ORIGINAL RESEARCH PAPER
Volume - 11 | Issue - 09 | September - 2022 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

A RETROSPECTIVE STUDY OF INDICATIONS, ROUTES AND HISTOPATHOLOGICAL FINDINGS IN PATIENTS OF ELECTIVE HYSTERECTOMY

Obstetrics & Gynaecology

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ABSTRACT

Background: Hysterectomy is the second most common surgery done in women, next only to caesarean section. However, it is resented by most women. But in several cases hysterectomy comes out to be the only rational option available as the indications include various clinical entities severely hampering the patient's health. Hysterectomy is done through various routes viz., abdominal, vaginal and laparoscopic. This usually depends on the surgeon's preference and patient's choice. **Aims and objectives:** To study the various indications of hysterectomy and to correlate the clinical findings with histopathological findings. **Methodology:** A retrospective analysis of 380 cases of elective hysterectomy from August to October 2021 was done from hospital records. Epidemiological details, clinical indication for hysterectomy, route of hysterectomy and main postoperative histo-pathological diagnosis was recorded and analysed. **Results:** A total 380 cases of hysterectomy were done during the study period. The most common age group was 43-51 years of age group. Major clinical indication was abnormal uterine bleeding and fibroid uterus. Most common histopathological finding was Leiomyoma. **Conclusion:** Hysterectomy was mostly indicated in 4th decade of age and onwards. Abnormal uterine bleeding was the most common clinical indication for hysterectomy. Fibroid uterus was the most common histopathological finding for which elective hysterectomy was performed.

KEYWORDS

hysterectomy, abnormal uterine bleeding, leiomyoma.

INTRODUCTION

Hysterectomy, which means surgical removal of the uterus, is one of the most common and is the second most frequently performed major surgical procedure next only after caesarean delivery[1]. In spite of a large number of potential alternatives to hysterectomy for the management of benign disease, hysterectomy rates have remained relatively stable.[2]

Indications of surgery vary from benign conditions to malignancies of genital tract and various pelvic pathologies like leiomyoma, abnormal uterine bleeding (AUB), chronic pelvic pain, endometriosis, adenomyosis, utero vaginal prolapse, and malignancies of uterus, cervix and ovaries.[3,4]

Indications and prevalence of hysterectomy changes in relation to women's demographic characteristics such as race, education and socioeconomic status and insurance status, as well as their physician's gender, training and geographical location, suggesting that the procedure is related to the broader social and health system environment as well as to biological risk. The estimated incidence of hysterectomy, 20.7/1000 woman- years (95% CI: 14.0, 30.8), is considerably higher than reported from other countries, at a relatively low mean age of 36 years especially among women of reproductive age, those with lower income and at least two children underwent hysterectomy at higher rates. Qualitative research suggests that weak sexual and reproductive health services, a widespread perception that the post-reproductive uterus is dispensable and lack of knowledge of side effects have resulted in the normalization of hysterectomy.[5]

Hysterectomy may be completed using an abdominal, vaginal, laparoscopic, or robotic approach, and selection is influenced by many factors such as shape and size of the uterus and pelvis, surgical indications, presence or absence of adnexal pathology, extensive pelvic adhesive disease, surgical risks, hospitalization and recovery length, hospital resources, and surgeon expertise are all weighed once hysterectomy is planned.[6]

There is a trend toward retention of the cervix at hysterectomy because of the perception that several outcome parameters, including sexual function and pelvic support, are better after a supracervical hysterectomy.[7] The decision to remove the ovaries and tubes should be based on assessment of risk and not the route of hysterectomy.[8] Premenopausal women who are at average risk of ovarian cancer (approximate lifetime risk of 1.4%) should be considered for ovarian preservation when they are undergoing hysterectomy for benign conditions where the ovaries and fallopian tubes are healthy.[9]

The patient should be evaluated for risk factors associated with venous thromboembolic events. Age, medical history, such as inherited or acquired thrombophilias, obesity, smoking, and hormonal medication, including contraceptives or hormone therapy, may increase the risk.[10]

We undertook present study to analyze the hysterectomy cases performed in a tertiary care center in Southern Rajasthan over a period of 3 months, based on age, common indications, route of hysterectomy and post operative histopathological findings, in order to improve health care.

MATERIALS AND METHODS

This was a descriptive study with retrospective design conducted in obstetrics and gynecology department of R.N.T. medical college, Udaipur.

Case records of elective hysterectomies conducted from August to October 2021 were reviewed to collect patient characteristics, indications for surgery, approach and post operative histopathological findings of specimens. Sample size for the present study was 380 cases.

Inclusion criteria

All cases of elective hysterectomies conducted during the study period were included in the study.

Exclusion criteria

Cases of emergency and caesarean hysterectomies were not included in the study.

RESULTS

Patient characteristics

Hysterectomy was mostly indicated in 40-50 (84.21%) years of age group as shown in the **Table 1.** It was done in 13.42% cases in women of age <40 years. Majority of the women undergoing hysterectomy were multiparous.

It was found that most women going for hysterectomy belonged to lower SES (75.8%)

Table 1: Patient characteristics		
Age distribution		
Age in years	Number of cases	Percentage

<40	51	13.42
40-44	119	31.3
45-50	150	39.4
>50	60	15.78
Total	380	
Socioeconomic status (SES) of the patients		
	Total number of cases	Percentage
Lower SES	288	75.8
Higher SES	92	24.2
Total	380	

Indications for hysterectomy

Most common indication for hysterectomy remains to be AUB (55.26%), a finding which is in accordance with other previously available studies focussing on poorly sourced health care systems. Other common indication for hysterectomy was fibroid uterus (28.68%).

Table 2: Indications for hysterectomy		
	Total number of cases	Percentage
AUB	201	55.26
Fibroid uterus	109	28.68
PID	31	8.15
Others	39	10.26
Total	380	

Route of hysterectomy

Hysterectomy can be performed by both abdominal and vaginal routes, abdominal (81.8%) being the most common route taken. Among the various procedure available with vaginal routes, vaginal hysterectomy with pelvic floor repair (14.73%) was found to be the most common surgical approach as shown in the **Table 3**.

Table 3: Routes of hysterectomy			
		Number of cases	Percentage
ABDOMINAL	TAH	94	24.7
	TAH USO	9	2.37
	TAH BSO	208	54.73
VAGINAL	VH PFR	56	14.73
	NDVH	10	2.63
	LAVH	3	0.79
Total		380	

(TAH total abdominal hysterectomy, TAH USO- total abdominal hysterectomy with unilateral salpingo oophorectomy, TAH BSO – total abdominal hysterectomy with bilateral salpingo oophorectomy, VH PFR - vaginal hysterectomy with pelvic floor repair, NDVH - Non descent vaginal hysterectomy, LAVH- laparoscopic assisted vaginal hysterectomy)

Histopathological findings in uterus

Analysis of histopathological records indicated that the initial clinical indications for hysterectomy correlated with the findings of microscopic examinations. Histopathological findings of the cases are summarized in the **Table 4.** Leiomyoma (61.58%) was the common post operative histopathological finding followed by adenomyosis (17.1%) and endometrial atrophy (12.10%).

Table 4: Histopathological findings in uterus		
	Total number of cases	Percentage
Leiomyoma	234	61.58
Adenomyosis	65	17.1
Atrophic endometrium	46	12.10
Endometrial hyperplasia	31	8.1
Endometrial polyp	3	0.79
Endometrial carcinoma	1	0.26
Total	380	

DISCUSSION

Hysterectomy is the most commonly performed gynecological surgery worldwide. Prevalence of hysterectomy varies from country to country, region to region.[11,12,13,14]

In majority of cases, hysterectomy is done for benign pathologies as it provides the maximum symptomatic relief and is curative in nature. Indications of hysterectomy vary from benign conditions to malignancies of genital tract such as fibroids, abnormal uterine bleeding (AUB), chronic pelvic pain, endometriosis, adenomyosis, uterovaginal prolapse (UV prolapse), pelvic inflammatory disease (PID) and other cancer of reproductive organs.[2,11] Term "hysterectomy" though means removal of uterus, in practice it has a much wider classification depending upon the indication. At times it is done without removal of the cervix (supracervical hysterectomy) or with removal of adnexa. It can also be a part of staging laparotomy or radical hysterectomy. Hysterectomy can be performed abdominally, vaginally or through abdominal ports with help of a laparoscope. Approach depends on surgeon's preference, indication for surgery, nature of disease, and patient characteristics.[1,15]

In our study, the most common indication for hysterectomy was found to be abnormal uterine bleeding (AUB) (55.26%), followed by fibroid uterus (28.68%). However, in developed health care systems as of in USA, uterine fibroid was the most common indication.[16] In a study from Canada, however, the commonest indication of hysterectomy was AUB (26.4%), followed by fibroid uterus (16.0%).[17]

Majority of the patients, in our study, belonged to the lower strata of society. It can be attributed to lack of awareness at the peripheral centers and in patients themselves about the early and easily manageable symptoms. This usually leads to late referral to higher centers where patients present with advanced symptom spectrum, strongly indicating hysterectomy for management of the patient. Hysterectomy not only cures most of benign diseases but also greatly improves the health-related quality of life.

Hysterectomy remains a matter of diverse debate owing to its physical, emotional, economic, sexual, and medical significance to women.[18] In a study to judge appropriateness of nonemergency and non-oncologic hysterectomies in USA, indications were often found to be inappropriate.[16]

Hysterectomy was justified in 98.8% women in our study based on postoperative histopathology report of the specimen. However, we hypothesize that a very few cases of AUB and postmenopausal bleeding without any significant pathology could have been managed conservatively. But due to retrospective design of the study, nothing can be stated confirmatively about the inappropriateness of the hysterectomy in remaining few cases, as decision to go for a specific treatment modality is greatly affected by the initial clinical presentation of the patient and clinician's approach.

CONCLUSION

Hysterectomy is used commonly to improve the quality of life. Sometimes can be a lifesaving procedure such as in early presentation of malignancy, when used along with other modalities. Most common indications were AUB and fibroid uterus.

However, as any surgical procedure is associated with a risk of complications, the indication should be carefully evaluated. With the emergence of many conservative approaches to deal with benign gynecological conditions, it is prudent to discuss available options with patient before taking a direct decision of sacrificing her uterus as hysterectomy is a surgery which has been used and misused, underused, and abused at different times in gynecology.

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