

A Clinicopathological Review of Elective Hysterectomies in Sir Ganga Ram Hospital

ZILL-E-HUMA¹, AASMA NAEEM², MARYAM SHOAIB³, SHUMAILA FAYYAZ⁴, ARJUMAND⁵

ABSTRACT

Objective: To audit indications and histopathological diagnosis of gynaecological hysterectomies.

Study design: Retrospective study.

Place and duration of study: Department of Obstetrics & Gynaecology, Unit-II, Sir Ganga Ram Hospital, Lahore. From 1st January 2011 to 31st December, 2011.

Methodology: Data regarding patient characteristics and indications of gynaecological hysterectomies performed during one year was collected from files and patients records..

Results: Total of 588 hysterectomies was performed in the year 2011. The ratio of abdominal to vaginal hysterectomy was 5:1. Mean age of patients was 45 years (range 35–65 years) and parity ranged from zero to eight. Most common presenting complaint was excessive menstrual blood loss in 275 patients (46.7%) followed by something coming out of vagina in 111 patients (18.8%). Majority of indications were benign. Most common preoperative diagnosis was fibroid uterus in 211 patients (35.8%) followed by dysfunctional uterine bleeding in 158(26.8%).

Conclusion: A yearly audit should be conducted in every institute to analyze the pattern of indications and lesions found on histopathological examination.

Keywords: Hysterectomies, indication, pathology

INTRODUCTION

Women worldwide suffer from gynaecological disorders that require hysterectomy as a treatment option^{1,2} i.e., incidence of hysterectomy is gradually increasing in the Western world as a whole, but it varies considerably from one country to another, reflecting differences in the attitudes of both patients and gynaecologists rather than a variation in pathology³. In 2003 over 600,000 hysterectomies were performed in United States alone, 90% for benign conditions^{4,5}. In UK 20% of women undergo hysterectomy before the age of sixty⁶ whereas the figure is 50% in California³.

Hysterectomy is an effective treatment option for many conditions like fibroid, abnormal uterine bleeding, endometriosis, adenomyosis, uterine prolapse, pelvic inflammatory disease and cancer of reproductive organ when other treatment options are contraindicated or have failed, or if the woman no longer wishes to retain her menstrual and reproductive function. In deciding the route of hysterectomy, individual assessment is essential regarding size, mobility and descent of uterus, site and size of fibroid, previous surgery and other comorbidities i.e., diabetes, hypertension and heart disease³. About 70–80% of hysterectomies are performed by the abdominal approach⁷.

Hysterectomy, although an effective treatment for many gynaecological disorders, is a major operation and is not without risk in term of both mortality and morbidity. In response to the consistent demand for this procedure, recent reports have identified hysterectomy as a key health care indicator used to measure and compare hospital performance.⁸ Whether every hysterectomy is necessary is a topic of debate and appropriate indications for hysterectomy are subject of substantial disagreement and there should be a periodical audit of this issue for its indications⁴.

METHODOLOGY

This is a retrospective study conducted at the Department of Obstetrics & Gynaecology, Sir Ganga Ram Hospital, Lahore. Record from history sheets and files of patients admitted in Gynaecology ward for hysterectomy during last one year from 1st January 2011 to 31st December 2011, was collected. Obstetrical hysterectomies were excluded from the study. Information was obtained regarding age, parity, clinical features, preoperative diagnosis/indication of hysterectomy and surgical procedure. Histopathological reports of hysterectomy's specimens were collected from department of pathology and their diagnosis was noted. Data was analyzed by using percentages.

^{1,2,4,5}Depatts. of Obs & Gynae, Sir Ganga Ram Hospital Lahore,

³Sandeman Provincial Hospital Quetta.

Correspondence to Dr. Zill-e-Huma,

Email: drzhuma12@yahoo.com

RESULTS

A total of 588 gynaecological hysterectomies were performed in 2011. Out of these 477(81.1%) were total abdominal hysterectomies with or without bilateral salpingoophorectomy and 111(18.8%) were vaginal hysterectomies. 64% of the patients were in the age group 41–50 years (Table 1) and 65.9% had parity between four and six (Table 2). The most common presenting complaints were menstrual abnormalities followed by something coming out of vagina (Table 3). Preoperative diagnosis of fibroid was made in 211(35.8%), dysfunctional uterine bleeding in 158(26.8%) and uterovaginal prolapse in 111 patients (18.8%). Ovarian cyst was the indication of hysterectomy in 38 patients (6.4%) while adenomyosis was suspected in 23 patients (3.9%) (Table 4). The commonest histopathological diagnosis made was that of chronic cervicitis (62%) which was an incidental finding in most of the cases followed by fibroid uterus in 43.7% cases (Table 5).

Table 1: Age wise distribution undergoing hysterectomy

Age (years)	No.	%age
36 – 40	106	18.0
41 – 45	147	25.0
46 – 50	235	39.9
51 – 55	58	9.9
56 – 60	30	5.1
Above 60	12	2.04

Table 2: Parity of patients undergoing hysterectomy (n=588)

Parity	No.	%age
P1 – p3	144	24.6
P4 – p6	388	65.9
≥ p6	56	9.5

Table 3: Presenting complaints of patients (n=588)

Presenting complaint	No.	%age
Menorrhagia	275	46.7
Polymenorrhagia	58	9.8
Irregular bleeding	82	13.9
Something coming out of vaginal	111	18.8
Lower abdominal pain	33	5.6
Abdominal distention	21	3.5
Postmenopausal bleeding	5	0.8
Postcoital bleeding	3	0.5

Table 4: Indication for hysterectomy (n=588)

Indication	No.	%age
Fibroids	211	35.8
DUB	158	26.8
Prolapse	111	18.8
Ovarian cyst	38	6.4
Adenomyosis	23	3.9
Chronic pelvic pain	19	3.2
Ovarian carcinoma	11	1.8
Cervical dysplasia	9	1.5
Carcinoma endometrium	8	1.3

Table 5: Spectrum of histopathological diagnoses (n=588)

Histopathological diagnosis	No.	%age
Non-neoplastic		
Chronic cervicitis	364	62
Hormonal imbalance	105	18
Ovarian cyst	52	8.8
Adenomyosis	19	3.2
Chronic pelvic inflammatory disease	19	3.2
No remarkable pathology	69	11.7
Preneoplastic		
Cystic endometrial hyperplasia	42	7.1
Complex hyperplasia	54	9.1
CIN	5	0.8
Neoplastic		
Leiomyoma	257	43.7
Ovarian carcinoma	11	1.8
Endometrial carcinoma	8	1.3

DISCUSSION

Hysterectomy is a major surgical procedure which involves the total removal of the uterus with or without the fallopian tubes and ovaries. It is the most common operation performed by the gynaecologist.^{2,4,6} Alternatives to hysterectomy like progestational intrauterine system and endometrial ablative techniques have decreased the rate of hysterectomy in recent years. However these approaches are often a compromise and hysterectomy frequently remains the final management option for some patients. For benign pelvic pathologies like fibroids, adenomyosis, pelvic organ prolapse, pelvic inflammatory disease, hysterectomy is still considered the treatment of choice for long-term patient's satisfaction. For malignancies of genital tract, hysterectomy is the mandatory part of the treatment in many cases.

Age and parity are factors usually considered before hysterectomy is performed. The peak age for the procedure in our study was the fourth decade (41–50) as has been observed in many other studies^{2,4,6,9,10}. The average parity in our study was four with a range of 0-9. Our finding is comparable with other studies^{2,4,10}.

Current study showed that major complaint of patients was excessive menstrual bleeding followed by something coming out of vagina.^{4,6,11} Uterine leiomyoma continues to be the most common indication for hysterectomy in many studies and this was our observation as well^{11,12}. Dysfunctional uterine bleeding ranked second in our indications while prolapse was third in number. Adenomyosis was suspected in 23 patients (3.9%). Similar results were seen by Leung et.al¹³ and Jaleel et al¹⁴.

The commonest surgical approach in the majority of cases in this study was abdominal hysterectomy with and without bilateral salpingoophorectomy

followed by vaginal hysterectomy. This is the observation in most of the studies.^{2,4,6,7} When histopathological reports were reviewed in this study, chronic cervicitis was the most common incidental finding^{2,4,15} and many hysterectomy specimens showed more than one type of pathology. Almost same results were obtained by other studies.

Our study showed that after chronic cervicitis, fibroid was the most common histopathological diagnosis. This is in conformation with other studies^{2,4,9,13}. Sixty nine patients (11.6%) had no remarkable pathology and their histopathological specimen showed proliferative phase, secretory phase or atrophic endometrium¹⁵.

Over a half of women with menorrhagia have fibroid during their reproductive life. Other studies have also reported leiomyoma as the most common pathological lesion with the frequencies ranging from 25-48% in local studies.^{4,12,14,16} Its incidence is 25.8% in Saudi Arab, 78% in USA, 48% in Nigeria and 8% in Sweden¹⁷.

We found that majority of preoperative diagnoses of our cases were confirmed on histopathology. The exception was patients with dysfunctional uterine bleeding in whom pathology like adenomyosis or small fibroids were found on histopathological specimens. Similar results have been reported by others^{2,4,9,17,18}.

CONCLUSION

In spite of the availability of a number of options of medical treatment and conservative surgeries, hysterectomy still remains the widely used treatment modality in developing as well as the developed countries. Although hysterectomy is quite a safe procedure nowadays, still it should only be performed when a proper indication is justified. Every hysterectomy specimen should be subjected to histopathological examination. A yearly audit should be conducted in every institute to collect data and to analyze the pattern of indications and types of histopathological lesions and pattern of diseases.

REFERENCES

1. Mayonda I. Total or sub-total abdominal hysterectomy for gynaecological disease. *Rev Gynaecol Prac* 2003;3:26-31
2. Samaila Modupeola OA, Adesiyon AG, Agunbiade OA, et al. Clinico-pathological assessment of Hysterectomies in Zaria. *Eur J Gen Med* 2009;6(3):150-3.
3. Sujan S, Mary AL. Menstruation and menstrual disorders. *Shaw's Gynaecology*. 4th ed. 2011
4. Qamar-ur-Nisa et al. Hysterectomies, an audit at a tertiary care hospital. *Professional Med J* 2011; 18(1):45-50.
5. Wu JM, Wechter ME, Geller EJ. Hysterectomy rates in the United States 2003. *Obstet Gynecol* 2007;12:110-191.
6. Ikram M, et al. Abdominal versus vaginal Hysterectomy: an audit. *Professional Med J* 2008; 15(4): 486 -91.
7. Begum J, Talukder SI, Hossain MA. A two years audit of complications of total abdominal hysterectomy at Dinajpur Medical College Hospital Dinajpur. *Med Col J* 2008;1(1):14-7.
8. Toma A, Hopman WM, Gorwill RH. Hysterectomy at a Canadian tertiary care facility: results of a one year retrospective review. *BMC Women Health* 2004;4(1):10.
9. Jaleel R, Khan A, Soomro N. Clinicopathological study of abdominal hysterectomies *Pak J Med Sci* 2009;25:630-4.
10. Sarfraz T, Tariq H. Histopathological findings in menorrhagia: a study of 100 hysterectomy specimens. *Pak J Pathol* 2005;16(3):83-5.
11. Sobande AA, Eskandar M, Archibong EI, Damole IO. Elective hysterectomy: a clinicopathological review from Abha catchment area of Saudi Arabia. *West Afr J Med* 2005;25:31-5.
12. Ahsan S, Naeem S, Ahsan A. A case note analysis of hysterectomies performed for non neoplastic indications Liaquat National Hospital, Karachi. *J Pak Med Ass* 2001;51(10):346-9.
13. Leung PL, et al. An audit on hysterectomy for benign diseases in public hospitals in Hong Kong *Med J* 2007;13:187-93.
14. Fayyaz S, Majeed SS. Audit of Gynaecological hysterectomies *JPMI* 2008;15(2):208-12.
15. Jha R, Pant AD, et al Histopathological analysis of hysterectomy specimens. *J Nepal Med Assoc* 2006;45(163):283-90.
16. Bukhari U, Sadiq S. Analysis of the underlying pathological lesions in hysterectomy specimens. *Pak J Pathol* 2007;18(4):110-2.
17. The Internet Journal of Gynecology and Obstetrics TM ISSN:1528-8439 Hysterectomy: a clinicopathological correlation of 500 cases.
18. Shergill SK, Shergill HK, Gupta M, Kaur S. Clinicopathological study of hysterectomies. *J Indian Med Assoc* 2002;100(4):238-9.