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AN AUDIT OF HYSTERECTOMY IN A TERTIARY CARE HOSPITAL IN CENTRAL INDIA

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ABSTRACT

Background: Hysterectomy is the most common gynaecological surgery performed worldwide. More than 90% of the hysterectomies are elective and are performed for a benign indication. With the emergence of effective medical and conservative measures for benign uterine conditions, there are doubts on justification of hysterectomy with its associated risks of morbidity. Hence,there is a need to monitor and regulate the appropriate use of hysterectomy, particularly for treatment of benign gynaecological conditions and amongst younger women. **Method:** This is a descriptive observational study conducted in the Department of Obstetrics and Gynecology at MTH Hospital , Indore. Present study involved all 150 patients who underwent hysterectomy over a period of 6 months from January 2023 to June 2023.Case records were reviewed to collect patient characteristics, indication for surgery, surgical approach and histopathology report of specimen and data entry and analysis done. **Results:** In our study, 45.3% women who underwent hysterectomy belonged to age group of 41 to 50 years.Only10% of the study subjects underwent hysterectomy below 40 years of age.Most of the hysterectomies were abdominal (46.6%) followed by vaginal (34.6%) and laparoscopic (18.6%).Most common indication in abdominal approach was symptomatic fibroid uterus (30.66%), while in vaginal it was uterovaginal prolapse (21.3%).Based on the histopathological report 98.6% hysterectomies in our setup were found to be justified. **Conclusion:** Reporting of all hysterectomies should be made mandatory and audit results should be used for improvement of quality of health care. Newer and less invasive treatment options like Levonorgestrel intrauterine system etc should be offered to women with benign pathologies. Peripartum hysterectomy should not be the first choice until all conservative options have been exhausted.

KEYWORDS : Hysterectomy, Hysterectomy audit, Peripartum Hysterectomy

INTRODUCTION

Hysterectomy is the most common gynaecological surgery performed worldwide. More than 90% of the hysterectomies are elective and are performed for a benign indication. Interestingly for most of these conditions, there are effective alternative medical or surgical treatments available.[1] As any other surgery, hysterectomy is also associated with intraoperative and postoperative complications like increased risk of cardiovascular diseases, dementia, osteoporosis, vault prolapse, sexual dysfunction, and has impact on psychological and emotional health.[2,3]

Hysterectomy is the definitive cure for benign conditions like fibroids, Adenomyosis, dysfunctional uterine bleeding and for premalignant and certain malignant conditions of cervix, uterus, tubes and ovaries. The route of carrying out hysterectomy include abdominal, laparoscopy, and vaginal approach. Approach depends on surgeon's preference, indication for surgery, nature of disease, and patient characteristics.With the emergence of effective medical and conservative measures for benign uterine conditions, there are doubts on justification of hysterectomy with its associated risks of morbidity. Hence,there is a need to monitor and regulate the appropriate use of hysterectomy, particularly for treatment of benign gynaecological conditions and amongst younger women.

OBJECTIVE

Aim of this study is to analyze sociodemographic data, clinical profile, approach and indications of hysterectomy and correlation of preoperative diagnosis with final histopathology report of all hysterectomies, performed in a tertiary care hospital.

METHOD

This is a descriptive observational study conducted in the Department of Obstetrics and Gynecology at MTH Hospital , Indore. Present study involved all 150 patients who underwent hysterectomy over a period of 6 months from January 2023 to June 2023.All elective as well as emergency hysterectomies (including obstetric hysterectomies) analyzed.Written consent taken from all study participants.Case records were reviewed to collect patient characteristics, indication for surgery, surgical approach and histopathology examination report of specimen obtained during surgery. All details required were noted in the proforma and data entry and analysis done using SSPS software version 26.

RESULTS

Total of 8760 women attended the gynecology outpatient department, in our hospital. Total gynec admissions were 732. The total number of major Gynec surgeries carried out during the period of study were 391.Out of which 150(38.36%) underwent hysterectomy. The mean rate of hysterectomy was 1.71%. The proportion of hysterectomy among all gynecological admissions was 20.49%.(Table 1)

Table 1 Distribution Of Number Of Cases

1.	Total number of women who attended GYNEC OPD	8760
2.	Total GYNEC admissions	732
3.	Major GYNEC surgeries	391
4.	No. of. hysterectomies	150
5.	Rate of hysterectomy	1.71%
6.	Proportion of gynec admissions for hysterectomy	20.49%
7.	Hysterectomy as a proportion of major surgery	38.36%

Around half of the women who underwent hysterectomy belonged to the age group of 41 to 50 years. This was followed by 61 to 70 years age. 3.3% hysterectomies that were under the age of 30 years, were all peripartum hysterectomies (postpartum hemorrhage, morbidly adherent placenta).10 hysterectomies were in the age group 31-40 years. Among these, two had malignant ovarian tumor, one had carcinoma endometrium, one endometriosis refractory to medical management and 6 fibroid uterus with severe dysmenorrhea and menorrhagia insisted on undergoing hysterectomy. All 10 patients who underwent hysterectomies in the age group of 31

to 40 years all had completed their families. With all these women feasible nonsurgical or conservative surgical options discussed and tried(Table 2)

Table 2 Age Distribution Of Cases Studied

Age (in Years)	Frequency	Percentage (%)
<30	05	3.3
31- 40	10	6.6
41- 50	68	45.3
51 - 60	32	21.3
61- 70	35	23.3

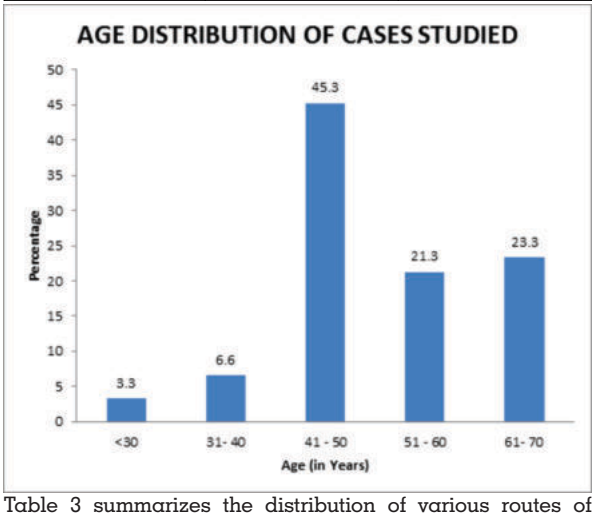
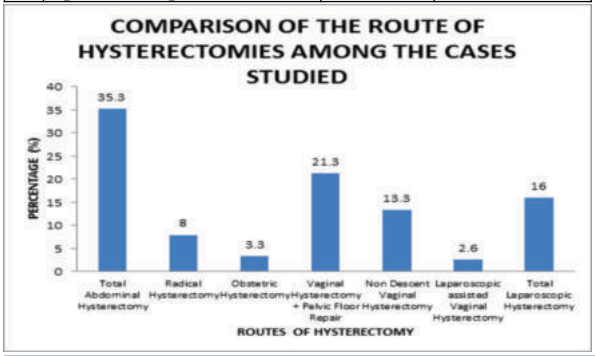


Table 3 summarizes the distribution of various routes of hysterectomies in our hospital.Most common surgical approach was abdominal (46.6%), followed by vaginal (34.6%), and laparoscopic (18.6%).Total abdominal hysterectomy with either unilateral or bilateral salpingoophorectomy accounted for 53 (35.3%) cases and vaginal hysterectomy with pelvic floor repair accounted for 32 (21.3%)cases.(Table 3)

Table 3 Comparison Of The Route Of Hysterectomies Among The Cases Studied

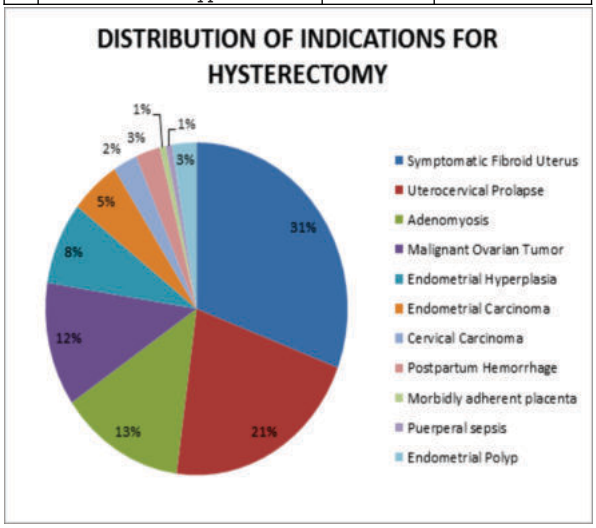
	Types Of Hysterectomy	Frequency	Percentage (%)
A.	Abdominal Hysterectomy	70	46.6
1.	Total Abdominal Hysterectomy	53	35.3
2.	Radical Hysterectomy	12	08
3.	Obstetric Hysterectomy	05	3.3
B.	Vaginal Hysterectomy	52	34.6
4.	Vaginal Hysterectomy + Pelvic Floor Repair	32	21.3
5.	Non Descent Vaginal Hysterectomy	20	13.3
C.	Laparoscopic Hysterectomy	28	18.6
6.	Laparoscopic assisted Vaginal Hysterectomy	04	2.6
7.	Total Laparoscopic Hysterectomy	24	16



The indications of hysterectomies are summarized in Table 4. Most common indication for hysterectomy was symptomatic fibroid uterus (30.6%), followed by utero-vaginal prolapse (21.3%). Other indications being adenomyosis (13.3%), malignant ovarian tumors (12%),endometrial hyperplasia (8%), endometrial cancer (5.3%) and cervical cancer (2.6%).Postpartum hysterectomy was performed in 6 cases (four postpartum hemorrhage (PPH), one morbidly adherent placenta, one puerperal sepsis not responding to medical management)(Table 4).

Table 4 Distribution Of Indications For Hysterectomy

	Indications Of Hysterectomy	Frequency	Percentage (%)
1.	Symptomatic Fibroid Uterus	46	30.66
2..	Uterocervical Prolapse	32	21.3
3.	Adenomyosis	20	13.3
4.	Malignant Ovarian Tumor	18	12
5.	Endometrial Hyperplasia	12	8.0
6.	Endometrial Carcinoma	08	5.3
7.	Cervical Carcinoma	04	2.6
8.	Postpartum Hemorrhage	04	2.6
9.	Morbidly adherent placenta	01	0.66
10.	Puerperal sepsis	01	0.66
11.	Endometrial Polyp	04	2.6



Most of the hysterectomies were performed electively. The proportion of emergency hysterectomies has remained 5.33% throughout (Table 5)

Table 5 Distribution Of Elective And Emergency Hysterectomies Among The Cases Studied

HYSTERECTOMY	FREQUENCY	PERCENTAGE (%)
Elective	142	94.66
Emergency	08	5.33

Based on the histopathological report 98.6% hysterectomies in our setup were found to be justified. Preoperative diagnosis has shown a good correlation with the postoperative confirmatory histopathology obtained from the specimen. Among total 150 hysterectomies 139 (92.6%) had the same pathology as it was suspected preoperatively. Around 5 cases (3.3%) were found to have an extra pathology that might have required surgical treatment. 4 cases (2.6%) were found to have a pathology which was different from the preoperative diagnosis.Two patients with preoperative normal Pap smears had cervical intraepithelial neoplasia: high grade (CIN II/III) in the hysterectomy specimen. Two cases of prolapse had incidental finding of squamous cell carcinoma in histopathology. Only 2 cases with preoperative diagnosis of AUB had no significant pathology in their hysterectomy specimen.(Table 6)

Table 6 Distribution Of Histopathological Correlation With Hysterectomy

	Diagnosis	Frequency	Percentage (%)
1.	Same Diagnosis	139	92.6
2.	Additional Diagnosis	05	3.3
3.	New Diagnosis	04	2.6
4.	No Abnormality found	02	1.3

DISCUSSION

In our study, around half of the women who underwent hysterectomy belonged to age group of 41 to 50 years. This was followed by 61 to 70 years age. In Taiwan, the peak age for women who underwent hysterectomy was 40 to 44 years.[4] In Tanzania mean age for hysterectomy was 48.8 ± 8.6 years.[5] This difference may be related to the availability and acceptability of nonsurgical treatments for benign gynecological pathologies among different countries.

In our institution, in a span of 6 months we performed 150 hysterectomies. Most of these were abdominal (46.6%) followed by vaginal (34.6%) and laparoscopic (18.6%). Observations of hysterectomies from Canada shows abdominal 78%, vaginal 14%, and laparoscopic 5.9%[6]. A study from UK shows the same trend of abdominal hysterectomies being five- to sixfold more common than vaginal approach.[7]

Around 80% of all hysterectomies in our hospital were for benign gynecological conditions. Most common indication in abdominal approach was symptomatic fibroid uterus (30.66%), while in vaginal it was uterovaginal prolapse (21.3%). Similar observations were noted in the study conducted by Rubina et al[8] where 33.9% of subjects underwent hysterectomy for Fibroid uterus, 14.9% for Utero-vaginal prolapse and 8.2% for ovarian masses.

In our study, 10% of the study subjects underwent hysterectomy below 40 years of age that was comparable to study conducted by Tayyaba et al(16.67%) [9] and 9.8% in study conducted by Saima et al.[10]Most of the hysterectomies were performed electively. The proportion of emergency hysterectomies has remained 5.33% throughout.

Based on the histopathological report 98.6% hysterectomies in our setup were found to be justified. Preoperative diagnosis has shown a good correlation with the postoperative confirmatory histopathology obtained from the specimen.

CONCLUSION -

Hysterectomy is a commonly performed surgery worldwide. Like any surgical procedure, hysterectomy is also associated with complications. Hence the indication should be carefully evaluated. Reporting of all hysterectomies should be made mandatory and audit results should be used for improvement of quality of health care. Newer and less invasive treatment options like endometrial ablation, Levonorgestrel intrauterine system etc should be offered to women with benign pathologies.Vaginal route of hysterectomy should be encouraged as it is economical and morbidity is less. Peripartum hysterectomy though a great obstetric tragedy could be live-saving especially if all conservative measures failed; this should not be the first choice until all conservative options have been exhausted.

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