

Audit of Gynaecological Hysterectomies

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ABSTRACT

Objective: To audit indications, histopathological diagnosis and complications of gynaecological hysterectomies performed at Social Security Hospital, Lahore.

Study design: Retrospective study

Place and duration of study: Department of Obstetrics and Gynaecology, Social Security Hospital, Lahore from 1st January to 31st December, 2010.

Methodology: Data regarding patient characteristics, indications and operative and postoperative morbidity of gynaecological hysterectomies performed during one year was collected from files and patients records. Histopathology reports of these patients were collected from the department of pathology. The results were analyzed by percentages.

Results: Total of 115 hysterectomies were performed in the year 2010. The ratio of abdominal to vaginal hysterectomy was 5:1 Mean age of patients was 46 years (range 35 – 67 years) and parity ranged from zero to eight. Most common presenting complaint was excessive menstrual blood loss in 79 patients (68.6%) followed by something coming out of vagina in 20 patients (17.4%). Majority of indications were benign. Most common preoperative diagnosis was fibroid uterus in 38 patients (33%) followed by dysfunctional uterine bleeding in 25 (21.7%). The most common histopathological diagnosis made was that of fibroid in 41.7% of cases. The commonest incidental histopathological finding seen in hysterectomy specimens was chronic cervicitis. Most of the hysterectomies were performed under spinal anaesthesia with smooth postoperative recovery.

Conclusion: A yearly audit should be conducted in every institute to analyze the pattern of indications and lesions found on histopathological examination. The clinical indication for hysterectomy and histopathological outcome are comparable in over 90% of cases.

Keywords: Hysterectomies, indication, pathology

INTRODUCTION

Hysterectomy is a very common elective gynaecological procedure in the world. No national statistics for this procedure in Pakistan are available. In United States, approximately 6,00,000 hysterectomies are performed each year and in United Kingdom, 20% of women undergo hysterectomy before the age of sixty (Royal college of Obstetrics and Gynaecology)³.

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 organs. 90% of the indications are benign. About 70 – 80% of hysterectomies are performed by the abdominal approach¹⁵. This procedure carries low morbidity and mortality. Modern anaesthesia and aseptic techniques have contributed to its safety.

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METHODOLOGY

This is a retrospective study conducted at the Department of Obstetrics and Gynaecology, Social Security Hospital, Lahore. Record from history sheets and files of patients admitted in gynaecology ward for hysterectomy during last one year from 1st January, 2010 upto 31st December, 2010, was collected. Obstetrical hysterectomies were excluded from the study. Information was obtained regarding age, parity, clinical features, preoperative diagnosis/indication of hysterectomy, surgical procedure, operative and postoperative complications and hospital stay. Histopathological reports of hysterectomy specimens were collected from department of pathology and their diagnosis was noted. Data was analyzed by using percentages.

RESULTS

A total of 115 gynaecological hysterectomies were performed in 2010. Out of these 95 (82.6%) were total abdominal hysterectomies with or without bilateral salpingoophorectomy and 20 (17.4%) were vaginal hysterectomies. 62.6% of the patients were in

the age group 41 – 50 years (Table 1) and 72.2% had parity between four and six (Table 2). The most common presenting complaints were menstrual abnormalities followed by something coming out of vagina (Tables 3).

Anemia at admission was found in 58.26% of patients requiring \geq one blood transfusion. The next common medical complication seen was hypertension in 32.2% cases. Preoperative diagnosis of fibroid was made in 38 patients (33%), dysfunctional uterine bleeding in 25 patients (21.7%) and uterovaginal prolapse in 18 patients (15.7%) Adenomyosis was suspected in 14 patients (12.2%) while ovarian cyst was the indication of hysterectomy in 10 patients (8.7%) (Table 4).

The most common histopathological diagnosis made was that of chronic cervicitis which was an incidental finding in most of the cases followed by fibroid uterus in 41.7% cases (Table 5). 86% of hysterectomies were performed under spinal anaesthesia which was found to be quite effective (Table 6). The only intraoperative complication seen was haemorrhage in 5 patients (4.35%) requiring more than one blood transfusion peroperatively (Table 7). Postoperatively anemia was seen in 28 patients (24.4%) and 8 patients (7%) had wound infection (Table 8). Average hospital stay was 7 days (Table 9).

Table 1: Age wise distribution of women undergoing hysterectomy (n = 115)

Age (years)	n=	%age
30 – 35	4	3.5
36 – 40	7	6.1
41 – 45	28	24.4
46 – 50	44	38.3
51 – 55	14	12.1
56 – 60	12	10.4
Above 60	6	5.2

Table 2: Parity of patients undergoing hysterectomy (n=115)

Parity	n=	%age
Nalliparous	2	1.7
P1 – p3	20	17.4
P4 – p6	83	72.2
\geq p6	10	8.7

Table 3: Presenting complaints of patients (n = 115)

Presenting complaint	n=	%age
Menorrhagia	24	20.9
Polymenorrhagia	10	8.7
Irregular bleeding	37	32.1
Something coming out of vagina	20	17.4
Abdominal distention	11	9.6
Lower abdominal pain	9	7.8
Post menopausal bleeding	3	2.6
Postcoital bleeding	1	0.9

Table 4 : Indication for hysterectomy (n = 115)

Indication	n=	%age
Fibroids	38	33
DUB	25	21.7
Prolapse	18	15.7
Ovarian cyst	10	8.7
Adenomyosis	14	12
Chronic PID	3	2.6
Molar pregnancy	2	1.7
Complex endometrial hyperplasia	1	0.9
Cervical dysplasia	1	0.9
Cervical polyp	1	0.9
Carcinoma endometrium	2	1.7

Table 5: Spectrum of histopathological diagnoses (n = 115)

Histopathological diagnosis	n=	%age
a. Nonneoplastic		
Chronic cervicitis	76	66
Adenomyosis	12	10.4
Chronic pelvic inflammatory disease	3	2.6
Endocervical polyp	2	1.7
Molar pregnancy	2	1.7
No remarkable pathology	26	22.6
b. Preneoplastic		
Atypical endometrial hyperplasia	2	1.7
CIN	1	0.9
c. Neoplastic		
Leiomyoma	48	41.7
Cystadenoma	8	7
Cystadenocarcinoma	2	1.7
Endometrial carcinoma	2	1.7
Endocervical adenocarcinoma	1	0.9
Leiomyosarcoma	1	0.9
Combined pathology	5	4.4
Fibroid + Adenomyosis		

Table 6: Type of anaesthesia given (n = 115)

Anaesthesia	n=	%age
Spinal	99	86
Epidural	4	3.5
General	12	10.5

Table 7: Intraoperative complications (n = 115)

Complication	n=	%age
Haemorrhage	5	4.4
Bladder injury	0	0
Bowel injury	0	0
Ureteric injury	0	0

Table 8: Postoperative complications (n = 115)

Complication	n=	%age
Anemia (requiring atleast 1 blood	28	24.3
Fever (after 24 hours of surgery)	12	10.4
Wound infection	8	6.9
Chest infection	4	3.5
Urinary tract infection	7	6.1
Urinary retention	1	0.9
Paralytic ileus	1	0.9
Deep venous thrombosis	0	0

Table 9: Hospital stay (n = 115)

No of days	n=	%age
6 – 8	78	67.8
9 – 11	26	22.6
≥12	11	9.6

DISCUSSION

Hysterectomy is the most common operation performed by the gynaecologist^{1,2,3}. It is a major surgical procedure which involves the total removal of the uterus with or without the fallopian tubes and ovaries. Hysterectomy rate varies according to geographic distribution, patient expectations and training and practice patterns of the local gynaecologic surgeons. 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 longterm patients 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 fifth decade (40 – 49) as has been observed in many other studies^{1,2,3,11,14}. The average parity in our study was four with a range of 0-9. Our finding is comparable with the parity range reported by others^{1,2}.

Current study showed that major complaint of patients was excessive menstrual bleeding followed by something coming out of vagina^{1,3}. Uterine leiomyoma continues to be the most common indication for hysterectomy in many studies and this was our observation as well. Dysfunctional uterine bleeding ranked second in our indications while prolapse was third in number. Adenomyosis was suspected in 12 pts (10.4%). Almost results were seen by Qamar-un-Nisa et al¹, M.Ikram et al³, Simi Fayyaz et al⁴ and others^{10,11,14}.

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^{1,2,3,15}

Histopathological examination of surgical specimens carries ethical, legal,diagnostic and therapeutic significance. A variety of conditions in gynaecological practice require removal of uterus that may show no gross or microscopic pathology.

Removal of a normal uterus may be indicated and permitted in the treatment of dysfunctional uterine bleeding, ovarian, fallopian tube and vaginal cancer, pelvic inflammatory disease, endometriosis and pelvic pain.

When histopathological reports were reviewed in this study, chronic cervicitis was the most common incidental finding^{1,2,12} 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 followed by adenomyosis. This is in conformation with other studies^{1,2,14}. 26 patients had no remarkable pathology¹ and they were the patients whose preoperative diagnosis was dysfunctional uterine bleeding or uterovaginal prolapse; histopathology showing proliferative phase or atrophic endometrium¹².

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^{1,4,7,9}. Its incidence is 25.8% in Saudi Arab, 78% in USA, 48% in Nigeria and 8% in Sweden¹¹. Adenomyosis is the next common uterine pathology as seen in other studies. Its incidence in Indian study is 26%, in Italy 24.9% and West Indies (6%)¹¹

We found that majority of preoperative diagnoses of our cases were confirmed on histopathology. The exception was patients with dysfunctional uterine bleeding in whom 40% had pathology like adenomyosis or small fibroids. Similar results have been reported by others^{1,2,10,11,14}

The only intraoperative complication encountered was haemorrhage in 4.4% cases requiring ≥ 2 blood transfusions⁴. In a study conducted by Begum J etal, haemorrhage was the major complication observed.¹⁶ Wound infection rate of 6.9% in our study is comparable to the incidence noted in the above-mentioned study (6.2%)¹⁶.

CONCLUSION

Inspite 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. Histopathological analysis correlates well with the pre-operative clinical diagnosis for hysterectomy. Benign pathologies are

more common than their malignant counterparts. Histopathology is mandatory for confirming diagnosis and thus ensuring optimal management ,in particular of malignant disease.

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