International Journal of Clinical Obstetrics and Gynaecology

ISSN (P): 2522-6614
ISSN (E): 2522-6622

www.gynaecologyjournal.com
2019; 3(4): 68-70
Received: 01-05-2019
Accepted: 05-06-2019

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An analysis of elective hysterectomies at a tertiary care center in Karnataka

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DOI: https://doi.org/10.33545/gynae.2019.v3.i4b.291

Abstract
All over the world hysterectomy is the most common surgery performed in women next only to caesarean section. It is the effective treatment option for many gynaecological conditions. It has significant associated complications. Aim and objective of this study was to analyze the indications, route of hysterectomy and associated complications.
Method: A retrospective study was conducted from January 2017 to December 2018 in department of Obstetrics and Gynaecology at SS Institute of Medical sciences and Research Centre, Davangere. A total of 300 hysterectomy patients were studied and parameters like age, parity, indication of hysterectomy and the type of hysterectomy, complications during and after the surgery were collected from the records and analyzed.
Results: A total of 300 hysterectomies were done during the study period. Out of this, 220 (73.6%) were abdominal, 68(22.6%) were vaginal and 12(3.8%) were laparoscopic hysterectomies. Most common indication was symptomatic fibroid uterus (47.3%) and majority of the patients (48.3%) were in the age group of 41 -50 years. Overall complication rate was 14.3 %.
Conclusion: Although hysterectomy is the definitive treatment for many gynaecological conditions, it is not risk free. Hence indication should be carefully evaluated. Patients should be counselled properly before this major surgery.

Keywords: Hysterectomy, complications, fibroid, oophorectomy

Introduction
Hysterectomy is widely used for treating a variety of gynaecological conditions. Hysterectomy remains the second most commonly performed surgical procedure for women of reproductive age, second only to caesarean section. It is a treatment option for many benign and malignant conditions but not free of associated morbidity and mortality [1]. The indications of hysterectomy vary from benign condition to malignancies of genital tract. The 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 cervix (supracervical hysterectomy) or with removal of adnexa (hysterectomy with salphingo-oophorectomy). It can also be a part of staging laparotomy or radical hysterectomy. Hysterectomy can be performed abdominally, vaginally or through abdominal ports with the help of laparoscope [2]. It can be done by abdominal or vaginal route and with the help of laparoscopy. This usually depends on the surgeon's preferences, patient's choice, indication and nature of disease [3].
There is a large variation in the rate of hysterectomy in different parts of the world. In US, approximately 600,000 hysterectomies are performed each year [1]. According to International Data base 2014, in India, 2.16/ 1000 women have had hysterectomy [4]. A study by Desai *et al*, from Gujarat has shown that 13 % of women had undergone hysterectomy at an average age of 37 years, in India [5]. The common indications of hysterectomy are symptomatic fibroid uterus, abnormal uterine bleeding not responding to medical treatment, ovarian tumour, uterovaginal prolapse, malignancies of uterus, cervix and ovary. As any other surgery, hysterectomy is also associated with intraoperative and postoperative complications. Rates of various complications have been reported to be in the range of 0.5 % to 43 % [6]. It is associated with risk of iatrogenic premature menopause, surgical and anaesthetic complications.
Authors present a retrospective study where two year data of all elective hysterectomy cases were reviewed. The cases were analyzed based on age, indications, route of hysterectomy and associated complications.

Method

This is a retrospective study done from January 2017 to December 2018 in the department of Obstetrics and Gynaecology at SS institute of medical sciences and research centre, Davangere. Patients were identified from hospital records. Case records were collected from medical records department.

Inclusion criteria: All cases of abdominal, vaginal and laparoscopic hysterectomies were included.

1. Abdominal hysterectomies included total abdominal hysterectomy (TAH), total abdominal hysterectomy with unilateral salphingo oophorectomy, (TAH+USO), total abdominal hysterectomy with bilateral salphingo oophorectomy, (TAH +BSO) and hysterectomy done as a part of staging laprotomy for malignancies.
2. Vaginal hysterectomy included vaginal hysterectomy with pelvic floor repair (VH+PFR) for uterovaginal prolapse and non descent vaginal hysterectomy (NDVH) for indications other than uterovaginalprolapse.
3. Total laparoscopic hysterectomy (TLH) and laparoscopic assisted vaginal hysterectomy (LAVH).

Exclusion criteria: The study did not include emergency hysterectomy and caesarean hysterectomies.

Case records then were reviewed to collect information of patient characteristics like age, parity, associated medical conditions, indication and type of hysterectomy, intraoperative and postoperative complications. Descriptive statistics based on age, indications, and type of hysterectomy were taken and presented as numbers and percentages. Collected results were then analysed.

Results

A total of 300 hysterectomies were done during the study period of 2017 & 2018 in our institute. Out of this 220 (73.6%) were abdominal, 68 (22.6%) were vaginal and 12 (3.8%) were laparoscopic hysterectomies.

Table 1: Age Distribution (n=300)

Age in years	Frequency	Percentage
31-40	21	7.0%
41-50	145	48.3%
51-60	96	32.0%
61 and above	38	12.6%

As shown in Table 1, majority of patients, i.e., 145 (48.3%) were between 41 and 50 years of age group.

Table 2: Indications of Hysterectomy (n=300)

Indications	Frequency	Percentage
Fibroid uterus	142	47.3%
Abnormal uterine bleeding	49	16.3%
Prolapse	48	16%
Benign ovarian tumour	17	5.6%
Adenomyosis	12	4%
Endometriosis	8	2.6%
Postmenopausal bleeding	5	1.6%
PID	11	3.6%
Severe cervical dysplasia	3	1%
Ca endometrium	2	0.6%
Malignant Ovarian tumour	3	1%

From table 2, it could be seen that most common indication for hysterectomy is fibroid uterus which constituted 142 (47.3%) cases. Abnormal uterine bleeding not responding to medical management (16.3%), uterovaginal prolapse (16%) and benign ovarian tumours (5.6%) were other major indications. Other indications were postmenopausal bleeding, (1.6%), adenomyosis, (4%), endometriosis, (2.6%), pelvic inflammatory disease, (3.6%), carcinoma endometrium, (0.6%), malignant ovarian tumour (1%), and severe cervical dysplasia, (1%).

Table 3 shows patients who had coexisting medical disorder. Majority had anaemia, (24 %), others had diabetes mellitus, (17.3%), hypertension (22.6%), thyroid disorder, (12.3%) and cardiac disease (1.6%). 22% had no pre-existing medical disorder.

Table 3: Coexisting Medical conditions (n=300)

Medical Condition	Frequency	Percentage
Anemia	72	24%
Diabetes mellitus	52	17.3%
Hypertension	68	22.6%
Thyroid disorder	37	12.3%
Cardiac disease	5	1.6%
None	66	22%

Table 4: Routes of hysterectomy

Route	Type	Frequency	Percentage
Abdominal 73.6% (220)	TAH	58	19.3%
	TAH+USO	8	2.6%
	TAH+BSO	154	51.3%
Vaginal 68(22.6%)	NDVH	20	6.6%
	VH+PFR	48	16%
Laparoscopic 12(3.8%)	TLH	4	1.3%
	LAVH	8	2.6%

Majority of hysterectomies were done through abdominal route i.e., 220 cases, (73.6%), vaginal and laparoscopic hysterectomy was done in 68 (22.6%) and 12 (3.8%) cases respectively. (Table 4). Among abdominal hysterectomies, total abdominal hysterectomy with bilateral salpingo oophorectomy was found common, 154 (51.3%) cases. Total abdominal hysterectomy with unilateral salpingo oophorectomy and only total abdominal hysterectomy was done in 8 (2.6%), and 58 (19.3 %) cases respectively. Among 68 vaginal hysterectomies, non descent vaginal hysterectomy was done in 20 (6.6%) and vaginal hysterectomy with pelvic floor repair in 48 (16%) cases. In all cases of vaginal hysterectomies, ovaries were conserved. Total laparoscopic hysterectomy was done in 4 (1.3%) cases, laparoscopic assisted vaginal hysterectomy in 8 (2.6%) cases.

Table 5: Complications of Hysterectomy

		Frequency	Percentage
Intraoperative Complications	Excessive Bleeding >1000ml	11	3.6%
	Bowel Injury	4	1.3%
	Bladder Injury	7	2.3%
	Ureter Injury	2	0.6%
	Anaesthetic complications	3	1.0%
Postoperative Complications	Wound infection/Gaping	11	3.6%
	UTI	5	1.6%
	Burst Abdomen	1	0.3%

Table 5 shows complications of hysterectomies in our study. The rate of Intraoperative complications was 8.8 %. Excessive bleeding was the most common complication observed i.e., in 11 (3.6%) cases. Bowel injury was seen in 4 cases (1.3%). Bowel injury occurred in 3 cases of hysterectomy done for malignancies and 1 case of endometriosis due to dense adhesions. Bladder injury occurred in 3 cases of abdominal and 4 cases of vaginal hysterectomies. 2 cases (0.6%) had ureter injury. All the injuries were identified intraoperatively and repair done with the help of general surgeon and urologist. 3 patients had anaesthetic complications in the form of hypotension and high spinal anaesthesia which was managed by anaesthesiologist.

For patients with Intraoperative complications, consultation was sought by either a general surgeon or a urologist. For 8 cases with premalignant and malignant disease, an oncosurgeon was part of the team.

17 patients (5.6%) had postoperative complications. 11(3.6%) had wound infection and gaping, among which 5 patients needed secondary suturing. 5 patients had urinary tract infection, 1 patient had burst abdomen on 7th postoperative day which was managed with emergency laparotomy. There were no mortalities.

Discussion

Hysterectomy is a commonly done operation worldwide in women. The frequency of hysterectomy is quite high in other parts of the world (10-20%) as compared to India where it is roughly 4-6% though the rate has been increasing in an alarming rate in recent years [7]. The indication to perform this major surgery should always be justified. We conducted a retrospective study on elective hysterectomies during the period of 2017 and 2018 and analyzed with respect to the indication, type and complications of hysterectomy. A total of 300 hysterectomies were done during this study period. Age of the patient studied was between 32-69 yrs. Most common age group was 41-50yrs. Similar age group was observed in other studies conducted by Sivapragasam V *et al*. [8]

In the present study the commonest indication for hysterectomy was symptomatic fibroid uterus in 142 cases (47.3%). Study done by Prasad DR *et al*. showed a 59.4% incidence of fibroid uterus in hysterectomy patients [9]. Next common indication was abnormal uterine bleeding (23.3%). Other indications were prolapse (16%), benign ovarian tumour (5.6%) This is comparable to studies conducted by Sivapragasam V *et al*. [8]

Most of the hysterectomies were abdominal (73.6%) followed by vaginal (22.6%), and laparoscopic (3.8%). This is comparable to the study conducted by Verma D *et al*. [10] and Sharma C *et al*. [11].

Most common hysterectomy done was total abdominal hysterectomy and bilateral salphingoopherectomy. Similar observations were made in the study conducted by Patil H *et al*. [12].

Overall intraoperative complication rate was 8.8 %. 11 cases had excessive bleeding of more than 1000 ml. They were managed medically and perioperative blood transfusion was given. 4 cases (1.3%) had bowel injury which was repaired by general surgeon. 7 patients and 2 patients had bladder and ureter injury respectively. The complication rate is similar to the studies done by Deeksha Pandey *et al*. [2]

In our study 11 (5.6%) patients had wound infection and 5 patients had wound gaping and secondary suturing was done. This is comparable to the studies done by Sivapragasam V *et al*. 5 patients (1.6%) had urinary tract infection and 1(0.3%) patient had burst abdomen.

Conclusion

Hysterectomy is the most frequently performed major surgical procedure in gynaecology. This study concludes that as with any surgical procedure, hysterectomy is also associated with complications during and after surgery. Therefore the indications of the surgery should be evaluated. With the emergence of many conservative approaches to deal with benign gynaecological conditions. It is prudent to discuss the available options with the patient before taking a decision of hysterectomy. The predicted advantage must be carefully weighed against the possible risks of surgery and other treatment alternatives.

References

1. Wu JM, Wechter ME, Geller EJ, Nguyen TV, Visco AG. Hysterectomy rates in the United States, 2003, Obstetrics and Gynecology. 2007; 110(5):1091-1095.
2. 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.
3. Olsson JH, Ellstrom M, Hahlin M. A randomized prospective trial comparing laparoscopic and abdominal hysterectomy. Br J of Obstet Gynaecol. 1996; 103:345-50.
4. Bala R, Devi Pratima K, Singh CM. Trend of hysterectomy. A retrospective analysis in RIMS, Imphal. Int J Gynaecol Obstet India. 2013; 29(1):4-7.
5. Desai S, Sinha T, Mahal A. Prevalence of hysterectomy among rural and urban women with and without health insurance in Gujarat, India. Reprod Health Matters. 2011; 19(37):42-5.
6. Lee N, Dicker R, Rubin G, Ory H. Confirmation of the preoperative diagnoses for hysterectomy. American Journal of Obstetrics and Gynecology. 1984; 150(3):283-287.
7. Singh A, Arora AK. Why hysterectomy rate are lower in India. Indian J Commu med. 2008; 33:197-7.
8. Sivapragasam V, Rengaswamy CK, Patil AB. An audit of hysterectomies: indications, complications, clinic pathological analysis of hysterectomy specimens in a tertiary care centre. Int J Reprod Contracept Obstect Gynaecol. 2018; 7:689-94.
9. Prasad DR, Nair NV. Retrospective analysis of elective hysterectomy cases in a tertiary care centre. Int J Reprod Contracept Obstet Gynecol. 2018; 7:3714-7.
10. Verma D, Singh P, Kulshreshta R. Analysis of histopathological examination of the hysterectomy specimens in a north Indian teaching institute.
11. Sharma C, Sharma M, Raina R, Soni A, Chander B, Verma S. Gynaecological diseases in rural India: A clinical appraisal of indications and route of surgery along with histopathology correlations of 922 women undergoing major gynaecological surgery. J Mid-life Health. 2014; 5(2):55.
12. Patil HA, Patil A, Mahajan SV. Histopathological findings in uterus and cervix of hysterectomy specimens. MVP J Med Sci. 2015; 2(1):26-9.