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Original Research Article

Analysis of indications and route of hysterectomy for benign conditions

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ABSTRACT

Background: Hysterectomy is the most common operation performed by gynecologist, next to caesarean section. The primary focus of this study was to review the indications and surgical technique of hysterectomy.

Methods: This retrospective study was performed in the department of Obstetrics and gynecology, in collaboration with Department of Pathology. All women in the reproductive age group and post-menopausal age who underwent hysterectomy with or without salpingo-oophorectomy were included in this study.

Results: In our study, out of 100 patients, clinical indication was fibroid in 45 (45%) patients, menorrhagia in 15 (15%) patients, adenomyosis in 25 (25%) patients, uterovaginal prolapse in 5 (5%) patients, endometrial polyp in 5 (5%) patients and ovarian tumor in 5 (5%) patients. Histo-pathological diagnosis was leiomyoma in 55 (55%), adenomyosis in 30 (30%), endometrial polyp in 5 (5%), endometrial hyperplasia in 5 (5%) and serous cystadenoma of ovary in 5 (5%). Abdominal hysterectomy was performed in 46 (46%) patients, vaginal hysterectomy in 44 (44.33%) patients while laparoscopic hysterectomy was performed in 5 (6.66%) patients.

Conclusions: In this study, most common indication for hysterectomy was fibroid uterus and it was correlated well with histopathology. Abdominal & vaginal hysterectomies were performed in almost equal number.

Keywords: Abdominal, Fibroid, Hysterectomy, Vaginal

INTRODUCTION

Hysterectomy word is derived from Greek word hystero 'uterus', 'ektome,' 'cutting out of'. It is the surgical removal of uterus. Hysterectomy is the most common surgical procedure performed on women.¹

Hysterectomy is the definitive cure for many indications like dysfunctional uterine bleeding, fibroid, utero-vaginal prolapse, endometriosis, adenomyosis, pelvic inflammatory disease, pelvic pain, gynaecological cancers and obstetric complications.²

Hysterectomy should be performed when the risk of preserving the uterus is more than the risk of its removal.

Improved hospital care, availability of blood transfusion, advanced anesthesia and antibiotics has opened up a new era for safe hysterectomy.³

Total hysterectomy procedures include total abdominal hysterectomy (TAH), total vaginal hysterectomy (TVH), and laparoscopically assisted vaginal hysterectomy (LAVH).⁴

Route of hysterectomy for benign causes is decided by the size and shape of the vagina and uterus, accessibility to the uterus, extent of extra uterine disease, need for concurrent procedures, surgeon training and experience, hospital technology, devices, emergency or elective surgery.⁵

Vaginal and laparoscopic procedures are considered “minimally invasive” surgeries because they do not require a large abdominal incision so they are associated with shortened hospital stay and postoperative recovery time compared with open abdominal hysterectomy. These approaches should be performed, whenever feasible. Vaginal approach is preferred among the minimally invasive approaches. Laparoscopic hysterectomy is a preferable alternative to open abdominal hysterectomy in whom a vaginal hysterectomy is not indicated or feasible. Still, open abdominal hysterectomy remains an important surgical option for some patients.⁵

Although hysterectomy is often the definitive treatment for many pelvic pathologies, nonsurgical alternatives should always be attempted in elective cases.⁶

Although hysterectomy is highly successful in curing the disease, it is associated with the accompanying risks, morbidity, and mortality & leads to sterility in women who are premenopausal. The patient needs hospitalization for several days and may require 6-12 weeks of convalescence. Complications, like excessive bleeding, infection, and injury to adjacent organs, may occur.⁷

Good surgical practice is that visibility and accessibility should be the primary criteria for selection of the route of oophorectomy with hysterectomy. In most patients the ovaries are visible and accessible in vaginal hysterectomy.⁸

Vaginal hysterectomy had already been introduced and performed long back, but with little success among gynecologists. Gynecologists consider abdominal hysterectomy to be a safer and easier procedure.⁹

Appropriate indications for hysterectomy include dysfunctional uterine bleeding, uterine enlargement, uterine prolapse, Leiomyomas, septic abortions, and obstetric catastrophes. Other indications include pelvic inflammatory disease, pelvic endometriosis, ectopic pregnancy and cervical intraepithelial carcinoma (carcinoma in situ), early invasive cervical cancer, endometrial adenocarcinoma and sarcoma, trophoblastic disease, ovarian and fallopian tube neoplasms, and malignant disease of other adjacent organs. Miscellaneous indications for hysterectomy include cervical stenosis with recurring pyometra, chronic pelvic pain, pelvic congestion syndrome, and surgical sterilization.¹⁰

In most women who suffer gynecological disorders, quality of life improves following a hysterectomy. This surgery does not produce any psychological disturbances in otherwise psychologically healthy women.¹¹

Aim and objectives

- To study retrospectively all the hysterectomies performed in this hospital over one year.

- To study the commonest age group undergoing hysterectomies
- To find out the commonest clinical indication for hysterectomies.

METHODS

This retrospective study was performed in the department of Obstetrics and gynecology, in collaboration with Department of Pathology at Patne Hospital and Maternity home. All women in the reproductive age group and post-menopausal age who underwent hysterectomy with or without Salpingo-oophorectomy were included in this study from January 2017 to March 2018. Emergency obstetric hysterectomy and hysterectomy for malignant diseases were excluded.

Inclusion criteria

Patient’s age above 30 years who have undergone hysterectomy for benign conditions

Exclusion criteria

- Patient’s age <30 years who have undergone hysterectomy
- Hysterectomy performed for Obstetrical indication
- Hysterectomy performed for malignant conditions

Following details were noted

Patient’s age, type of hysterectomy (abdominal, vaginal or laparoscopic), clinical indication, histo-pathological diagnosis, clinic pathological correlation

Data was entered in Microsoft excel sheet & analyzed. Statistics was taken out in percentages.

RESULTS

Table 1: Age distribution.

Age distribution	No. of patients	Percentage (%)
31-40 years	15	15
41-50 years	72	72
51-60 years	8	8
>60 years	5	5
Total	100	100

In present study, out of 100 patients, 72 (72%) patients were in the age group of 41-50 years, 15 (15%) were from 31-40 years, 8 (8%) were from 51-60 years while 5 (5%) were above 60 years of age.

Benign conditions of uterus and ovary are most commonly seen in 41-50 years age for which hysterectomy is needed. So majority of our study group was found in this age.

Table 2: Clinical indication for hysterectomy.

Clinical diagnosis	No. of patients	Percentage (%)
Fibroid	45	45
Menorrhagia	15	15
Adenomyosis	25	25
UV Prolapse	5	5
Endometrial Polyp	5	5
Ovarian tumor	5	5

In present study, out of 100 patients, clinical indication was fibroid in 45 (45%) patients, menorrhagia in 15 (15%) patients, adenomyosis in 25 (25%) patients, uterovaginal prolapse in 5 (5%) patients, endometrial polyp in 5 (5%) patients and ovarian tumor in 5 (5%) patients. Fibroid and menorrhagia being estrogen dominant conditions, both were seen predominantly in our study group.

Table 3: Histo-pathological diagnosis.

Histo-pathological diagnosis	No. of patients	Percentage (%)
Leiomyoma	55	55
Adenomyosis	30	30
Endometrial Polyp	5	5
Endometrial hyperplasia	5	5
Serous cystadenoma of ovary	5	5

In present study, histo-pathological diagnosis was leiomyoma in 55 (55%), adenomyosis in 30 (30%), endometrial polyp in 5 (5%), endometrial hyperplasia in 5 (5%) and serous cystadenoma of ovary in 5 (5%). Fibroid and adenomyosis are the two most common pathological diagnosis in our study group. It correlated well clinically.

Table 4: Type of hysterectomy.

Type of hysterectomy	No. of patients	Percentage (%)
Abdominal hysterectomy	46	48
Vaginal hysterectomy	44	45.33
Laparoscopic hysterectomy	10	6.66

In present study, abdominal hysterectomy was performed in 46 (46%) patients, vaginal hysterectomy in 44 (44.33%) patients while laparoscopic hysterectomy was performed in 5 (6.66%) patients. For uterine size more than 12 weeks and with previous 2 or more cesarean section and for ovarian tumors, abdominal hysterectomy was preferred. For less than 12 weeks uterine size, non-descent vaginal hysterectomy was preferred. Laparoscopic hysterectomy was done in less number due to cost factor.

DISCUSSION

In present study, out of 100 patients, 72 (72%) patients were in the age group of 41-50 years, 15 (15%) were from 31-40 years, 8 (8%) were from 51-60 years while 5 (5%) were above 60 years of age.

Mehta et al found that most common age group affected was 41-50 years (52%), second most common 30-40 years (38%) and only 5 patients were >60 years.⁸

In our study, out of 100 patients, clinical indication was fibroid in 45 (45%) patients, menorrhagia in 15 (15%) patients, adenomyosis in 25 (25%) patients, uterovaginal prolapse in 5 (5%) patients, endometrial polyp in 5 (5%) patients and ovarian tumor in 5 (5%) patients. Mehta et al found that most common indication was dysfunctional uterine bleeding (41%) not responded with medical treatment, second most common fibroid (35%) and third most common indication was adenomyosis (20%) of uterus.⁸

Authors found were similar with study by Pathak et al, who found that most common indication for TAH for benign gynaecological condition was fibroid uterus in 49.78%, abnormal uterine bleeding in 11.01%, adenomyosis in 9.25%, Ovarian mass in 8.81%, chronic cervicitis in 8.37% and AUB in 6.60%.¹²

In present study, histo-pathological diagnosis was leiomyoma in 55 (55%), adenomyosis in 30 (30%), endometrial polyp in 5 (5%), endometrial hyperplasia in 5 (5%) and serous cystadenoma of ovary in 5 (5%).

Pathak et al, found similar findings that the most common HPR correlation of uteri of TAH were leiomyoma with chronic cervicitis (49.78%), chronic cervicitis (22.84%), adenomyosis with chronic cervicitis (9.25%).¹²

In present study, abdominal hysterectomy was performed in 46 (46%) patients, vaginal hysterectomy in 44 (44.33%) patients while laparoscopic hysterectomy was performed in 5 (6.66%) patients. Contrast to our study, Tan et al found that TAH was done in 78.4%, LAVH in 13.0% and vaginal hysterectomy in 8.6%.¹³

Khunte et al, found that total abdominal hysterectomy with bilateral salpingo-oophorectomy was the most common procedure done in 59.0%.¹⁴

CONCLUSION

In our study, most common indication for hysterectomy was fibroid uterus and it was correlated well with histopathology. Abdominal and vaginal hysterectomies were performed in almost equal number.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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