
A Retrospective Study of Gynaecological Hysterectomies at a Teaching Hospital in Pakistan

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Abstract

Objective: To assess the indications and complications of gynaecological hysterectomies in a teaching hospital so as to improve quality of patient care and outcome.

Study Design: Retrospective Study

Place and duration of study: from 1st November, 2013 to 30th November 2014, department of Obs/Gynae-Unit A, Mardan Medical Complex, Mardan.

Methodology: data regarding patients characteristics, indications, operative and postoperative morbidity of gynaecological hysterectomies performed during one year of study period were collected from the hospital record. Statistical analyses in the form of frequency and percentages were performed by using SPSS 17.

Results: A total of 233 gynaecological surgeries were performed. Out of these surgeries, 96 (41.20%) were gynaecological hysterectomies which included 71(73.95%) abdominal and 25(26.04%) vaginal hysterectomies. Multipara in the fifth decade was the demographic feature. DUB (22.92%), chronic PID (18.75%) and fibroid (18.75%) were the commonest indications for abdominal hysterectomy while UV-prolapse (26.05%) was the only indication for vaginal hysterectomy. Anaemia (57.29%) and fever (12.51%) were the common post op complications. There was no DVT or bowel and Ureteric injuries were 1.04%.

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Conclusion: Abdominal hysterectomy was the most commonly performed gynaecological procedure for DUB, chronic PID and fibroids. Surgical skill improvement for vaginal and laparoscopic assisted vaginal hysterectomy could improve better patient outcome with less intra and post operative complications.

Key words: gynaecological study, hysterectomies, indications.

Introduction

Hysterectomy is the most commonly performed operation in women. It ranks second after cesarean section. This was described for the first time by Sonarus in his writings in the third century A.D.¹ In developed countries like United States and England, annual data showed that during 2005 the rate of hysterectomies was more than 500,000 and 70,000 respectively.^{2,3}

Menorrhagia is the most common indication for hysterectomy in women during reproductive period.⁴ Medical treatment for menorrhagia is somewhat helpful but is prolong, expensive and does not cure it permanently. The woman's quality of life is affected adversely.^{5,6} Majority of women are not satisfied with medical treatment and finally end up with surgery.⁷ That is why half of the hysterectomies currently performed worldwide are carried out for this reason.³ Hysterectomy is performed by various surgical approaches like abdominal (64 %), vaginal (22 %), and laparoscopic (14 %). However, the prevalence of abdominal hysterectomy appears to be decreasing and now a days vaginal hysterectomy has become more common and safe as it is less invasive.⁸ In patients with increase body mass index (BMI) abdominal route is still the preferred approach but associated with more operative time and wound infection.⁹ Despite improvement in anaesthesia

and aseptic techniques, morbidity rates are still high (25-50%) while mortality rate is 4.1-14.6 per 10,000.¹

This is a baseline study which is carried out in our unit to have better understanding of the practices, various indications and complications of hysterectomies so that impact on quality of care can be measured in future.

Methodology

This one year study was conducted from 1st November 2013 to 30th November 2014 in unit -A of Obs/Gynae department in Mardan Medical Complex Teaching Hospital. Records from registers and history sheets of patients admitted in gynaecology ward for hysterectomy during the last one year were collected. The study included preoperative information like age, parity, relevant medical history and previous gynaecological management. Indications and type of hysterectomy (abdominal/vaginal) were documented. Operative and postoperative complications were also recorded. All patients had under gone appropriate baseline investigations including blood group with Rh factor, haemoglobin estimation, urine routine examination, blood sugar, X-rays chest, ECG and abdomino-pelvic ultrasound were done. Obstetrical hysterectomies were excluded from the study. [Approval from the ethical committee was taken.](#)

Statistical analysis was performed using statistical package for social sciences version 17(SPSS-17). Data analyzed in terms of percentages of variables. The variables included incidence, age, parity, indications and complications of hysterectomies.

Results

A total of 233 gynaecological surgeries were performed in our unit during one year of study. Out of these surgeries, 96 (41.20%) were gynaecological hysterectomies which included 71(73.95%) abdominal and 25(26.04%) vaginal hysterectomies (Table-I).

Total Gynaecological Surgeries	Total Hysterectomies	Abdominal Hysterectomies	Vaginal Hysterectomies
233	96 (41.20%)	71 (73.96%)	25(26.04%)

Distribution of age was from 30 to 70 years. Fifty percent of gynaecological hysterectomies were performed in the age group of 41-50 years. The incidence was less with increasing age and it was 5.21% (5 hysterectomies) in the age group of 61 to 70 years. Gynaecological hysterectomies rate was more in the multiparous women (80.21%) while it was 5.21% (5 hysterectomies) for nullipara patients. (Table II)

Dysfunctional uterine bleeding (DUB) was the most common indication for abdominal hysterectomy (22.92%) in this studies series while uterovaginal prolapse was common in patients of vaginal hysterectomy (26.04%) (Table III).

Table II. Distribution of Age and parity (n=96)

Age (years)	No of patients	Percentage (%)
30-40	23	23.96%
41-50	48	50%
51-60	20	20.83%
61-70	5	5.21%
Parity		
Nullipara	5	5.21%
P1-3	14	14.58%
P4-6	39	40.63%
>P6	38	39.58%

Table III. Indications for Hysterectomies (n=96)

Indication	No	Percentage (%)
Carcinoma Endometrium	2	2.08(%)
Chronic PID	18	18.75(%)
Complex Endometrial Hyperplasia	8	8.33(%)
DUB	22	22.92(%)
Fibroid	18	18.75(%)
Molar Pregnancy	1	1.04(%)
Ovarian Cyst	2	2.08(%)
Utero-Vaginal Prolapse	25	26.05(%)

Anaemia was found in the majority of patients 55(57.29%). Fever was documented in 12 patients (12.51%) and hemorrhage when was seen in 8 patients (8.33%). There was no case of deep venous thrombosis (Table IV).

Table IV: Complications of Hysterectomies (n=96)

Complication	No	Percentage (%)
Anaemia*	55	57.29
Bladder injury	2	2.08
Bowel injury	1	1.04
Chest infection	5	5.21
DVT	0	0
Fever**	12	12.51
Hemorrhage***	4	4.17
Paralytic ileus	5	5.21
Ureteric injury	1	1.04
Urinary tract infection	5	5.21
Urinary Retention	2	2.08
Wound infection	4	4.17

* Requiring at least one unit of blood

** $\geq 100^{\circ}F$ after 24-hours of surgery

*** Blood loss of 1000 ml

Discussion

This one year retrospective study covered all hysterectomies performed in Gynae unit A of Mardan Medical Complex Teaching Hospital. The rate of hysterectomies varied according to regional distribution, expectations of patients and skill of gynaecological surgeons. In this study series the proportion of patients having abdominal hysterectomies was higher than vaginal hysterectomies (73.9% vs. 26.0%) which are almost similar to the studies conducted by Deeksha Pandey et al and Simi Fayyaz.^{10, 11} Age and parity are features usually considered before hysterectomy. The peak age for procedure

in our study was the fifth decade (41-50 years) and this has been documented in many studies.^{2,13-15} Most of our patients were multiparous (P4-6 and above). This finding has been reported by Qamar-ur-Nisa et al and Samaila Modupeola OA, Adesiyun AG et al.^{12, 13} The nulliparous women who had hysterectomy was 49 years old and had presented with severe menorrhagia leading to extreme anaemia. Dysfunctional uterine bleeding was the most common indication for abdominal hysterectomy (22.92%) which also correlates well with other local studies.^{11, 12} Utero vaginal prolapse was seen in 26.04% of patients and all patients with this pathology were operated through vaginal route. Incidence of visceral damage reported in the literature and various international studies showed no significant difference to our study. In one Australian population-based study by Maresh MJ et al, incidence of bladder injury correlated well with our study which is 2%.³ Bowel injury was also similar.^{16, 17} Procedure related hemorrhage and wound infection was 4.17% in our study which is similar to Tahira Yasmin and PL Leung.^{15, 18} However incidence of anaemia was more as most of the patients were anaemic prior to surgery. Vaginal hysterectomy is being advocated in the literature due to fewer complications which is also observed in our audit but this could be due to difference in pathology apart from surgical approach.¹⁹ In our study abdominal hysterectomies were done for DUB, chronic PID and fibroids while vaginal hysterectomy was performed only for Utero vaginal prolapse. These

indications are not comparable. The vaginal procedure could be more difficult if it is done for DUB, chronic PID and fibroid. To get a better understanding comparison of procedures is required in the presence of same pathology.

Conclusion

Abdominal hysterectomy was the most commonly performed gynaecological procedure for many indications. In this study presence of anaemia could be explained due to nutritional deficiency in our setup as general and the associated pathology in particular. Patient quality of care and better outcome can be improved by advocating skilled and vigorous training for vaginal hysterectomy and latter for laparoscopic assisted vaginal hysterectomy (LAVH).

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