

# CASE-NOTES ANALYSIS OF HYSTERECTOMIES PERFORMED AT KHYBER TEACHING HOSPITAL, PESHAWAR

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## ABSTRACT

**Objective:** To determine the clinical, intra-operative and histopathological findings of hysterectomy specimens. Aim of study is to emphasize on the requisite for regular audit of hysterectomy indications and highlights relationship between clinical judgment and histopathological evaluation of hysterectomy specimens.

**Methodology:** This is a descriptive retrospective type of study in which all hysterectomy cases were included, from October 2014 till end of October 2015. Sample size was 255. All electives and emergency hysterectomies (including obstetric hysterectomies) were included and oncological hysterectomies were excluded. The clinical history, examination findings and per operative findings recorded on the pathology laboratory request form were collected and slides stained with hematoxylin and eosin were reexamined. Histopathological diagnoses were compared with preoperative indications.

**Results :** Out of a total of 255 hysterectomies, 114 presented with fibroid uterus, 86 with dysfunctional uterine bleeding, 37 with utero-vaginal prolapse and 18 with pelvic inflammatory disease and mass in adnexa. There was a high correlation among clinical and histopathological diagnosis of fibroids but low in cases of Dysfunctional uterine bleeding, pelvic inflammatory disease and malignancies.

**Conclusion:** Leiomyoma was the most common cause of abdominal hysterectomy while Utero Vaginal prolapse is the most common cause of vaginal hysterectomy. Regular audit of surgeries can help improve healthcare and provide more conservative treatment options for hysterectomy due to benign conditions.

**Keywords:** hysterectomy, histopathological findings, fibroids, DUB, endometrial hyperplasia.

## INTRODUCTION

Hysterectomy, a definitive treatment option of a variety of pelvic pathological conditions, namely uterine fibroids, DUB, Chronic PID, adenomyosis, endometriosis, UV prolapse, and many malignant tumors since early twentieth century<sup>1</sup> by definition, is to remove the uterus completely, either through vaginal or Abdominal route and rank second among the most frequent major surgeries done on females world wide, led only by cesarean section<sup>2</sup>. Morbidity due to the surgical procedure is a problem and sometimes, grave post-operative complications like damage to the urinary system leading to urinary extravasations and haemorrhage in 0.2%-2% of patients<sup>3</sup> urinary bladder injury in 2% cases, infections in 10% cases and troublesome vaginal granulations in 10% cases, may develop<sup>4,5</sup>. The aim is to identify the

most common pathologies leading to hysterectomy and evaluate the association of clinical and intraoperative findings with the ultimate histopathological diagnosis of all hysterectomy specimens. In KPK, not many studies regarding hysterectomy indications and its justification have been published lately and our study might prove a baseline for such studies in the future.

## METHODOLOGY

The study was conducted at the department of histopathology, Khyber teaching Hospital, Peshawar, KPK, on all the hysterectomy cases sent during the period of October 2014 to end of October 2015. Two hundred and fifty-five cases were available during that period. All electives and emergency hysterectomies (including obstetric hysterectomies) were included and oncological hysterectomies were excluded. Preoperative indications, examination findings and per operative findings along with all other necessary required data were recorded from the histopathology requisition form. Slides stained with hematoxylin and eosin were reexamined. The most common clinical indications were identified and Histopathological diagnoses were compared with preoperative indications.

## RESULTS

Among them 114 (44.7%) cases were of fibroid uterus, 86 cases (33.72%) of DUB, 37 cases (14.5%) of UV prolapsed, 18 cases (7.05%) of PID and Adnexal

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mass (table 1). Most of the patients with dysfunctional uterine bleeding also had associated complaints like pain in lower abdomen or dysmenorrhoea.

Among 255 cases, on histopathology, 86 cases of leiomyoma were diagnosed. The histopathological findings of 28 patients were different. Among 86 cases of clinically diagnosed dysfunctional uterine bleeding (DUB), majority of the cases were of chronic non-specific cervicitis. All cases of adenomyosis and advanced carcinoma ovary had been diagnosed histopathologically only. The details of clinical versus histopathological diagnosis are shown in Table 3. The patient's ages

ranged between 20 to 70 years with a mean age of  $40 \pm 5$  years. Majority of these cases belonged to women in the age group 40-49 years presenting mostly with fibroids. Four of the advanced carcinoma cases also belonged to this group. The second majority was those of 30-39 years presenting mostly with DUB and 3 cases of malignancy. The third group with higher number of hysterectomies was the age group 50-59 years with utero-vaginal prolapse, 1 carcinoma ovary and 1 benign ovarian tumor. All the cases with malignant tumors were grand multi para women with parity  $\geq 5$  with only one exception.

**Table 1: Clinical indications for hysterectomy**

Clinical diagnosis	No. of patients	Percentage (n=255)
Fibroids	114	44.7%
DUB	86	33.72%
Utero-vaginal prolapse	37	14.50%
Adnexal mass/ Pelvic inflammatory disease with associated symptoms	18	7.05%

**Table 2: Age distribution of patients**

Age group of patients	No. of patients	Percentage (n=255)
20-29 years	9	3.52%
30-39 years	52	20.39%
40-49 years	138	54.11%
50-59 years	37	14.5%
60-70 years	19	7.45%

**Table 3: clinical versus histopathological diagnosis (total hysterectomies n = 255)**

hysterectomies	No. of hysterectomies	Histopathological Dx with no. of hysterectomies
DUB	86	Chronic non-specific cervicitis / chr. Endometritis = 37 Adenomyosis = 24 , endometrial hyperplasia = 20 Endometrial polyp = 3 , choriocarcinoma = 1 Benign ovarian tumor = 1
Fibroids	114	Leiomyoma = 86 , adenomyosis with leiomyoma = 18 Chronic non-specific cervicitis / chr. Endometritis = 4 Adenomyosis = 4 , ovarian carcinoma = 2
Adnexal mass / PID	18	Chronic non-specific cervicitis / chr. Endometritis = 7 Adenomyosis = 6 , ovarian carcinoma = 4 Benign ovarian tumor = 1
Utero-vaginal prolapse	37	Changes consistent with UV-prolapse = 37  Total case of adenomyosis = 34 Total Adenomyosis with leiomyoma = 18 Total Chronic non-specific cervicitis = 48 Total cases of endometrial hyperplasia = 20 Total cases of benign and malignant tumors = 9

## DISCUSSION

As in other parts of Pakistan, the diagnosis of disease done in our set up is more on clinical grounds rather than on the modern investigations due to limited facilities and the economical restraint. In our study, Leiomyoma is found to be the most frequent indication of abdominal hysterectomy and uterovaginal prolapse seem to be the sole indication for vaginal hysterectomy. Both these findings are in accordance with various other studies<sup>6,7</sup>. Out of the 255 cases, 127 cases diagnosed on histopathology correlated well with the clinical diagnosis and 128 had a different diagnosis. Majority of the advanced carcinoma ovary cases were grand multi para women with only one exception of  $P < 5$ . These results are similar to the findings of Zahra F.<sup>8</sup>, denying any defensive role of multiparity against ovarian malignancies in our country. Histopathology has confirmed most of the apparent pathologies of hysterectomy, with a variety of other secondary findings seen in most specimens. In cases of pelvic inflammatory disease and DUB, the clinical and the histopathological association was poor but in cases of fibroids it was high. Many cases were found to have nonspecific cervicitis with no other significant histopathological changes, raising questions about the validation of the procedure.

Justification of Hysterectomy has become a matter of discussion now that more efficient medical treatments and much better conservative treatment options have been devised<sup>9</sup>. According to Magon et al. "hysterectomy is a surgery which has been used and misused, underused, and abused at different times in gynecology"<sup>10</sup>. Hence assessment of hysterectomy indications and the association amid clinical judgment and histopathological findings need to be an essential element of audit. This offers an efficient way to assure excellence.

## CONCLUSION

This study verifies the frequency of benign pathologies of hysterectomy cases as compared to malignant ones. The clinical and histopathological correlation is not 100% in cases of leiomyoma, DUB or pelvic inflammatory disease and malignancies.

Rules need to be made regarding compulsory histopathological reporting of all hysterectomy speci-

mens and the data analysed to enhance the services of health professionals. Patients should be cautiously assessed and the risk to benefit ratio considered. However, the responsibility lies on the shoulders of healthcare professionals to encourage more conservative therapies for benign gynecologic conditions and put into practice substitute measures to hysterectomy.

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