ABDOMINAL HYSTERECTOMY FOR BENIGN GYNECOLOGICAL DISEASES

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ABSTRACT

OBJECTIVES

The aim of this study was to determine the frequency, common indications and complications related to abdominal hysterectomy in a tertiary care hospital.

METHODOLOGY

This is a descriptive study carried out in the Department of Obstetrics and Gynecology Hayatabad Medical Complex, Peshawar from 1st Jan-2020 to 31st Dec-2020. This study involved all patients who underwent abdominal hysterectomy for benign gynecological diseases in the study period. Patient characteristics and relevant data were entered in a pre-designed proforma, and frequencies were obtained in the form of percentages.

RESULTS

Total major operations performed in the year 2020 were 165 out of which total hysterectomies were 89. The total number of Abdominal Hysterectomies was 68, Vaginal Hysterectomies were 11 and the total number of Laparoscopic Hysterectomies was 10. The frequency of abdominal Hysterectomy was 76.40%. In this study commonest indication for abdominal hysterectomy was the fibroid uterus. The incidence of which was 47.05% followed by Dysfunctional Uterine Bleeding (DUB), with an incidence of 41.17%. The commonest intraoperative complication was excessive bleeding with an incidence of 2.94%. The commonest immediate post-op complication was wound infection with an incidence of 23.52% followed by pyrexia with an incidence of 8.82%.

CONCLUSION

Although hysterectomy is the definitive management option for most benign gynecological diseases, removal of this major organ must be balanced and weighed against the potential morbidity associated with the procedure and even the very low risk of mortality.

KEYWORDS: Abdominal Hysterectomy, Benign Diseases, Uterine, Gynecological

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INTRODUCTION

Despite the development of a newer and less invasive intervention for the management of benign gynecological conditions, Hysterectomy remains the most performed major gynecological operation. Nearly 600,000 Hysterectomies are carried out in the USA every year.¹ In UK 100,000 Hysterectomies are performed annually.² It is expected that nearly 20% of women by the age of 60 years will have this procedure done.³ Nine out of every ten Hysterectomies are performed for non-malignant diseases.⁴ Common indications for Hysterectomy uterine are leiomyoma, dysfunctional uterine bleeding, genital prolapse,

endometriosis, adenomyosis, pelvic inflammatory disease, endometrial hyperplasia, and genital tract malignancies.⁵ Currently, there are three main types of Hysterectomy operations in practice for benign diseases: Abdominal Hysterectomy (AH), Vaginal Hysterectomy (VH) and Laparoscopic Hysterectomy (LH). Abdominal Hysterectomy remains the predominant method of uterus removal (66%), followed by vaginal Hysterectomy (22%) followed by Laparoscopic Hysterectomy (12%).⁶ Abdominal Hysterectomy can either be in the form of total abdominal Hysterectomy (TAH) which involves removal of both the uterus and the cervix, or it can be in the form of subtotal abdominal Hysterectomy (STAH) which involves only removal of the uterus leaving behind the cervix depending upon the technical feasibility of the operation. Abdominal Hysterectomy can be associated with bilateral salpingo-oopherectomy (BSO) or without BSO depending upon the patient family history of ovarian malignancy and intraoperative finding which in turn is associated with its own pros and cons thus influencing the risks and benefits associated this modality of treatment options. As with any other surgery Abdominal Hysterectomy is also associated with intraoperative and post-operative complications. Rates of various complications have been reported in the range of 0.5% to 43%.⁷ Mortality is a recognized complication of Hysterectomy. The risk of death for the abdominal approach is estimated as 1 in 4000 procedures. Serious risks include damage to the bladder or ureter (7 per 1000), damage to the bowel (0.4 per 1000), major hemorrhage (15 per 1000), thromboembolism (4 per 1000) and pelvic hematoma 5.2%.8 Infectious complications related Abdominal Hysterectomy include pelvic to abscess (2 per 1000), wound infection 7.3%, urinary tract infection 4.8% and chest infection 4.5%. Long-term complications include increased risk of vaginal wall prolapse due to loss of supporting ligament and urinary incontinence.⁹ The emergence of effective medical and conservative surgical treatment options for benign conditions in the uterus is now posing a question mark regarding the justification of Hysterectomy. It has been realized that the uterus should not be considered a vestigial organ after childbearing. Studies have proved that following Hysterectomy women suffer from bothersome psychosexual function.¹⁰ It has also been hypothesized that ovarian endocrine function weans off more rapidly after removal of these target organs, means the age of onset of menopause in those who underwent Hysterectomy is 3.7 years earlier than average, even where the ovaries are preserved.¹¹

METHODOLOGY

This is a descriptive study conducted in the department of Obstetrics and Gynecology at Hayatabad Medical Complex (HMC) a tertiary care hospital in Peshawar KPK, from 1st January 2020 to 31st December 2020. Patients who were already admitted from OPD were selected. Detailed history, general physical examination, a systematic examination, and a pelvic examination were carried out. Following inclusion and exclusion criteria were followed. Patients with benign gynecological diseases who were already scheduled for Abdominal Hysterectomy like Hydroxymethylbutyrate (HMB) with fibroid, HMB with suspected Adenomyosis, Bleeding of Endometrial origin (previously called DUB), Chronic pelvic pain with suspected chronic pelvic inflammatory disease and Chronic pelvic pain with suspected Endometriosis. The exclusion criteria were hysterectomy done by other routes, hysterectomies done for gynecological malignancies, and obstetrical Hysterectomies. Approval from the ethical committee of the institution was taken. Patient characteristics were entered into a predesigned proforma which included age, parity, presenting complaints, indications for Hysterectomy, associated comorbidity and complications. Informed written consent was taken from all the patients as part of pre-op work beside other pre-op preparation which included routine labs, ECG, chest X-Ray and other relevant investigations in accordance with other associated co-morbidities. Pre-op anesthesia fitness was also taken. All procedures were performed by the consultant.

RESULTS

Total major operations performed in our unit in the year 2020 were 165. Total Hysterectomies were 89, which contributes 53.93% to the total major operations. Total abdominal Hysterectomies were 68 making its frequency 76.40%. Total (VH) Vaginal Hysterectomies were 11 (12.35%) Total Laparoscopic Assisted Vaginal Hysterectomies (TLAVH) were 10 (11.23%).

Table 1: Indications of Abdominal Hysterectomy

Indication	No. of Cases	%age
Fibroid	32	47.05%
DUB	28	41.17%
Adenomyosis	05	07.35%
Endometriosis	01	01.47%
PID	02	02.94%

Table 1 shows common indications of Abdominal Hysterectomy. The commonest indication was fibroid uterus followed by DUB (Now called bleeding of endometrial origin according to PALM COIEN classification).

Intra-Operative Complications	No. of Cases	%age
Bladder Injury	01	01.47 %
Bowel Injury	0	0
Ureter Injury	0	0
Excessive Bleeding Requiring Blood Transfusion	02	02.94 %
Mortality (Table Death)	0	0

Table 2: Intra-operative Complic

Table 2 shows intra-operative complications related to Abdominal Hysterectomy. The commonest complication was excessive bleeding requiring blood transfusion. Other complications were rare. The frequency of complications was related to the indication of Hysterectomy. Frequency was more in conditions like endometriosis, a chronic pelvic inflammatory disease resulting in the frozen pelvis and repeated pelvic surgeries with dense adhesions.

 Table 3: Immediate Post-Operative Complications

Immediate Post-Operative	No. of	9/ 000
Complications	Cases	70age
Pyrexia	06	08.82%
Paralytic Ileus	02	02.94%
Wound Infection	16	23.52 %
UTI	04	05.88%
Secondary Hemorrhage	01	01.47%
Vault Hematoma	02	02.94%
Re-Opening	0	0
D.V.T	0	0

Table 3 shows immediate post-operative complications. The commonest postoperative complication in the present study was wound infection followed by post-operative pyrexia. There was no case of re-opening for any reason. There was no mortality in our study period.

DISCUSSION

Abdominal Hysterectomy is the most common gynecological operation done for benign diseases. In one year, period total Hysterectomies performed were 89 out of which total Abdominal Hysterectomies were 68 with an overall frequency of 76.4 %. In a study, the frequency of Abdominal Hysterectomy was 74.7%.¹² In our study, the most common indication for Abdominal Hysterectomy was fibroid uterus, the incidence of which was 47.05 %, followed by DUB, the incidence of

which was 41.17%. In another study also from Pakistan, the most common indication for Abdominal Hysterectomy was fibroid uterus 33% followed by DUB 12%.¹³ The incidence of overall intra-operative complications in our study was 4.41 %. In a study, this incidence was 10.4% which was higher than our rate.¹⁴ The commonest intra-operative complication in our study was hemorrhage requiring blood transfusion with an overall incidence of 2.94% in our study. In a study, this incidence was 7.8%. The incidence of visceral damage in our study was 1.47% in another study this incidence was 2.6% but this incidence was also lower in our study.15 In our study, there was only one case of iatrogenic intra-operative bladder injury detected during the study period. But according to recent studies, the rate of bladder injury is increasing with an overall rate of 1-2% which is partly due to the increased rate of C/Section which resulted in bladder adherence to the uterus. In our study, 8.82 % developed postoperative pyrexia which was the second most common complication but in a study from Nigeria post-operative pyrexia was reported in 24% of women which was high rate than ours.¹⁶ In our study, 23.52% developed wound infection which was a high rate. This was more common in diabetic, obese and anemic patients. In a study, post-operative wound infection rate was 9.1%.^{17,18} Hysterectomy should only be performed if there is a valid indication for it after exhaustion of all other conservative approaches.

LIMITATION

This study was single centered which can be performed in multi-centers to generalize the result throughout province or country.

CONCLUSION

Although Hysterectomy is the definitive management option for most benign gynecological diseases and the complication rate in our study no doubt was low still this option should only be exercised when all other alternative medical and conservative surgical options are exhausted, failed, inappropriate or not available. The removal of this major organ must be balanced and weighed against the potential complications associated with this procedure and even the very low risk of mortality.

CONFLICT OF INTEREST: None

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CONTRIBUTORS

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