



Description of hysterectomy cases in Al-Salam Teaching Hospital

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Abstract

Objective: To study the reasons behind hysterectomy and most common approach.

Method: Retrospective study done in department of Obstetrics and Gynecology at Al-Salam Teaching Hospital, Mosul, from 1st Jan 2012 to 1st Jan 2013 for women who undergone hysterectomy for different reasons.

Results: 105 patients did hysterectomy, their age range from 15 to 75 years old, more than half 56.2% from 40-49 years. Most common indication is DUB 34.3%, fibroid 27.6%, uterine carcinoma 13.3%, emergency peripartum hysterectomy 9.5% weather PPH or morbid adherent placenta, ovarian tumor and uterine prolapse 4.8% for each one, non-specific cause 3.8% and mental retardation 1.9%. 95.2% did abdominal approach and 4.8% vaginal approach.

Conclusion: Bleeding is the most important cause weather gynecological or obstetric cause and try to find a ways to reduce this.

Keywords: hysterectomy, retrospective

Introduction

Hysterectomy is the most commonly performed major gynecologic operation ^[1, 2, 3].

The term hysterectomy originates from two Greek words (hysteron) which means uterus and (ectomy) which means resection removal from the human body ^[4]. Hysterectomy is the treatment of choice for certain gynecologic conditions that predicted advantages must be carefully weighed against the possible risks of the surgery and other treatment alternatives in the properly selected patients, the result from the surgery should be an improvement in the quality of life ^[5]. Approximately 600.000 hysterectomies are performed each year in United States. After cesarean section, hysterectomy is the 2nd most frequently performed major surgical procedure in women of reproductive age in united state ^[6, 7]. Hysterectomy is either total or subtotal, with or without the adnexae and depended on the way performed: abdominal, vaginal and laproscopic assisted vaginal hysterectomy ^[4]. Historically the 1st vaginal hysterectomy was performed by Conard Langenback in 1813, and the 1st subtotal abdominal hysterectomy by Walter Burnham in 1853, the 1st elective abdominal gysterectomy by Clay and Koebele in 1863 and the 1st laproscopic hysterectomy by Harry Reich in 1982 ^[8].

Patients and Methods

A retrospective study was done in department of obstetrics and gynecology at Al-Salam Teaching Hospital, Mosul from 1st Jan 2012 to 1st Jan 2013, study was done for women who had hysterectomies wheather an emergency as obstetric indication or elective as most of gynecologic indication. Information such as clinical history, physical examination findings, indication for hysterectomy, route wheather abdominal or vaginal, total or subtotal, preserve ovaries or remove them, intraoperative complications like bladder ot ureteric or intestinal injuries were recorded, need for blood transfusion pre or intra or post operatively was observed, hospital stay and post-operative complications were extracted from case sheets.

Results

During the study period. One hundred five patients were undergone hysterectomy. Patients age varies from 15 years to 75 years old with arithmetic mean 46 years, age distribution was shown in table (1) which reveals that 2.8% of patients had hysterectomy their age varies from 15 to 29 years old, 8.6% from 30 to 39 years, 56.2% from 40 to 49 years, 23.8% from 50 to 59 years and 8.6 equal and more than 60 years old.

Table 1: ge distribution

GE (ye r)	No.	%
15-29	3	2.8
30-39	9	8.6
40-49	59	56.2
50-59	25	23.8
≥60	9	8.6

Regarding parity of women who had hysterectomy, it ranges from nulliparous to 12 with arithmetic mean 5.2 as shown in table (2).

Table 2: Prity distribution

Parity	No. cases	%
0	12	11.4
1-4	21	20
5-8	62	59
9-12	10	9.5

Most common indication for hysterectomy was bleeding in 46 cases 43.8% wheather it is obstetric related cause for 10 cases 9.5% or gynecologic cause in 36 cases 34.2%. Emergency peripartum hysterectomy as lifesaving obstetric causes done for 10 cases 9.5%, 4 cases 3.8% were done for uncontrollable post-partum hemorrhage and 6 cases 5.7% morbid adherent placenta was the cause of bleeding. The 2nd cause was leiomyoma in 29 cases 27.6%, malignancy in 14 cases 13.3%, ovarian tumor 5 cases 4.8%, uterine prolapse 5 cases 4.8%, mental retardation as a cause for hysterectomy in 2 cases 1.9% as shown in table (3).

Table 3: Indications of Hysterectomy

Indications	No. of cases	%
bnorm l uterine bleeding	46	43.8
1-Obstetric c use EPH	(10)	(9.5)
2-Gynecologic c use DUB	(36)	(34.3)
Uterine fibroid	29	27.6
M lign ncy	14	13.3
Benign ov ri n lesion	5	4.8
Uterine prol pse	5	4.8
Combine non-specific c use	4	3.8
Mentalaretardation	2	1.9
Tot l	105	100%

Hospital stay for abdominal hysterectomy in average 4 days, while it was 2 days in average for vaginal hysterectomy. Regarding blood transfusion whether pre, intra or post operatively, 45 cases 42.9% need blood transfusion and all of them were abdominal hysterectomy, none with vaginal hysterectomy. Abdominal hysterectomy was done for 100 cases 95.2% while vaginal hysterectomy done for 5 cases 4.8% as shown in table (4).

Table 4: Routes of hysterectomy

Indication	No. of cases	%
bdomin l	100	95.2
V gin l	5	5.7

Subtotal hysterectomy done for 6 cases only 5.7% Unilateral or bilateral salpingo-oophorectomy done for 47 cases 44.9%. The decision to remove the ovaries and tubes should be based on assessment of risk and not on the route of hysterectomy. So, in our study unilateral or bilateral salpingo-oophorectomy done for 49.5%, those late forties, menopausal or with ovarian pathology or with a family risk to develop ovarian cancer later on. So premenopausal women who are at average risk to ovarian cancer (approximately life time risk of 1.4%) should be considered for ovarian preservation when they are undergone hysterectomy for benign conditions where the ovaries and fallopian tubes are healthy, this is also recommended by the American Collage of Obstetrician and Gynecologist and the society of gynecologic oncologists. Subtotal hysterectomy done for patients with big multiple uterine fibroid or dense adhesions that preclude total hysterectomy, in our study subtotal hysterectomy done for 5.7% and associated with a reduction in the operative time. In the past, the most common indications for emergency peripartum hysterectomy were uterine atony and uterine rupture. Most recent reports list placenta accrete as the most those with emergency peripartum hysterectomy need up to 8 units of blood while those with elective gynecological cause of hysterectomy need up to 3 units of blood in average. Regarding complications of hysterectomy, renal tract injury as bladder injury was reported in 2 cases 1.9% both of them were morbid adherent placenta, none had ureteric injury. Paralytic ileus reported in 2 cases 1.9%, wound infection 2 cases 1.9% and pulmonary embolism in one case 0.95%. In our study, no mortality was reported.

Discussion

The present study done for description of hysterectomy cases done in Al-Salam Teaching Hospital. The mean age for women who undergone hysterectomy is 46 years, the same result approved by Novak^[1], the average age was 48.5 years

by Toma *et al* study. 56.2% of patients, their age between 40 to 49 years, this agree with other studies^[6, 10, 11]. While younger patients 15 to 39 years (reproductive age group) were 12 patients, 10 of them need emergency peri partum hysterectomy, other 2 patients were mentally retarded and hysterectomy done for social concern. Patients parity in this study ranges from nulliparous to 12 with mean 5.2 while Toma *et al* study done in Canada, the mean parity was 2.1, this difference is related to social and cultural conditions, in our study 11.4% were nulliparous while Shanthini *et al* 2.2% were nulliparous^[9, 11]. Abdominal hysterectomy done for 95.2% and vaginal hysterectomy for 4.8% in this study, these results are close to Shanthini *et al* as 90.7% were abdominal and 9.3% were vaginal^[11]. In USA, from 2000 to 2004, approximately 68% of all hysterectomy were performed abdominally and 32% performed vaginally. One third of vaginal hysterectomy were performed with the assistance of laparoscope (LAVH), the route chosen should be based on the individual patients, but vaginal access is preferred^[1]. Vaginal hysterectomy and laparoscopic hysterectomy where feasible, are associated with low surgical risks and can be performed with a short hospital stay and safely accomplished as an outpatient procedure^[12]. In Norway, the percentage of abdominal hysterectomy remained high (50-70%). Until total laparoscopic hysterectomy was introduced in 2010^[13]. In our study, emergency peripartum hysterectomy done for 10 patients 9.5%, 6 of them 60% were with morbid adherent placenta and 4 patients 40% of EPH with uncontrollable post-partum hemorrhage and uterine rupture not reported in the study period. This agree with Shanthini *et al* while Obiechina *et al* showed that most common indication for EPH was placenta previa 48%, uterine rupture 35% followed by morbid adherent placenta 10% and uterine atony 7%^[16], this related to increase in the numbers of caesarean deliveries observed over past two decades^[15, 16]. Incidence of EPH in this study is 1.6 per 1000 deliveries while it is 0.33 Netherland, 0.2 Norway, 0.3 Ireland, 0.63 Saudia Arabia and 1.2 to 2.7 per 1000 deliveries in USA. A differences in the incidence of EPH is noted following vaginal deliveries and caesarean section. As incidence of EPH after vaginal deliveries varies from 0.1 to 0.3/1000 deliveries and is rather constant between European and US studies, the incidence of EPH following cesarean section varies widely between 0.17 and 8.7/1000 deliveries, this is attributed to the proportion of women with a previous cesarean section with the concomitant risk of placenta previa and accrete^[17], so reducing rate of cesarean section and proper management of uterine atony can lead to reduction in EPH. The most common indications for hysterectomy was abnormal uterine bleeding for gynecological causes as dysfunctional uterine bleeding (DUB), it accounts for 34.2% in our study, this agree with Toma *et al* study which reports 37% and Pity *et al* study 50.4% while Aurangzeb *et al* study reports higher results up to 88%^[8]. Although hysterectomy is considered the definitive treatment for abnormal uterine bleeding regardless the etiology, less invasive options are the increasingly available including medical therapy, levonorgestrel intrauterine system (LNG-IUS) and endometrial ablation and hysterectomy should be reserved for patients who do not responds to or cannot tolerate medical therapy^[1]. The second most common indications for hysterectomy is uterine fibroid (leiomyoma), it is reported in 27.7% in our study, agree with Pity *et al* study who reports 24.6% of hysterectomies done for uterine fibroid^[10]. The indications for hysterectomy in a

completely asymptomatic patients are few and include rapidly enlarging fibroids or enlarging fibroids after menopause when concerns of leiomyosarcoma are raised (5). Alternatives to hysterectomy include uterine artery embolization which was first described in 1995, transvaginal temporary uterine artery occlusion and MRI guided focused ultrasound (MRGFUS) are minimal interventional methods to treat fibroids in certain individuals^[4]. Third most common indications was suspected malignancy in 13.3% which was later on approved by histopathology, while Aurangzeb *et al* in Pakistan, malignancy account for only 0.4%^[8]. Benign ovarian lesion was found in 4.8% in our study while Pity *et al* report 13%^[10]. Other indication was uterine prolapse in 4.8% and all of them treated with vaginal hysterectomy as there is no successful alternatives to advanced uterine prolapse other than vaginal hysterectomy and pelvic floor repair^[5]. Regarding complications occurred in the study group, bleeding was the most common indication which necessitate blood transfusion in 42.9% of EPH who need up to 8 units of blood with an average 4 units of blood while gynecological related causes of hysterectomies need less blood transfusion with 2 units in average. Renal tract injury is most common complications of pelvic surgery, its incidence is reported to be from 0.5-1.5% and bladder injury is more common than ureteric injury which agree our study^[18]. So bladder injury reported in 1.9%, suturing and drainage for up to 14 days, all these cases had morbid adherent placenta, none of patients had ureteric injury this agree with Saha *et al.* and Shanthini *et al.* which report bladder injury in 2% and 2.3% respectively^[3, 11]. None had visceral or bowel injury in this study. While paralytic ileus and wound infection happened in 1.9% for each, conservative treatment and follow up till discharged in good health, serious complication as pulmonary embolism occur in 0.95%, thanks God no mortality report in study period.

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