2018

www.jmscr.igmpublication.org Impact Factor 5.84 Index Copernicus Value: 71.58 ISSN (e)-2347-176x ISSN (p) 2455-0450 crossref DOI: \_https://dx.doi.org/10.18535/jmscr/v6i1.49



Journal Of Medical Science And Clinical Research An Official Publication Of IGM Publication

# Histopathological Spectrum of Uterine and Cervical Lesions in Hysterectomy Specimens

Authors

## Snehal Chavhan<sup>1</sup>, Rahul Pathrikar<sup>2</sup>, Shital Dhoble<sup>3</sup>, Nitin Tiple<sup>4</sup>

<sup>1</sup>Assistant Professor, Dept of Pathology, Government Medical College, Chandrapur, Maharashtra, India
 <sup>2</sup>Senior Resident, Department of Surgery, Government Medical College, Chandrapur, Maharashtra, India
 <sup>3</sup>Assistant Professor, Department of PSM, Government Medical College, Chandrapur, Maharashtra, Inda
 <sup>4</sup>Assistant Professor, Dept of Pathology, Government Medical College, Chandrapur, Maharashtra, India
 Corresponding Author

## Dr Snehal Chavhan

Assistant Professor, Dept of Pathology, Government Medical College, Chandrapur, Maharashtra, India Email: *snehalvchavhan@gmail.com* 

#### Abstract

**Background:** For centuries, the female reproductive system has been affected by various abnormalities and diseases and hence has been the subject of interest and the basis for the gynaecological practice. The uterus being a vital reproductive and hormone responsive organ is subjected to a variety of physiological changes and benign and malignant disorders.

**Aim:** The study was undertaken to see different patterns of histopathological lesions in uterus and cervix in hysterectomy specimens.

**Methodology:** This was a retrospective study of histopathological findings of uterus and cervix in 50 specimens over a period of 1 year. Data was tabulated and analyse.

**Results**: Total 50 cases were included in the study. Age of patient ranged from 28-65 years. 50 % of cases were found in 41-50 age group. Leiomyoma 33 cases (66%) was the common histopathoogical finding followed by combined leiomyoma and adenomyosis accounting for 7 cases (14%). Non-specific cervicitis 39 cases (78%) was the common histopathological finding in cervical lesion followed by 3 cases (6 %) of dysplasia cervix.

**Conclusion:** The most common benign lesion in uterus was found to be leiomyoma followed by adenomyosis combined with leiomyoma while non-specific cervicitis was found in cervical lesion in hysterectomy specimen.

Keywords: Hysterectomy, leiomyoma, cervicitis.

#### Introduction

The uterus being a vital reproductive and hormone responsive organ is subjected to a variety of physiological changes, and benign and malignant disorders.<sup>[1]</sup> Most common complaints presented

are per vaginal bleeding, vaginal discharge, pain in abdomen, menstrual irregularity, difficulty in micturition and post menopausal bleeding and sensations of something coming out of vagina etc.<sup>2</sup> The cervix is prone to many non-neoplastic

# JMSCR Vol||06||Issue||01||Page 32699-32701||January

and neoplastic conditions which are mostly seen in the reproductive age group. All these diseases are seen across all age groups and contribute significantly to increased morbidity and mortality amongst women.<sup>3</sup>

Many treatment options are available nowadays including medical and conservative surgical procedures but hysterectomy remains the most preferred method to manage gynaecological disorders. It is the definitive cure for many of its indication which includes dysfunctional uterine utero-vaginal bleeding, fibroids. prolapse, endometriosis and adenomyosis, pelvic inflammatory disease, pelvic pain, gynaecological cancers and obstetric complications. Ultimate diagnosis is only on histology, so every hysterectomy specimen should be subjected to histopathological examination.<sup>4</sup> This study is aimed to study gross and histopathological findings in uterus and cervix of hysterectomy specimens received department in of histopathology at tertiary care hospital.

## **Material and Method**

This is a retrospective study of gross and histopathological findings in hysterectomy specimens received at department of pathology at tertiary care hospital over a period of 1 year. On receiving the hysterectomy specimen as per protocol they were fixed in 10% formalin, large specimens were cut and left for fixation. Gross features were recorded and representative samples were taken after proper fixation of specimen. Multiple representative bits were processed and paraffin blocks made, sections were then stained with Hematoxylin and Eosin stains (H & E Staining). After thorough microscopic examination a histopathological diagnosis was given.

## Results

Total 50 cases were included in the study. Age of patient ranged from 28-65 years. Peak age of incidence for hysterectomy was  $5^{th}$  decade of life i.e. 41-50 years. 50 % of cases were found in 41-50 age group. (Table 1)

The most common histopathological finding was leiomyoma 33 cases (66%) followed by combined leiomyoma and adenomyosis 7 cases (14%). 2 cases (4%) showed atrophied uterus while 3 cases (6%) showed hyperplasia of endometrium.(Table 2)

Table 3 depicts that non-specific cervicitis 39 cases (78%) was the common histopathological finding in cervical lesion followed by 3 cases (6%) of dysplasia cervix.

**Table 1:** Age distribution of hysterectomyspecimens in Uterine and Cervical Pathologies

Sr. No.	Age group in Years	No. of cases	Percentage
1	<=30	1	2
2	31-40	18	36
3	41-50	25	50
4	51-60	5	10
5	>60	1	2
Total		50	100

**Table 2:** Uterine lesions in Hysterectomyspecimen

Sr. No.	Uterine lesion	No. of cases	Percentage
1	Leiomyoma	33	66
2	Adenomyosis	5	10
3	Leiomyoma with Adenomyosis	7	14
4	Atrophied Uterus	2	4
5	Hyperplasia	3	6
	Total	50	100

 Table 3: Histopathological findings in Cervix

Sr. No.	Cervical Changes	No. of cases	Percentage
1	Cervicitis	39	78
2	Dysplasia cx	3	6
	Papillary	5	
3	cervicitis	5	10
4	Normal	3	6
	Total	50	100

#### Discussion

Hysterectomy is commonly performed surgical procedure in gynecology in perimenopausal age throughout the world. Charles Clay was the first to perform subtotal and total hysterectomy in Manchester, England in 1843 and 1929 respectively. It is a successful procedure done in terms of symptom relief, patient satisfaction and

# JMSCR Vol||06||Issue||01||Page 32699-32701||January

2018

definitive cure in many disease.<sup>5,6</sup> In the present study maximum number of patients i.e.50% were seen in the age group of 41-50 years. This was in accordance with the study done by Rather et al<sup>7</sup>. In an analysis of 150 cases by Patil HA et al<sup>8</sup> most cases were seen in the age group of 41- 50 years. Various studies done by Ramchandran T et al<sup>9</sup> and Ajmera et al<sup>10</sup> had similar findings.

uterine myometrial Amongst the lesion Leiomyoma was the most common finding which is similar to other studies of Gupta G et al<sup>11</sup> and Baral R et al.<sup>12</sup> Adenomyosis is the second most common myometrial pathology in this study. Adenomyosis is rarely diagnosed preoperatively and is still largely underdiagnosed as it has no specific symptoms of its own. It is usually diagnosed after hysterectomy by histopathological examination. In our study adenomyosis with leiomyoma is seen in 14% (7 cases). This is similar to thed study done by  $DhomblaeV^2$  and Baral R et  $al^{12}$ .

Chronic cervicitis is an extremely common condition seen in adult females. Similar finding were reported by Talukder SI et al<sup>13</sup>.

Three cases of cervical dysplasia (CIN - 1) were studied in the present study. It is similar to the study done by Ramachandran et al<sup>9</sup>.

## Conclusion

Leiomyoma and adenomyosis are most common uterine pathology and chronic cervicitis is most common in cervix in hysterectomy specimens.

## References

- Qamar-Ur-Nisa, Habibullah, Shaikh TA, Hemlata, Memon F, Memon Z. Hystrectomies; An audit at a tertiary care hospital. Professional Med J. 2011 Mar; 18(1):46– 50.
- Domblae V, Gundalli S, Sonali. International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064.
- 3. Forae GD, Aligbe JU. Histopathological patterns of endometrial lesions in patients with abnormal uterine bleeding in a

cosmopolitan population. J Basic Clin Reprod Sci 2013;2:101-4.

- SMO Zaid, MAB Thabet. Histopathological findings in hysterectomy specimens: A retrospective study. Middle East J of Internal Medicine.2017;10(1):17-24.
- John A, Rock MD, Jhon D, Thompson MD; Telinds's Operative Gynaecology. 1st Edition Lippincott. Med J. 3003:878-8
- Gowri M, Geetha M, Srinivasa M, Nayak V. Clinicopathological study of uterine leiomyomas in hysterectomy specimens. JEMDS. 2013;2(46):9002-9009.
- Rather GR, Gupta Y, Bardhwaj S. Pattern of lesions in hysterectomy specimens: A prospective study. J K Science. 2013;15 (2):63-8.
- Patil HA, Patil A, Mahajan SV. Histopathological findings in uterus and cervix of hysterectomy specimens.MVP Journal of Medical Sciences. 2015;2:26–29.
- 9. Ramachandran T, Sinha R, Subramanium. Correlation between clinico pathological and ultrasonographic findings in hysterectomy. Journal of Clinical Diagnosis and Research. 2011;5:734-40.
- Ajmera SK, Mettler L, Jonat W. Operative spectrum of hysterectomy in a German university hospital. J Obstet Gynecol India. 2006;56(1):59-63.
- Gupta G, Kotasthane DS, Kotasthane VD, Hysterectomy: A Clinico-pathological Correlation of 500 cases. The Internet J of Gynecology and Obstetrics 2009; 14: 1-5.
- 12. Baral R, Sherpa P, Gautam D. Histopathological analysis of hysterectomy specimens: one year study. J of Pathology of Nepal. 2017;7:1084 -1086.
- Talukder SI, Haque MA, Huq MH, Alam MO, Roushan A, Noor Z, Nahar K. Histopathological analysis of hysterectomy specimens. Mymensingh Med J 2007; 16 (1):81-84.