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Histopathological Study Of Spectrum Of Non-Neoplastic Female Genital Tract Lesions At Tertiary Care Hospital

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ABSTRACT:

INTRODUCTION: Incidence of non neoplastic and neoplastic lesions vary according to different age groups. Early recognition of infections and inflammatory lesions can prevent considerable damage to FGT organs. It also helps to decrease morbidity and mortality.

So the current study, is to provide a specific diagnosis based upon the histomorphological study which is of paramount clinical significance in further management of the patient. Despite the new techniques in imaging and genetics, the diagnosis of FGT lesions is primarily dependent upon histological examination.

METHOD: The present study "HISTOPATHOLOGICAL STUDY OF SPECTRUM OF NON-NEOPLASTIC FEMALE GENITAL TRACT LESIONS AT TERTIARY CARE HOSPITAL" was conducted in our institution.

All specimens of FGT; including Hysterectomy with unilateral or bilateral salpingo- oophorectomy, endocervical & Endometrial biopsies and biopsies from vulva and vagina received in the histopathology department were studied.

RESULT: A 1 year study was performed to study histopathological evaluation of non neoplastic lesions of FGT in a tertiary care hospital.

A total 172 cases of FGT were received of which 317 specimens were examined. Out of 317 specimens, 243 non- neoplastic lesions were identified histopathologically.

Out of 243 non neoplastic lesions, majority of the patients who formed a part of this study were in the 5th decade of life (94 cases).

Out of total 243 cases of non neoplastic lesions, we encountered maximum lesions of uterus: cervix [124 cases(51.02%)], followed by fallopian tube [46 cases(18.93%)], ovary [43 cases(17.69%)],uterus: corpus [23 cases(9.46%)] and vagina [1 case (0.44%)].

CONCLUSION:

- Chronic cervicitis was the most common lesion seen in uterus:cervix.
- Adenomyosis was found to be the most common non neoplastic lesion of uterus:corpus.
- In the fallopian tube**,** most common non neoplastic lesion encountered was tubal ectopicpregnancy.
- The most common ovarian non neoplastic lesion in our study was follicular cyst.

There were a minimum number of lesions seen in vulva and vagina.

KEY WORDS: Non-neoplastic lesions, Female genital tract

Introduction:

The Female Genital Tract (FGT) is made up of internal and external genital organs that function in reproduction of new offspring.

The external genital organs are vulva including pubis, pudendal cleft, labia majora, labia minora, bartholin gland, skene's gland, clitoris and vaginal opening[3]. The vagina allows for sexual intercourse and birth and is connected to uterus at the cervix. Vulvar pathology encompasses a wide range of inflammatory and neoplastic conditions. The vagina is the least likely part of FGT to be sampled for diagnostic purposes and most pathological condition involving the vagina are more commonly encountered in the vulva or cervix.

Internal genital organs are uterus, fallopian tube and ovaries[3].The uterus accommodates the embryo which develops into the fetus. Diseases of the uterine cervix are mainly due to HPV infection. Tumor like non neoplastic cervical lesions according to the WHO include endocervical hyperplasia, endometriosis, nabothian cyst and endocervical polyp.

Endometrial biopsy and Curetting specimens are among the most commonly encountered in general surgical pathology practice and can show a wide range of pathology alterations. Many relate to perturbations in the normal hormonal environment, secondary exogenous hormones or shifts in endogenous hormone levels during perimenopausal period.

In the fallopian tube, most findings are incidentally identified by surgical pathologist, in which some diagnosis is critically important. The infections of the FGT are predisposing the women not only to tubal infertility but also increasing the risk of tubal pregnancy[1]. A broad range of pathologic conditions are encountered in the ovary in routine surgical pathology practice. The ovary has germ cells and their supporting sex cord stromal cells, both cell types can give rise to various pathological conditions.

Incidence of non neoplastic and neoplastic lesions vary according to different age groups. Early recognition of infections and inflammatory lesions can prevent considerable damage to FGT organs. It also helps to decrease morbidity and mortality.

So the current study, is to provide a specific diagnosis based upon the histomorphological study which is of paramount clinical significance in further management of the patient. Finally clinical data, operative findings, gross features and microscopic features of the lesions may provide important and at times decisive diagnostic clues. Despite the new techniques in imaging and genetics, the diagnosis of FGT lesions is primarily dependent upon histological examination.

AIMS AND OBJECTIVES:

1) To analyse the histopathological spectrum of Non-Neoplastic lesions of FGT.

2) To study the clinical parameters of non- neoplastic lesions of FGT.

3) To estimate the frequency the of various Non- Neoplastic FGT Lesions and to correlate them with the age distribution of patients.

4) To compare the results of the present study with other studies.

MATERIAL AND METHODS:

The current study was conducted at the Department of Pathology, Shrimati Bhikhiben Kanjibhai Shah Medical Institute and Research Centre, Sumandeep Vidyapeeth.

All specimens of FGT; including Hysterectomy with unilateral or bilateral salpingo- oophorectomy, endocervical & Endometrial biopsies and biopsies from vulva and vagina received in the histopathology department were studied.

Type of study: Observational study

Inclusion criteria: All specimens of female genital tract referred to the histopathology department and diagnosed as “non neoplastic lesions” were included in this study.

Exclusion criteria:

- Any specimen diagnosed as “normal histology” pattern.
- Specimens having physiological hormonal changes reflected in endometrium viz. proliferative phase, secretory phase, gestational pattern, atrophic pattern etc.
- All specimens diagnosed as neoplasms of FGT.
- Any autolyzed specimens or poorly processed tissue.

Statistical analysis: Data collected was analysed statistically using percentage and frequency distribution and was presented in the form of tables, charts and graphs.

For sake of convenience in analysis, patients were divided in following age groups: below 20 years, 21 to 40 years, 41 to 60 years and 61 to 80 years.

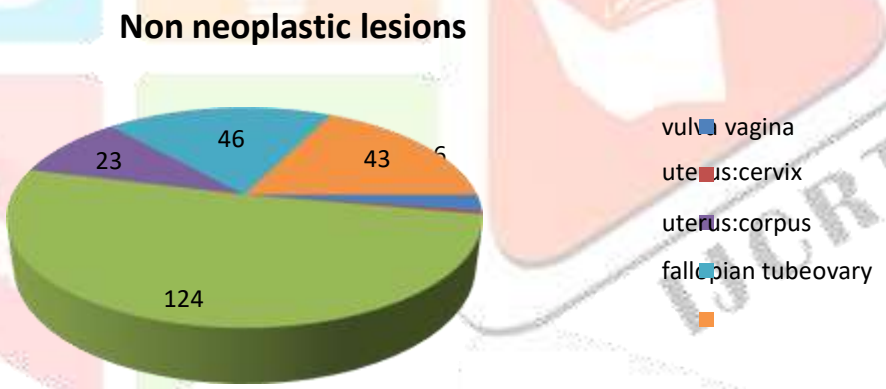
OBSERVATIONS AND RESULTS:

A total 172 cases of female genital tract tissue specimens were received which were further segregated into total 317 specimens according to different genital tract organs as shown below (Table no.1 &chart no.1). Out of 317 cases,
most commonly received organ of FGT was uterus:corpus [103 specimens (32.49%)] followed by uterus:cervix [102 specimens (32.17%)] and least commonly received organ was of vagina [1 case(0.33%)].
In this study, histologically normal specimens(74 cases) were excluded.

Table No.1:Total No. of cases studied by histopathologically were distributed in below table

Organ	**No. of Specimen**	**Non-neopastic FGT lesions**
Vulva	6 (1.89%)	6(2.46%)
Vagina	1(0.33%)	1(0.44%)
Uterus: Cervix	102(32.17%)	124(51.02%)
Uterus: Corpus	103(32.49%)	23(9.46%)
Fallopian tube	68(21.45%)	46(18.93%)
Ovary	37(11.67%)	43(17.69%)
Total	**317(100%)**	**243(100%)**

Chart no.1 – No. of FGT specimen performed histopathologically



In this study, histopathological examination was performed, in which 243 cases (chart no.2 & 3) of non neoplastic lesions were identified. Out of these HPE was performed on 6 cases (2.46%) of vulva , 1 case (0.44%) of vagina, 124 cases(51.02%) of uterus: cervix, 23

cases(9.46%) of uterus: corpus, 46 cases(18.93%) of fallopian tube and 43 cases(17.69%) ofovary.
Out of 243 non-neoplastic lesions , most commonly involved organ seen in non neoplastic lesion of FGT was uterus:cervix [124 cases(51.02%)] and least commonly involved organ was of vagina[1 case (0.44%)].

Chart no.2 - Frequency of non neoplastic lesions of FGT:

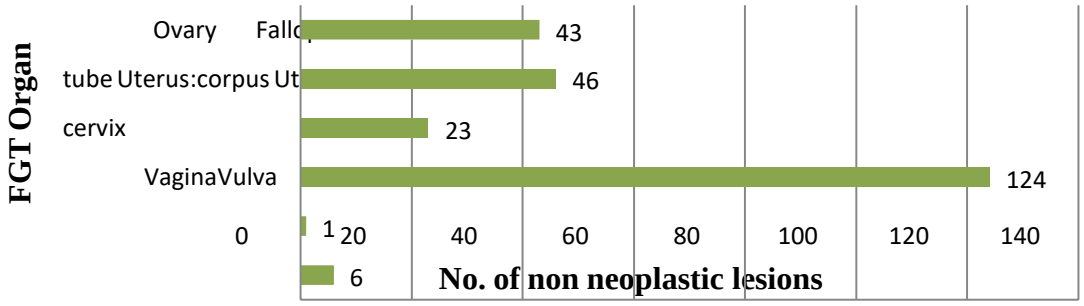
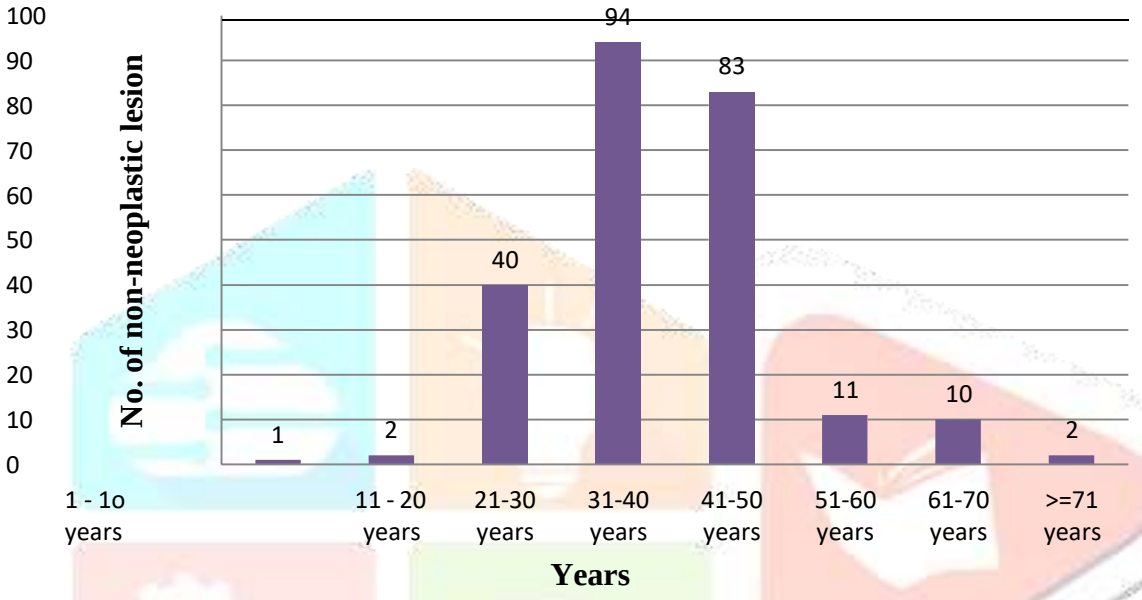


Chart no.3 - Frequency of non neoplastic lesions of FGT:



In our study, the different surgical procedures were used. The distribution of cases according to types of procedure is depicted in Table No.2.

Table No. 2 :Distribution of cases, according to types of procedure:

	No. of cases	Percentage
Laproscopic Hysterectomy	28	16.27%
Vaginal Hysterectomy	35	20.39%
Abdominal Hysterectomy	16	9.30%
Dilation and Curettage	8	4.65%
Dilation and Evacuation	29	16.86%
Mersupialization	5	2.90%
Salpingectomy	41	23.83%
Oophorectomy	7	4.06%
Excision	1	0.58%
Vulvectomy	1	0.58%
Vaginectomy	1	0.58%
Total	**172**	**100%**

In our study, most common presenting complaints in FGT was Acute abdominal pain (50 cases) followed by Menorrhagia (42 cases) and Amenorrhea (39 cases).

Table no. 3 : Presenting complaints and clinical features:

Clinical Features	No. of cases
Chronic abdominal pain	9
Acute abdominal pain	50
Something coming out from vagina	16
Menorrhagia	42
Irregular menses	14
Polymenorrhea	12
Dysmenorrhea	18
Amenorrhea	39
Whitish discharge	6
Bleeding per vagina	5
Post partum Haemorrhage	4
Swelling over labia	5
Swelling over LSCS scar	1

In vulva, most common non neoplastic lesion was bartholin cyst [5 cases (83.34%)] followed by [1 case (16.66%)] of lichen sclerosus.

Table no. 4 :Histopathological diagnosis of Non neoplastic lesions of Vulva:

Nature of lesions	No.of cases	Percentage
Bartholin cyst	5	83.34%
Lichen sclerosus	1	16.66%
Total	**6**	**100%**

In vagina, only [1 case (100%)] of vaginal adenosis was found.

Table no. 5 : Histopathological diagnosis of Non neoplastic lesions of Vagina:

Nature of lesions	No.of cases	Percentage
Adenosis	1	100%
Total	**1**	**100%**

In Uterus: Cervix, we found were 124 non neoplastic lesions, in which commonest lesion was chronic cervicitis [109 cases (87.89%)], out of which [12 cases(9.67%)] showed squamous metaplasia. Least common lesions were glandular hyperplasia [2 cases(1.62%)] and endometriosis [2 cases(1.62%)]. Other lesions identified were endocervical polyp [4 cases(3.23%)] and nabothian cyst [7 cases(5.64%)].

Table No. 6 : Histopathological diagnosis of Non neoplastic lesions of Uterus:Cervix

Nature of lesions	No.of cases	Percentage
Chronic cervicitis	97	78.22%
Chronic cervicitis with Squamous metaplasia	12	9.67%
Endocervical polyp	4	3.23%
Nabothian cyst	7	5.64%
Glandular Hyperplasia	2	1.62%
Endometriosis	2	1.62%
Total	**124**	**100%**

In Uterus: Corpus, 23 cases of non neoplastic lesions were identified.
Most common lesion was adenomyosis [17 cases(73.95%)], followed by endometritis [2 cases(8.69%)], while tuberculosis, endometrial polyp, hormonal effect and squamous metaplasia were seen only [1 case(4.34%)] each.

Table No. 7: Histopathological diagnosis of Non neoplastic lesions of Uterus:Corpus

Nature of lesions	No.of cases	Percentage
Endometritis	2	8.69%
Tuberculosis	1	4.34%
Adenomyosis	17	73.95%
Endometrial polyp	1	4.34%
Hormonal effect	1	4.34%
Squamous metaplasia	1	4.34%
Total	**23**	**100%**

In fallopian tube, we found 46 non neoplastic lesions, in which most common lesion was Tubal ectopic pregnancy [39 cases(84.78%)], while least common lesion was walthrd cell nests [1case (2.17%)]. Other lesions we found were [3 cases(6.52%)] of salpingitis and paratubal cyst each.

Table No. 8: Histopathological diagnosis of Non neoplastic lesions of Fallopian tube

Nature of lesions	No.of cases	Percentage
Salpingitis	3	6.52%
Tubal pregnancy	39	84.78%
Walthrd cell nests	1	2.17%
Paratubal cyst	3	6.53%
Total	**46**	**100%**

In ovary, non neoplastic lesions identified in our study were 43. Most common lesion was Follicular cyst [10 cases (23.25%)]. Other lesions we identified were inclusion cyst [8 cases (18.60%)], corpus luteum cyst [7 cases(16.27%)], [4 cases(9.35%)] of cystic follicle and endometriosis, [3 cases (6.97%)] chronic oophoritis and simple cyst, [1 case(2.32%)] of polycystic ovary and ovarian torsion each.

Table No. 9 : Histopathological diagnosis of Non neoplastic lesions of Ovary

Nature of lesions	No. of cases	Percentage
Chronic Oophoritis	3	6.97%
Simple cyst	3	6.97%
Inclusion cyst	8	18.60%
Follicular cyst	12	27.90%
Cystic follicle	4	9.35%
Polycystic ovary	1	2.32%
Corpus luteum cyst	7	16.27%
Endometriosis	4	9.30%
Ovarian torsion	1	2.32%
Total	**43**	**100%**

DISCUSSION:

The present study was conducted in tertiary care hospital. A total 172 cases of female genital tract tissue specimens were received which were further segregated into total 317 specimens according to different genital tract organs and histopathological examination was performed, in which 243 cases of non neoplastic lesions were identified.

Out of 317 specimens of FGT, we received [6 specimens (1.89%)] of vulva, [1 specimen (0.33%)] of vagina, [102 specimens (32.17%)] of uterus:cervix,[103 specimens (32.49%)] of uterus:corpus, [68 specimens (21.45%)] of fallopian tube, and [37 specimens (11.67%)] of ovary.

Out of total 243 cases of non neoplastic lesions, we encountered maximum lesions of uterus: cervix [124 cases(51.02%)], followed by fallopian tube [46 cases(18.93%)], ovary [43 cases(17.69%)],uterus: corpus [23 cases(9.46%)] and vagina [1 case (0.44%)].

Hysterectomy is one of the common surgeries performed in the gynecology department. Hysterectomy is a procedure which gives permanent relief in many non neoplastic conditions. There is a wide spectrum of diseases; both benign and malignant affecting the female genital tract from teen age to throughout adult life[11].

In present study, most common symptom was abdominal pain followed by menstrual irregularity.

- **Non neoplastic FGT lesions:**

  The infections of the FGT are the gateway, predisposing the women not only to tubal infertility but also increasing the risk of tubal pregnancy[15].

  The present study highlights the wide spectrum of non neoplastic lesions of FGT that were confirmed by histopathology.

  We compare the FGT lesions of our study with other studies.

- **Vulva:**

  Some vulva lesions may present as cystic or nodular swelling without pain and may get unnoticed. Due to these overlapping clinical features as well as for early prevention of precursor lesions to

malignancy, a biopsy for HPE is to importance for confirmatory diagnosis[12].

Table no. 11 :Comparative study of Non neoplastic lesions of Vulva:

Nature of lesions	B Siddiqui & Y Jamal et al.[12]	Present study
Bartholin cyst	8(12.1%)	5(83.34%)
Lichen sclerosus	4(6.1%)	1(16.66%)
Gartner cyst	2(3.1%)	-
Tuberculosis	1(1.5%)	-
Inflamation	7(10.6%)	-
Verrucous Hyperplasia	3(4.5%)	-
Fibroepithelial polyp	7(10.6%)	-

In present study, bartholin cyst [5 cases(83.34%)] was the commonest lesion. Similarly in the study of B Siddiqui & Y Jamal et al[12], bartholin cyst [8 cases(12.1%)] was more common thanother lesions.

- **Uterus:Cervix:**
  Of the various non neoplastic lesions, cervical inflammations due to non infective and infective causes were common. Early detection of these non neoplastic lesions can prevent further complications[15].

Table no. 12 : Comparative study of Non neoplastic lesions of Uterus:Cervix

Nature of lesions	Olutoyin G omoniyi-Esan et.al[13]	Aravind Pallipady et.al [14]	Krishna Dubey et.al[15]	Pandya et.al[16]	Present study
Chronic cervicitis	123(82.0%)	297(29.26%)	123(49.5%)	26(50.4%)	97(78.22%)
Acute cervicitis	3(2.0%)	-	-	4(0.16%)	-
Chronic granulomatous cervicitis	5(3.3%)	-	-		-
Papillary endocervicitis	-	-	-	1(0.4%)	-
Chronic non specific cervicitis with HPV infection	18(12.0%)	-	-		-
Chronic cervicitis with Squamous metaplasia	-	744(73.30%)	30(12.09%)	23(9.2%)	12(9.67%)
Endocervical polyp	-	19(1.87%)	7(2.82%)	4(1.6%)	4(3.23%)
Nabothian cyst	-	295(29.06%)	49(19.7%)	30(12%)	7(5.64%)
Glandular Hyperplasia	1(0.7%)	27(2.6%)	-	-	2(1.62%)
Endometriosis	-	-	-	-	2(1.62%)
Tunnel clusters	-	25(2.46%)	1(0.4%)	-	-
Mesonephric rest	-	12(1.18%)	-	-	-
Koilocytosis	-	39(3.84%)	23(9.2%)	-	-
Exocytosis	-	36(3.54%)	-	-	-

Supra basal bulla	-	2(0.19%)	-	-	-
Changes in prolapse	-	214(21.08%)	-	45(18%)	-
Pregnancy changes	-	1(0.098%)	-	-	-
Hyperplasia	-	488(48.07%)	-	-	-
Basal cell hyperplasia	-	-	14(5.6%)	-	
Condylomata acuminatum	-	-	1(0.4%)	-	

In present study, chronic cervicitis [97 cases (78.22%)] was the most common non neoplastic lesion of Uterus: cervix. This study is in accordance with the study of Olutoyin G omoniyi- Esan Et.al[13], Krishna Dubey et.al[15] and Pandya et al.[16](Table no.12).
While in the study of Aravind Pallipady et.al[14] chronic cervicitis with squamous metaplasia [744 cases(73.30%)] was more common.

- **Uterus:Corpus:**
  The reproductive life of a female leads to periodic changes in uterus throughout life[30]. Adenomyosis was the most common non neoplastic lesion in our study, which is a commonly missed preoperative diagnosis and is diagnosed on histopathological examination[16].

Table no. 13: Comparative study of Non neoplastic lesions of Uterus:Corpus

Nature of lesions	Poonam Singh et al.[17]	Rufus K Sam Vargis et al. [18]	Singh et al.[19]	Present study
Endometritis	32(19.52%)	-	-	2(8.69%)
Tuberculosis	-	-	-	1(4.34%)
Chronic endometriosis	-	-	10(2.0%)	-
Adenomyosis	24(14.63%)	17(14.40%)	10(2.0%)	17(73.95%)
Endometrial polyp	38(23.17%)	-	10(2.0%)	1(4.34%)
Hormonal effect	-	-	-	1(4.34%)
Squamous metaplasia	70(42.68%)	-	-	1(4.34%)
Endometrial hyperplasia	-	35(42.66%)	18(3.7%)	-
DPE	-	19(23.17%)	-	-

In our study, we observed that adenomyosis [17 cases(73.95%)] was the most common non neoplastic lesion of uterus: corpus.
The study done by Poonam singh et al[17] reported most common lesion as squamous metaplasia [70cases (42.68%)].

Rufus K Sam Vargis et al[18] and Singh et al[19] found that most common lesion was endometrial hyperplasia [35 cases(42.66%) and 18 cases(3.7%) respectively].
This result is discordant with our study.

- **Fallopian tube:**
  Although fallopian tubes are one of the most common structures reported in surgical gynaecological specimens, the spectrum of fallopian tube lesions has been defined infrequently in other literature.

In india the incidence of ectopic pregnancy is 3.12 per 1000 pregnancies and fallopian tube is the commonest site[21].

Risk for ectopic pregnancy are higher in women with damage to the fallopian tubes because of pelvic infections, pelvic surgery, or previous ectopic pregnancy and in smokers[22].

In present study, we had a maximum number of tubal pregnancy cases compared to other studies.

Table no. 14: Comparative study of Non neoplastic lesions of Fallopian tube

Nature of lesions	Manjunath HK et. al.[20]	Borgohain et.al[21]	Present study
Salpingitis	1(0.33%)	251(77.47%)	3(6.52%)
Hydrosalpinx	143(44.96%)	29(8.95%)	-
Haematosalpinx	-	1(0.31%)	
Salpingitis isthmic nodosa	1(0.33%)	-	-
Tubal pregnancy	8(2.51%)	8(2.47%)	39(84.78%)
Walthrd cell nests	24(7.54%)	-	1(2.17%)
Paratubal cyst	137(43.08%)	-	3(6.53%)
Tubal torsion	4(1.25%)	-	-

In our study, tubal pregnancy [39 cases(84.78%)]was the commonest non neoplastic lesion of fallopian tube.

In the study of Manjunath HK et. al[20] showed most common non neoplastic lesion was Hydrosalpinx [143 cases(44.96%)] followed by paratubal cyst [137 cases(43.08%)].Borgohain et.al[21] reported most common non neoplastic lesion as salpingitis [251 cases(77.47%)].

These results are not comparable with our study.

- **Ovary**

  Certain non –neoplastic lesions of ovary frequently from a pelvic mass and often associated with abnormal hormonal manifestations, thus potentially mimicking ovarian neoplasm, that are very difficult to differentiate clinically and radiologically[26].

Table no. 15 : Comparative study of Non neoplastic lesions of Ovary

Nature of lesions	Kanthikar S.N. et al.[23]	Makwana HH et al.[24]	Modi et al.[26]	Singh et al.[17]	Present study
Chronic Oophoritis	-	4(2.48%)	4(1.92%)	-	3(6.97%)
Granulomatous inflammation	-	-	3(1.44%)	-	-
Congestion/edema	-	-	6(2.88%)		-
Simple cyst	-	56(34.78%)	102(49%)	-	3(6.97%)
Inclusion cyst	2(2.67%)	-	5(2.4%)	-	8 (18.60%)
Follicular cyst	56(74.6%)	38(23.60%)	-	42(8.5%)	12 (27.90%)
Cystic follicle	-	-	-	-	4(9.35%)
Polycystic ovary	-	-	-	-	1(2.32%)
Corpus luteum cyst	15(20.00%)	59(36.64%)	35(16.82%)	10(2.0%)	7(16.27%)
Endometriosis	2(2.67%)	4(2.48%)	19(9.13%)	30(6.1%)	4(9.30%)

Ovarian torsion	-	-	-	-	1(2.32%)
Hydatid cyst	-	-	1(0.48%)	-	-
Luteoma	-	-	1(0.48%)	-	-

In this study, most common non neoplastic lesions observed were follicular cyst [10 cases(23.25%)].
The results of the present study were similar to the studies carried out by Kanthikar S.N.et al[23] and Singh et al[17] in which follicular cyst was more common[56 cases(74.6%) and 42 cases(8.5%) respectively].
However in the study performed by Makwana HH et al[24] and Modi et al[26], most common non neoplastic lesion was corpus luteal cyst [59 cases(36.64%)]and simple cyst [102 cases(49%)]respectively.

- **Comparative study of non neoplastic lesions of FGT according to age group.**

In the study population, the age ranged from 1 - 75 years.
Out of 243 non neoplastic lesions, majority of the patients who formed a part of this study were in the 5th decade of life (94 cases).

In present study, majority of non neoplastic lesions of **vulva and vagina** were observed in the age group of 21-30 years as compared to the study of B Siddiqui & Y Jamal et al[12], in which majority of non-neoplastic vaginal lesions were noticed in the age group of 31-40 years.

We found majority of **uterus: cervix** non neoplastic lesion in the age group of 41-50 years. This is comparable with Poonam singh et al[17], having similar findings (41-50 years).
While in Krishna Dubey et.al[15] most common age group affected was 30-40 years, which is discordant to our study.
In this study majority of non neoplastic **uterus :corpus** lesions were noticed in 41-50 years of age group, which was similar to the study of S.O.Keshinro et al[28] that reported non-neoplastic uterus corpus lesions in 41-50 years age group.
Singh et al[17] reported majority of non neoplastic lesion of uterus: corpus in the age group of 31-40 years. Which is in discordance to our study.

In present study, we found majority number of non neoplastic **fallopian tube** lesions in the age group of 21-30 years. While Singh et al[19] reported majority of non neoplastic lesions in the age group of 31-40 years and Borgohan et al[21] reported majority of non neoplastic lesions in the age group of 40-49 years. These results are in discordance to our study.

In this study most common age group affected by non neoplastic lesion of **ovary** was 41-50 years, while in Modi et al[26] most common age group affected was 20-39 years, which is in discordance to our study.
In Dhakal et al[35]most common age group affected by non neoplastic lesion of ovary was 41- 50 years, which is in concordance with our study.

SUMMARY:

A 2 years study was performed to study histopathological evaluation of non neoplastic lesions of FGT in a tertiary care hospital.

A total 172 cases of FGT were received of which 317 specimens were examined. Out of 317 specimens, 243 non- neoplastic lesions were identified histopathologically.

Out of 243 non neoplastic lesions, majority of the patients who formed a part of this study were in the 5th decade of life (94 cases).

Out of total 243 cases of non neoplastic lesions, we encountered maximum lesions of uterus: cervix [124 cases(51.02%)], followed by fallopian tube [46 cases(18.93%)], ovary [43 cases(17.69%)],uterus: corpus [23 cases(9.46%)] and vagina [1 case (0.44%)].

- Chronic cervicitis was the most common lesion seen in uterus:cervix.
- Adenomyosis was found to be the most common non neoplastic lesion ofuterus:corpus.
- In the fallopian tube**,** most common non neoplastic lesion encountered was tubal ectopicpregnancy.
- The most common ovarian non neoplastic lesion in our study was follicular cyst.
- There were a minimum number of lesions seen in vulva and vagina.

CONCLUSION:

A wide range of lesions are encountered when hysterectomy specimens are subjected to HPE. Histopathological examination of a biopsy specimen is the **gold standard** for the diagnosis.

Though the histopathological analysis correlates well with the clinical and gross diagnosis, a few lesions are also encountered as incidental findings and mismatch diagnosis. Hence, it is mandatory that every specimen should be subjected to detailed gross and histopathological examination.

For non neoplastic lesions, it is also mandatory to do HPE as it is difficult to differentiate them from neoplasm clinically. This is to ensure a better post operative management of the patients.

There is a need to increase awareness, counsel the female population regarding the risk factors and also to conduct screening programs to diagnose non neoplastic lesions of FGT to reduce morbidity and mortality.

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