

## Histopathological Study of Hysterectomy Specimens with or without Adnexa

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### Abstract

*Introduction:* Women worldwide suffer from gynaecological and obstetric disorders that require hysterectomy as a treatment option. Hysterectomy forms the major bulk among the specimens received in our histopathology laboratory, hence this study was undertaken to know the incidence and also understand the variety of lesions in the hysterectomy specimen. *Materials and Methods:* The present study was done in the Department of Pathology, KBNIMS, Kalaburagi, from July 2014 to June 2016. All types of hysterectomy specimens (with or without adnexa) received during this period, were studied. *Results:* Total number of hysterectomy specimens received was 269. Out of 269 cases, non-neoplastic lesions were 141 (52%), benign tumors were 114 (43%) and malignant tumors were 14 (5%). One case of tuberculosis of the endometrium was diagnosed. Malignant lesions were 3 (1.2%), 2 cases of endometrial adenocarcinoma and 1 case of endometrial stromal sarcoma. Incidence of leiomyoma in present study was 31.8% (86/269) with mean age of 42.42 years and incidence of adenomyosis was 32%. Among 6 malignant tumors of cervix, 4 (82%) cases were squamous cell carcinoma, 1 (9%) case of adenocarcinoma, 1 (4.5%) case of adenosquamous carcinoma. One of primary adenocarcinoma of fallopian tube was diagnosed, which was not diagnosed clinically. One case of mucinous cystadenocarcinoma with metastasis to the serosa of the uterus and to the colon, was diagnosed. *Conclusion:* Study of hysterectomy specimens is fascinating, as a variety of lesions are encountered. This specimen needs to be thoroughly studied, in order to know the different types of lesions in the female genital tract.

**Keywords:** Hysterectomy; Leiomyoma; Squamous Cell Carcinoma; Tuberculous; Endometritis.

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### Introduction

The female genital tract is a hormone responsive system to a degree unmatched by any other system in the body. The gross configuration of uterus changes dramatically throughout life by the changing levels of ovarian hormones.

Cyclical uterine bleeding, which begins in the anatomically and physiologically normal female, marks an important stage of reproductive maturation [1].

The endometrium is a dynamic organ that responds to circulating blood levels of estrogen and progesterone [1].

Abnormal uterine bleeding and infertility are the two cardinal clinical manifestations of gynecological diseases. Uterine morphology has to be correlated with the clinical differential diagnoses of abnormal uterine bleeding and associated endocrinologic disturbances.

One of the greatest advances in gynecology was early detection and cure rate of cancer of the uterine cervix that has resulted from the development of cytology and the recognition of carcinoma in situ.

Hysterectomy is the most common surgery performed by the gynecologists, next to Caesarian section. There are many indications for hysterectomy, such as, uterine fibroids, that cause bleeding, infertility, pain and other problems; uterine prolapse;

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adenomyosis; endometriosis; cancer of the uterus, cervix, fallopian tubes or ovaries; abnormal vaginal bleeding or chronic pelvic pain etc. The present study is aimed at a detailed histopathological evaluation of all lesions of hysterectomy specimens with or without adnexa.

#### *Aims and Objectives*

1. To study the histopathological features of varied lesions in hysterectomy specimens, with or without adnexa,
2. To study the incidence and distribution of various types of lesions in the hysterectomy specimens, with or without adnexa.

#### **Methods of Collection of Data**

This prospective study consists of 269 hysterectomy specimens, with or without adnexa, received over a period of two years i.e. from July 2014 to June 2016, in the Department of Pathology, Khaja Bandanawaz Institute of Medical Sciences, Kalaburagi.

Following the receipt of surgical specimens in 10% formalin, they were allowed to fix for 24-48 hours. Detailed gross examination was carried out and multiple parallel sections were made and examined. The tissue bits from representative areas were taken for histopathological examination and paraffin blocks were prepared. The number of blocks prepared depended upon the size and morphology of tumors.

Multiple sections of three to five microns thickness were cut and routinely stained with hematoxylin and eosin stain and studied.

**Table 1:** Distribution of neoplastic and non-neoplastic lesions in hysterectomy specimens

Types of Lesions	No. of Cases	Percentage (%)
Non-neoplastic	141	52%
Benign	114	43%
Malignant	14	5%
<b>Total</b>	<b>269</b>	<b>100%</b>

Among the benign tumors, 86 (75%) were from myometrium, and among malignant tumors, 6 (39%) were from cervix, 4(31%) from ovary, 3(23%) from endometrium, and one from fallopian tube.

Graph 2 shows distribution of tumors in the hysterectomy specimens studied.

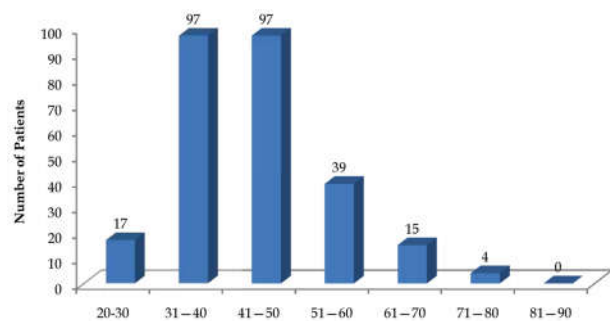
Graph 2 shows distribution of tumors in the study, total number of benign tumors were 114 and malignant tumors were 14. Among the benign tumors 86 (75%)

#### **Observation and Results**

During the present study period, total specimens received were 1956, and specimens from the gynecological department were 521, of which 269 (52%) were hysterectomy specimens.

Hysterectomy specimens accounted for 13.8% of all specimens received in our department within the study period.

In the present study patients age range was from 20-80 years, with a mean age of 44.75 years.



**Graph 1:** Age distribution of patients in present study

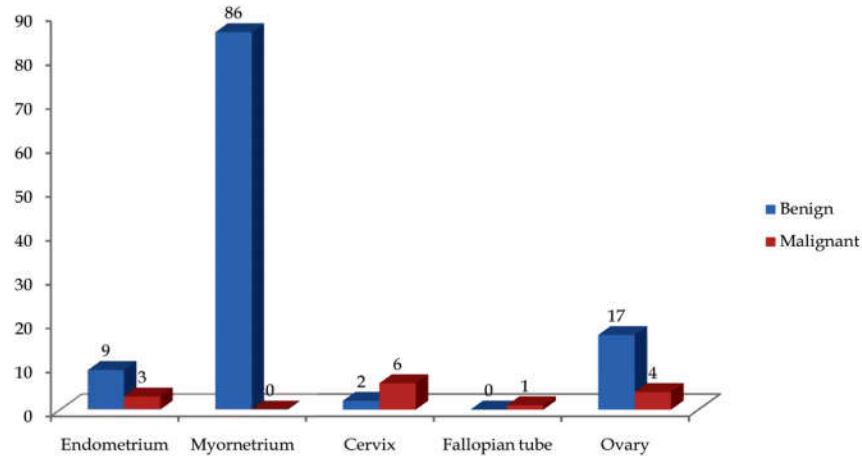
Graph 1 shows the age group distribution of patients in the present study. Maximum number of hysterectomies were noted in the patients in 3<sup>rd</sup> and 4<sup>th</sup> decade with 97 (36.1% each) cases, followed by 39 (14.5%) in 5<sup>th</sup> decade. Out of 269 cases, non-neoplastic lesions were seen in 141 cases (52%), benign tumors were seen in 114 cases (43%) and malignant tumors were seen in 14 cases (5%).

Table 1. shows distribution of non-neoplastic and neoplastic lesions in hysterectomy specimens.

were from myometrium, and among malignant tumors 6 (39%) were from cervix.

Table 2 shows the distribution of lesions in the endometrium. Out of 269 cases, 248 were unremarkable, 9 cases were non-neoplastic and 12 cases were neoplastic.

Among 9 non-neoplastic lesions, one case was of tubercular endometritis and one case was of non-specific endometritis and seven cases were of hyperplasia.



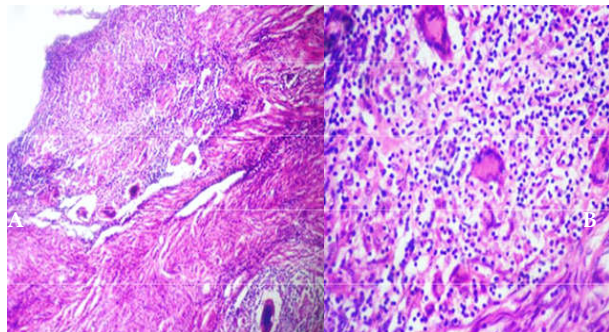
**Graph 2:** Distribution of the Tumors in hysterectomy specimens

**Table 2:** Distribution of lesions in endometrium

Lesions in endometrium.		No. of cases	Total	%
<b>Unremarkable</b>		248	248	92.18
Non-neoplastic	Chronic endometritis	2	9	3.35
Neoplastic	Simple hyperplasia without atypia.	7		
	Benign		9	3.35
	Leiomyomatous polyp	4		
	Adenomatous polyp	5		
	Malignant		3	1.12
	Endometrial adenocarcinoma	2		
	Endometrial stromal sarcoma	1		
<b>Total</b>		269	269	100

There was one case of tubercular endometritis, which was not diagnosed clinically. Histopathological examination of the endometrium showed multiple necrotizing granulomas in the endometrium (Figure 1.)

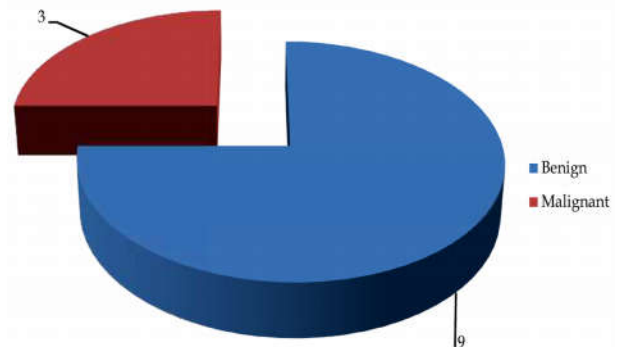
Among 12 neoplastic lesions, 9 were benign and 3



**Fig. 1:** Tubercular endometritis, **A:** Photomicrograph showing granuloma in endometrium and myometrium with giant cells (H&E 10X), **B:** Photomicrograph showing granuloma with Langhans type of giant cells, with chronic inflammatory cell infiltrate (H&E, 40X)

were malignant, as shown in Graph 3.

Among 9 benign neoplastic lesions, 4 cases showed leiomyomatous polyps and 5 cases showed



**Graph 3:** Distribution of tumors in endometrium

adenomatous polyps.

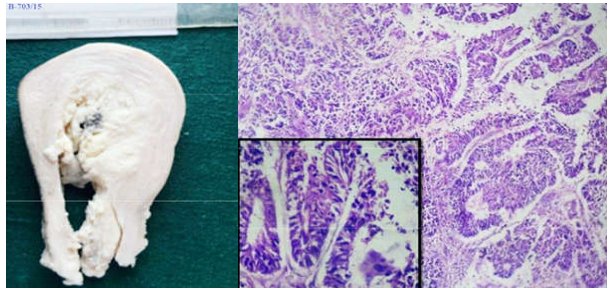
The incidence of endometrial polyps in the present study was 3.5% (9/269).

Table 3. shows the age distribution of patients with endometrial polyps. Five cases (56%) were seen between the age group of 41 to 50 years, followed by 3 cases (34%) in between the age group of 31 to 40 years.

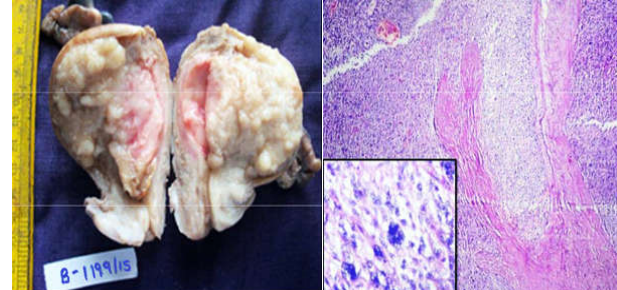
Among three malignant lesions, two cases were of endometrial adenocarcinoma (Figure 2) and one case was of endometrial stromal sarcoma (Figure 3), as

**Table 3:** Age distribution of endometrial polyps

Age	No. of cases	Percentage (%)
31-40	3	34
41-50	5	56
51-60	1	10
61-70	0	0
<b>Total</b>	<b>9</b>	<b>100</b>



**Fig. 2:** Endometrial Adenocarcinoma, **A:** Gray white growth in the endometrium, extending into the protruding through the cervix, **B:** Photomicrograph showing atypical cells arranged in papillary pattern and infiltrating in myometrium and protruding through the cells with mitotic figure (H&E, 40X)



**Fig. 3:** Endometrial stromal sarcoma, **A:** Cut section of uterus show gray white, irregular growth in endometrium and extending into the myometrium, **B:** Photomicrograph showing finger like tumor tissue infiltrating into smooth muscle bundles (H&E 10X). Insert shows mitotic figures (H&E, 40X)

**Table 4:** Distribution of malignant tumors in endometrium

Malignant tumors	No. of tumors	Percentage (%)
Endometrial adenocarcinomas	2	66
Endometrial stromal sarcomas	1	34
Total	3	100

**Table 5:** Age distribution of endometrial malignancies

Age	No. of cases	Percentage (%)
20-30	0	0
31-40	0	0
41-50	2	66
51-60	0	0
61-70	1	34
71-80	0	0
<b>Total</b>	<b>3</b>	<b>100</b>

shown in Table 4.

Incidence of endometrial carcinoma was 0.74% (2/269), and of endometrial stromal sarcoma, it was 0.37% (1/269).

Table 5 shows the age incidence of endometrial malignancies.

**Table 6:** Distribution of myometrial lesions

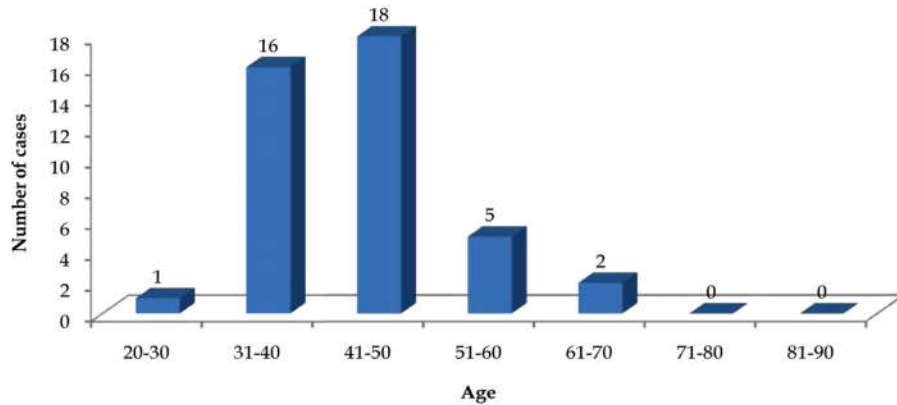
Lesion		No. of cases	Total
Non neoplastic	Chronic inflammation	2(2%)	44
	Adenomyosis	42(32%)	
Neoplastic	Benign- leiomyomas	86(66%)	86

Out of 42 cases of adenomyosis, 12 cases were associated with leiomyomas. 15.7%.

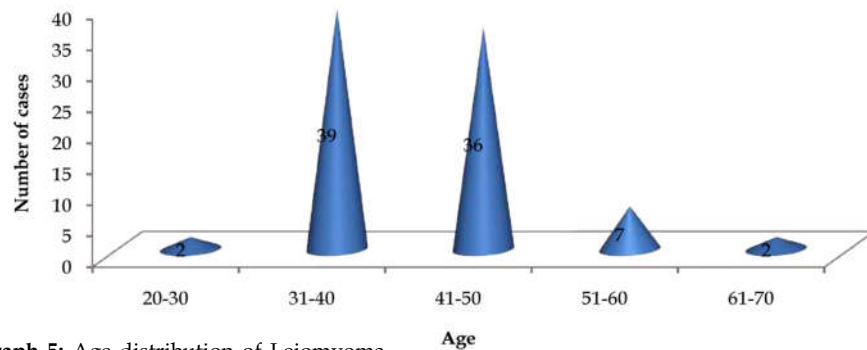
The incidence of adenomyosis in present study was adenomyosis.

In the present study the youngest case was of 30 years of age and the oldest case was of 70 years. In patients with carcinoma endometrium the age group was 41-50 years, and of stromal sarcoma, the age group was 61-70 yrs.

Table 6 shows the distribution of lesions in myometrium.



Graph 4: Age distribution of adenomyosis



Graph 5: Age distribution of Leiomyoma

In patients with adenomyosis the age range was from 27 to 80 years, with mean age of 44.68 years. Majority of patients with adenomyosis were between 41 and 50 years (43%).

The incidence of leiomyoma in present study was 31.9% (86/269).

The age incidence of leiomyoma is shown in

graph 5.

In patients with leiomyoma, age range was from 25 to 70 years, with a mean age of 42.42 years. The peak age of patients with leiomyoma was between 31 to 40 years - 39 cases (45.3%), followed by 36 cases (41.8%) in between 41 to 50 years.

Table 7 shows the location of leiomyoma.

Table 7: Distribution of location of Leiomyomas

Location	No. of cases	Percentage %
Intramural	45	53
Subserosal	10	12
Submucosal	7	8
Multiple	24	27
<b>Total</b>	<b>86</b>	<b>100</b>

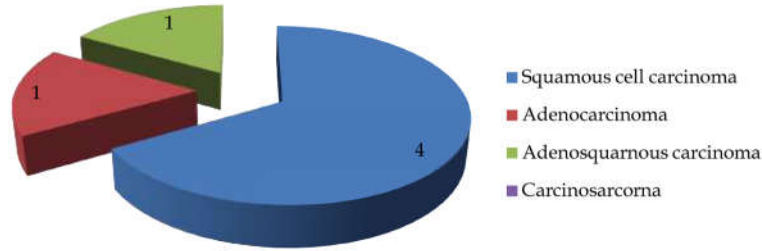
Table 8: Distribution of lesions in cervix

Distribution of lesions in cervix		No. of cases	Total	%	
<b>Non-neoplastic</b>	Chronic cervicitis	231	257	95.54	
	Chronic cervicitis with epidermidization	26			
<b>Pre-neoplastic</b>	Mild dysplasia	1	4	1.49	
	Severe dysplasia	2			
	Carcinoma In situ	1			
<b>Neoplastic</b>	<b>Benign</b>	Leiomyoma	1	2	0.74
		Leiomyomatous Polyp	1		
		Adenomatous Polyp	0		
	<b>Malignant</b>	Squamous cell carcinoma	4	6	2.23
		Adenocarcinoma	1		
		Adenosquamous carcinoma	1		
		Carcinosarcoma	0		
<b>Total</b>		<b>269</b>	<b>269</b>	<b>100</b>	

The majority of leiomyomas in the present study were intramural in location i.e.; 45 cases (53%), followed by multiple sites in 24 cases (27%), subserosal 10 cases (2%) and submucosal 7 cases (8%).

Table 8 shows distribution of various lesions of cervix

Graph 6 shows the distribution of malignant



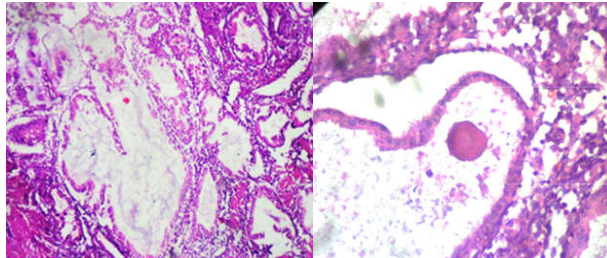
**Graph 6:** Distribution of malignant lesions in cervix

cervical tumors in present study. Among 6 malignant tumors of cervix, 4 (66%) cases were of squamous cell carcinoma, 1 (17%) case of adenocarcinoma (Figure 4) and 1(17%) case of adenosquamous carcinoma (Figure 5).

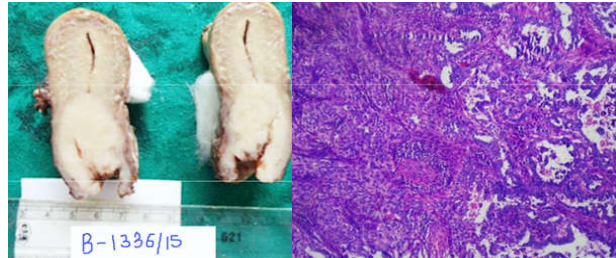
Table 9 shows the age distribution of patients in carcinoma cervix.

**Table 9:** Age distribution of carcinoma cervix

Age	No. of cases	Percentage (%)
20-30	0	0
31-40	1	16
41-50	2	34
51-60	3	50
61-70	0	0
<b>Total</b>	<b>6</b>	<b>100</b>



**Fig. 4:** Adenocarcinoma of cervix, **A.** Cut section shows grey white growth in the cervix extending into the lower segment of uterus, **B.** Photomicrograph showing the adenocarcinoma component in right and squamous cell carcinoma on left. (H&E,10X)



**Fig. 5:** Adenosquamous carcinoma, **A.** Cut section shows grey white growth in the cervix extending into the lower segment of uterus, **B.** Photomicrograph showing adenocarcinoma component in right and squamous cell carcinoma on left. (H&E,10X)

In the present study age range of cervical carcinomas were from 30 years to 65 years, with mean age of 45.83%.

Peak age incidence was noted between 51 to 60 years with 3(50%) cases, followed by 2 cases (34%) cases in

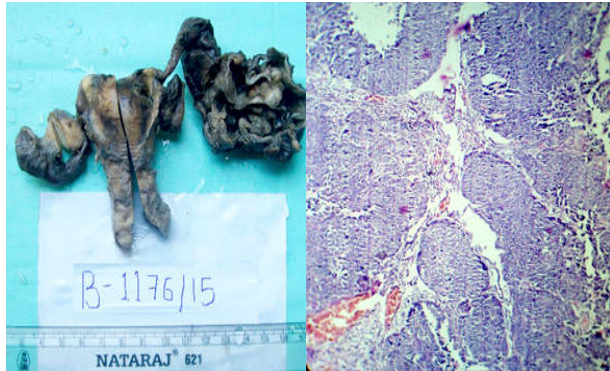
between the age group of 41-50 years and 1(16%) case in between the age group of 31 to 40 years.

Table 10 shows the distribution of various lesions of the fallopian tube.

**Table 10:** Distribution of various lesions in fallopian tube

Lesions	No. ofcases	%	
Unremarkable	94	77.04	
<b>Non-neoplastic</b>	Hydrosalpinx	26	21.32
	Chronic salpingitis	1	0.82
<b>Neoplastic</b>	Primary Adenocarcinoma	1	0.82
<b>Total</b>	<b>122</b>	<b>100</b>	

There was one case of primary adenocarcinoma of the fallopian tube, detected in total hysterectomy specimen of a 50 year old woman which was not diagnosed clinically (.Fig.6).



**Fig. 6:** Primary adenocarcinoma of fallopian tube, **A.** Gross picture showing hysterectomy specimen with bilateral adnexa left fallopian tube is cystically dilated. C/S shows solid and cystic areas, **B.** Microphotograph showing complex papillary arrangement of pleomorphic tall columnar cells with marked nuclear pleomorphism. 40X (H&E)

Grossly, the tube was cystically dilated with papillary growth in the lumen. Histopathological study of the cyst wall and the papillary growth showed complex papillary arrangement of pleomorphic, tall columnar cells with marked nuclear pleomorphism. There were frequent mitotic figures and some solid areas. The tumor tissue showed infiltration upto the serosa. Serial sections from the endometrium, cervix, other tube and both the ovaries were studied and no tumor was detected.

Total numbers of hysterectomy specimens with ovaries were 122, of which 21 cases showed ovarian tumours and the remaining were non-neoplastic lesions. Incidence of ovarian tumors in the present study was 8.17%.

Table 11 shows distribution of ovarian tumors. Among the ovarian tumors majority were surface epithelial tumors {16 cases(76%)}, followed by sex-cord stromal tumors {3 cases(14.28%)}, germ-cell tumors {2 cases(10%)}. Among the tumors, benign were 17(82%) and malignant tumors were 4(19%).

**Table 11:** Distribution of tumors of ovary

Tumors		Number of cases	Total	Percentage (%)
Surface epithelial tumors	Serous cystadenoma	8	16	76%
	Cystadenofibroma	1		
	Serous Cystadenocarcinoma	1		
	Mucinous cystadenoma	4		
	Mucinous Cystadenocarcinoma	1		
	Brenner tumor	1		
Sex cord stromal tumors	Granulosa cell tumor	1	3	14%
	Fibroma	1		
	Fibrothecoma	1		
Germ cell Tumors	Teratoma	2	2	10%
	Dysgerminoma	0		
Secondary Tumors		0	0	0
<b>Total</b>		<b>21</b>	<b>21</b>	<b>100</b>

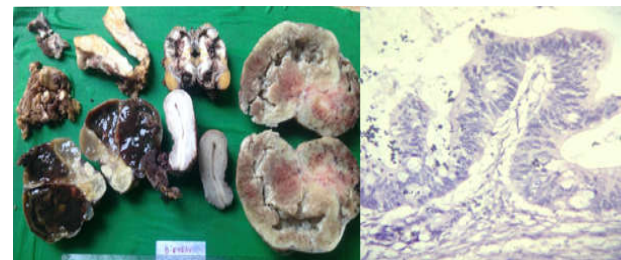
There was one case of serous cystadenocarcinoma (Figure 7).

There was one case of mucinous cystadenocarcinoma (Figure 8) which showed local metastasis to serosa of uterus and also metastasis to the colon. The tumour showed positivity for CK-7 and CK-20

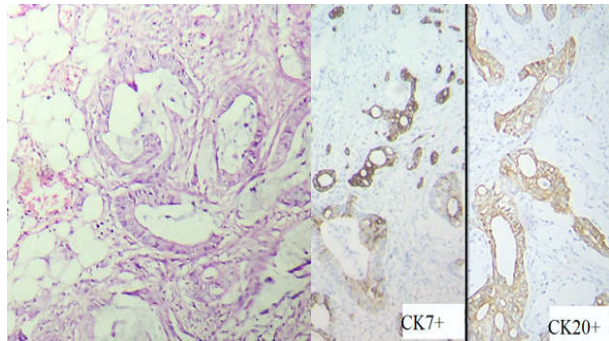


**Fig. 7:** Serous cystadenocarcinoma. **A.** Cut section of ovary showing solid and cystic areas. **B.** Photomicrograph showing papillary architecture and with high Nuclear cytoplasmic ratio.

carcinoma (Figure 8) which showed local metastasis to serosa of uterus and also metastasis to the colon. The tumour showed positivity for CK-7 and CK-20



**Fig. 8:** Mucinous cystadenocarcinoma, **A.** Gross picture shows cut section of uterus, bilateral Ovaries, part of colon and Omentum. Ovaries are enlarged and shows Solid and cystic areas with mucinous material in it. Colon Shows grey white areas, **B.** Microphotograph from the ovary shows papillary projections lined by tall columnar cells with pleomorphic nuclei in it. 40X (H & E)



**Fig. 9:** Immunohistochemistry- positive for CK 7 AND CK 20, **A:** Microphotograph of colon pleomorphic glands lined by tall columnar cells with marked pleomorphic nuclei in it 40X (H&E), **B.** Microphotograph showing showing CK 7 and CK 20 Positive

(Figure 9).

Table 12 shows the age distribution of patients with ovarian tumors, the peak age incidence was observed in the age group of 40 to 50 years with 8 cases (38%).

The minimum age of patient with ovarian tumor was 27 years and maximum of 70 years. Mean age of patients with ovarian tumor was 47.17 years.

## Discussion

In the present study, 269 total hysterectomy specimens (with or without adnexa), were studied over

**Table 12:** Age distribution of ovarian tumors

Age	No. of cases	Percentage (%)
20-30	2	9.5
31-40	6	28.5
41-50	8	38
51-60	4	9
61-70	1	5
71-80	0	0
81-90	0	0
<b>Total</b>	<b>21</b>	<b>100</b>

a period of 2 years, i.e. from July 2014 to June 2016, in the Department of Pathology, Khaja Bandanawaz Institute of Medical Sciences, Kalaburagi.

One of the greatest advances in gynecology was early detection and cure rate of cancer of the uterine cervix that has resulted from the development of cytology and the recognition of carcinoma in situ. In 1943, George N. Papanicolaou (1883-1962) and Herbert Traut (1894-1963) published their seminal

monograph entitled 'Diagnosis of Uterine Cancer by the Vaginal Smear [1].

The uterus is subject to a variety of disorders the most common of which result from endocrine imbalances, inflammation complications of pregnancy, and neoplastic proliferation.

Hysterectomy specimens accounted for 13.8% of all specimens received during the study period.

**Table 13:** Comparison of age range and peak age incidence of hysterectomy specimens

Sl. No.	Study groups	Age Range	Peak age group	Percentage (%)
1	Walter F.Watts, et al (1956) <sup>3</sup>	19-87	41-50	45.20
2	Domblae V et.al. ) <sup>25</sup>	21-75	41-50	34.60
3	Kasturi Lal, et al (1981) <sup>4</sup>			
4	Ajmera Sachem K et al (2006) <sup>5</sup>	30-94	41-50	31.64
5	Yogesh. N et al (2013) <sup>17</sup>	35-65	45-55	54.16
6	Mangala. G et al(2013) <sup>18</sup>	20-60	41-50	49
7	Harshal A et al(2015) <sup>19</sup>	31-80	41-50	42
8	Present study(2016)	20-80	41-50	36.30

Table 13. shows that, in the present study, age range of the patient for hysterectomy was between 20 to 80 years with majority of patients in age group of 41-50 years (36.30%), which was similar to other studies, and the peak age incidence in the present study and all other studies was in between 41- 50 years of age.

The mean age for hysterectomies was 45.6 years,

in a study conducted by Ranabhat S K et al [24] and in the present study, it was 44.75 years.

Hysterectomy with without salpingo-oophorectomy specimens have revealed a variety of lesions.

Table 14 shows the various lesions encountered in the hysterectomy specimens (with or without adnexa) included in this study, and the histopathological diagnoses, along with their incidence, are compared



with other studies.

Incidence of leiomyoma in present study was 31.8% (86/269), comparable with other studies. It was the commonest lesion seen in hysterectomy specimens. The next common lesions were adenomyosis, non-inflammatory lesions of the endometrium, and endometrial polyps.

Among malignancies, carcinoma of the cervix was common than, carcinoma of the endometrium, as observed in other studies.

The peak age incidence of cervical carcinoma in the present study was noted in the age group of 41 to 60 years with 3 cases (64 %). The peak age incidence in study by Samaila et al [8] was seen in the age group of 40 to 49 years, but in (Mrs.) M L Solapurkar [11] study the age incidence was lower, i.e. between 36 to 40 years.

Table 15 shows the comparison of distribution of malignant tumors of the cervix, with other studies.

**Table 14:** Comparison of Histopathological diagnoses with other studies and their incidence

Histopathological Diagnosis	G.Gupta et.al. <sup>9</sup> No. of cases. (%)	WattsW.F et.al <sup>17</sup> No. of cases. (%)	Jaleel R. et.al. <sup>22</sup> No. of cases. (%)	Ranabhat S K.et al <sup>24</sup> No. of cases. (%)	Rathar G R et al <sup>23</sup> No. of cases. (%)	Present study. No. of cases. (%)
Leiomyoma	175/500 (35.00)	415/1000 (41.50)	67/166 (40.40)	51/168 (30.30)	215/698 (30.80)	82/269 (31.80)
Adenomyosis	121/500 (24.20)		08/166 (4.80)	47/168 (28.00)	97/698 (13.89)	42/269 (15.70)
Endometrial hyperplasia	139/500 (27.80)	40/1000 (4.00)	17/166 (10.20)	41/168 (25.50)	42/698 (6.00)	9/269 (3.35)
Chronic endometritis						
Endometrial polyps	21/500 (4.20)			07/168 (4.20)	17/698 (02.43)	09/269 (3.35)
Endometrial carcinoma	05/500 (1.00)	03/1000 (0.03)	03/166 (1.80)	03/168 (01.80)	01/698 (0.14)	02/269 (0.74)
Carcinoma cervix	09/500 (1.78)	07/1000 (0.70)	02/166 (1.20)	01/168 (00.60)	04/698 (0.56)	06/269 (02.23)
Benign ovarian cysts	14/500 (2.77)	51/1000 (5.1)	11/166 (6.60)	33/1000 (3.30)	27/698 (3.86)	16/269 (5.95)
Malignant ovarian tumors	08/500 (1.58)	12/1000 (1.20)	03/166 (1.80)	05/1000 (0.50)	03/698 (0.43)	05/269 (1.86)

**Table 15:** Comparison of distribution of malignant tumors of cervix

Malignant lesions in cervix	(Mrs.) M L Solapurkar's study (1985) <sup>11</sup>		S Dhanraj et al (2015) <sup>21</sup>		Present study (2016)	
	No. of cases	Percentage (%)	No. of cases	Percentage (%)	No. of cases	Percentage
Squamous cell carcinoma	477	97.8	77	92	4	66
Adenocarcinoma	6	1.2	6	5.5	1	17
Adenosquamous carcinoma	3	0.6	3	2.3	1	17
Carcinosarcoma	2	0.4	0	0	0	0
<b>Total</b>	<b>488</b>	<b>100</b>	<b>86</b>	<b>100</b>	<b>6</b>	<b>100</b>

**Table 16:** Comparison of distribution of ovarian tumors

Tumor type	Kar et al (2005) <sup>14</sup>	Pilli et al (2002) <sup>11</sup>	G G Swamy et al (2010) <sup>15</sup>	A. Pradhan (2012) <sup>16</sup>	Present study (2016)
Surface epithelial Tumor	79.1%	71%	61.6%	46.9%	75%
Sex cord stromal Tumor	1.5%	7%	11.7%	3.6%	13.63%
Germ cell Tumor	16.4%	21%	21.7%	45.7%	9.09%
Metastasis	3%	0.7%	5.0%	3.6%	0%

Hysterectomy specimens with adnexa showed simple ovarian cysts and some benign ovarian tumors. Incidence of benign and malignant tumors, is comparable with other studies.

Ovarian malignancy is the second most common cancer of the female reproductive system and the leading cause of death from gynaecological malignancy.

The peak age incidence of ovarian tumors were seen in between 41 to 60 years, which was 52.27%, and was comparable with Kar et al's [14] study with 46% in between 41 to 60 years of age but in Pilli et al's [11] study majority were in 21 to 40 years of age with 58% of ovarian tumors.

### Conclusion

The present study reveals that the majority of tumors were benign, which were leiomyomas in myometrium, constituted 31.8% in the hysterectomy specimens, with peak age incidence in 4th decade. The other common benign lesion was adenomyosis, in 15.6% of cases. Among the malignant lesions in the study, majority were carcinoma cervix, which constituted 39% of all malignant neoplasms, followed by endometrial and ovarian malignancies. There was one case of bilateral mucinous cystadenocarcinoma which had metastasized to colon. There was one rare case of primary adenocarcinoma of fallopian tube. Majority of patients with malignant neoplasms in the study were in the 5th decade. As hysterectomy specimens are frequently encountered, they have to be studied thoroughly in order to detect the lesions, which were not suspected clinically.

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