

An Audit of Gynecological Hysterectomies

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ABSTRACT

- Objective** To determine the frequency, indications, clinical concordance with histopathological diagnosis and complications of gynecological hysterectomies.
- Study design** Retrospective study.
- Place & Duration of study** Department of Obstetrics and Gynecology Unit II, Ghulam Muhammad Mahar Medical Collage Hospital (GMMCH) Sukkur, from January 2018 to December 2020.
- Methodology** All patients who underwent hysterectomy for gynecological reasons were included. Obstetrical hysterectomy cases were excluded. Data was recorded on specially designed form and descriptive statistics were used for presentation.
- Results** A total of 121 hysterectomies were performed during the study period. There were 103 (85.1%) abdominal and 18 (14.9%) vaginal hysterectomies. Most of the patients were between 35 years to 50 years of age. Parity was from 0 – 10. Majority of patients were para 5. Most common indication of hysterectomy was fibroid (n=41 - 33.9%) followed by dysfunctional uterine bleeding (n=31 - 25.6%), and uterovaginal prolapse (n=18 - 14.9%). In 90.9% patients the pathological findings were in concordance with the preoperative clinical diagnosis. Ten (8.2%) patients developed wound infection, and 2 (1.6%) had pelvic abscess after vaginal hysterectomy.
- Conclusion** Uterine fibroid was the commonest indication followed by dysfunctional uterine bleeding (DUB) for the hysterectomy. High concordance found between clinical diagnosis and histopathological findings.
- Key words** Abdominal hysterectomy, Vaginal hysterectomy, Fibroid uterus, Dysfunctional uterine bleeding.

INTRODUCTION:

Hysterectomy is the most common surgical procedure performed in gynecological practice all over the world.^{1,2} It may done through abdominal or vaginal routes and laparoscopy may be used if feasible depending upon the diagnosis, by surgeons who are skilled in this technique.³ Hysterectomy is considered definite treatment of various pelvic pathologies

like fibroid, DUB, endometriosis, uterovaginal prolapse, malignancies.⁴ A frequent audit helps in analyzing the pattern and outcome of hysterectomy so that appropriate changes in practices can be made, to benefit patients and guide surgeons.^{5,6}

Hysterectomy is associated with definite morbidity and at times carries mortality, depending upon the surgical indication.⁷ The complication rate following hysterectomy is reported as between 0.5%-43%.⁸ It is therefore important to have clear indication and plan to undertake this procedure which is usually done to improve the quality of life of the patients. This study was conducted to analyze the indications, surgical approach undertaken and concordance between clinical diagnosis and histopathological findings as well as procedure related complications as an audit to improve clinical practices.

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METHODOLOGY:

This retrospective study was conducted in the Department of Obstetrics & Gynecology Unit II GMMC Hospital Sukkur. The records of all hysterectomies done for gynecological indications from January 2018 to December 2020 were retrieved. The information was gathered from history sheets. Obstetrical hysterectomy cases were excluded from this study. Information regarding age, parity, clinical diagnosis, presenting complaints, menstrual history and preoperative diagnosis and indication of hysterectomy and its complications were collected. Histopathology reports were also analyzed. The Data was analyzed by using SPSS version 20. Results were presented as frequencies and percentages for categorical variables and as numbers and mean for numerical variables.

RESULTS:

Total of 121 gynecological hysterectomies were performed. Most of the procedures were done through abdominal route (n=103 - 85.1%). Majority of the patients were between 35 years to 50 years

of age. The parity was from 0 - 10. Most common presenting complaints was heavy menstrual bleeding in 64 (52.8%) patients followed by uterovaginal prolapse in 18 (14.9%). The most common preoperative condition suspected was fibroid uterus in 41 (33.9%) patients followed by DUB in 31 (25.6%). Ovarian masses were found in 10 (8.2%) patients (table I).

In 110 (90.9%) patients the clinical diagnosis was same as reported in histopathological notes. However, in 11 (9.1%) patients there was alternate diagnosis made that included two (1.6%) patients with benign tumors where clinical suspicion was that of malignant ovarian tumor. In 6 (4.1%) patients with suspected postmenopausal bleeding with preoperative diagnosis of endometrial carcinoma, five (4.1%) turned out benign endometrial hyperplasia and one (0.8%) patient was diagnosed as endometrial carcinoma on histopathology report. One (0.8%) patient with gestational trophoblastic disease (GTD - molar pregnancy) had hysterectomy as their family was complete and histopathology report revealed choriocarcinoma. Details are given in table II.

Table I: Indications of Hysterectomy (n=121)

Indications	Number (n)	Percentage (%)
Fibroid Uterus	41	33.9%
DUB	31	25.6%
Uterovaginal Prolapse	18	14.9%
Pelvic Inflammatory Disease	14	11.5%
Ovarian Mass	10	8.2%
Post menopausal Bleeding	06	4.9%
GTD	01	0.8%

Table II: Histopathological Findings of Hysterectomy Specimen

Histopathological Findings	Number (n)	Percentage (%)
Leiomyoma	41	33.9%
Chronic Cervicitis	18	14.9%
Chronic Endometritis	14	11.5%
Benign Ovarian Tumor	08	6.6%
Malignant Ovarian Tumor	02	1.6%
Endometrial Hyperplasia	05	4.1%
GTD (Choriocarcinoma)	01	0.8%
Endometrial Carcinoma	01	0.8%
Unremarkable Pathology (DUB)	31	25.6%
Not responding to Medical Treatment		

Table III: Complications of Hysterectomy

Complications	Number (n)	Percentage (%)
Wound Infection	10	8.2%
Pyrexia	07	5.7%
Paralytic Ileus	04	3.3%
UTI	06	4.9%
Pelvic Collection	02	1.6%

Most of the patients (n=92 - 76.0%) had uneventful recovery after hysterectomy. Details of the complications are given in table III. There was no mortality in this study.

DISCUSSION:

The most common gynecological surgery performed worldwide is hysterectomy that is a definitive treatment for number of diseases including pathological bleeding, tumors, inflammatory conditions and anatomical aberrations like uterovaginal prolapse.⁹ Rate of hysterectomy varies in different geographical regions and based upon economic status of the country. A study from Kano hospital in Nigeria reported 5.1% hysterectomy rate.¹⁰ In our study over a period of three years 121 hysterectomies were performed for gynecological indications. Majority of patients were operated through open abdominal approach. Similar data is reported in a study conducted in Canada where 78% patients underwent abdominal hysterectomy.¹¹ In a national study a similar pattern was found.¹²

In literature the age of the patients varies from 30 years - 70 years which is similar to our observations. The wide variation in age also reflects the type of diseases the patients were suffering from. Most of the women were middle aged as reported in other studies.^{10,12} The average parity in our study was five which again is comparable to other studies. The most common presenting complaints in index study was heavy menstrual bleeding in 83 (68.5%) patients followed by something coming out of vagina, the typical presentation of prolapse. Same findings were reported in a study from a tertiary care hospitals in Peshawar and Lahore.^{13,14}

Uterine fibroid, though a benign condition, was the most common indication of hysterectomy in our study where 33.8% patients had final diagnosis of leiomyoma on histopathology. Various types of bleeding disorders were also reported in about quarter of cases. This is also reported in other series.^{14,15} Fibroid uterus is commonly found in child bearing age. They are slow growing benign tumors and sometimes reach massive size. They tend to

shrink after menopause. Different treatment options are available to deal with this condition, however as most of the women were with high parity, hysterectomy was chosen as an appropriate procedure to deal with this pathology. Similar findings are reported in other studies.^{16,17}

In this study most of the women recovered well after hysterectomy. Complications occurred in few patients that were reported in those who underwent laparotomy like wound infection, paralytic ileus and pelvic collection. The most common complication in this study was wound infection and pyrexia in postoperative period that were managed with dressing and antipyretics. The frequency of pelvic abscess after vaginal hysterectomy was found similar to other studies.^{14,15} No mortality occurred in this study group.

CONCLUSION:

Uterine fibroid a non-cancerous condition was the most common cause of bleeding as well as an indication of hysterectomy followed by DUB. The clinical diagnosis had high concordance with the histopathological findings. Minimal complications that were managed easily in postoperative period occurred.

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Tehmina Mahar: Data collection and manuscript writing. All authors approved final version of the manuscript.

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Competing Interest:

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