L2/LSCS	ND	S,P	mass abd	Cx-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	-	0	363	Rt ovarian mass 12x10cm,multiloculated,solid components	TAH+LSO+RC	Rt-mucinous cystadenoma with borderline malignancy
38	Viruthambal	45	31045	13	P5L5/NVD	D	S,P	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst
39	Dhavamani	31	31106	16	P2L1/NVD	D	AUB	bulky uterus	C<V-H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x8cm	thin	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	corpus luteal cyst with adanomyosis
40	Lalitha	45	30212	13	P2L2/LSCS	D	vague mass	mass abd	Cx-H	RF-F	NS	Rt adnexal mass	complex cyst	8x8cm	thick	-	-	-	M	89	Ovarian cyst 8x8cm/multilobulates,solid cystic areas	TAH BSO	granulosa cell tumor
41	Devi	55	34543	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	AF-F	NS	?Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	thin	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst
42	Deepika	34	29901	12	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	55	-	12	ovarian cyst 6x6cm	ROC	Simple cyst
43	Prabavathy	45	45362	15	P2L2/LSCS	ND	S,P	mass abd 13x15	Cx-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	S	-	363	Rt ovarian mass 12x10cm,multiloculated,solid components	TAH+LSO+RC	Rt-mucinous cystadenoma with borderline malignancy

44	Anjalai	32	32890	13	P5L5/NVD	D	D	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst
45	Pencilamma	24	25490	16	P2L1/NVD	D	AUB	bulky uterus	C,V-H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x4cm	-	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	corpus luteal cyst with adanomyosis
46	Sumathi	55	34123	13	P2L2/LSCS	D	D	mass abd 20x15cm	Cx-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst	8x8cm	thick	-	M	S	-	89	Ovarian cyst 8x8cm/multilobulated,solid cystic areas	TAH BSO	granulosa cell tumor
47	Devi	43	43897	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	C,V-H	AF-F	Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	-	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst
48	Hema	32	32134	13	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	-	-	12	ovarian cyst 6x6 cm	ROC	Simple cyst
49	Janaki	36	43212	15	P4L4/NVD	ND	D	mass abd 15x12cm	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt complex ovarian cyst	15x15cm	thick	M	-	S	P	243	Lt ovarian mass 15x15cm multiloculated,solid components with papillary excurrences	TAH RSO LC	Lt mucinous cystadenoma
50	Muniyamma	45	23413	13	unmarried	-	AUB	uterus 14 weeks	C,V-H	FF	bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x6cm	-	-	-	-	-	16	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	adenomyosis with corpus luteal cyst
51	Chinnamaal	34	23111	15	P4L4/NVD	D	AUB	mass abdomen	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	-	-	-	-	-	21	rt ovarian cyst 7x8cm	TAH BSO	serous cystadenoma
52	Nandini	45	43768	14	P2L1/NVD	ND	P	vague mass	C,V-H	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x4cm	thin	-	-	-	-	13	Lt ovarian cyst 6x4cm	TAH BSO	simple cyst
53	Pushpammal	23	42312	14	P2L2/LSCS	D	abd distension	vague mass	C-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	15x10cm	thick	M	-	-	-	98	Rt multiloculated complex ovarian cyst	TAH BSO	Mucinous cystadenoma
54	Lakshmi	45	43112	15	P2L2/NVD	D	AUB	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	thin	-	-	-	-	24	rt ovarian cyst 7x8cm	ROC	Simple cyst
55	Snehapraba	34	32123	16	P5L5/NVD	D	vague mass	mass abd	C,V-H	LF-F	atrophy	Lt adnexal mass	Lt ovarian cyst	20x15cm	thick	M	M	-	P	234	Lt multiloculated ovarian cyst with papillary excurrences	TAH+RSO+LC	Mucinous cystadenoma
56	Stellamary	38	45234	13	P4L4/NVD	D	D,P	cystic mass	C,V-H	RF-F	atrophy	Rt adnexal mass	Rt ovarian cyst	8x7cm	thick	M	M	-	-	113	Rt multiloculated thick walled cyst	TAH+LSO+RC	Mucinous cystadenoma
57	Manjula	54	34512	14	P3L3/NVD	D	S,P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	4x5cm	thin	-	M	-	-	46	Round ligament fibroid(1x1cm)Retr operitoneal fibroid 6x6cm	staging laprotomy proceede to TAH	papillary serous cystadenosarcoma with omental mets
58	Geetha	29	45123	15	P2L2/LSCS	ND	S,P	mass abd 13x15	Cx-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	S	-	363	Rt ovarian mass 12x10cm,multiloculated,solid components	TAH+LSO+RC	Rt-mucinous cystadenoma with borderline malignancy
59	Vatchala	65	34123	13	P5L5/NVD	D	D	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst

60	Hema	29	23121	16	P2L1/NVD	D	AUB	bulky uterus	C,V-H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x4cm	-	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	corpus luteal cyst with adenomyosis
61	Roselinmary	45	30987	13	P2L2/LSCS	D	D	mass abd 20x15cm	Cx-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst	8x8cm	thick	-	M	S	-	89	Ovarian cyst 8x8cm/multiloculated, solid cystic areas	TAH BSO	granulosa cell tumor
62	Kanniyammal	35	23451	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	C,V-H	AF-F	Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	-	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst
63	Ammu	41	43567	13	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	-	-	12	ovarian cyst 6x6 cm	ROC	Simple cyst
64	Ponnamal	34	45234	15	P4L4/NVD	ND	D	mass abd 15x12cm	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt complex ovarian cyst	15x15cm	thick	M	-	S	P	243	Lt ovarian mass 15x15cm multiloculated, solid components with papillary excrescences	TAH RSO LC	Lt mucinous cystadenoma
65	Govindammal	31	32122	13	unmarried	-	AUB	uterus 14 weeks	C,V-H	FF	bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x6cm	-	-	-	-	-	16	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	adenomyosis with corpus luteal cyst
66	Devi	53	43212	15	P4L4/NVD	D	AUB	mass abdomen	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	-	-	-	-	-	21	rt ovarian cyst 7x8cm	TAH BSO	serous cystadenoma
67	Sakunthala	34	36578	14	P2L1/NVD	ND	P	vague mass	C,V-H	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x4cm	thin	-	-	-	-	13	Lt ovarian cyst 6x4cm	TAH BSO	simple cyst
68	Radha	32	23412	14	P2L2/LSCS	D	abd distension	vague mass	C-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	15x10cm	thick	M	-	-	-	98	Rt multiloculated complex ovarian cyst	TAH BSO	Mucinous cystadenoma
69	Jeya	36	43123	15	P2L2/NVD	D	AUB	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	thin	-	-	-	-	24	rt ovarian cyst 7x8cm	ROC	Simple cyst
70	Uma	45	36545	16	P5L5/NVD	D	vague mass	mass abd	C,V-H	LF-F	atrophy	Lt adnexal mass	Lt ovarian cyst	20x15cm	thick	M	M	-	P	234	Lt multiloculated ovarian cyst with papillary excrescences	TAH+RSO+LC	Mucinous cystadenoma
71	Shanthi	54	34765	13	P4L4/NVD	D	D,P	cystic mass	C,V-H	RF-F	atrophy	Rt adnexal mass	Rt ovarian cyst	8x7cm	thick	M	M	-	-	113	Rt multiloculated thick walled cyst	TAH+LSO+RC	Mucinous cystadenoma
72	Gomathiammal	43	23122	14	P3L3/NVD	D	S,P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	4x5cm	thin	-	M	-	-	46	Round ligament fibroid(1x1cm)Retr operitoneal fibroid 6x6cm	staging laprotomy proceede to TAH	papillary serous cystadenosarcoma with omental mets
73	Priyadarshini	34	34786	11	P2L2/LSCS	D	D	AUB	C,V-H	FF	bulky	adenosis+adnexal mass	Rt ovarian cyst with adenomyosis	5x6cm	thin	-	-	-	-	23	Rt simple ovarian cyst with adenomyos	TAH LSO RC	adenomyosis with corpus luteal cyst
74	Sengani	54	34111	14	P2L2/NVD	D	S,P	vague mass	C,V-H	RF-F	NS	Rt adnexal mass	Torsion of ovarian cyst	8x6cm	thick	-	M	-	-	15	mucinous cyst	TAH BSO	Mucinous tumor of borderline malignancy

75	Rekha	43	44231	13	P3L1/NVD	D	D	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian mass	6x4cm	thin	-	M	-	-	46	Round ligament fibroid(2x1cm)Retr operitoneal fibroid 5x7cm	staging laprotomy proceeded to TAH	serous cystadenoma
76	Jeyalakshmi	45	34122	11	P4L4/NVD	ND	S.P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst Rt	4x5cm	thin	-	M	-	-	363	Lt rupture cyst with clear fluid	TAH BSO	Mucinous cystadenocarcinoma
77	Revathi	55	31123	12	P1L1/LSCS	ND	D	abd distension	C,V-flushed	LF-F	NS	Lt adnexal mass	simple ovarian cyst	11X9X7 cm	thin	-	-	-	-	15	twisted ovarian cyst	TAH+RSO+LO	simple cyst
78	Yasmin	45	37564	14	P5L5/NVD	ND	vague mass	abd distension	C,V-H	both Fornices-F	NS	ovarian cyst	ovarian cyst	30x20x20cm	thick	M	M	-	-	8.4	rt ovarian cyst	TAH BSO	papillary serous cystadenosarcoma
79	Revathi	35	23112	14	P5L5/NVD	ND	vague mass	abd distension	C,V-H	both Fornices-F	NS	ovarian cyst	ovarian cyst	30x20x20cm	thick	M	M	-	-	8.4	rt ovarian cyst	TAH BSO	papillary serous cystadenosarcoma
80	Dhanalakshmi	45	23786	15	P2L2/LSCS	ND	S.P	mass abd	Cx-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	-	0	363	Rt ovarian mass 12x10cm,multiloculated,solid components	TAH+LSO+RC	Rt-mucinous cystadenoma with borderline malignancy
81	Sumithra	43	43122	13	P5L5/NVD	D	S.P	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst
82	Kausalya	38	32123	16	P2L1/NVD	D	AUB	bulky uterus	C<V-H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x8cm	thin	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6X4cm	TAH BSO	corpus luteal cyst with adanomyosis
83	Revathy	56	32122	13	P2L2/LSCS	D	vague mass	mass abd	Cx-H	RF-F	NS	Rt adnexal mass	complex cyst	8x8cm	thick	-	-	-	M	89	Ovarian cyst 8x8cm/multilobulated,solid cystic areas	TAH BSO	granulosa cell tumor
84	Banumathi	45	41235	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	AF-F	NS	Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	thin	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst
85	Sridevi	54	32187	12	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	45	-	12	ovarian cyst 6x6 cm	ROC	Simple cyst
86	Indirani	43	32187	13	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	-	-	12	ovarian cyst 6x6 cm	ROC	Simple cyst
87	Roselinmary	45	30985	15	P4L4/NVD	ND	D	mass abd 15x12cm	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt complex ovarian cyst	15x15cm	thick	M	-	S	P	243	Lt ovarian mass 15x15cm multiloculated,solid components with papillary excerences	TAH RSO LC	Lt mucinous cystadenoma
88	Loganayaki	54	31276	13	unmarried	-	AUB	uterus 14 weeks	C,V-H	FF	bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x6cm	-	-	-	-	-	16	uterus 14 weeks+B/L ovarian cyst 6X4cm	TAH BSO	adenomyosis with corpus luteal cyst
89	Thaiyalammal	54	43246	15	P4L4/NVD	D	AUB	mass abdomen	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	-	-	-	-	-	21	rt ovarian cyst 7x8cm	TAH BSO	serous cystadenoma
90	Prassana	43	43123	14	P2L1/NVD	ND	P	vague mass	C,V-H	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x4cm	thin	-	-	-	-	13	Lt ovarian cyst 6x4cm	TAH BSO	simple cyst

91	Meenakshi	33	32144	14	P2L2/LSCS	D	abd distension	vague mass	C-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	15x10cm	thick	M	-	-	-	98	Rt multiloculated complex ovarian cyst	TAH BSO	Mucinous cystadenoma
92	Vijayalakshmi	54	21876	15	P2L2/NVD	D	AUB	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	thin	-	-	-	-	24	rt ovarian cyst 7x8cm	ROC	Simple cyst
93	Mariyaselvam	43	31786	16	P5L5/NVD	D	vague mass	mass abd	C,V-H	LF-F	atrophy	Lt adnexal mass	Lt ovarian cyst	20x15cm	thick	M	M		P	234	Lt multiloculated ovarian cyst with papillary excurescences	TAH+RSO+LC	Mucinous cystadenoma
94	Saroja	43	31734	13	P4L4/NVD	D	D,P	cystic mass	C,V-H	RF-F	atrophy	Rt adnexal mass	Rt ovarian cyst	8x7cm	thick	M	M	-	-	113	Rt multiloculated thick walled cyst	TAH+LSO+RC	Mucinous cystadenoma
95	Padma	43	65111	14	P3L3/NVD	D	S,P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	4x5cm	thin	-	M	-	-	46	Round ligament fibroid(1x1cm)Retr operitoneal fibroid 6x6cm	staging laprotomy procedee to TAH	papillary serous cystadenosarcoma with omental mets
96	Kanniammal	43	32123	15	P2L2/LSCS	ND	S,P	mass abd 13x15	Cx-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	S	-	363	Rt ovarian mass 12x10cm,multiloculated,solid components	TAH+LSO+RC	Rt-mucinous cystadenoma with borderline malignancy
97	Amudha	65	65123	13	P5L5/NVD	D	D	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst
98	Indhu	56	51234	16	P2L1/NVD	D	AUB	bulky uterus	C,V-H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x4cm	-	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	corpus luteal cyst with adanomyosis
99	Govindammal	54	41298	13	P2L2/LSCS	D	D	mass abd 20x15cm	Cx-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst	8x8cm	thick	-	M	S	-	89	Ovarian cyst 8x8cm/multilobulated,solid cystic areas	TAH BSO	granulosa cell tumor
100	Vijaya Rani	43	51234	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	C,V-H	AF-F	Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	-	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst
101	Rajan	48	54098	13	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	-	-	12	ovarian cyst 6x6cm	ROC	Simple cyst
102	Pensillamma	43	61087	15	P4L4/NVD	ND	D	mass abd 15x12cm	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt complex ovarian cyst	15x15cm	thick	M	-	S	P	243	Lt ovarian mass 15x15cm multiloculated,solid components with papillary excurescences	TAH RSO LC	Lt mucinous cystadenoma
103	Saritha	54	32123	13	unmarried	-	AUB	uterus 14 weeks	C,V-H	FF	bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x6cm	-	-	-	-	-	16	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	adenomyosis with corpus luteal cyst
104	Parvathy	54	41987	15	P4L4/NVD	D	AUB	mass abdomen	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	-	-	-	-	-	21	rt ovarian cyst 7x8cm	TAH BSO	serous cystadenoma
105	Varalakshmi	43	51230	14	P2L1/NVD	ND	P	vague mass	C,V-H	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x4cm	thin	-	-	-	-	13	Lt ovarian cyst 6x4cm	TAH BSO	simple cyst
106	Ponnamal	54	61209	14	P2L2/LSCS	D	abd distension	vague mass	C-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	15x10cm	thick	M	-	-	-	98	Rt multiloculated complex ovarian cyst	TAH BSO	Mucinous cystadenoma

107	Gowri	51	41238	15	P2L2/NVD	D	AUB	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	thin	-	-	-	-	24	rt ovarian cyst 7x8cm	ROC	Simple cyst
108	Meena	54	30981	16	P5L5/NVD	D	vague mass	mass abd	C,V-H	LF-F	atrophy	Lt adnexal mass	Lt ovarian cyst	20x15cm	thick	M	M		P	234	Lt multiloculated ovarian cyst with papillary excrescences	TAH+RSO+LC	Mucinous cystadenoma
109	Ambujam	43	50981	13	P4L4/NVD	D	D,P	cystic mass	C,V-H	RF-F	atrophy	Rt adnexal mass	Rt ovarian cyst	8x7cm	thick	M	M	-	-	113	Rt multiloculated thick walled cyst	TAH+LSO+RC	Mucinous cystadenoma
110	Mary	43	51209	14	P3L3/NVD	D	S,P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	4x5cm	thin	-	M	-	-	46	Round ligament fibroid(1x1cm)Retr operitoneal fibroid 6x6cm	staging laprotomy procedee to TAH	papillary serous cystadenosarcoma with omental mets
111	Suguna	54	60012	11	P2L2/LSCS	D	D	AUB	C,V-H	FF	bulky	adenosis+adnexal mass	Rt ovarian cyst with adenomyosis	5x6cm	thin	-	-	-	-	23	Rt simple ovarian cyst with adenomyososis	TAH LSO RC	adenomyosis with corpus luteal cyst
112	Varalakshmi	32	51209	14	P2L2/NVD	D	S,P	vague mass	C,V-H	RF-F	NS	Rt adnexal mass	Torsion of ovarian cyst	8x6cm	thick	-	M	-	-	15	mucinous cyst	TAH BSO	Mucinous tumor of boderline malignancy
113	kokila	56	50008	13	P3L3/NVD	D	D	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian mass	6x4cm	thin	-	M	-	-	46	Round ligament fibroid(2x1cm)Retr operitoneal fibroid 5x7cm	staging laprotomy procedeed to TAH	serous cystadenoma
114	lakshmi	43	31988	11	P4L4/NVD	ND	S,P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst Rt	4x5cm	thin	-	M	-	-	363	Lt rupture cyst with clear fluid	TAH BSO	Mucinous cystadenocarcinoma
115	sunitha	57	41235	12	P1L1/LSCS	ND	D	abd distension	C,V-flushed	LF-F	NS	Lt adnexal mass	simple ovarian cyst	11X9X7cm	thin	-	-	-	-	15	twisted ovarian cyst	TAH+RSO+LO	simple cyst
116	devaki	45	31109	14	P5L5/NVD	ND	vague mass	abd distension	C,V-H	both Fornices-F	NS	ovarian cyst	ovarian cyst	30x20x20cm	thick	M	M	-	-	8.4	rt ovarian cyst	TAH BSO	papillary serous cystadenosarcoma
117	raji	54	50912	14	P5L5/NVD	ND	vague mass	abd distension	C,V-H	both Fornices-F	NS	ovarian cyst	ovarian cyst	30x20x20cm	thick	M	M	-	-	8.4	rt ovarian cyst	TAH BSO	papillary serous cystadenosarcoma
118	kavitha	51	60981	15	P2L2/LSCS	ND	S,P	mass abd	Cx-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	-	0	363	Rt ovarian mass 12x10cm,multiloculated,solid components	TAH+LSO+RC	Rt-mucinous cystadenoma with borderline malignancy
119	Umamaheshwari	58	31056	13	P5L5/NVD	D	S,P	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst
120	amutha	45	41230	16	P2L1/NVD	D	AUB	bulky uterus	C<V-H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x8cm	thin	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	corpus luteal cyst with adaniomyosis
121	Narayani	53	39065	13	P2L2/LSCS	D	vague mass	mass abd	Cx-H	RF-F	NS	Rt adnexal mass	complex cyst	8x8cm	thick	-	-	-	M	89	Ovarian cyst 8x8cm/multilobulated,solid cystic areas	TAH BSO	granulosa cell tumor
122	banumathi	42	60009	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	AF-F	NS	Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	thin	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst

123	Saratha	31	30097	12	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	-	-	12	ovarian cyst 6x6 cm	ROC	Simple cyst
124	Radhambal	35	34562	15	P2L2/LSCS	ND	S.P	mass abd 13x15	Cx-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	S	-	363	Rt ovarian mass 12x10cm,multiloculated,solid components	TAH+LSO+R C	Rt-mucinous cystadenoma with borderline malignancy
125	Parvathy	42	45326	13	P5L5/NVD	D	D	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst
126	Padmavathy	41	34562	16	P2L1/NVD	D	AUB	bulky uterus	C,V-H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x4cm	-	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	corpus luteal cyst with adenomyosis
127	Amsaveni	34	43210	13	P2L2/LSCS	D	D	mass abd 20x15cm	Cx-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst	8x8cm	thick	-	M	S	-	89	Ovarian cyst 8x8cm/multilobulated,solid cystic areas	TAH BSO	granulosa cell tumor
128	ushandini	54	45679	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	C,V-H	AF-F	Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	-	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst
129	mohanambal	36	23455	13	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	-	-	12	ovarian cyst 6x6 cm	ROC	Simple cyst
130	jebamani	39	65432	15	P4L4/NVD	ND	D	mass abd 15x12cm	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt complex ovarian cyst	15x15cm	thick	M	-	S	P	243	Lt ovarian mass 15x15cm multiloculated,solid components with papillary excurrences	TAH RSO LC	Lt mucinous cystadenoma
131	kuppamal	40	45321	13	unmarried	-	AUB	uterus 14 weeks	C,V-H	FF	bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x6cm	-	-	-	-	-	16	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	adenomyosis with corpus luteal cyst
132	gladys	42	44321	15	P4L4/NVD	D	AUB	mass abdomen	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	-	-	-	-	-	21	rt ovarian cyst 7x8cm	TAH BSO	serous cystadenoma
133	mohanambal	44	23456	14	P2L1/NVD	ND	P	vague mass	C,V-H	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x4cm	thin	-	-	-	-	13	Lt ovarian cyst 6x4cm	TAH BSO	simple cyst
134	sivagama sundari	47	21324	14	P2L2/LSCS	D	abd distension	vague mass	C-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	15x10cm	thick	M	-	-	-	98	Rt multiloculated complex ovarian cyst	TAH BSO	Mucinous cystadenoma
135	ramabai	51	45328	15	P2L2/NVD	D	AUB	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	thin	-	-	-	-	24	rt ovarian cyst 7x8cm	ROC	Simple cyst
136	kokila	38	34217	16	P5L5/NVD	D	vague mass	mass abd	C,V-H	LF-F	atrophy	Lt adnexal mass	Lt ovarian cyst	20x15cm	thick	M	M	-	P	234	Lt multiloculated ovarian cyst with papillary excurrences	TAH+RSO+L C	Mucinous cystadenoma
137	mahalakshmi	54	34218	13	P4L4/NVD	D	D,P	cystic mass	C,V-H	RF-F	atrophy	Rt adnexal mass	Rt ovarian cyst	8x7cm	thick	M	M	-	-	113	Rt multiloculated thick walled cyst	TAH+LSO+R C	Mucinous cystadenoma
138	devi	52	38975	14	P3L3/NVD	D	S.P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	4x5cm	thin	-	M	-	-	46	Round ligament fibroid(1x1cm)Retr operitoneal fibroid 6x6cm	staging laprotomy proceede to TAH	papillary serous cystadenosarcoma with omental mets



139	vimala	39	23423	15	P2L2/LSCS	ND	S.P	mass abd 13x15	Cx-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	S	-	363	Rt ovarian mass 12x10cm, multiloculated, solid components	TAH+LSO+RC	Rt-mucinous cystadenoma with borderline malignancy
140	munniyammal	42	45231	13	P5L5/NVD	D	D	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst
141	Saroja	36	43562	16	P2L1/NVD	D	AUB	bulky uterus	C,V-H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x4cm	-	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	corpus luteal cyst with adenomyosis
142	neelavathy	55	23451	13	P2L2/LSCS	D	D	mass abd 20x15cm	Cx-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst	8x8cm	thick	-	M	S	-	89	Ovarian cyst 8x8cm/multilobulated, solid cystic areas	TAH BSO	granulosa cell tumor
143	sengeniama	47	46572	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	C,V-H	AF-F	Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	-	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst
144	shanthi	35	32413	13	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	-	-	12	ovarian cyst 6x6cm	ROC	Simple cyst
145	anjalai	50	32321	15	P4L4/NVD	ND	D	mass abd 15x12cm	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt complex ovarian cyst	15x15cm	thick	M	-	S	P	243	Lt ovarian mass 15x15cm multiloculated, solid components with papillary excrescences	TAH RSO LC	Lt mucinous cystadenoma
146	sagunthala	37	32456	13	unmarried	-	AUB	uterus 14 weeks	C,V-H	FF	bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x6cm	-	-	-	-	-	16	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	adenomyosis with corpus luteal cyst
147	lalitha	54	34256	15	P4L4/NVD	D	AUB	mass abdomen	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	-	-	-	-	-	21	rt ovarian cyst 7x8cm	TAH BSO	serous cystadenoma
148	Rajeshwari	46	45612	14	P2L1/NVD	ND	P	vague mass	C,V-H	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x4cm	thin	-	-	-	-	13	Lt ovarian cyst 6x4cm	TAH BSO	simple cyst
149	Saroja	47	35217	14	P2L2/LSCS	D	abd distension	vague mass	C-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	15x10cm	thick	M	-	-	-	98	Rt multiloculated complex ovarian cyst	TAH BSO	Mucinous cystadenoma
150	Dhanalakshmi	43	34523	15	P2L2/NVD	D	AUB	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	thin	-	-	-	-	24	rt ovarian cyst 7x8cm	ROC	Simple cyst
151	Anandhi	42	37789	16	P5L5/NVD	D	vague mass	mass abd	C,V-H	LF-F	atrophy	Lt adnexal mass	Lt ovarian cyst	20x15cm	thick	M	M	-	P	234	Lt multiloculated ovarian cyst with papillary excrescences	TAH+RSO+LC	Mucinous cystadenoma
152	Moideen Beevi	41	24657	13	P4L4/NVD	D	D,P	cystic mass	C,V-H	RF-F	atrophy	Rt adnexal mass	Rt ovarian cyst	8x7cm	thick	M	M	-	-	113	Rt multiloculated thick walled cyst	TAH+LSO+RC	Mucinous cystadenoma
153	Malarvizhi	51	243576	14	P3L3/NVD	D	S.P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	4x5cm	thin	-	M	-	-	46	Round ligament fibroid(1x1cm)Retropertoneal fibroid 6x6cm	staging laprotomy proceede to TAH	papillary serous cystadenosarcoma with omental mets
154	Devi	53	45321	11	P2L2/LSCS	D	D	AUB	C,V-H	FF	bulky	adenosis+adnexal mass	Rt ovarian cyst with adenomyosis	5x6cm	thin	-	-	-	-	23	Rt simple ovarian cyst with adenomyososis	TAH LSO RC	adenomyosis with corpus luteal cyst

155	Swathi	49	46732	14	P2L2/NVD	D	S,P	vague mass	C,V-H	RF-F	NS	Rt adnexal mass	Torsion of ovarian cyst	8x6cm	thick	-	M	-	-	15	mucinous cyst	TAH BSO	Mucinous tumor of borderline malignancy
156	Swathi	40	34567	13	P3L1/NVD	D	D	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian mass	6x4cm	thin	-	M	-	-	46	Round ligament fibroid(2x1cm)Retr operitoneal fibroid 5x7cm	staging laprotomy proceeded to TAH	serous cystadenoma
157	Deivanai	39	32412	11	P4L4/NVD	ND	S,P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst Rt	4x5cm	thin	-	M	-	-	363	Lt rupture cyst with clear fluid	TAH BSO	Mucinous cystadenocarcinoma
158	Baby	36	33265	12	P1L1/LSCS	ND	D	abd distension	C,V-flushed	LF-F	NS	Lt adnexal mass	simple ovarian cyst	11X9X7 cm	thin	-	-	-	-	15	twisted ovarian cyst	TAH+RSO+LO	simple cyst
159	Veerammal	42	34215	14	P5L5/NVD	ND	vague mass	abd distension	C,V-H	both Fornices-F	NS	ovarian cyst	ovarian cyst	30x20x20cm	thick	M	M	-	-	8.4	rt ovarian cyst	TAH BSO	papillary serous cystadenosarcoma
160	Lakshmi	45	45376	15	P2L2/LSCS	ND	S,P	mass abd	Cx-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	-	0	363	Rt ovarian mass 12x10cm,multiloculated,solid components	TAH+LSO+RC	Rt-mucinous cystadenoma with borderline malignancy
161	Pooja	43	34215	13	P5L5/NVD	D	S,P	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst
162	Subbammal	47	43212	16	P2L1/NVD	D	AUB	bulky uterus	C<V-H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x8cm	thin	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	corpus luteal cyst with adanomyosis
163	Sujatha	54	45321	13	P2L2/LSCS	D	vague mass	mass abd	Cx-H	RF-F	NS	Rt adnexal mass	complex cyst	8x8cm	thick	-	-	-	M	89	Ovarian cyst 8x8cm/multilobulated,solid cystic areas	TAH BSO	granulosa cell tumor
164	Poongavanna m	53	32324	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	AF-F	NS	Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	thin	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst
165	Ramadevi	50	32143	12	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	53	-	12	ovarian cyst 6x6 cm	ROC	Simple cyst
166	Kamala	37	33421	15	P2L2/LSCS	ND	S,P	mass abd 13x15	Cx-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	S	-	363	Rt ovarian mass 12x10cm,multiloculated,solid components	TAH+LSO+RC	Rt-mucinous cystadenoma with borderline malignancy
167	Amirthammal	39	32154	13	P5L5/NVD	D	D	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst
168	Mannan	41	45671	16	P2L1/NVD	D	AUB	bulky uterus	C,V-H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x4cm	-	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	corpus luteal cyst with adanomyosis
169	Vellaiammal	47	34512	13	P2L2/LSCS	D	D	mass abd 20x15cm	Cx-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst	8x8cm	thick	-	M	S	-	89	Ovarian cyst 8x8cm/multilobulated,solid cystic areas	TAH BSO	granulosa cell tumor
170	Venkatammal	45	34267	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	C,V-H	AF-F	?Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	-	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst

171	Rajalaxmi	39	32147	13	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	-	-	12	ovarian cyst 6x6 cm	ROC	Simple cyst
172	anathi	49	34587	15	P4L4/NVD	ND	D	mass abd 15x12cm	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt complex ovarian cyst	15x15cm	thick	M	-	S	P	243	Lt ovarian mass 15x15cm multiloculated, solid components with papillary excurrences	TAH RSO LC	Lt mucinous cystadenoma
173	sahana	48	46378	13	unmarried	-	AUB	uterus 14 weeks	C,V-H	FF	bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x6cm	-	-	-	-	-	16	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	adenomyosis with corpus luteal cyst
174	santhiya	32	45378	15	P4L4/NVD	D	AUB	mass abdomen	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	-	-	-	-	-	21	rt ovarian cyst 7x8cm	TAH BSO	serous cystadenoma
175	vanaja	41	23453	14	P2L1/NVD	ND	P	vague mass	C,V-H	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x4cm	thin	-	-	-	-	13	Lt ovarian cyst 6x4cm	TAH BSO	simple cyst
176	jahera	44	51232	14	P2L2/LSCS	D	abd distension	vague mass	C-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	15x10cm	thick	M	-	-	-	98	Rt multiloculated complex ovarian cyst	TAH BSO	Mucinous cystadenoma
177	Sarana	46	52132	15	P2L2/NVD	D	AUB	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	thin	-	-	-	-	24	rt ovarian cyst 7x8cm	ROC	Simple cyst
178	Muthu lakshmi	35	53214	16	P5L5/NVD	D	vague mass	mass abd	C,V-H	LF-F	atrophy	Lt adnexal mass	Lt ovarian cyst	20x15cm	thick	M	M	-	P	234	Lt multiloculated ovarian cyst with papillary excurrences	TAH+RSO+L C	Mucinous cystadenoma
179	Manimegalai	36	44652	13	P4L4/NVD	D	D,P	cystic mass	C,V-H	RF-F	atrophy	Rt adnexal mass	Rt ovarian cyst	8x7cm	thick	M	M	-	-	113	Rt multiloculated thick walled cyst	TAH+LSO+R C	Mucinous cystadenoma
180	Saradha	38	44543	14	P3L3/NVD	D	S,P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	4x5cm	thin	-	M	-	-	46	Round ligament fibroid(1x1cm)Retr operitoneal fibroid 6x6cm	staging laprotomy proceede to TAH	papillary serous cystadenosarcoma with omental mets
181	Sherin Banu	39	45321	15	P2L2/LSCS	ND	S,P	mass abd 13x15	Cx-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	12x10cm	thick	M	M	S	-	363	Rt ovarian mass 12x10cm,multiloculated,solid components	TAH+LSO+R C	Rt-mucinous cystadenoma with borderline malignancy
182	Madhumitha	42	43254	13	P5L5/NVD	D	D	Tender adnexa	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x8cm	thin	-	-	-	-	12	cyst 6x8cm	LOC	Simple cyst
183	Patchayamal	43	23412	16	P2L1/NVD	D	AUB	bulky uterus	C,V-H	FF	Bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x4cm	-	-	-	-	-	23	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	corpus luteal cyst with adanomyosis
184	Muthulakshmi	46	34251	13	P2L2/LSCS	D	D	mass abd 20x15cm	Cx-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst	8x8cm	thick	-	M	S	-	89	Ovarian cyst 8x8cm/multilobulated,solid cystic areas	TAH BSO	granulosa cell tumor
185	mahalakshmi	45	34231	14	P3L3/NVD	ND	vague mass	Tender adnexa	C,V-H	C,V-H	AF-F	Twisted ovarian cyst	?Torsion of adnexal mass	4x6cm	-	-	-	-	-	43	Gangrenous ovarian cyst	ROC	Gangrenous cyst
186	Munyamal	41	34564	13	P2L2A1/NVD	D	AUB	mass abd	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	6x6cm	thin	-	-	-	-	12	ovarian cyst 6x6 cm	ROC	Simple cyst

187	Rajamal	48	12343	15	P4L4/NVD	ND	D	mass abd 15x12cm	Cx-flushed	LF-F	NS	Lt adnexal mass	Lt complex ovarian cyst	15x15cm	thick	M	-	S	P	243	Lt ovarian mass 15x15cm multiloculated, solid components with papillary excurrences	TAH RSO LC	Lt mucinous cystadenoma
188	Rammamal	49	34212	13	unmarried	-	AUB	uterus 14 weeks	C,V-H	FF	bulky	adenosis+adnexal mass	adenomyosis+B/L ovarian cyst	6x6cm	-	-	-	-	-	16	uterus 14 weeks+B/L ovarian cyst 6x4cm	TAH BSO	adenomyosis with corpus luteal cyst
189	Piyarsi begam	52	45321	15	P4L4/NVD	D	AUB	mass abdomen	Cx-E	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	-	-	-	-	-	21	rt ovarian cyst 7x8cm	TAH BSO	serous cystadenoma
190	Saroja	34	32145	14	P2L1/NVD	ND	P	vague mass	C,V-H	LF-F	NS	Lt adnexal mass	Lt ovarian cyst	6x4cm	thin	-	-	-	-	13	Lt ovarian cyst 6x4cm	TAH BSO	simple cyst
191	prakasha mary	33	56432	14	P2L2/LSCS	D	abd distension	vague mass	C-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	15x10cm	thick	M	-	-	-	98	Rt multiloculated complex ovarian cyst	TAH BSO	Mucinous cystadenoma
192	Nirmala	41	34567	15	P2L2/NVD	D	AUB	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian cyst	7x8cm	thin	-	-	-	-	24	rt ovarian cyst 7x8cm	ROC	Simple cyst
193	Nagammal	43	32412	16	P5L5/NVD	D	vague mass	mass abd	C,V-H	LF-F	atrophy	Lt adnexal mass	Lt ovarian cyst	20x15cm	thick	M	M	-	P	234	Lt multiloculated ovarian cyst with papillary excurrences	TAH+RSO+LC	Mucinous cystadenoma
194	Kasthuribai	35	54321	13	P4L4/NVD	D	D,P	cystic mass	C,V-H	RF-F	atrophy	Rt adnexal mass	Rt ovarian cyst	8x7cm	thick	M	M	-	-	113	Rt multiloculated thick walled cyst	TAH+LSO+RC	Mucinous cystadenoma
195	Kullammal	38	54326	14	P3L3/NVD	D	S,P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt complex ovarian mass	4x5cm	thin	-	M	-	-	46	Round ligament fibroid(1x1cm)Retr operitoneal fibroid 6x6cm	staging laprotomy proceede to TAH	papillary serous cystadenosarcoma with omental mets
196	Anitha	41	61234	11	P2L2/LSCS	D	D	AUB	C,V-H	FF	bulky	adenosis+adnexal mass	Rt ovarian cyst with adenomyosis	5x6cm	thin	-	-	-	-	23	Rt simple ovarian cyst with adenomyososis	TAH LSO RC	adenomyosis with corpus luteal cyst
197	Murugamma	43	23456	14	P2L2/NVD	D	S,P	vague mass	C,V-H	RF-F	NS	Rt adnexal mass	Torsion of ovarian cyst	8x6cm	thick	-	M	-	-	15	mucinous cyst	TAH BSO	Mucinous tumor of borderline malignancy
198	santhy	52	43256	13	P3L1/NVD	D	D	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	Rt ovarian mass	6x4cm	thin	-	M	-	-	46	Round ligament fibroid(2x1cm)Retr operitoneal fibroid 5x7cm	staging laprotomy proceeded to TAH	serous cystadenoma
199	maegaret	50	32435	11	P4L4/NVD	ND	S,P	mass abd	C,V-H	RF-F	NS	Rt adnexal mass	complex ovarian cyst Rt	4x5cm	thin	-	M	-	-	363	Lt rupture cyst with clear fluid	TAH BSO	Mucinous cystadenocarcinoma
200	santha	49	34532	12	P1L1/LSCS	ND	D	abd distension	C,V-flushed	LF-F	NS	Lt adnexal mass	simple ovarian cyst	11X9X7cm	thin	-	-	-	-	15	twisted ovarian cyst	TAH+RSO+LO	simple cyst