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Research Article

Hysterectomy: clinical profile, indications and postoperative complications

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ABSTRACT

Background: Hysterectomy is today a relatively safe routine operation performed commonly worldwide. This study aims to know the clinical profile, indications and post-operative complications of patient undergoing hysterectomy.

Methods: This is the prospective study of 200 cases of hysterectomy done for benign conditions of uterus. The study period was from July 2012 to December 2014. Women who were tentatively going to undergo hysterectomy in the future were chosen irrespective of their age, parity or clinical presentation. A detail history of their complaints and a thorough physical and gynecological examination was done and recorded on performa.

Results: Women in the study group were between 20-70 years. 50% belonged to 41-50 years of age. Hysterectomy was predominantly performed in para two and para three cases. Commonest presenting symptom was abnormal menstrual flow (62%). Commonest indication for hysterectomy was dysfunctional uterine bleeding (DUB) (30%), fibroid (23%) and prolapse (20%). Abdominal hysterectomy (63%) was performed more commonly than vaginal hysterectomy (37%). Complications are more common in abdominal hysterectomy than vaginal hysterectomy.

Conclusions: Women aged between 41-50 years with multiparous status were commonly affected. Abnormal menstrual flow was the commonest presenting complaint. Commonest indications for hysterectomy were dysfunctional uterine bleeding. Abdominal hysterectomies were commonly done than vaginal hysterectomy.

Keywords: Hysterectomy, Bangalore, Haemorrhage, Clinical profile

INTRODUCTION

Hysterectomy is today a relatively safe routine operation performed commonly worldwide. Today approximately 6,00,000 hysterectomies are performed each year in United States making it second most common operation after caesarean section.¹ Only 150 years later, hysterectomy was the most common operation performed in United State, and elsewhere, accounting for some 75,000 operation in 1975 in United States itself.²

This study of 200 cases of hysterectomies for benign condition of uterus has been taken to correlate the clinical profile with histopathological examination of uterus. It is in this field of non-malignant hysterectomy the indications are often over used resulting in many unnecessary operations. Hence this study will bring about the facts and figures about the clinical indication and final histopathological diagnosis and throw some conclusion on justification of hysterectomy.

METHODS

This is the prospective study of 200 cases of hysterectomy done for benign conditions of uterus. The study period was from July 2012 to December 2014. During this study period, over 1000 hysterectomies were done and among these 200 cases were selected randomly. The cases were collected from among those attending the gynaecological outpatient department of Vanivilas Hospital and Bowring and Lady Curzon Hospital, Bangalore, India. Women who were tentatively going to undergo hysterectomy in the future were chosen irrespective of their age, parity or clinical presentation. Out of these the 200 women who underwent hysterectomy either abdominal or through the vaginal route were selected for the study. A detailed history of their complaints and a thorough physical and gynaecological examination was done on them, as per the proforma. A provisional diagnosis was made. Then these patients were investigated thoroughly, few of them underwent D.D and C and cervical biopsy and few of them underwent pap smear. Routine laboratory examination were done like Hb% BT, CT, TC, DC, ESR, blood group and RH typing. Following hysterectomy these patients were followed up in the immediate post-operative period and till six weeks after hysterectomy. The specimen was sent for histopathology examination to the pathology department of Vanivilas Hospital and Bowring and Lady Curzon Hospital, Bangalore, India. All the collected data was tabulated and statistically analyzed by using SPSS software.

RESULTS

200 men who had undergone hysterectomy for benign conditions of the uterus were studied at Vanivilas Hospital and Bowring and Lady Curzon Hospital Bangalore, India between July 2012 to December 2014. Women in the study group were between 20-70 years. 50 % belonged to 41-50 years of age.

Table 1: Indications for hysterectomy.

Indication	No. of patients	Percentage
DUB	66	33%
Fibroid	46	23%
Prolapse	40	20%
Adinomyiasis	5	4%
PID	12	6%
Chronic cervicitis	22	11%
Post-menopausal bleeding	6	3%

Hysterectomy was predominantly performed in para two and para three cases. Commonest presenting symptom was abnormal menstrual flow (62%). Commonest indication for hysterectomy was DUB (30%), fibroid (23%) and prolapse (20%). Abdominal hysterectomy (63%) was performed more commonly than vaginal

hysterectomy (37%). Complications are more common in abdominal hysterectomy than vaginal hysterectomy. Febrile morbidity, hemorrhage, wound infection and urinary tract infection were commonly encountered complications after hysterectomy. No mortality was seen in 200 cases studied.

Table 2: Post-operative complications in hysterectomy cases.

Complications	Abdominal hysterectomy	Vaginal hysterectomy
Febrile morbidity	20 (15.87%)	9 (12%)
Hemorrhage	12 (9.5%)	6 (8.1%)
Abdominal wound infection	13 (10.3%)	-
Urinary tract infection	10 (7.9%)	4 (6%)
Wound dehiscence	2 (1.58%)	-
Vault abscess	1	2 (2.6%)
Rectal injury	-	1 (0.7%)
Lung infection	3 (2.3%)	-
Mortality	0 (0%)	0 (0%)

Table 3: The type of hysterectomy is tabulated as follows.

Surgery	No. of cases	Percentage
A. Abdominal hysterectomy	126	63%
Total abdominal hysterectomy only (TAH)	48	24%*
TAH+ bilateral salpingoopharectomy	30	15%
TAH-f- right salpingoopharectomy	22	11%
TAH+ LL salpingoopharectomy	20	10%
Subtotal hysterectomy	6	3%
B. Vaginal hysterectomy	74	37%

DISCUSSION

In this study on 200 hysterectomy cases a few observations were read regarding the anthropometric data, clinical presentation. Type of operation, post-operative complication and histopathological study observations are described below.

The patients were divided into six groups depending on their age. The commonest age group was between 41-50 years and similar reports were also given by Millet et al, Watts et al reported that 45.2% of hysterectomies were done between 41-50years.^{3,4} Amrika et al found that 37% were between 41-50 years of age.² Watts et al reported 23.7% nulliparous and 75.3% were parous women.⁴

Amirika et al similarly reported much higher incidence in parous women. In this series only 5% of women were

nulliparous.² Dickers et al in reported 90.3% parous woman and 9.7% were nulliparous.⁵ So we can say that parity has got a definite role to play. Although nulliparous were not altogether immune to lesions requiring hysterectomy. Their number is for less than that of parous woman. In this study we found that 174 cases were Hindus, 20 cases were Muslims and 6 were Christians.

Patient presented with various symptom. The main presenting complaint was abnormal menstrual flow in 62% of cases, white discharge per vagina 32% of cases, pain abdomen 25%, backache 22% of cases, prolapse 29% of cases and urinary symptoms 6%, abdominal mass 4%, post-menopausal bleeding 3%, pot coital bleeding 5%, dyspareunia 2%, and other associated symptoms like loss of weight 1, fever 1.5% were also observed. It was observed that abnormal menstrual flow was the single most complaint comprising of 62% of cases. Similarly Emil F Cava (35.7%) and Grant et al in (57.7%) reported that abnormal menstrual flow was the most common complaint.^{6,7} Next common complaint was white discharge per vagina in 32% of cases. Miller et al reported 3.6% and Watts et al reported 0.9%.^{3,4} This difference is explained due to the powers of observation and fastidious of individual woman who are overanxious may tend to exaggerate the symptom of discharge. Indian woman tend to have poor hygiene, so associated white discharge was found common. Abdominal pain was observed in 25% of cases. Miller et al reported 17.4% and Watts et al reported 17.2% which is almost similar. We observed prolapse in 29% of cases. Miller et al reported 4.4%, Watts et al found in 12.5%, Emil F Lave found it 37.9%.⁶ Backache was observed in 22% of cases as compared to 5% in Miller et al study and 3% by Emil Cava. Mass abdomen was observed in 4% of cases as compared to 2.8% in Miller et al study. Post-menopausal bleeding was seen in 4% of cases as compared to 1.2% in watts et al series. Dyspareunia was observed in 2% of cases as compared to 3% in Emil F Cava study.⁶

DUB is the most common indication for hysterectomy constituting about 33%. Similar percentages were quoted by Copen hover 38.9%, Dickers et al quoted 45.3%.^{8,5} But Ackens et al quoted a very low percentage of 0.4% in.⁹ Fibroid uterus was the next commonest indication found in 23% of cases. Dickers et al quoted 47.4%, Miller et al quoted 31.7% and Ackens et al quoted 74.8% cases.⁹ Prolapse of the uterus constituted 20% cases in this study. Prolapse constitute one of the major indications for surgery and according to cope hover it constituted about 41.3% and according to Amirika it is 3.46%.² Post-menopausal bleeding constituted about 3% of cases. Copenhover et al reported 1.8% of cases. Acken et al quoted 0.9% Adenomyosis was found in 4% of cases. Acken et al observed in 2.8%, White et al observed in 8.5%, Amirika et al in 12.4% and Dickers et al 9.8%.^{1,10} So dysfunctional uterine bleeding and Leiomyoma found to be the main indications for hysterectomy and similar reports were observed in other

series also. Most of the patients who underwent surgery were given spinal anesthesia whether it is abdominal or vaginal hysterectomy. Only 4 cases of abdominal hysterectomy patients were given general anesthesia due to concomitant systemic disease. Two of the patient had hypertension. In another two cases general anesthesia was given because of failure of spinal anesthesia. 126 cases underwent abdominal hysterectomy in comparison to the 74 patients who underwent vaginal hysterectomy. From the above table abdominal hysterectomy constitutes 63% of the cases. Out of this 24% of patient had total abdominal hysterectomy 15% of patient had associated bilateral salpingo-oophorectomy, 11% had associated right salpingo-oophorectomy and 10% had associated left salpingo oophorectomy. 3% of patient had subtotal hysterectomy subtotal hysterectomy was done because of adhesion and difficult tubo-ovarian mass. Vaginal hysterectomy was done in 37% of cases. Pelvic floor repair was performed in all cases of pelvic relaxation. So, in our study abdominal hysterectomy was performed more commonly than vaginal hysterectomy in benign condition of uterus. Similar results were given by following authors. Watts et al reported 75% abdominal hysterectomy and 25% underwent vaginal hysterectomy.⁴ Emil et al reported 59.6% abdominal and 40.4% of cases vaginal hysterectomy.⁶ Dickers et al reported 30.6% vaginal hysterectomy compared to 69.4% abdominal hysterectomy.⁵ So, in many of the studies abdominal hysterectomy was done more commonly than vaginal hysterectomy.

Complications encountered in our series are as follows. In abdominal hysterectomy the following complications are noted:

- Febrile morbidity was observed in 20 cases (20.1%). Patient was said to be suffering from febrile morbidity if oral temperature was 100.4°F or more on any two post-operative days excluding first 24 hours. It was observed in 15.8% of cases constituting the commonest complication noted.
- Post-operative wound infection occurred in 13 cases comprising 10.3% of cases.
- Hemorrhage: Any patient who required blood transfusion in intra operative or post-operative period is included in this category. 12 patients out of 126 cases required one or more pints of blood either intra operatively or post operatively. That means 9.5% of cases required one or more pints of blood either intra operatively or post operatively.
- UTI: Urinary tract infection occurred in 10 cases out of 126 cases comprising 7.9% of cases. Most of these patients had indwelling Foleys catheter which may be cause for this infection.
- Wound dehiscence was observed in two cases which needed resuturing of the wound (1.5%).
- Miscellaneous: Pelvic hematoma was seen in one case, post-operative lung infection in three cases, and one patient had thrombophlebitis at the site of IV infusion.

In vaginal hysterectomy following complication are noted:

- Febrile morbidity occurred in 12% of cases.
- Hemorrhage occurred in 8.1% of cases.
- Urinary tract infection in 6% of cases.
- Rectal injury was seen in one case (%).
- Vault abscess occurred in 2 cases (26%).

In general, complication after vaginal hysterectomy was less as compared to abdominal hysterectomy. We observed that prophylactic antibiotics in beneficial, which the incidence of post-operative complication. This goes well with the studies of Ledger et al, Harralson et al.^{11,12}

CONCLUSION

Hysterectomy will remain a common gynecological operation in both developing and developed countries. The clinical and the pathological correlation are poor, when abdominal pain or dysfunctional uterine bleeding (DUB) was the preoperative clinical diagnosis. Women aged between 41-50 years with multiparous status were commonly affected. Abnormal menstrual flow was the commonest presenting complaint. Commonest indications for hysterectomy were dysfunctional uterine bleeding. Abdominal hysterectomies were commonly done than vaginal hysterectomy. Leiomyoma, adenomyosis and endometrial hyperplasia were commonly found in the histopathological examination of specimen. No mortality was found in this study.

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