# Clinicopathological Study of Hysterectomy among Rural Patients in a Tertiary Care Center

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**Abstract:** Hysterectomy is one of the most commonly performed surgeries throughout the world.Objective:To find out the most common indication for hysterectomy among rural patients and to correlate the histopathological findings with clinical presentation.Materials and methods:A retrospective study was performed in the Department of Pathology, Karpagam Faculty of Medical Science from Oct 2013 – Nov 2014. A total of 90 specimens were received and histopathological findings were compared with clinical presentation. Results:The most common indication for hysterectomy was leiomyoma (41%) followed by adenomyosis (15.5%) and the most common presentation was increased bleeding. The mean age of hysterectomy was 44.6 years and the average parity of the patients was 1.7.

Keywords: Hysterectomy, Leiomyoma, Menorrhagia.

#### I. Introduction

Hysterectomy is one of the most commonly performed surgeries in the world<sup>[1]</sup>. In India it accounts for only 6% of major surgeries<sup>[2]</sup>. Hysterectomy rate varies from place to place depending upon patient and clinician related factors<sup>[3]</sup>.

Uterus, being a vital female reproductive organ is subjected to many different pathological conditions. There has been a remarkable improvement in conservative management of uterine lesions; still hysterectomy remains the most preferred modality of treatment for pelvic pathologies like fibroid, adenomyosis, pelvic inflammatory disease and malignant disorder <sup>[4].</sup> With accurate selection of patients the morbidity and mortality of hysterectomy is low<sup>[5,8].</sup> Prevalence of uterine pathology varies from place to place. Very less data is available regarding uterine pathology in this part of India, so this study was planned.

## II. Objectives

1. To find out the pattern and frequency of uterine pathology

- 2. To correlate the uterine pathology with different age groups
- 3. To correlate the uterine pathology with clinical features.

## III. Material And Methods

Karpagam Faculty of Medical Science and Research(KFMS&R) is a tertiary care center which is situated in rural part of Coimbatore to serve the needs of rural patients.

In the present retrospective study clinical features and histopathological diagnosis of 90 consecutive patients with hysterectomy during Oct 2013 – Nov 2014, in Department of Pathology, KFMS&R were collected and analyzed. All hysterectomy specimens were fixed in 10% buffered formalin, paraffin embedded and 4-5 $\mu$ m thick sections were cut and stained with Haematoxylin & Eosin. Special stains were used as and when required. Brief clinical data with respect to age, parity, clinical manifestation and clinical diagnosis was obtained from medical records department. All cases of hysterectomy performed for obstetrical causes were excluded from the study. The data was analysed by using SPSS version 20.

## IV. Observation

In this study the most common indication for hysterectomy was found to be leiomyoma (41%). This was followed by adenomyosis (15.5%) and chronic cervicitis(14.4%). 8.8% of patients had both adenomyosis and leiomyoma (Fig.1).10% of people presented with polycystic ovarian disease The age group of patients ranged from 30-70 yrs with mean age of 44.5yrs(Fig.2). The most common clinical presentation was increased bleeding (62.2%) followed by pain abdomen (16.6%) (TABLE 1). The mean parity of the patients was 1.7.

Adenomyosis was the most common pathology seen in nulliparous women whereas women with history of abortion had fibroids (TABLE 2).



Fig.1. Showing Distribution Of Various Pathological Lesions In Hysterectomy Specimens

Age(yrs)	Increased bleeding	Pain abdomen	Mass descending p.v.	Low back ache	White discharge
30-35	3	2	0	0	0
36-40	21	4	0	2	0
41-45	15	5	0	0	2
46-50	16	3	3	1	1
51-55	0	0	4	0	0
56-60	1	1	2	0	1
61-65	0	0	1	1	0
66-70	0	0	1	0	0

Table 1.	Showing	Correla	tion	Between	Clinical	Presentati	on A	and A	ge Of	The Patient	;
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Fig.2. Showing Relationship Between Age And Histological Findings

		Chronic	Endometrial			Fibroid with	Ovarian	Serous
Parity	Adenomyosis	cervicitis	polyp	Endometriosis	Fibroid	adenomyosis	cyst	cystadenoma
Nulliparous	2	1	0	1	1	0	0	0
L1-2	9	6	4	2	29	7	6	1
L3-4	2	5	0	0	3	0	2	1
Abortion	1	1	0	0	3	1	1	0

TABLE 2. Relationship between parity and histopathological diagnosis

## V. Discussion

Hysterectomy is the most commonly performed major gynaecological surgery in the world<sup>[1]</sup>. The prevalence of hysterectomy varies from place to place<sup>[2]</sup>. Rural women seek medical care relatively late depending upon socio-economic factors and access to health care. So conservative treatment cannot be offered to them. Most of the time the best treatment option available is hysterectomy. This study was undertaken to find out the most common pathology and to correlate with clinical features.

In this study the most common pathology was leiomyoma accounting for 41% which is similar to other studies<sup>[3,6,7,8]</sup>. Leiomyoma was the most commonly observed pathology among women with parity of L1-L2 and was commonly seen in the age group of 36 to 45 yrs<sup>[8]</sup>. The second most common indication was adenomyosis which is also similar to other studies<sup>[8,9,10]</sup>8.8% of patients had both leiomyoma and adenomyosis which is similar to other studies<sup>[9,10,11]</sup>. It is commonly seen in the age group of 41 to 45 yrs<sup>[8]</sup>.

The mean age of hysterectomy was 44.5 yrs which is similar to other studies<sup>[9,12,13]</sup>. The most common clinical presentation in our study was increased menstrual bleeding(62.5%) which is significantly higher when compared with other studies<sup>[10,14,15]</sup> which could be attributed to the perimenopausal age<sup>[11,13,14]</sup> and high parity of the patients and also due to lack of use of oral contraceptives in rural population. The most common endometrial pathology in our study was endometrial polyp which accounted for only 4% of cases .

Leiomyomas are benign uterine tumours which are commonly seen in women of reproductive age group and commonly present with increased menstrual bleeding which is due to increased vascularity, endometrial surface and altered uterine contractility and usually do not respond to hormonal therapy<sup>[16,17]</sup>. Hysterectomy is the treatment of choice in women who have completed their family. Early menarche, delayed menopause, delayed parity, obesity and lack of exercise are some risk factors of leiomyoma<sup>[7]</sup>.

Adenomyosis was the second most common pathology accounting for 15% of cases which is similar to other studies .The prevalence of adenomyosis increases with rising parity which supports the theory of implantation of the basal endometrium deep in the myometrium

#### VI. Conclusion

Hysterectomy is a very commonly performed major surgical procedure .Menstrual disturbance was the most important indication for hysterectomy with leiomyoma being the most common pathology diagnosed in rural women.

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