ORIGINAL ARTICLE

The Inevitable Need of Hysterectomies in Gynaecological Procedures

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ABSTRACT

Aim: To determine indications of hysterectomies in our hospital besides different routes of procedures and their histo-pathologies.

Methods: Present study was conducted in Department of Gynaecology and Obstetrics, Ghurki Trust Teaching Hospital, Lahore, Pakistan in 18 months (January 2016 to July 2017). A total number of hundred hysterectomies for different indications were analysed.

Results: Main indications under study were heavy menstrual bleeding (Menorrhagia) 42%, Abnormal Uterine bleeding (19%) and mostly fibroids 22% presented as abdominal and pelvic masses 15 & 7 respectively. The woman undergoing surgery were mostly para 4 & 5 (53%) in 41 to 50 years ages (59%).Abdominal hysterectomy being the most favoured procedure (75%) followed by Vaginal (17%) and Laparoscopic hysterectomy only 2%. The histological findings were uterine fibroids, Dysfunctional Uterine Bleeding (DUB) and Adenomyosis 41, 15 & 13% accordingly, whereas malignant disease was detected in 4 patients.

Conclusion: In developing countries, Hysterectomy still remains the widely accepted treatment modality. The leading indication is menstrual disturbance though the commonest pathology is leiomyoma.

Keywords: Abdominal hysterectomy, Vaginal hysterectomy, Laparoscopic hysterectomy, DUB, Fibroid

INTRODUCTION

Hysterectomy is one of the most commonly performed gynaecological surgical procedures throughout the world[1].In USA, Hysterectomy is the second most frequently performed surgical procedure (after Caesarean Section) in women of reproductive age. According to the Center for Disease Control and Prevention (CDC) 11.7% of women between the ages of 40-44 had a hysterectomy from 2006-2010[2].Approximately 600,000 hysterectomies are performed annually in the United States[3]. Each year, there are about 100,000 hysterectomies performed in United Kingdomand by age 60 every 5thwoman undergoes a hysterectomy[4]. For failed medical treatment, hysterectomy being the least accessible option leading to high rate of hysterectomies in Pakistan. However, the procedure is associated with high morbidity and mortality[5].

Uterine fibroid is the most distinctive indication for hysterectomy (40%) world over. In United Kingdom Dysfunctional Uterine Bleeding (DUB) being the second common indication accounts for at least one-third hysterectomies. Whereas countries like Finland and USA, England and Denmark Endometriosis resulted in 10%, 5% and 3% hysterectomies, making it as third most frequent indication[6, 7].

Currently in developing countries, Total Abdominal Hysterectomies (TAH) is the most preferred procedure. Different surgical approaches to hysterectomy are available nowadays e.g. vaginal, abdominal and Laparoscopic etc. Today, the limitations of conventional laparoscopy have led to the development of robotic surgery, which has evolved over the past decade from simple adjustable arms to more sophisticated four-armed machines[8].

Vaginal and laparoscopic hysterectomies are associated with fewer complications. However, high cost, less expertise and non-availability of facilities in our hospital makes abdominal hysterectomy the only acceptable procedure. Among different treatment options available for fibroid uterus (uterine artery embolization, monthly administration of GnRH agonists) and DUB (Microwave endometrial ablation, second generation endometrial ablation) but hysterectomy remain treatment of choice[9].

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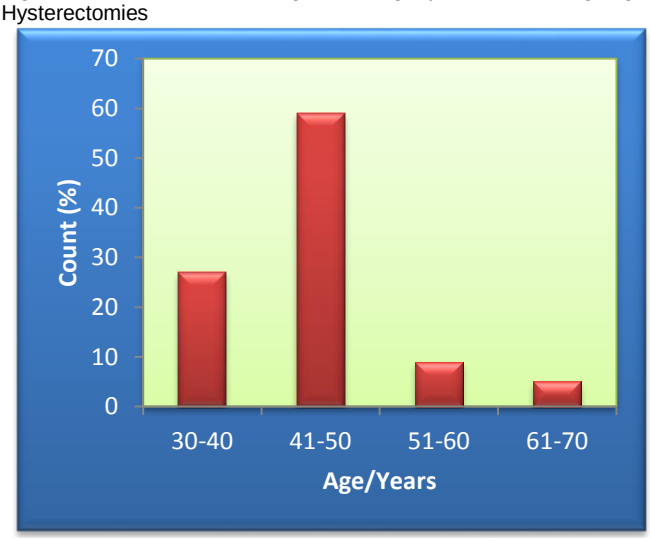
MATERIALS AND METHODS

Data was collected retrospectively from January 2016 to July 2017 for women undergoing hysterectomies at department of Obstetrics and Gynaecology, Ghurki Trust Teaching Hospital, Lahore Pakistan. Patients with malignant disease and uterine prolapse undergone hysterectomy were also included whereas obstetric complications ending in hysterectomies were excluded from this study. Patient's age, Parity, Clinical indications and routes of surgery along with histopathology reports were analysed by using SPSS V 20.

RESULTS

One hundred hysterectomies were performed for different indications over a period of 18 months. The woman undergoing surgery were mostly para 4 &5 (53%) in 41 to 50 years age group (59.0%). Mean age of the patient was 45 and average parity was 5 as indicated in Figures 1 & 2. The commonest indication was heavy menstrual bleeding. Among them 42% patients presented with Menorrhagia while 19% presented with Abnormal Uterine bleeding. Second most common indication was abdominal and pelvic masses 22% (15 & 7% respectively) mainly because of fibroids (Fig. 3). Abdominal hysterectomy being most favoured procedure (75%) followed by vaginal (17%) while laparoscopic hysterectomy LAVH done in 2% only as presented in Figure 4. Uterine fibroids were the most common histological findings (49%), followed by DUB (20%), endometrial hyperplasia, adenomyosis (15%), endometriosis (5%) & benign ovarian tumours. Chronic cervicitis was also commonly seen in histo-pathological findings. In addition to primary pathology ovarian cysts of variable sizes were observed in 20 patients. Malignant disease was found in 4 patients presented with abnormal uterine bleeding (Fig 5).

Fig. 1: Distribution of age among patients undergoing Hysterectomies



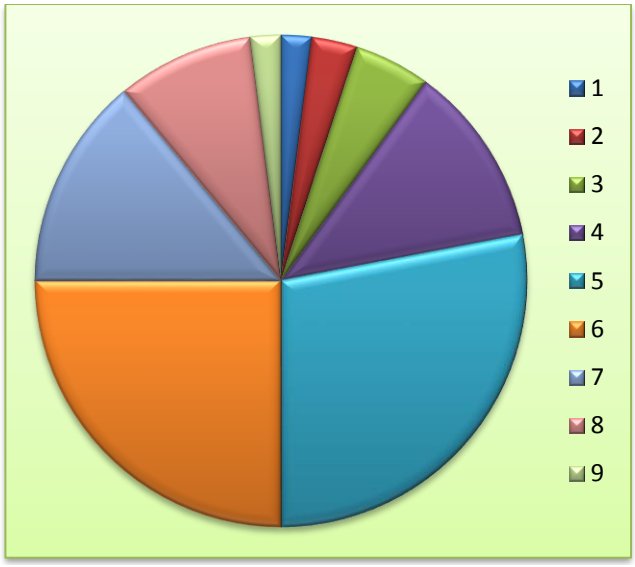


Fig. 2: Distribution of parity among patients undergoing Hysterectomies

Fig. 3: Indications and clinical presentations of the patients undergoing Hysterectomies

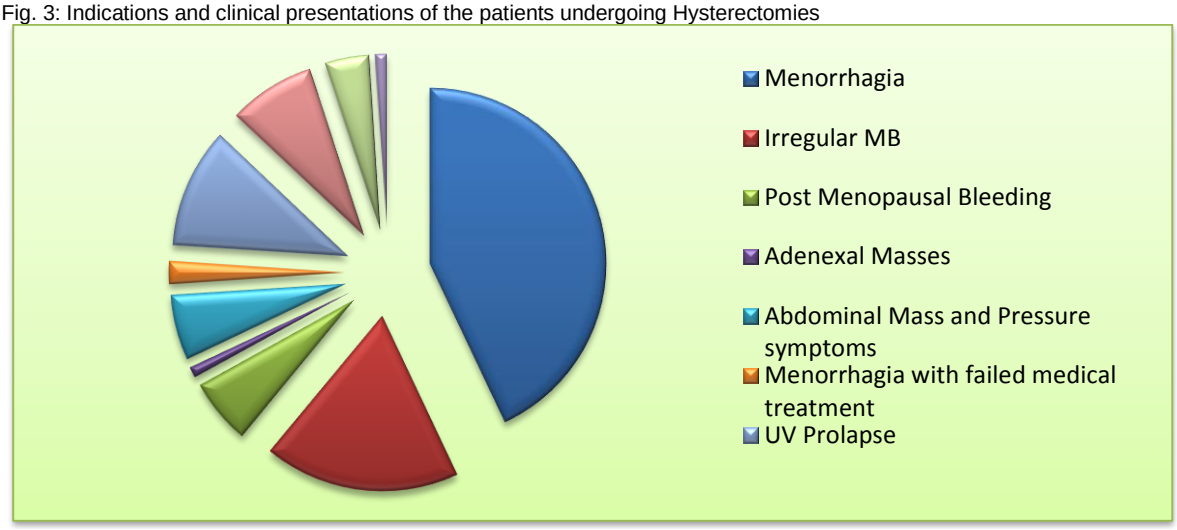


Fig. 4: Overview of Hysterectomy procedures

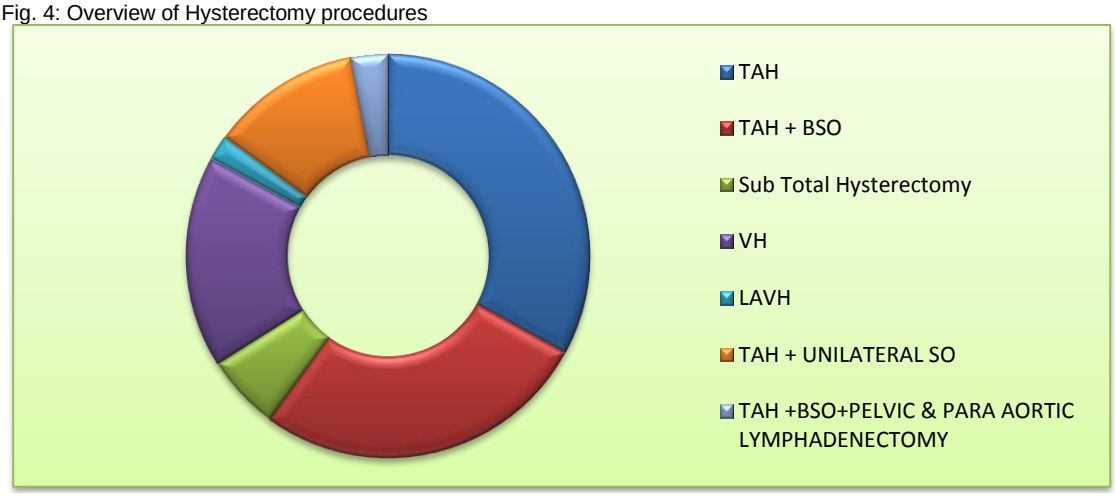
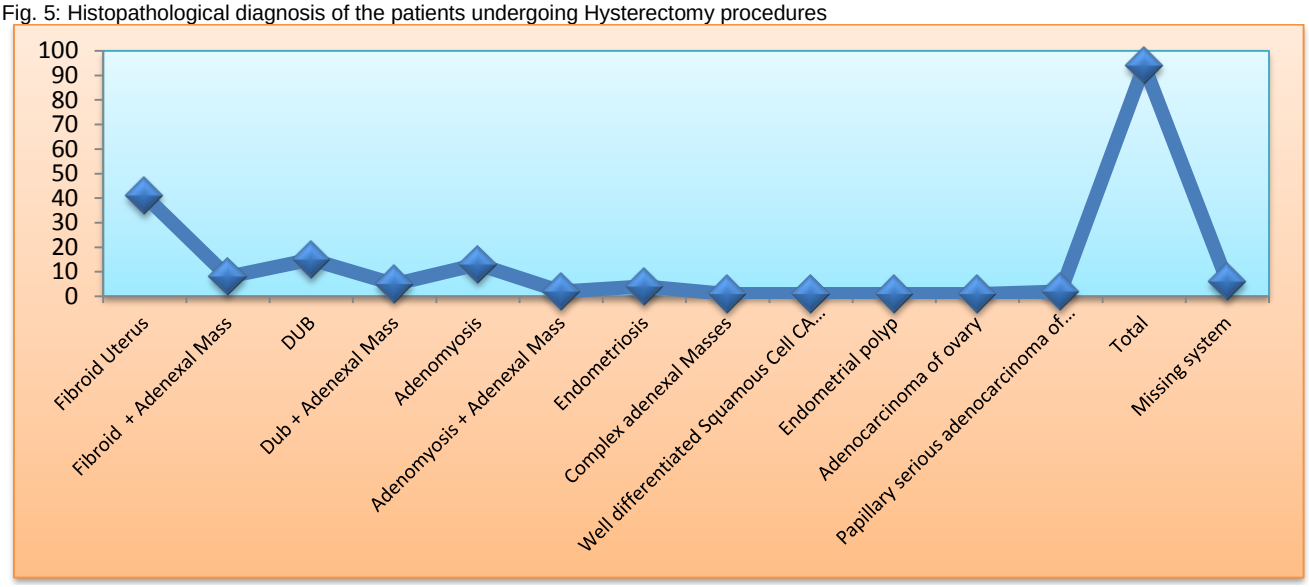


Fig. 5: Histopathological diagnosis of the patients undergoing Hysterectomy procedures



DISCUSSION

Hysterectomy being the most common surgical procedures dates back to ancient times.Vaginal hysterectomy probably was performed for the first time by The mison of Athens 20 years before the Christ birth and performed and described definitely by Soranus of Ephesus in 120 AD. Abdominal hysterectomy was performed for the first time by Charles Clay in Manchester, England in 1834. Unfortunately it was not successful surgery and patient died in immediate post op period. The first successful abdominal hysterectomy was performed in 1853, by Walter Burnham from Lowell. With the introduction of anaesthesia, antibiotics and antisepsis, blood transfusion, and intravenous therapy hysterectomy has become safer now. Over the last 100 years, with the advent of minimal invasive surgery (MIS) laparoscopic assisted vaginal hysterectomy, even use of Robotics has become modern more sophisticated options[10].

As compared to developed countries, Pakistani women especially in our set up in Ghurki Trust Teaching Hospital, usually come late for medical careso conservative treatment cannot be offered and even sometimes not acceptable to them. In most cases, Hysterectomy is the best option for their gynaecological problem. The rate of abdominal hysterectomy in our study is 4.0 /1000. In comparison with this in other cities of Pakistan, it was 4.4 /1000 in 2005 while6.1 /1000 in year 2003[11].

A significant fall was observed in the rate of abdominal hysterectomy for benign diseases from 4 to 3.4 /1000 in (1994 to 2003) due to advent of minimal invasive procedures i.e. laparoscopic procedures, endometrial ablation, umbilical artery embolization and progesterone based intrauterine devices [12]. Although this trend has been observed in west but these options are not accepted by our patients of low socioeconomic setup. Other than absence of offices for conservative management and the monetary limit of the patient likewise directs our administration.

As indicated by my examination, abdominal route was utilized for the greater part of the cases in around 80 % cases. Vaginal route was held for instances of genital organ prolapse 17% and LAVH just in two cases. In the UK and USA around 60-80 % hysterectomies are abdominal. Abdominal route is related with longer hospitalization with complications and higher expense yet because of training styles, preparing propensities and exhibitions of gynaecologist. The vast majority of the gynecologist still keep on using abdominal approach for hysterectomies that could be performed vaginally. Abdominal route is the decision for more genuine pathologies while vaginal course is fitting for less genuine diseases[6].

Peak age incidence of most of the pathologies was 41-50 years (59 %) and peak parity was 4-6. In, benign diseases were indications for surgery in 96% of the cases. In USA, 91.7% hysterectomies were performed for benign indications[13]. In our study main indication for hysterectomy was menstrual disturbance 67 %, heavy menstrual bleeding in 42% and abnormal uterine bleeding 19%. Similar results were seen in a study from Karachi[11, 14].Similar incidences of menstrual problem were shown in two other studies (45% and 38%) done in Pakistan[15].

Leiomyoma presented as abdominal mass accounting for second most prominent indication of hysterectomy in 22.2% of cases. While, it was the leading indication for hysterectomy as shown in many studies[16].

The most common pathology seen on histopathology was leiomyoma (49%). However different incidences were shown in different studies. According to one study done in Abbah city of Saudi Arab, its incidence was 25.8%, in USA (78.0%), Nigeria (48.0%) and 8% in Sweden[4, 17]indicating geographical and racial influences on its prevalence.

During present study dysfunctional uterine bleeding (DUB) was seen in 20.0 % of cases responsible for menstrual disturbances leading to hysterectomy while Adenomyosis and Endometriosis were seen on the lower side of spectrum (15&5% respectively). Similar results were shown in different studies done in UK and in Denmark indicating 20 % DUB. Where as in Finland endometriosis being third most frequent indication for hysterectomy accounts 10%[4]. Adenomyosis prevalence in Indo Pak was

seen around 20.0 to 26.0 % as shown in different studies[14, 18].It was observed that with the increase parity the incidence of adenomyosis also increases because of the basal endometrial deep implantation in the myometrium. Therefore, hysterectomy was inevitable in these cases due to refractory response to endometrial resection and other medical treatments[14].

CONCLUSIONS

In developing countries, Hysterectomy still remains the widely accepted treatment modality. The leading indication is menstrual disturbance though the commonest pathology is leiomyoma.

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REFERENCES

1. Hadi RA, Khan B, Anwar I. An Audit of Abdominal Hysterectomy, J, Med, Sci 2014; 22(4):152-4.
2. Centers for Disease Control and Prevention Website, Key Statistics from the National Survey of Family Growth, Atlanta, GA: Centers for Disease Control and Prevention 2015. Retrieved on June 23, 2015 from: http://www.cdc.gov/nchs/nsfg/key_statistics/h.htm#hysterectomy.
3. Whiteman M, Hillis S, Jamieson D et al.Inpatient hysterectomy surveillance in the United States 2000-2004, Am J ObstetGynecol 2008; 198(1): 34.
4. Garry R. The future of hysterectomy. BJOG, 2005; 1;112(2):133-9.
5. Majeed T, Adnan R, Mahmood Z. Audit of Gynaecological Hysterectomies. age. 2011;30(4):2-67.
6. Gimbel H, Settnes A, Tabor A. Hysterectomy on benign indications in Denmark 1988–1998. ActaObstetGynecolScand 2001;80: 267–272.DOI: 10.1034/j.1600-0412.2001.080003267.
7. Vuorma S, Teperi J, Hurskainen R, Keskimaki I, Kujansuu E. Hysterectomy trends in Finland 1987–1995. ActaObstetGynecolScand 1998;77: 770–776.DOI: 10.1034/j.1600-0412.1998.770713.
8. Sparić R1, Hudelist G, Berisava M, Gudović A, Buzadzić S. Hysterectomy throughout history.ActaChirIugosl. 2011;58(4):9-14.
9. Yasmin T, Chaudhry JN. Audit of Gynaecological hystrectomies. PJMHS. 2011; 15: (3). 561-64.
10. Sutton CJ. The History of Hysterectomy. In Hysterectomy 2018 (pp. 3-28). Springer, Cham.
11. Nausheen F, Iqbal J, Bhatti FA, Khan AT, Sheikh S. Hysterectomy: The patient's perspective. Annals Gynecol 2004; 10:339-41.
12. Jacobson GF, Shaber RE, Armstrong MA, Yi Hung Y. Hysterectomy rates for benign indications. ObstetGynecol 2006;107:1278- 83.
13. Kovac SR. Hysterectomy outcomes in patients with similar indications. ObstetGynecol 2000;95:787-93.
14. A Clinicopathological Review of Elective Abdominal Hysterectomy. Journal of Surgery Pakistan (International) 13 (1) January - March 2008 Shakira Parveen.
15. Bashir R, Parveen Z, Sultana R, Khan B. A two year audit of complications of hysterectomy at Ayub Teaching Hospital Abbottabad. J Ayub Med Coll Abbottabad 2005;17:47-9.
16. Gupta S, Manyonda I. Hysterectomy for benign gyaecological diseases. Current ObstetGynaecol 2006;16:147- 53.
17. Baird DD, Dunson DB, Hill MC, CousinsD, Schectman JM. High cumulative incidence of uterine leiomyoma in black and white women: Ultrasound evidence. Am J ObstetGynecol 2003;188:100-7
18. Ali A. Incidence of adenomyosis in hysterectomies Pak J Med Res 2005;44:38-40.