

A Retrospective Study of Indication of Total Abdominal Hysterectomy among Women Admitted at BMIMS, Pawapuri

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Abstract

Introduction: The indications for hysterectomy have changed due to the introduction of many alternatives. However, it is still the most common major gynecological operation. Therefore, this study was conducted to study the indications for a hysterectomy in a teaching hospital.

Aims and Objectives: The aim of the study was to assess indications, frequency, and complications among women admitted to our department.

Materials and Methods: This is a retrospective study analyzing the indications for abdominal hysterectomy in a teaching hospital over 2 years and 3 months (October 2021 to December 2023) in the Department of Gynecology of BMIMS, Pawapuri. The case notes of these patients were reviewed.

Results: The median age was 40 years. In the present study, 55 cases underwent total abdominal hysterectomy with the leading indications of uterine leiomyoma (51%), uterine polyp (14.5%), adenomyosis (13%), abnormal uterine bleeding (7%), ovarian tumor (7%), uterine prolapse (5.5%), and endometriosis (2%). We reported no major complication that endangered the life of the patient, as most of the complications were the usual minor post-operative.

Conclusion: The most common indication for abdominal hysterectomy was fibroids. It was followed by uterine polyps and adenomyosis. Minimal complications were noted in the post-operative period.

Key words: Abdominal hysterectomy, Abnormal uterine bleeding, Adenomyosis, Fibroid

INTRODUCTION

Hysterectomy is the most common gynecological surgery reported in various parts of the world.^[1-3] It is second only to cesarean sections as the most common surgery among women. Cesarean section is an obstetric surgery, leaving hysterectomy the most common surgery among women in a non-gravid state. Indications of hysterectomy can be benign or malignant. It can be performed as an emergency or elective surgery. Hence, indications of hysterectomy

need to be accessed regularly for both clinical quality improvement and standard regulation. Hysterectomy is justifiable on weighing the risk-to-benefit ratio given the patient's underlying clinical presentation.

Aims and Objectives

The aim of the study was to determine the indications, frequency, and complications related to abdominal hysterectomy.

METHODS AND MATERIALS

This is a retrospective study carried out among 55 women who underwent total abdominal hysterectomy during a 2-year and 3-month period (October 2021 to December 2023) in the Department of Gynecology of BMIMS, Pawapuri. All patients who underwent total abdominal

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hysterectomy with or without bilateral or unilateral salpingo-oophorectomy during the study period were included in this study. In cases of total abdominal hysterectomy, their indications were recorded along with other demographic profiles such as age, parity, need for blood transfusion, and complication. Patients with gynecological malignancies and obstetrical hysterectomy were excluded from this study.

We referred the malignant case to a higher center for proper management.

RESULTS

In the present study, 55 cases underwent total abdominal hysterectomy with the leading indications of uterine leiomyoma (51%), uterine polyp (14.5%), adenomyosis (13%), abnormal uterine bleeding (7%), ovarian tumor (7%), uterine prolapse (5.5%), and endometriosis (2%) [Table-1].

In our study, the majority of the patients belonged to the middle age group; most patients are in their 5th decade of life (37 patients), with a median age of 40 years [Table-2].

The maximum number of total abdominal hysterectomies was in multiparous women (50 patients) [Table-3].

In 14 patients, there was a need for blood transfusions pre-operative or post-operative. Many patients came to the outpatient department (OPD) with complaints of abnormal uterine bleeding. Hence, the patient already suffered from anemia. In some patients who were admitted with severe anemia, we gave them blood transfusions preoperatively [Table-4].

In a young patient with a healthy ovary, we had a total abdominal hysterectomy. In Perimenopausal patients, total hysterectomy with unilateral or bilateral salpingo-oophorectomy was performed depending on the condition of the adnexa [Table-5].

Most of the complications reported were normal minor post-operative ones, ranging from wound infection in 9% to fever and urinary tract infection (UTI) in 3% [Table-6].

We noted that none of our women had abnormal liver or kidney function test reports. One patient (age 65) operated for ovarian cyst and was diabetic.

For all women whose diagnosis was uterine leiomyoma, a decision of surgery was made after imaging findings confirmed the provisional diagnosis. After each surgery, tissue was sent for histopathological examination. However,

Table 1: Indication of total abdominal hysterectomy

Indication	Frequency (n)	Percentage
Leiomyoma	28	51.0
Uterine Polyp	8	14.5
Adenomyosis	7	13.0
Abnormal uterine bleeding	4	7.0
Ovarian tumor	4	7.0
Uterine prolapse	3	5.5
Endometriosis	1	2.0
Total	55	100

Table 2: Age groups

Age	Frequency (n)	Percentage
30–39	14	25.40
40–49	37	67.30
>50	4	7.20
Total	55	100

Table 3: Parity

Parity	Frequency (n)	Percentage
Nullipara	3	5.40
Primipara	2	3.60
Multipara	50	91.00
Total	55	100

Table 4: Blood transfusion

Blood transfusion	Frequency (n)
Pre-operative	6
Post-operative	8

Table 5: Total abdominal hysterectomy with or without BSO/USO

Surgery	Frequency (n)	Percentage
TAH+BSO	29	53
TAH	21	38
TAH+USO	5	9
Total	55	100

TAH-Total abdominal hysterectomy, BSO: Bilateral salpingo-oophorectomy, USO: Unilateral salpingo-oophorectomy

Table 6: Procedure-related complications

Intraoperative complication	No	Percentage
Ureteric injuries	00	00
Bladder injuries	00	00
Bowel injuries	00	00
Mortality	00	00
Post-operative complication		
Pyrexia	3	5
Wound infection	5	9
Urinary tract infection	3	5

none of these women reported with histopathological examination report for a confirmatory diagnosis.

DISCUSSIONS

The condition that may lead to a hysterectomy almost causes discomfort and inconvenience rather than threatens life. Broadly speaking, the vast majority of hysterectomies are performed to relieve the symptoms of pain, bleeding, or both. Consequently, hysterectomy rates vary widely between countries and over small geographic areas within the countries.^[4] For most women who suffer from gynecological disorders, quality of life improves following a hysterectomy, as 75% of our patients were happy regarding this issue after the planned surgery. While hysterectomy carries a low risk of mortality.^[5,6] It is a major surgery that can require weeks, and possibly months, for recovery.^[7,8] In our patients, we reported no major complications that endanger the life of the patient, as most of the complications reported were the normal minor post-operative ones, ranging from wound infection in 9% to fever and UTI in 3%. The current indications have evolved considerably from time to time, when heavy bleeding, fear of cancer, and undiagnosed pelvic pain were common reasons for the procedure.^[9-11] We believe in the benefits of ovarian conservation, and at no age is there a clear benefit from prophylactic oophorectomy. The importance of this study at this particular point is that ovarian conservation at the time of hysterectomy (in women who are not at risk for ovarian cancer or having related malignancy at the time of surgery, even in postmenopausal women) may lead to longer survival and limit the need for hormonal replacement therapy. We can report in our study that fibroids (51%) and uterine polyps (14%) are the most frequent indications, accounting for as many as 65% of all hysterectomies. Unlike in a study from Karachi, where dysfunctional uterine bleeding (DUB) was the indication in 62.5% of patients.^[12] In another study conducted at Peshawar, DUB was reported as more common than fibroid.^[13] This difference in indication is due to imaging confirmation by USG, computed tomography scan, or magnetic resonance imaging in most cases before surgical intervention. In our study, the majority of the patients belonged to the middle age group, and most patients were in their 5th decade, of life (37 patients) with a median age of 40 years. This figure coincides with that from an Indian study. Many studies showed that the majority of hysterectomies were performed in the 5th decade similar to our study.^[14] A study conducted in Nigeria also showed that hysterectomy was the most common among the 40–49-year-old age group.^[15] In our study, 9% of patients developed a wound infection. This was more common in women with a high body mass index, diabetes mellitus, and anemia. All patients were managed conservatively. Similar data were reported in

another study from Karachi that showed a wound infection rate of 8.3%.^[12] Hysterectomy has a high patient satisfaction rate because it cures the problem and is usually performed when medical treatment fails.^[13] In our study, maximum patients were of reproductive age. Therefore, there was a compelling indication for the preservation of their uteri. Besides, on account of psychological, as well as traumatic stress, that is associated with the removal of parts of human bodies among patients further necessitates a second look at the current statistics.

In one nulliparous woman (age 40 years) with a history of myomectomy. We found a large cervical fibroid as the small uterus appeared like a lantern sitting on the dome of the cervical fibroid similar to Paul's cathedral. In this patient, enucleation of cervical fibroid followed by a total abdominal hysterectomy was performed [Figure 1].

In other nulliparous women (age 35 years), FIGO-type 2 submucosal fibroid of 5 × 5 cm was found [Figure 2]. This patient came in OPD with a complaint of heavy menstrual bleeding and very severe anemia. A trial for medical management was given, but the patient did not get relief from her symptoms. The patient was admitted, 3 units of blood were transfused pre-operative, and a total



Figure 1: Lantern sitting on the dome of cervical fibroid



Figure 2: Submucosal uterine fibroids

abdominal hysterectomy was performed. One unit of blood was transfused postoperatively.

In one patient (age 40 years), a laparotomy was performed with an indication of pseudo-mucinous cyst adenoma (benign ovarian cyst in the CECT report). We found a large right adnexal cyst size ~30 × 30 cm. A whole lump adhered to the appendix, right ureter, posteriorly to the gut, and retroperitoneal structures. In this condition, an appendectomy was also done because the appendix was lacerated during adhesion dissection. The post-operative period was uneventful for all patients in our study, who were discharged from the hospital in stable condition.

CONCLUSION

Abdominal hysterectomy was found to be one of the most common gynecological procedures performed. It was found safe with minimal complications. The uterine fibroid was the most common indication of total abdominal hysterectomy in our study. Age has an important influence on the relative frequency of the indications, which are flexible rather than absolute. The limitation of our study is that we are doing a total abdominal hysterectomy only for benign indications at our institution.

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