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Original Research Article

An audit of hysterectomies at a tertiary care teaching hospital

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ABSTRACT

Background: Hysterectomy is the second most common major surgical procedure performed on women all over the world next to caesarean section. Emergence of effective medical and conservative treatment for benign conditions in the uterus is now posing a question mark regarding the justification of hysterectomy. It has been realized that uterus should not be considered as a vestigial organ after child bearing. Apart from few population based studies, there is no national level survey done in India which give us the prevalence and indications for hysterectomy in India.

Methods: Present study involved all patients who underwent Hysterectomy at Guru Gobind Singh Medical College Faridkot in a span of one year from 1st January 2017 to 31st December 2017.

Results: In the year 2017, 250 hysterectomies were done, most common age group was 40-49 years (36.8%) and most common indication was fibroid uterus (40%) followed by ca ovary (19.6%), Abdominal route was most commonly preferred.

Conclusions: Hysterectomy was justified in 98% women in our series based on post operative histopathological report of the specimen. However we hypothesize that 20 cases of DUB, 5 cases of CIN and 10 cases of endometriosis and 3 cases of chronic cervicitis could have been managed conservatively. 10 cases of obstetric hysterectomies could have been avoided by disseminating awareness among peripheral centres for early referral and by attempting a rather conservative approach of uterine artery embolizations. As the incidence of carcinoma is increasing in the Malwa region of Punjab people prefer hysterectomies instead of conservative treatment. Hysterectomy is used commonly to improve the quality of life and sometime it is life saving procedure. However it should be justified before taking a direct decision of sacrificing uterus.

Keywords: Fibroid, Hysterectomy, Prolapse

INTRODUCTION

Hysterectomy is the second most common major surgical procedure performed on women all over the world next to caesarean section.¹ Indications of hysterectomy vary from benign condition to malignancies of genital tract. Since early twentieth century, it is considered definite treatment of various pelvic pathologies like leiomyoma, dysfunctional uterine bleeding (DUB) chronic pelvic pain, endometriosis, adenomyosis, prolapse, and malignancies.² Rates of hysterectomy vary with geographic area, patient expectations and training and practice patterns of the local gynaecological surgeons. A

study conducted in a northern state of India (Haryana) states that the incidence of Hysterectomy was 7% among married women above 15 years of age.³ Another study from a western state (Gujarat) pointed out that 7-8% of rural women and 5% of urban women had already undergone hysterectomy at an average age of 37 years.⁴ Indeed by age of 60 years approximately one third of women in US have had a hysterectomy.⁵

Indications of hysterectomy vary from benign condition to malignancies of genital tract. It can be supra cervical or hysterectomy with salpino-oophorectomy or a part of staging laparotomy or radical hysterectomy. It can be

performed abdominally, vaginally or through abdominal ports with help of a laparoscope. Approach depends on surgeon preference, indication for surgery, nature of disease and patient characteristics.⁶

As any other surgery, it is also associated with intraoperative and post operative complications. Rate of various complications with hysterectomy have been reported in the range from 0.5% to 43%.⁷

Emergence of effective medical and conservative treatment for benign conditions in the uterus is now posing a question mark regarding the justification of hysterectomy. It has been realized that uterus should not be considered as a vestigial organ after child bearing. Apart from few population based studies, there is no national level survey done in India which give us the prevalence and indications for hysterectomy in India. There have been several news reports and case studies done indicated that women were being subjected to hysterectomy in an unscrupulous way for the health conditions which doesn't warrant surgical treatment. As there are no hysterectomy audits published from India recently, present study may provide a basis for a future audit of our gynaecologic practice and for comparison of our practice with others.

METHODS

Present study involved all patients who underwent hysterectomy at Guru Gobind Singh Medical College and Hospital Faridkot in a span of one year from 1st January 2017 to 31st December 2017. Data were collected from patient's folders, theatre registry and admission discharge registry. There was no exclusion criteria case records were reviewed to collect patient characteristics, indication for surgery, approach taken and complication faced. All elective as well as emergency hysterectomies were analysed. Abdominal hysterectomies included supra cervical hysterectomy, total hysterectomy (TAH) and hysterectomy with unilateral (TAH with USO) or bilateral salpingo-oophorectomy (TAH with BSO). It also included hysterectomy done as a part of staging laparotomy for ovarian tumor and radical hysterectomy done for early stage cervical carcinoma. Vaginal hysterectomy with pelvic floor repair (VH with PFR) for uterovaginal prolapse laproscopic hysterectomy group had both Laproscopic assisted vaginal hysterectomy (LAVH) and total laproscopic hysterectomy. Preoperative indications were compared with pathological reports after surgery. Hysterectomy was considered justified if the pathological report verified the indication for surgery or showed a significant alternative pathology.

RESULTS

In the year 2017 in our hospital of all Gynaecological admission, 250 patients ended up with one or other type of hysterectomy. Though 262 patients were planned for hysterectomy but in 12 cases during staging laparotomy for malignant ovarian tumor hysterectomy was

abandoned because of frozen pelvic and only biopsies were taken in order to start neoadjuvant chemotherapy.

Of the 250 cases analysed, the most common age group undergoing hysterectomy appeared to be 40-49 years (36.8%) followed by age group 50-59 years (28.8%). Hysterectomy below 30 years and above 70 year was rare (Table 1).

Table 1: Age profile (n=250).

Age	No.	%
>30	6	2.4
30-39	56	22.4
40-49	92	36.8
50-59	72	28.8
60-69	20	8
>70	4	1.6

Most common indication for hysterectomy was fibroid uterus (40%) followed by carcinoma ovary (19.6%) and utero vaginal prolapse (10.4%) other indications being DUB (8%) abnormally invasive placenta (AIP) (4%). Benign tubo ovarian mass (4%) cervical intra epithelial neoplasia(CIN) (2%) carcinoma endometrium (4) and carcinoma cervix (2.8%) endometriosis (4%) chronic cervicitis (1.2%) adenomyosis (1.6%) (Table 2).

Table 2: Indications (n=250).

Indication	No.	%
Fibroid	100	40
Ca ovaries	49	19.36
Prolapse	26	10.4
DUB	20	8
AIP	6	2.4
Tubo Ovarian Mass (benign)	10	4
Ca endometrium	10	4
Ca cervix	7	2.8
CIN	5	2
Endometriosis	10	4
Chronic cervicitis	3	1.2
Adenomyosis	4	1.6

Table 3: Types of hysterectomies performed (n=250).

Type	No.	%
TAH	33	13.2
TAH with USO	60	24
TAH with BSO	125	46.4
Supracervical Hysterectomy	3	1.2
Wertheim	7	2.8
Laproscopic Hysterectomy	5	2
VH with PFR	26	10.4

Most common surgical approach approach was abdominal (87.6%) followed by vaginal (10.4%) and laproscopy (2%) (Table 3).

Most of the hysterectomies were done as elective surgical procedure except in 6 cases of abnormally invasive placenta where emergency peripartum hysterectomies were done to save the life of patient.

Table 4: Complications.

Fever	100
Bowel Injury	4
Bladder Injury	4
Wound Infection	10
Burst Abdomen	6
Post Operative Intestinal Obstruction	2
Need for ICU	4
Need Blood Transfusion	15
Mortality	2

Most common post-operative problem appeared to be fever and pain which was settled down without any complication. 15 patients needed blood transfusion specially in those with peri partum hysterectomy. Bowel and bladder injury was noted in 8 cases but no patient landed on any type of fistula. 10 post-operative patients had wound infection & 6 required resuturing due to burst abdomen, two patients had post-operative intestinal obstruction but both were successfully managed conservatively. Two patients one with AIP and other with advance stage CA ovary died after surgery (Table 4).

DISCUSSION

In our study, the mean age at which hysterectomy done was 42 ± 7 years with 36.8% cases under went hysterectomy in age group 40-49 years. Similar findings were seen in Pranita et al where the mean age was found to be 40 ± 6 years and the most common age group appeared to be 40-49 years.⁸ In study by Pandey D et al, mean age of women undergoing hysterectomy was 48 ± 9.9 years.⁹

In the present study majority had abdominal hysterectomy (87.6%) as compared to VH (10.4%) and laproscopic route (2%) which is in concurrence with study by Deeksha et al where most common surgical approach was abdominal (74.7%) followed by Vaginal (17.8%) and laproscopic (6.6%). A decade long data from UK showed the same trend of abdominal hysterectomies being five to six fold more common than the vaginal approach.¹⁰

Most common indication in abdominal approach was fibroid uterus (40%) followed by CA ovary while in VH it was utero vaginal prolapse (10.4%). A study evaluating the appropriateness of recommendation for hysterectomy in USA also found fibroid (60%) to be the most common indication followed by prolapse (11%).¹¹ In the data from Hong Kong fibroid constituted even higher proportion of indication for abdominal (73.7%) and genital prolapse was the most common indication for vaginal hysterectomy.¹² In the recent study from Africa too, uterine fibroid was the most common reason of

performing hysterectomy (23%). However it was followed by DUB (14.9%).¹³ In a study from Canada however, the common indication was DUB (26.4%) followed by fibroid uterus (16%).¹⁴ In our study this hospital caters almost all cancer patient of Malwa region so carcinoma ovary endometrium and cervix were also an important indication for hysterectomy.

Most common complication faced was fever, infection and burst abdomen which is in accordance with Pandey et al.⁹

CONCLUSION

Hysterectomies remain a matter of diverse debate owing to its physical, emotional, economic, sexual and medical significance to women. There is a concern among the medical and health policy community that hysterectomy is used too frequently as a first line treatment. It is well known fact that in order to achieve the most favourable outcome, appropriateness of surgery must be carefully evaluated along with all available options in context of the disease process like medical management endometrial ablation, UAE, and Levonorgesterol intrauterine system (LNG-IUS).

According to Magon et al hysterectomy is a surgery which has been used and misused, under used and abused at different times in Gynaecology.¹⁵ Hysterectomy is used commonly to improve the quality of life. However at sometimes it is life saving procedure. As any surgical procedure is associated with a risk of complication, the indication should be carefully evaluated. With the emergence of many conservative approaches to deal with benign Gynaecological condition, it is prudent to discuss available options with patient before taking a direct decision of sacrificing uterus.

Hysterectomy was justified in 98% women in our series based on post operative histopathological report of the specimen. However we hypothesize that 20 cases of DUB, 5 cases of CIN and 10 cases of endometriosis and 3 cases of chronic cervicitis could have been managed conservatively. 10 cases of obstetric hysterectomies could have been avoided by disseminating awareness among peripheral centres for early referral and by attempting a rather conservative approach of uterine artery embolizations. As the incidence of carcinoma is increasing in the Malwa region of Punjab people prefer hysterectomies instead of conservative treatment.

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REFERENCES

1. Wu JM, Wechter ME, Geller EJ, Nguyen TV, Visco AG. Hysterectomy rates in the United States, 2003. *Obstet Gynecol.* 2007;110(5):1091-5.

2. Nausheen F, Iqbal J, Bhatti FA, Khan AT, Sheikh S. Hysterectomy: the patient's perspective. *Ann Gynecol.* 2004;10:339-41.
3. Singh A, Arora AK. Why hysterectomy rate are lower in India? *Indian J Comm Med.* 2008;33(3):196-7.
4. Desai S, Sinha T, Mahal A. Prevalence of hysterectomy among rural and urban women with and without health insurance in Gujarat, India. *Reprod Health Mat.* 2011;19(37):42-51.
5. Babalola E, Bharucha A, Schleck C, Gebhart J, Zinsmeister A, Melton J. Decreasing utilization of hysterectomy: a population-based study in Olmsted county, Minnesota, 1965-2002. *Am J Obstet Gynecol.* 2007;196(3):214.
6. Radha K, Devi PG, Chandrasekharan PA, Swathi P, Radha G, Keerthana. Epidemiology of Hysterectomy - A Cross Sectional Study among Pilgrims of Tirumala. *IOSR J Dent Med Sci.* 2015;14(7):1-5.
7. Lee N, Dicker R, Rubin G, Ory H. Confirmation of the preoperative diagnoses for hysterectomy. *Am J Obstet Gynecol.* 1984;150(3):283-7.
8. Medhi P, Dowerah S, Borgohain D. A Histopathological Audit of Hysterectomy: Experience at a Tertiary Care Teaching Hospital. *International Journal of Contemporary Medical Research.* 2016;3(4):1226-8.
9. 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;2:279273.
10. Mukhopadhyaya N, Manyonda I. The hysterectomy story in the United Kingdom. *J Mid-Life Health.* 2013;4(1):40-1.
11. Broder MS, Kanouse DE, Mittman BS, Bernstein SJ. The appropriateness of recommendations for hysterectomy. *Obstet Gynecol.* 2000; 95(2):199-205.
12. Leung PL, Tsang SW, Yuen PM. An audit on hysterectomy for benign diseases in public hospitals in Hong Kong. *Hong Kong Med J.* 2007;13(3):187-93.
13. Butt JL, Jeffery ST, Van Der Spuy ZM. An audit of indications and complications associated with elective hysterectomy at a public service hospital in South Africa. *Int J Gynecol Obstet.* 2012;116(2):112-6.
14. Toma A, Hopman WM, Gorwill RH. Hysterectomy at a Canadian tertiary care facility: results of a one year retrospective review. *BMC Women's Health.* 2004;4:10.
15. Magon N, Divakar H, Kriplani A. Editorial: the use, misuse, and abuse of hysterectomy. *J Mid-Life Health.* 2013;4(1).

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