MEDICAL CHANNEL

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AUDIT OF COMPLICATION OF HYSTERECTOMY AT SINDH GOVERNMENT QATAR HOSPITAL KARACHI

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ABSTRACT

Background: Hysterectomy is one of the most common & frequent major gynaecological (surgical) procedures performed in Gynaecology.
Despite the advantages of the vaginal & laparoscopic approaches, most hysterectomies carried out involving laparotomy.
Our objective was to determine the operative and postoperative complications of this procedure with an aim to improve management at our unit.
Methods: This descriptive prospective study was conducted in the Department of Gynaecology, Sindh Government Qatar Hospital, Karachi form January 2009 to December 2009.
Indications, complications, mortalityand morbidity associated with hysterectomy were assessed.
Results: Total number of hysterectomies performed in one year at our unit was 160.
Major Indications for hysterectomies were dysfunctional uterine bleeding (42%), fibroid uterus, (19.3%) & Endometriosis/ Adenomyosis (16.2%) followed by prolapse uterus (23%).
Complications developed in 14% out of these. The frequency of complications was related with indication for hysterectomy, age, parity and history of associated serious illness.
It was found that frequency of complications in fibroid uterus was higher (1.2%) than that for Dysfunctional uterine bleeding (DUB) (1.0%). There was no operative death.
Conclusion: We have a fairly high frequency of morbidity associated with hysterectomy. In order to reduce these proper selection, pre-operative preparation and less invasive alternative treatment for the commonest indications of hysterectomy {that is fibroids and Dysfunctional uterine bleeding (DUB)} for example various methods of endometrial ablation or resections can be employed. Intra-operative & post-operative blood transfusion requirements are higher with vaginal than abdominal hysterectomies.

Keywords: Hysterectomy, Complications, morbidity, dysfunctional uterine bleeding, Blood transfusion.

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INTRODUCTION

Hysterectomy is currently the most common major elective procedure in the world, with more than 70,000 Hysterectomies performed annually in England alone[15]and even higher proportions in USA.

There have been few population based studies in Pakistan providing estimates of Hysterectomy prevalence, although there has always been concern about the high rates of this procedure. Approximately 20% of women have had the procedure by the age of 60 years, about 40% of these for Dysfunctional uterine bleeding (DUB) with no gynecological pathology.[11]

The aim of this study was to find out the frequency of Hysterectomies and complications associated with it, and to recommend plan to reduce complications.

As any other surgery, hysterectomy is also associated with intraoperative and postoperative complications. Rates of various complications with hysterectomy have been reported in the range from 0.5% to 43% [16].

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. Studies have proved that following hysterectomy women suffer with bothersome psychosexual functions [17] and increased incidence of vaginal prolapse due to deficiency of supporting ligaments. It has also been hypothesized that ovarian endocrinal function weans of more rapidly after removal of their target organ. Mean age of onset of menopause in those who underwent hysterectomy is 3.7 years earlier than average, even when the ovaries are preserved [18].

Aim of this audit was to analyze indications, complications, and correlation of preoperative diagnosis with final histopathology report of all hysterectomies, performed in a premier teaching hospital. As there are no hysterectomy audits published from India recently, present study may provide a basis for a future audit of our gynecologic practice and for comparison of our practice with others.

METHODOLOGY

This descriptive prospective study was carried out at Gynaecology/Obstetric unit of Sindh Government Qatar HospitalKarachi form January 2009 to December 2009.

Patients received in outdoor Department with Fibroids, DUB, endometriosis, Adenomyosis, Prolapse and chronic Pelvic Inflammatory Disease (PID) were admitted in the indoor department for Hysterectomywere included in the study. The patients with gynaecological malignancies like carcinoma of endometrium, carcinoma of cervix & ovarian carcinoma were excluded from the study.

Preoperative information include relevant past medical history and information regarding previous gynaecological management.

Baseline investigations included Blood Group with Rh factor, Hemoglobin estimation,urine routine examination, blood sugar levels, X-ray chest, ECG and an abdomino-pelvic ultrasound scan were done.

Majority of the patients were found to be anemic, correction of anemia with blood transfusions and hematinic prior to surgery was done.

Any other associated disease eg infections, diabetes mellitus, hypertension etc. were treated, in collaboration with medical team.

Operative information included the details of operative procedure, operative findings and complications. Post-operative complications were documented and patients were discharged between 5th-7th post-operativedays, after receiving the histopathology report. Outpatient follow-ups were done fortnightly for six weeks.

We investigated the operative and post-operative complications and its relation with indication for hysterectomyage, parity and general physical health prior to surgery, use of prophylactic preoperative and postoperative antibiotics & methods of hysterectomy, expertise and grade of surgeon. Complications encountered intra-operatively were haemorrhage due to damage to the surrounding structures.

Antibiotic coverage was given to all patients (100%) prophylactic single pre-operative dose of antibiotic half an hour prior to surgery definitely decreased the incidence of infections.

Post-operative complications were categorized into early (during the stay in hospital) and late (after discharge). Early post-operative complications included anemia, wound infections, hematoma formation, Urinary tract infection (UTI), Chest infection, Deep Vein Thrombosis(DVT), pulmonary embolism, secondary haemorrhage, myocardial infarction, bladder damage, fistula formation and death late complications included, secondary haemorrhage, withdrawal symptoms in patients undergoing oophorectomy included hot flushes, anxiety, depression and mood changes.

RESULT

A total of 160 hysterectomies were carried out in a period of one yearat Gynaecology/Obstetric unit of Sindh Government Qatar Hospital, Orangi Town, Karachi. Out of these 124 were total abdominal hysterectomies while the rest 36 were vaginal hysterectomies.

The results of this study are summarized in tables & graphs. The rate of complications was found to be higher in vaginal than abdominal procedure.

Visceral damage included damage to intestines and bladder injury which were detected during surgery and repaired mostly in cases with endometriosis pelvic inflammatory disease or previous pelvic surgery in which dense adhesion were present. Highest frequency of post-operative complications was infections either related to wound, urinary

TABLE-1

DISTRIBUTION OF PATIENTS ACCORDING TO AGE GROUPS (N= 160)

Age Group	Cases
30-39	32
40-49	93
50-59	20
>60	15

TABLE-2

INDICATIONS FOR HYSTERECTOMY N = 160

Indications for Hysterectomy	Cases (%)
DUB	67= 41.87%
Fibroid uterus	31=19.37%
Endometriosis/ Adenomyosis	26=16.25%
Prolapse36=22.5%	

TABLE – 3

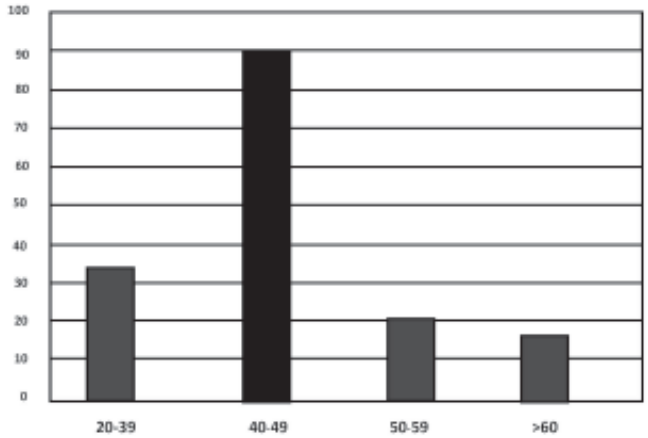
COMPLICATION OF HYSTERECTOMY N = 160

Complications for Hysterectomy	Cases
Wound Infection	09
UTI / Chest Infection	08
Hematoma07	
Deep Venous Thrombosis (DVT)	01
Sec. Hemorrhage	03
Bladder Injury	03
Intestinal Damage	02
Vesico-Vaginal Fistula	01

tract infection or chest infection.DVT was found to be more common in anemic obese or reluctant to ambulate patients. Frequency of withdrawal symptoms in cases with removal of ovaries was almost 80% and mostly needed psychological support and hormone replacement therapy in carefully selected cases.

Mortality: There were no deaths following hysterectomies during this 01 year period, i.e. mortality rate is zero.

DISTRIBUTION OF PATIENTS ACCORDING TO AGE GROUPS (N=160)



AGE

DISCUSSION

This study indicates that the highest frequency of hysterectomy was for DUB followed by fibroid uterus. Operative complications were seen more commonly in cases of fibroid uterus as compared to DUB.

To reduce the number of hysterectomy and associated complications with less invasive alternative treatment methods can be tried.

For fibroid uterus thousands of women worldwide have undergone the procedure of uterine artery embolization and have found the result to be worthy of comment[9].

Monthly administration of GnRH agonist significantly reduces the size of uterine leiomyoma[13].

GnRH agonist therapy induces the reduction of gonadal estrogen growth factors and blood flow, which are required for the growth of fibroid.

There are now an increasing number of non-surgical alternatives to hysterectomy, particularly for abnormal uterine bleeding and since this is the indication for hysterectomy in at least one third of cases recent treatment advances could bring the hysterectomy rates down still further[14].

Microwave endometrial ablation is an established treatment for DUB[10]. Several second generation endometrial ablation treatments have been performed under local anesthetic including thermal balloon, monopolar diathermy and hydro-thermal ablation techniques.

Gynecologists are also again beginning to favor subtotal hysterectomy with its less complication rate and less risk of impaired sexual function[2], particularly when combined with the removal of transformation zone which minimizes the risk of cervical cancer.

The higher incidence of infection rates is caused by contamination from vagina[6].

To lessen the spill of vaginal bacteria into operative site a

vaginal douche and thorough bath with hexachlorophene or povidine-iodine, the evening before surgery and thorough cleaning of vagina in the operation room is recommended[7].

CONCLUSION

We have a fairly high frequency of morbidity associated with hysterectomy. In order to reduce these proper selection, pre-operative preparation and less invasive alternative treatment for the commonest indications of hysterectomy {that is fibroids and Dysfunctional uterine bleeding (DUB)} for example various methods of endometrial ablation or resections can be employed.

Intra-operative & post-operative blood transfusion requirements are higher with vaginal than abdominal hysterectomies.

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