

**A PROSPECTIVE STUDY OF HISTOPATHOLOGICAL OUTCOME OF PATIENTS  
UNDERGOING HYSTERECTOMY IN A TERTIARY CARE HOSPITAL**

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**Abstract**

**Introduction:** The removal of the uterus is called hysterectomy. It is one of the common operations performed on females and has mental, physical, social, economic, and psychosexual impacts, along with intra-operative and post-operative complications. Hysterectomy is the most common gynaecological surgical procedure after caesarean section. In India there is lower rate (4-6%) of hysterectomy has been reported, while there is higher frequency of hysterectomy (10-20%) in developed countries. Over 600,000 hysterectomies were having been performed in US alone in 2003 according to reports, out of them 90% were performed for benign conditions.

**Materials and methods:** This was a Prospective observational study done in the Department of obstetrics and gynaecology, Govt Medical College, Ananthapur from June 2023 to May 2024. All the patients who had undergone abdominal hysterectomy and vaginal hysterectomy during the study period were included in the study. Hysterectomy done by other approach (VH or minimal invasive hysterectomy), hysterectomy done for malignancy and emergency hysterectomy were excluded from the study. A detailed history, clinical examination and imaging study were done for pre-operative diagnosis. Histopathological confirmation was done after surgery all data placed in table and were expressed in frequency and percentage.

**Results:** The age range was 30-75 years and the leading age group was 41-50 years. Majority of the respondents were from rural areas 53% and 47% patients were from urban settings. Among the subjects 74% were housewives and the rest 26% were service holders. Out of 78 cases clinically diagnosed as leiomyoma of the uterus, histopathology revealed leiomyoma in 76 cases, adenomyosis in 3 cases and chronic cervicitis in 2 case. Leiomyoma was associated with chronic. Cervicitis in 18 cases (25%), with adenomyosis in 7 cases (9.62 %), with CIN-I in 6 cases (7.69%) and associated with endometrial hyperplasia is 3 cases (3.77%).

**Conclusion:** Hysterectomy is the commonest performed gynaecological surgery throughout the world. Uterine leiomyomas are the most common solid pelvic tumours in women and they can have serious adverse effects and impact on quality of life. As women postpone having children, gynaecologists will have to manage leiomyoma and polyps in a conservative manner. However, it is the responsibility of health care professionals to encourage teaching and implementation of alternative procedures to ensure that women receive the maximum benefits with least morbidity. Every hysterectomy specimen we subjected to histopathological examination histopathological analysis correlates well with the preoperative clinical diagnosis for hysterectomy. Histopathology is thus mandatory for confirming diagnosis and thus ensuring optimal management.

**Key Words:** hysterectomy, benign, Uterine leiomyomas, Histopathology, health care professionals.

## **INTRODUCTION**

The removal of the uterus is called hysterectomy. It is one of the common operations performed on females and has mental, physical, social, economic, and psychosexual impacts, along with intra-operative and post-operative complications.<sup>1</sup>

Hysterectomy is the most common gynaecological surgical procedure after caesarean section. In India there is lower rate (4-6%) of hysterectomy has been reported, while there is higher frequency of hysterectomy (10-20%) in developed countries. Over 600,000 hysterectomies were having been performed in US alone in 2003 according to reports, out of them 90% were performed for benign conditions.<sup>3</sup>

Currently there are three main types of hysterectomy operations in practice for benign diseases abdominal hysterectomy, vaginal hysterectomy and laparoscopic hysterectomy. Abdominal hysterectomy remains the predominant method of uterus removal. The common indications of hysterectomy are fibroid uterus, dysfunctional uterine bleeding (DUB), prolapsed genital organ, Leiomyoma, endometriosis, pelvic inflammatory disease, endometrial hyperplasia, menorrhagia, dysmenorrhoea or pelvic pain associated with significant pelvic disease, intractable postpartum haemorrhage, endometrial hyperplasia with atypia and malignancies such as cervical intraepithelial neoplasia or invasive Disease etc. using a variety of techniques and approaches including abdominal, vaginal. In India, most of the surgeons prefer vaginal hysterectomy.<sup>5</sup>

## **MATERIALS AND METHODS**

**Study Design:** A Prospective observational study

**Study location:** Department of obstetrics and Gynaecology, Govt Medical College, Ananthapur

**Study duration:** June 2023 to May 2024

**Sample Size:** 150 patients.

This was a Prospective observational study done in the Department of obstetrics and gynaecology, Govt Medical College, Ananthapur from June 2023 to May 2024.

**Inclusion Criteria:** All the patients who had undergone abdominal hysterectomy and vaginal hysterectomy during the study period were included in the study.

**Exclusion Criteria:** Hysterectomy done by other approach (VH or minimal invasive hysterectomy), hysterectomy done for malignancy and emergency hysterectomy were excluded from the study.

A detailed history, clinical examination and imaging study were done for pre-operative diagnosis. Histopathological confirmation was done after surgery all data placed in table and were expressed in frequency and percentage.

## RESULTS

The age range was 30-75 years and the leading age group was 41-50 years. Majority of the respondents were from rural areas 53% and 47% patients were from urban settings. Among the subjects 74% were housewives and the rest 26% were service holders.

Age group (years)	No. of patients, (n=150)	Percentage (%)
30-40	28	18.66%
41-50	63	42%
51-60	32	21.33%
61-70	15	10%
More than 70	12	8%

**Table 1: Age Distribution**

Presenting complaints	No. of patients	Percentage (%)
Menorrhagia	106	71
Dysmenorrhoea	60	40
Excessive prevagina discharge	22	15
Lump in lower abdomen	18	12
Dyspareunia	13	9
Pelvic pain	42	28

**Table 2: Distribution of cases according to presenting complaints.**

Clinical diagnosis	No. of patients	Percentage (%)
Leiomyoma of the uterus	78	52

Dysfunctional uterine bleeding	45	30
Adenomyosis	10	7
Endometriosis	9	6
Pelvic inflammatory disease	4	3
Endometrial polyp	1	1

**Table 3: Preoperative clinical diagnosis**

Out of 78 cases clinically diagnosed as leiomyoma of the uterus, histopathology revealed leiomyoma in 76 cases, adenomyosis in 3 cases and chronic cervicitis in 2 case. Leiomyoma was associated with chronic. Cervicitis in 18 cases (25%), with adenomyosis in 7 cases (9.62 %), with CIN-I in 6 cases (7.69%) and associated with endometrial hyperplasia is 3 cases (3.77%).

Clinical diagnosis	Histopathological diagnosis	No. of patients	Percentage (%)
<b>Liomyoma of uterus (78)</b>	Leiomyoma alone	39	50
	Leiomyoma of the uterus with chronic cervicitis	19	25
	Leiomyoma with adenomyosis	7	9.62
	Leiomyoma with CIN-I	6	7.69
	Adenomyosis with chronic cervicitis	3	3.77
	Leiomyoma with endometrial hyperphasia	3	3.77
	Chronic cervicitis	2	1.87

**Table 4: Histopathological diagnosis in clinically diagnosed cases of leiomyoma**

Clinical diagnosis	Histopathological diagnosis	No. of patients	Percentage (%)
<b>dysfunctional uterine bleeding (45)</b>	Leiomyoma	4	10
	Adenomyosis	13	30
	Leiomyoma with adenomyosis	7	16.67
	Adenomyosis with chronic cervicitis	3	6.67
	Endometrial polyp	3	6.67
	Disordered proliferative and atrophic endometrium	3	6.67
	Chronic cervicitis	2	3.33

	Cystic hyperplasia	2	3.33
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**Table 5: Histopathological diagnosis in clinically diagnosed cases of dysfunctional uterine bleeding.**

<b>Pathology identified</b>	<b>No of patients (N=150)</b>	<b>Percentage (%)</b>
Leiomyoma of uterus	43	29
Adenomyosis	16	11
Chronic cervicitis	3	2
Endometrial hyperplasia	4	3
Endometrial polyp	1	2
Combined pathology	79	53

**Table 6: Uterine pathologies identified in 150 cases of hysterectomy.**

## DISCUSSION

Indications for abdominal and vaginal hysterectomy vary from benign to malignant diseases. For purpose of clarity, we chose only one dominate pre-operative diagnosis as indication for hysterectomy for each case. Gambone and associates have pointed out that the process of using only a single designated indication and reviewing only two documents in the record i.e., the surgeon's pre-operative notes and the pathology report, greatly simplified the quality assurance process in order to monitor the justification for hysterectomy.<sup>6</sup>

A total of 150 patients ranging from 30-75 years were included in this study, who were managed by abdominal and vaginal hysterectomy having menorrhagia in Govt Medical College, ananthapur. The present study findings were discussed and compared with previously published relevant studies.<sup>7</sup>

In the present study, it was observed that occurrence of menstrual disorders of excessive type increase with age. The commonest age group in our patients was 41-50 years (42%). Similar age incidence reported by Railway hospital study at Rawalpindi 71%; where Yosuf and Moghal reported 38.06% and 30% respectively in this age group.<sup>8</sup>

The most common complaint was menorrhagia (71%), associated complaints in this study were pelvic pain in 42 cases (28%), dysmenorrhoea in 60 cases (40%). Shergill et al and Sculpher et al reported hysterectomy due to excessive menstruation were 66% and 69.60%. Leiomyoma of the uterus was the most common cause (52%) of menorrhagia diagnosed preoperatively in this study, which is the most common indication of hysterectomy.<sup>9</sup> Similar results were reported by Fonseca et al (55%), a study of DAQ hospital and Nishar hospital, Multan in which 54.8% was leiomyoma of uterus.

Out of 78 cases clinically diagnosed fibroid was confirmed on histopathology in 75 cases (94.23%). In 53% of hysterectomy specimens more than one pathology was identified; the most common combinations were leiomyoma and adenomyosis in 15 cases. In 30 cases uterine leiomyoma was present with other pathology like chronic cervicitis, CIN and others. In 25 cases adenomyosis was present with other pathology rather than leiomyoma. So, in most cases, preoperative clinical diagnosis was confirmed on histopathological examination. Similar correlation was observed in other study. This study was similar to Abdullah study at king A.Aziz medical city, Jeddah, revealed leiomyoma in 34%.<sup>10</sup>

### **CONCLUSION**

Hysterectomy is the commonest performed gynaecological surgery throughout the world. Uterine leiomyomas are the most common solid pelvic tumours in women and they can have serious adverse effects and impact on quality of life. As women postpone having children, gynaecologists will have to manage leiomyoma and polyps in a conservative manner. However, it is the responsibility of health care professionals to encourage teaching and implementation of alternative procedures to ensure that women receive the maximum benefits with least morbidity. Every hysterectomy specimen we subjected to histopathological examination histopathological analysis correlates well with the preoperative clinical diagnosis for hysterectomy. Histopathology is thus mandatory for confirming diagnosis and thus ensuring optimal management.

### **REFERENCES**

1. Singh S. Hysterectomy trends in rural India-an analytic study. *Int J Clin Obst Gynaecol*. 2019;3(3):166-8.
2. Bala KR, Devi P, Singh CM. Trends of hysterectomy: a retrospective analysis in RIMS, Imphal. *Jmedsoc*. 2021;29:121-4.
3. Yakasai IA. Complications of Hysterectomy: A Review. *Brit J Sci*. 2013;9(2):120-3.
4. Sobande AA, Eskander M, Archibong EI. Elective hysterectomy: A clinicopathological review from abha catchment of Saudi Arabia. *WAJM*. 2005;24(1):24-9.
5. Pity IS, Jalal JA, Hassawi BA. Hysterectomy: A clinicopathologic study. *Tikrit Med J*. 2011;17(2):7-16.
6. Rahim G, Yudhvirgupta. Pattern of lesion in hysterectomy specimen: A prospective study. *J K science*. 2013;15(9):110-5.
7. Pradhanang V, Tuladhar H, Maskey S, Dali SM, Pradhan P. Review of Hysterectomies at NMCTH: A Retrospective Study. *J Nep Health Res Coun*. 2005;3(1).
8. Begum J, Talukder SI. A two year audit of complication of total abdominal hysterectomy at Dinajpur Medical Colleged hospital. *Dinajpur Med Col J*. 2008;1(1).
9. Zahan AA, Shahnawaz K. Non descent vaginal hysterectomy: a rational surgical approach. *Bagladesh J Obstet Gynaecol*. 2015;30(1):15-9.
10. Zaman S, Anjuman A, Begum. Hysterectomies at a rural medical college of Assam-A retrospective study. *J Obstet Gynaecol Barpeta*. 2015;1(2).