## **ORIGINAL ARTICLE**

# Indications and Histopathological Analysis of Hysterectomy Specimens

SHABANA BANO SOOMRO1, HINA PIRZADA2, AHMAL FAWAD ZAFAR3, MUTAYYABA MAJEED4, SADIA HABIB5, SANIA6

<sup>1</sup>Assistant Professor, Department of Obstetrics & Gynaecology, Shaheed Mohtarma Benazir Bhutto Medical University, Chanka Medical College, Shaikh Zayed Women Hospital. Larkana

<sup>2</sup>Assistant Professor, Department of Obstetrics & Gynaecology, AJK Medical College Muzaffarabad, Sheikh Khalifa bin Zayed Al-Nahyan Hospital/CMH Muzaffarabad Azad Kashmir

<sup>3</sup>Consultant General Surgeon, THQ Hospital Shahkot, Punjab

<sup>4</sup>Senior Demonstrator, Department of Physiology, Independent Medical College, Faisalabad

<sup>5</sup>Associate Professor, Chairperson, Department of Obstetrics & Gynaecology, Ayub Medical Teaching Institute, Abbottabad

<sup>6</sup>Assistant Professor, Department of Obstetrics & Gynaecology, Pir Abdul Qadir Shah Jeelani Institute of Medical Sciences, Gambat

Correspondence to: Sadia Habib, Email: sadiazeb@yahoo.com, Cell: 0333-5033929

### **ABSTRACT**

Objective: To examine the indications and histopathological analysis of hysterectomy specimens.

Study Design: Prospective study.

Place and Duration of Study: Department of Obstetrics & Gynaecology, Shaikh Zayed Women Hospital Larkana from 1<sup>st</sup> January 2021 to 31<sup>st</sup> December 2021.

**Methodology:** Fifty women undergoing hysterectomies with an age greater than 18 years were enrolled as study participants. Partial or complete hysterectomy was performed in each patient and the samples gained post hysterectomy were placed in 10 percent formalin until histopathological examination was performed. The process of hysterectomy was done by a qualified surgeon keeping quality surgical standards. Demographic details including age, gender as well as other information regarding clinical symptoms, diagnosis and clinical history were documented on a well-structured questionnaire.

**Results:** The mean age was 34.4±5.4 years with most of the women within the age group of 40-49 years and 68% of the women with abundant menstrual bleed followed by presentation of abdominal mass. In most of the females a uterus fibroid was presented whereas UV prolapse was also common in women indicating towards hysterectomy. Leiomyoma was presented highest on histopathological report findings such as in 29% of the cases followed with adenomyosis reporting.

**Conclusion:** Every hysterectomy sample should be evaluated properly and timely for post-operative management and for the exact diagnosis of underlying disease.

Keywords: Hysterectomy; Evacuation; Pathology; Malignancies

## INTRODUCTION

Hysterectomy is a surgical process required for the removal of the uterus with or without involvement of other organs. The hysterectomy has been reported globally as the second highest surgical gynecological procedure after caesarean.¹ Hysterectomy is performed either due to initialization of a benign related condition in the genital tract or cause of genital-tract carcinomas. Conditions like dysfunctional bleeding from the uterus, adenomyosis, chronic pain in the pelvis, leiomyoma, endometriosis, prolapse and other conditions like malignancies.²-4

The first partial hysterectomy was performed in United Kingdom during nineteenth century followed by complete hysterectomy was performed in twentieth century. A complete hysterectomy involves the complete removal of uterus, cervix and fundus while partial involves evacuation of uterus only with keeping the cervix preserved. The later type of hysterectomy is referred to supracervical hystrectomy. Other type of hysterectomies includes abdominal, laparoscopic and vaginal. <sup>5-8</sup>

The mortality ratio due to hysterectomy is around 30 to 40 percent however its prevalence is estimated different in accordance with various geographical areas as well as training trends of surgeons. Pathological evaluation before hysterectomy is a mandatory protocol as the indications which are gained through pathological examination are crucial in identifying hysterectomy type and surgical plan.<sup>9,10</sup> The present study was designed for the same purpose and improving health related quality of life of patients.

# MATERIALS AND METHODS

This prospective study was conducted at Department of Obstetrics & Gynaecology, Shaikh Zayed Women Hospital Larkana from 1st January 2021 to 31st December 2021. Fifty women undergoing hysterectomies with an age greater than 18 years were enrolled as study participants. A written informed consent was taken from each patient who was enrolled in this study. Those women having histopathological known conditions were excluded from this study. Partial or complete hysterectomy was performed in each patient and the samples gained post hysterectomy were placed in 10

percent formalin until histopathological examination was performed. The process of hysterectomy was done by a qualified surgeon keeping quality surgical standards. All the SOPs were observed with high focus by the working surgeon and its team. Demographic details including age, gender as well as other information regarding clinical symptoms, diagnosis and clinical history were documented on a well-structured questionnaire. The data was entered and analyzed through SPSS-26.

### **RESULTS**

The mean age of patients was 34.4±5.4 years with most of the women within the age group of 40-49 years. The main complains and clinical symptoms of women presented 68% of the women with abundant menstrual bleed followed by presentation of abdominal mass (Table 1).

In most of the females a uterus fibroid was presented whereas UV prolapse was also common in women indicating towards hysterectomy. The further indication for hysterectomy was presentation of ovarian cancer in 12% of the cases where as benign mass in ovaries was present in 6% patients (Table 2).

Leiomyoma was presented highest on histopathological report findings such as in 29% of the cases followed with adenomyosis reporting. The histopathological reports also showed that serous cystadenoma was also present in 12% cases while chronic cervicitis was present in 7% of the total enrolled women (Fig. 1).

Table 1: Distribution of age and clinical features (n=50)

Variables	No.	%		
Age (years)				
18-29	3	6.0		
30-39	17	34.0		
40-49	20	40.0		
>49	10	20.0		
Clinical symptoms				
Abundant menstrual bleed	34	68.0		
Mass in abdomen	10	20.0		
Post menopause bleeds	6	12.0		

Table 2: Hysterectomy route and reason in various women (n=50)

Variables	No.	%		
Hysterectomy via vagina	10	20.0		
Hysterectomy via abdomen	40	80.0		
Fibroid uterus	20	40.0		
UV prolapse	10	20.0		
Carcinoma Type				
CA Ovary	6	12.0		
CA Endometrium	3	6.0		
CA Cervix	1	2.0		
Benign Ovarian Mass	3	6.0		
DUB	7	14.0		

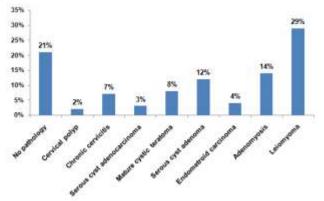


Fig. 1: Histological finding graph of various women undergone hysterectomy

#### DISCUSSION

Hysterectomy is one of the most widely done surgical procedures in gynecology after caesarean section in females, worldwide. There are many reasons for this condition such as genital tract cancers. Hysterectomy is used for the treatment of numerous pelvic pathologies including leiomyoma, dysfunctional uterine bleeding, chronic pelvic pain, adenomyosis, endometriosis and prolapsed. 11 It is one of the prevalent surgical protocol especially in menopausal aged women. Uterine biopsies were taken and proved useful for the treatment and diagnosis for histopathological assessment.12 Present study was designed for histopathological assessment of specimen that was undergoing hysterectomy.

In present study, the mean age of patients was 34.4±5.4 years with most of the women within the age group of 40-49 years. In contrast to our findings, Harshal et al<sup>13</sup> reported 41-50 years of females were more affected. Geethamala et al<sup>14</sup> reported the similar findings. In most of the females a uterus fibroid was presented whereas UV prolapse was also common in women indicating towards hysterectomy. Leiomyoma was presented highest on histopathological report findings such as in 29% of the cases followed with adenomyosis reporting. 15-17

Hysterectomy can be proved useful for the evaluation and diagnosis of various underlying conditions. When histopathological examination was done, different types of lesions were present.

### CONCLUSION

Every hysterectomy sample should be evaluated properly and timely for post-operative management and for the exact diagnosis of underlying disease.

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