

TO ANALYSE THE PATTERN OF HYSTERECTOMY ATA TERTIARY CARE CENTRE: A RETROSPECTIVE STUDY

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Abstract

Background: The surgical removal of uterus is known as hysterectomy. It is the second most common gynaecological surgery performed worldwide, after caesarian section. The study helps to analyse the pattern of hysterectomy at a tertiary care centre. **Materials and Methods:** This is a retrospective study conducted from October 2022 to September 2023 in the department of obstetrics and gynecology, Rama Medical College & Hospital, Hapur. Sample size for the present study was 150 cases. Inclusion criteria -The study included all patient who underwent elective hysterectomy in Rama Medical College & Hospital, Hapur. Exclusion criteria -Both emergency hysterectomy and caesarean hysterectomy were excluded from the study. **Result:** Majority of the patients i.e., 65.4% (98) were between age groups of 41-50 years. Hysterectomy was performed under age 40 in 10.6% (16). The most common indications for elective hysterectomy were uterine fibroids. It constitutes of 37.4% (56 cases), The majority of hysterectomy were performed by the abdominal route 78.6% (118 cases) with One or both ovaries were preserved in 75.4% (113 cases). **Conclusion:** In gynecological practice, hysterectomy is a major surgical procedure that is performed frequently. After 40 years of age, a hysterectomy is performed, with a mean age of 47±4 years. The most typical sign was a symptomatic fibroid uterus.

INTRODUCTION

Hysterectomy is defined as the surgical removal of uterus.^[1] It is the second most commonly performed surgery in the field of gynecology worldwide following caesarian section.^[2]

Menstrual disorders are one of the most common reasons for women of reproductive age to visit the doctor, and heavy menstrual bleeding can affect as many as 30% of women during reproductive life.^[3,4] one of the most common and confusing conditions in adult women is abnormal uterine bleeding.^[5] AUB can mean anything that deviates from typical menstrual cycle, including irregularity and frequency of menstruation, duration of menstruation, or blood loss.^[6]

Treatment of AUB is performed by clinical examination and ultrasound confirmation, but there may be discrepancies between clinical, ultrasound, and histopathological diagnoses. The final diagnosis always correlated with histopathological

examination. The management of AUB includes both medical as well as surgical. There is a notable improvement in the conservative treatment of AUB, but hysterectomy remains the most favored treatment. Most women experience relief from symptoms after a hysterectomy, along with a high level of satisfaction with the procedure. Hysterectomy is performed by three routes 1) abdominal 2) vaginal 3) laparoscopic. The most common indication of hysterectomy is uterine leiomyoma other indication include adenomyosis, polyp, pelvic organ prolapses, endometriosis, post-menopausal bleeding.

Prophylactic use of this procedure can be made against cancer of the reproductive tract, particularly in individuals with a strong family history of the disease, such as breast cancer with a BRCA 1 & 2 and ovarian carcinoma after family is complete.

To enhance healthcare, this study attempts to analyse the hysterectomy cases that were performed in a tertiary care center over the course of a year. It does this by attempting to analyse the cases

according to age, parity, common indication, hysterectomy method, preservation of ovary or whether prophylactic salpingectomy was done. It is a retrospective study.

MATERIALS AND METHODS

This is a retrospective study conducted from October 2022 to September 2023 in the department of obstetrics and gynecology, Rama Medical College & Hospital, Hapur. Sample size for the present study was 150 cases.

Inclusion Criteria

The study included all patient who underwent elective hysterectomy in Rama Medical College & Hospital, Hapur

Exclusion Criteria

Both emergency hysterectomy and caesarean hysterectomy were excluded from the study

Patient Analysis

There was no bias in the selection of the sample in terms of age, parity, or socioeconomic status.

Hospital records contained information on the patients. Information was gathered from hospital records about age, parity, indications, hysterectomy technique, and ovarian preservation. Under the category of abdominal hysterectomy, there are four types: total abdominal hysterectomy (TAH), Total abdominal hysterectomy with bilateral salphingo-oophorectomy (TAH BSO), Total abdominal hysterectomy with unilateral salphingo-oophorectomy (TAH USO) total abdominal hysterectomy with bilateral salpingectomy. Among the vaginal hysterectomy procedures were laparoscopic vaginal hysterectomy (LAVH), non-descent vaginal hysterectomy (NDVH), and vaginal hysterectomy with pelvic floor repair (VH PFR) which was performed for uterovaginal prolapse.

Statistical Analysis

SPSS 20 IBM statistics was used for statistical analysis of the collected data. Age, parity, indications, route, and ovarian preservation were the factors used to collect descriptive statistics, which were then given as percentages.

RESULTS

Age

The majority of the patients i.e., 65.4% (98) were between age groups of 41-50 years. Hysterectomy was performed under age 40 in 10.6% (16). [Table 1]

Parity

In the study 2.6% (4) were nulliparous, while majority were in para 4 or greater 57.4% (86). [Table 2]

Indications

The most common indications for elective hysterectomy was uterine fibroids. It constitutes of 37.4% (56 cases). Second most common indications for hysterectomy was adenomyosis i.e.,20% (30 cases). Pelvic inflammatory disease constitutes of 4% cases. [Table 3]

Routes of Hysterectomy

The majority of hysterectomy were performed by the abdominal route 78.6% (118 cases), while 22.4% (32 cases) were performed through the vaginal route of which 4% (6 cases) were laparoscopic assisted vaginal hysterectomy. [Table 4]

Preservations of Ovary

One or both ovaries were preserved in 75.4% (113 cases). In 24.6% (37 cases) both ovaries were removed. [Table 5]

Post Hysterectomy Histopathological Report

In the study 32% had leiomyoma, 18% had adenomyosis, 10% had both leiomyoma & Adenomyosis and 10% had endometrial hyperplasia. [Table 6]

Table 1: Age distribution

Age in years	No. of cases	Percentage
31-40	16	10.6
41-50	98	65.4
51-60	30	20
>60	6	4
total	150	100

Table 2: Parity distribution

Parity	No. of cases	Percentage
Nulliparous	4	2.6
1	6	4
2	20	13.4
3	34	22.6
≥4	86	57.4
total	150	100

Table 3: Indications of Hysterectomy

Indications	No. of cases	Percentage
Fibroid uterus	56	37.4
Uterovaginal prolapse	22	14.6
Benign ovarian tumor	9	6
AUB	8	5.4
Postmenopausal bleeding	12	8

Adenomyosis	30	20
Endometrial polyp	7	4.6
Pelvic inflammatory disease	6	4
total	150	100

Table 4: Routes of hysterectomy

Routes	Types	No. of cases	Percentage
Abdominal 78.6% (118)	TAH	15	10
	TAH USO	6	4
	TAH BSO	37	24.6
	TAH BS	60	40
Vaginal 22.4% (32)	VH PFR	20	13.4
	NDVH	6	4
	LAVH	6	4
total		150	100

Table 5: Preservations of ovary

Preservations of ovary	No. of cases	Percentage
One or both ovaries preserved	113	75.4
Both ovaries removed	37	24.6
total	150	100

Table 6: Post hysterectomy histopathology report

On HPE	No. of cases	Percentage
Leiomyoma	48	32
Adenomyosis	27	18
Both	15	10
Polyp	9	6
Endometrial hyperplasia	15	10
Normal	12	8
Benign ovarian cyst	7.5	5
Chronic endocervicitis	16.5	11
Total	150	100

DISCUSSION

The most common major surgical treatment performed on women is hysterectomy, second only to a cesarean section.

Between the ages of 20 and 49, approximately 75% of hysterectomy procedures are performed.^[7] According to a study by Pandey et al., women undergoing hysterectomy had an average age of 48±9.9 years. In our study, the mean age of patients was 47±4 years, with 65.4% falling into 41-50 age range.

According to the current study, 37.4% of patients had fibroid uterus as their primary reason for elective hysterectomy. Pandey et al., study revealed that patients who had hysterectomy had a 39.9% incidence of fibroid uterus.^[8] Patients who had hysterectomy revealed an incidence of 34% of fibroid, according to Bala et al.^[9] The current study revealed a marginally increased occurrence of uterine fibroids. Prolapse and AUB rates, however, were comparable to those from earlier trials. According to Wu et al. 2003 study on hysterectomy rates in the US, 37% of leiomyoma were indicated for a hysterectomy.^[10]

Levonorgestrel intrauterine device (LNG IUD), endometrial ablation, uterine artery embolization (UAE), and medication management are non-surgical techniques of therapy that are less well-liked by patients. For some women, oral medication

is a good long-term solution.^[11] A hysterectomy provides long-lasting comfort. After a year, hysterectomy reduces menstrual bleeding more than medical intervention. Equally successful in raising quality of life is LNG-IUD. Even while UAE has a patient satisfaction rate that is comparable to that of hysterectomy and myomectomy, there is a higher chance that surgery will be needed within 2.5 years after the initial procedure.^[12] The necessity of hysterectomy is being questioned due to development of efficient medical and conservative treatments for benign disease. After childbearing, the uterus shouldn't be viewed as a vestigial organ. Research has demonstrated that after having hysterectomy women experience from psychosexual dysfunction,^[13] and increased incidence of vault prolapse.

In present study majority of hysterectomy were performed by the abdominal route 78.6% (118 cases), while 22.4% (32 cases) were performed through the vaginal route of which 4% (6 cases) were laparoscopic assisted vaginal hysterectomies.

Overall, because the vaginal approach is associated with less difficulties than other techniques, vaginal hysterectomy is regarded as the surgery of choice if it is feasible.^[14-17] Studies comparing laparoscopic and vaginal procedures have revealed that the former is more expensive but offers no additional benefits.^[16,18]

One or both ovaries were preserved in 75.4% (113 cases). In 24.6% (37 cases) both ovaries were removed. Even when ovaries are maintained, the mean age at which menopause begins is 3.7 years younger in hysterectomy patients.

CONCLUSION

In gynecological practice, hysterectomy is a major surgical procedure that is performed frequently. After 40 years of age, a hysterectomy is performed, with a mean age of 47±4 years. The most typical sign was a symptomatic fibroid uterus. For reason other than uterovaginal prolapse, the rates of vaginal hysterectomies were lower. In several cases, the ovaries were preserved. When possible, the patients should be encouraged to pursue conservative treatment for gynecological disorders. Because vaginal hysterectomies are associated with greater patients, comfort and lower morbidity, gynecologist ought to endeavor to perform more of these procedures. In women who are not at high risk of cancer, ovaries should be preserved. A wide range of lesions were observed, and it is yet unclear if microscopic evaluation and clinicopathological correlation of all the pathology visible at the time of hysterectomy are required or not. The answer is yes, a clear visible benign pathology may harbor a malignant Centre. The current study demonstrates a strong relationship, particularly in benign conditions, between clinical indications and histology.

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REFERENCES

1. Rees M. Menstrual Problems: menorrhagia and primary dysmenorrhea. In Dewhurst's textbook of obstetrics and gynaecology. Ed Keith Edmond 7th ed. Blackwell publishers' pp 399-406.
2. Neela M, Mayonda IT. The hysterectomy story in the UK. J Midlife Health. 2013;4(1):40-1.
3. Kjerulff KH, Erickson BA, Langenberg PW. Chronic gynaecological conditions reported by US women: findings

- from the national health interview survey, 1984 to 1992. Am J Public Health. 1996; 86:19.
4. Market Opinion and Research International (MORI). Women's health in 1990. Research study conducted on behalf of Parke-Davis Laboratories. London: MORI; 1990.
5. Sarwar A, ul Haque A. Types and frequencies of pathologies in endometrial curettings of abnormal uterine bleeding. 2005;3(2):65-70.
6. Livingstone M, Fraser IS. Mechanisms of abnormal uterine bleeding. Hum Reprod Update. 2002; 8:60-67.
7. Rajeshwari BV, Hishikar V. Views and reviews of hysterectomy: a retrospective study of 260 cases over a period of 1 year. Bombay Hospital J. 2008;50(1):59.
8. Pandey D, Sehgal K, Saxena A, Hebbar S, Nambiar J, Bhat RG. An audit of indications, complications, and justification of hysterectomies at a teaching hospital in India. Int J Reprod Med. 2014;2014.
9. Bala R, Devi Pratima K, Singh CM. Trend of hysterectomy. A retrospective analysis in RIMS, Imphal. Int J GynaecolObstet India. 2013;29(1): 4-7.
10. Wu JM, Wechter ME, Geller EJ, Nguyen TV, Visco AG. Hysterectomy rates in the United States, 2003. Obstet Gynecol. 2007 Nov 1;110(5):1091-5
11. Lethaby A, Shepperd S, Cooke I, Farquhar C. Endometrial resection and ablation versus hysterectomy for heavy menstrual bleeding. The Cochrane Database System Rev. 2000(2):CD000329
12. Gupta JK, Sinha AS, Lumsden MA, Hickey M. Uterine artery embolization for symptomatic uterine fibroids. Cochrane Database Syst Rev. 2006;5(1):ID CD 005073, 2006
13. McPherson K, Herbert A, Judge A, Clarke A, Bridgman S, Maresh M et al. psychosexual health 5 years after hysterectomy: population-based comparison with endometrial ablation for dysfunctional uterine bleeding. Health Expectations. 2005 Sep;8(3):234-43
14. Johnson N, Barlow D, Lethaby A, Tavender E, Curr E, Garry R. Surgical approach to hysterectomy for benign gynaecological disease (Cochrane Review). In: Cochrane Library, Oxford: Update Software. 2006(2).
15. Meikle SF, Nugent EW, Orleans M. Complications and recovery from laparoscopy-assisted vaginal hysterectomy compared with abdominal and vaginal hysterectomy. Int J Gynecol Obstet. 1997 Feb 1;57(2):242
16. Summitt JR, Stovall TG, Lipscomb GH, Ling FW. Randomized comparison of laparoscopy-assisted vaginal hysterectomy with standard vaginal hysterectomy in an outpatient setting. Obstet Gynecol. 1992 Dec;80(6):895-901.
17. ACOG Committee Opinion. Number 311, April 2005. Appropriate use of laparoscopically assisted vaginal hysterectomy. Obstet Gynecol. 2005 Apr;105(4):929-30.
18. Garry R, Fountain J, Brown J, Manca A, Mason S, Sculpher M et al. evaluate hysterectomy trial: a multicentre randomised trial comparing abdominal, vaginal and laparoscopic methods of hysterectomy. Health technology assessment (Winchester, England). 2004 Jun;8(26):1-54