The Professional Medical Journal
www.theprofesional.com

ORIGINAL PROF-2414

GYNAECOLOGICAL HYSTERECTOMY;
AN AUDIT IN TERTIARY CARE HOSPITAL

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ABSTRACT… Objective: To audit indications and outcome of hysterectomies in Fatima Hospital Baqai Medical University Karachi so as to improve the quality of care provided to patients. **Study Design:** Descriptive observational study. **Place and Duration of Study:** Department of Obstetrics and Gynaecology, Fatima hospital, Baqai Medical University Karachi from November 2009 to November 2011. **Patients and Methods:** All patients undergoing hysterectomy for gynaecological conditions from 2009 to 2011were included in the study. **Results:** Hysterectomies for gynaecological conditions accounted for184 cases during the study period. Mean age of patient was 49 (range 30-60 years). Mean parity was 6 (range 0-11). The most common indication for hysterectomy was fibroid uterus56(30.4%) cases, dysfunctional uterine bleeding 38 (20.6%) cases, and uterovaginal prolapse 10 (5.4%) cases. Abdominal hysterectomy accounted for 174(96.6%) and vaginal hysterectomy accounted for 10 (5.4%) cases. Twenty six (14%) patients were found to be suffering from hypertension,6(3.3%)patients were suffering from diabetes mellitus. Wound infection occurred in 11 (6%) cases. No mortality was associated with hysterectomy during the study period. The duration of hospital stay was less in vaginal route as compared to abdominal. **Conclusions:** An audit should be carried out every year to improve the level of care of patients and also the expertise of surgeon should be checked. The study has shown that hysterectomy is a safe procedure but the high morbidity associated with this procedure is bothersome. The other options like endometrial ablation, intrauterine hormonal device like mirenaetc should also be considered. More efforts should be made on vaginal hysterectomies as it is economical and morbidity is less with it.

Key words: Hysterectomies, indication, complications, morbidity, dysfunctional uterine bleeding

Article received on:
30/12/2013
Accepted for Publication:
15/02/2014
Received after proof reading:
27/05/2014

Article Citation: Perveen S, Naheed F, Batool A. Gynaecological hysterectomy; an audit in tertiary care hospital. Professional Med J 2014;21(3): 432-435.

INTRODUCTION

All over the world women suffer from gynaecological problems that require hysterectomy as a treatment option. This may involve removal of uterus, cervix, fallopian tubes and ovaries depending upon the indication, age and parity of women. In United States over one third of women have undergone hysterectomy by the age of 60, while in United Kingdom100, 000 women undergo this procedure annually[1].

Hysterectomy is an effective treatment option for many conditions like fibroid, abnormal uterine bleeding, endometriosis, uterine prolapse, pelvic inflammatory disease and malignancies of reproductive organ. Majority of indications approximately 90% are benign. The most hysterectomies are performed through abdominal route and rest through vaginal route or through laparoscopy[2].

Early hysterectomies were associated with high morbidity and mortality mainly from hemorrhage and infection. Improvement in blood banking services, use of potent antibiotics and safe anesthetic technique have dramatically reduced morbidity and mortalities associated with hysterectomy. The aim of this study was to audit indications ,procedure done and complications of hysterectomies and to recommend plan to reduce

the morbidity and improve the care of patients[3].

PATIENTS AND METHODS

This is adescriptive observational study conducted at Fatima hospital Baqai MedicalUniversity Karachi from November 2009 to November 2011.All patients undergoing hysterectomy for gynaecological conditions were included in the study. Obstetrical hysterectomies were excluded from the study. Information on sociodemographic characteristic, presenting symptoms, indications for surgery, type of hysterectomy, operative findings, blood transfusion, premorbid conditions, duration of hospital stay and post-operative morbidity retrieved. Data was analyzed by using percentage.

RESULTS

Hysterectomies for gynaecological conditions accounted for184 cases of all major gynaecological surgeries which were 509 during the study period.The age range of patient was 30 to 60with a mean of 49 years (Table-I).

Age (years)	n	%age
30-39	18	9.8
40-49	99	53.8
50-59	53	28.8
60-69	14	7.6

Table-I. Age wise distribution of women undergoing hysterectomy (n = 184)

Most of cases were in the age group between 40 to 50years(53.8%),which is the most common age group for contracting various diseases. The mean parity was 6 with a range of 0 to 11(Table-II).

parity	n	%age
Nulliparous	17	9.2
P1-P3	43	23.4
P4-P6	52	28.3
≥ P6	72	39.1

Table-II. Parity of patients undergoing hysterectomy (n=184)

A high incidence was seen with parity more than 6. The most common indication for hysterectomy was fibroid uterus56(30.4%)cases ,followed by dysfunctional uterine bleeding 38(20.6%)cases, chronic pelvic inflammatory disease 18(9.7%) and uterovaginal prolapse 10(5.4%)cases. The various indications for hysterectomy are shown in (Table-III).

Indication	n	%age
Fibroids	56	30.4
DUB	38	20.7
Utero vaginal prolapse	10	5.4
Chronic PID	18	9.7
Adenomyosis	16	8.7
Ovarian cyst	14	7.6
Molar pregnancy	2	1.1
Endometrial hyperplasia	14	7.6
Endometrial polyp	6	3.3
Cervical polyp	8	4.3
Carcinoma endometrium	2	1.1

Table-III. Indications for hysterectomy (n = 184)

Size of uterus was normal in 50(27.1%) cases, 78(42.3%) cases size was less than 12 weeks,46 (25%) cases size was between 12-24 weeks and in 10 (5.4 %) cases size was more than 24 weeks. Hypertension was the commonest premorbid condition diagnosed in 26(14%) cases, hypertension and diabetes mellitus in 6(3.3%) cases. Total abdominal hysterectomy with either unilateral or bilateral salpingo oophorectomy accounted for 174(96.6%) and vaginal hysterectomy accounted for 10 (5.5%)cases. The majority of cases were not transfused. The major intra-operative complication was hemorrhage in 12(6.5%) cases requiring more than one blood transfusion. Bladder injury and ureteric injury occurred in one case (0.54%)(Table-IV). Wound infection occurred in 11(6%) cases. No mortality was associated with hysterectomy during the study period. The duration of hospital stay was 5-7 days in 80 (43.4%) cases, 7-9 in 59(32%) cases and more than 10 days in 45(24.5%) cases.

Complication	n	%age
Haemorrhage	12	6.5
Bladder injury	1	0.5
Bowel injury	-	-
Ureteric injury	1	0.5

Table-IV. Intraoperative complications (n = 184)

Complication	n	%age
Fever (after 24 hours of surgery)	28	15.2
Wound infection	11	6
Chest infection	4	2.2
Urinary tract infection	9	4.9
Urinary retention	3	1.6
Paralytic ileus	5	2.7

Table-V. Postoperative complications (n = 184)

No. of days	n	%age
5-7	80	43.5
7-9	59	32
>10	45	24.5

Table-VI. Hospital stay (n = 184)

DISCUSSION

Hysterectomy is the second most common surgery performed by gynaecologist after cesarean section. Hysterectomy may be subtotal or total and may be with or without removal of ovaries and fallopian tube[4,8].

Most patients who underwent hysterectomy in our study were in their 4th to 6th decades of life. The fact that majority of our patients were married reflects the sociocultural background of population studied. The average parity in our study was 6 with a range of 0-11. It is comparable to range reported by other studies[5]. Majority of patients presented with complaint of excessive menstrual bleeding which is the most common cause of anemia in such patient. The leading indication for hysterectomy in our study is uterine fibroid. This is in agreement with studies conducted by Zaiba Sheret. al, Tayyba majeed et al and others[6]. Dysfunctional uterine bleeding was the second most common indication while prolapse was 6th in number. Adenomyosis was suspected in 20 patients and ovarian cyst in 26 cases. Almost same results were seen by Tahira Yasmine, Qamar –un-Nisa et al, Simi Fayyaz et al, and others[7,8,10].

Few of our patients,14(7.6 %) had other medical conditions with hypertension being the commonest. This finding is in agreement with vessery et al but in contrast to M Bukaretal[9].

Total abdominal hysterectomy accounted for 164(89%) in this study. This is comparable to 82.7% and 85.33% reported from some series[10]. The vaginal hysterectomy of 10(5.4%) is lesser than 10.6% to10.7%, 14.7% reported by Samaila Modupeola OA and M. Ikram et.al[11,12].

Although size of uterus in majority of patients 90(48.9%) were less than 12 week. This wide disparity between abdominal and vaginal hysterectomy may be because many gynaecologist are not proficient with vaginal hysterectomy. The fact that the indications for all the vaginal hysterectomies were uterovaginal prolapse and that the vaginal hysterectomies were performed by consultant suggest an unmet need for pelvic surgeries in our environment[13]. Previously large uterine size, nulliparity, previous cesarean section and pelvic laparotomy were contraindications to vaginal hysterectomies, now rarely constitute contraindication to vaginal hysterectomy. Although vaginal hysterectomy has been shown to be associated with less morbidity than abdominal hysterectomy. Such was found in our study. Urinary tract infection and vaginal discharge were more common in vaginal hysterectomies[14]. These may be because of longer duration of catheterization and excessive granulation tissue formation in vaginal hysterectomy. In consonance with other studies the hospital stay was shorter in those who underwent vaginal hysterectomies in our study. This has economic appeal and therefore vaginal

hystrectomies should be performed more readily whenever feasible[15]. Subtotal hysterectomy was performed in 20(10.8%). This is higher than 1.17% and5.8% from earlier studies. The main duration of hospital stay was 5-7 days. The major intraoperative complication was haemorrhage accounted for 14(7.6%).Bladder injury and ureteric injury occurred in 1 case(0.45%). This is comparable with other studies Begum Jan and others. Wound infection and febrile morbidity were the leading post operative complication in our study. This is similar to reports by Simi Fayyazand Shamim S Majeed[10,16].

CONCLUSIONS

Abdominal hysterectomy is the commonest procedure performed. An audit should be carried out every year to improve the level of care of patients and also the expertise of surgeon should be checked. The study has shown that hysterectomy is safe procedure but the high morbidity associated with this procedure is bothersome. The other options like endometrial ablation, intrauterine hormonal device like mirenaetc should also be considered. More efforts should be made on vaginal hysterectomies as it is economical and morbidity is less with it. Perioperative antibiotic prophylaxis rather than postoperative prophylaxis or combination of both may reduce the infectious morbidity associated with hysterectomy.

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