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THE OUTCOME OF SUBTOTAL ABDOMINAL HYSTERECTOMY

1. **FOUZIA KASHIF**
FCPS
2. **SHAISTA TABUSUM ABRO**
FCPS
3. **AFSHAN BHATTI**
FCPS
4. **RAFIA BALOCH.**
FCPS

1. ***Assistant Professor***
Department of Gyne/Obstt:
CHANDKA MEDICAL COLLEGE, LARKANA.
2. ***Assistant Professor***
Department of Gyne/Obstt:
CHANDKA MEDICAL COLLEGE, LARKAN,
3. ***Assistant Professor***
Department of Gyne/Obstt:
CHANDKA MEDICAL COLLEGE, LARKANA.
4. ***Professor and Chairman***
Department of Gyne/Obstt:
CHANDKA MEDICAL COLLEGE, LARKANA.

CORRESPONDENCE
DR. FOUZIA KASHIF
Assistant Professor
BUNGLOW NO. 24/3, STAFF COLONY, CHANDKA MEDICAL COLLEGE, LARKANA.
Cell: 0333-7533093
E-mail: Kashiftebani1@yahoo.com

ABSTRACT

OBJECTIVE: *To determine the effect of subtotal abdominal hysterectomy in conditions of intraoperative and postoperative complications in women with benign uterine conditions.*
DESIGN: *Descriptive study.*
PLACE AND DURATION OF STUDY: *The sheikh zyed women hospital Chandka medical college, Shaheed Mohtarma Benazir Bhutto medical University Larkana from March, 2008 to February, 2009.*
PATIENTS AND METHODS: *The study included 60 women, who underwent subtotal abdominal hysterectomy due to benign uterine diseases. Patients over 60 years of age, suspected cancer of cervix and uterine prolapse were excluded. Inclusion criteria were dysfunctional uterine bleeding, menorrhagia and repeated pelvic infection refractory to medical treatment, fibroid uterus and ovarian cyst with adenomyosis of uterus. Detailed history was taken and examination done. Routine investigations including ultrasound were carried out. Subtotal hysterectomy was performed by clamp-cut and ligate manner.*
RESULTS: *The mean age of patients undergoing hysterectomy was 44 years and parity between 4 - 10. Most common complaint was excessive menstrual loss. Fibroid was found in 15 (25%) cases, dysfuntional uterine bleeding in 18(30%), pelvic pain and menorrhagia in7(11.6%), ovarian cyst with adenomyosis in 12(20%). It seems to be that pelvic infections refractory to medical treatment in 8(13.4%) cases. Intraoperatively 5 (8.3%) had difficulty to separate the bladder and there was no injury to adjacent vicera during the procedure .Early complications like temperature was noted in 5(8.3%) and late complications like cyclical menstrual bleeding in 1 (1.6%) and vaginal discharge in 3(5%) patients. All patients were followed-for 3 and 6 monthly up to 1 year. There was no mortality connected with the procedure. The urinary, sexual and bowel functions were found to be unaffected during that period. The histopathology of specimen exposed fibroid and 2nd most was adenomyosis to be the commonest pathology.*
CONCLUSION: *The subtotal abdominal hysterectomy concluded less operative time, rapid recovery, some number of short-term complications while infrequently caused cyclical bleeding and vaginal discharge.*

KEYWORDS: Menorrhagia. Dysfunctional uterine bleeding. Adenomyosis, Subtotal abdominal hysterectomy, Complications.

INTRODUCTION

Until the late 1930s, the standard type of abdominal hysterectomy was subtotal, leaving the cervix behind to decrease the risk of peritonitis with its attendant high mortality. With the discovery of antibiotics, careful attention to antisepsis, and other medical and surgical advances, many gynecologists performed total abdominal hysterectomy in the United States and the United Kingdom , although the subtotal approach is more simple technique require less times and still remained popular, in Scandinavian countries. With the advent of laparoscopic hysterectomy, many surgeons, wanting a simpler approach and for a variety of other reasons, have returned to performance of subtotal hysterectomy.[1]The recompense and negative aspect of total and sub-total hysterectomy still a topic of debate. Due to fewer side effects Subtotal hysterectomy can be beneficial in preventing severe complications while total hysterectomy is technically difficult and more complicated procedure. Besides, conservation of the uterine cervix may decrease vaginal attrition in genital prolapse repair when synthetic meshes are used. [2]The type of procedure does not appear to determine the doggedness or development of problems related to sexual activity (frequency of intercourse, sexual desire, and achievement of orgasm). There are no obvious advantages to subtotal hysterectomy compared with total hysterectomy with

manner to bowel or bladder function. Hysterectomy is rottenly performed operation in gynaecology. [3]Total abdominal hysterectomy involves the removal of both the body of uterus and cervix, whereas subtotal abdominal hysterectomy means conservation of cervix. Hysterectomy disturbed the local nerve supply and also can be mess the anatomical relations of pelvic organs. [4]During the procedure the main branches of plexus passing underneath the uterine arteries may be damaged during division of cardinal ligaments, the vesical innervation which go through the bladder base may be damaged during blunt dissection of bladder from uterus and cervix. Subtotal abdominal hysterectomy is technically easier as there is lower incidence of vesicourethral dysfunction, also the uterosacral and cardinal ligaments remain intact, thus preserving pelvic floor support. [5]There is less perioperative blood loss, less postoperative infections and haematoma and no complications like vault granulation. The lifetime contemporary risk of carcinoma of cervix with 3 normal papanicolaou smears is 0.05%. Injury to the urinary tract is less frequent (0.5 -3%) after subtotal abdominal hysterectomy. [6]The rationale of this study is to conclude the outcome of subtotal abdominal hysterectomy in conditions of intraoperative and postoperative complications in women with benign uterine conditions.

TABLE: I.
Cases of undergoing surgery
n=60

Clinical variables	No.	%
Fibroid uterus	15	25
Dysfunctioning uterine bleeding	18	30
Pelvic pain and menorrhgia	07	11.6
Ovarian cyst	12	20
Recurrent PID	08	13.3

TABLE:II.
Histopathoogical findings.
N=60

Uterus	NO.	%
Leiomyoma	24	40
Adenomyosis	19	31.6
Benign endrometrial polyp	08	13.3
Cystic endrometrial hyperplasia	09	15.1
Ovaries		
Normal	37	61.6
Benign cyst	23	38.4

Table:III
Complications of surgery
no=60

Complications	NO	%
Temperature	5	8.3
Wound infection	0	0
Urinary infection	0	0
Wound hematoma	0	0
Cyclical menstrual bleeding	1	1.6
Vaginal discharge	3	5

PATIENTS AND METHODS

The study was conducted over a period of one year from March, 2008 to February 2009 in Gynaecology and Obstetric Department of sheikh zyed women hospital Chandka medical college, Shaheed Mohtarma Benazir Bhutto University Larkana. All the selected patients were admitted from the consultant's OPD. Patient's age, parity, weight, menstrual history and presenting complaints were noted. All of them gave history of treatment in various clinics / hospitals. The inclusion criteria were menorrhagia and chronic pelvic pain, pelvic infections refractory to medical treatment, dysfunctional uterine bleeding, fibroid uterus and ovarian cyst with adenomyosis of uterus. Exclusion criteria were age more than 60 years, suspected cancer of cervix, uterine prolapse and symptomatic urinary incontinence. A complete general, physical and pelvic examination was performed. Investigations including ultrasound were performed and findings were noted. Diagnostic curettage was done and malignancy excluded. All the patients were counseled about the disease and the surgical procedure (hysterectomy) they had to undergo and also the technical difficulty the surgeon could face during surgery. All patients were admitted couple of days prior to surgery especially for correction of anemia. Patients with haemoglobin of under 10 gm% were either transfused blood or were given intramuscular iron therapy. Blood for the day of surgery was arranged for all patients as a routine, although it was transfused only when it was indicated depending upon blood loss during surgery. Anaesthesia fitness was obtained in all patients. 60 women under went sub total hysterectomy due to technical difficulties during surgery. The operation for subtotal abdominal hysterectomy was identical for total abdominal hysterectomy until ligation of uterine arteries. The bladder was tried to be freed as much as possible from the cervix but due to technical difficulties and adhesions it was not possible to separate it as in total hysterectomy. The uterus was removed above the level of internal os to avoid bother some cyclic menstrual bleeding from remnant of endometrium. One healthy ovary was left in perimenopausal women, while bilateral salpingooophorectomy was performed in postmenopausal women. All specimens after surgery were sent for histopathology. Duration of operation was calculated from the time from incision of the skin to the closure, while the blood loss was assessed by counting swabs and measuring the volume of blood collected by suction. All patients received single dose of intravenous prophylactic antibiotic Intravenous line was maintained with 18-gauge cannula and a

16-gauge foley's catheter was used to catheterize the bladder before surgery. Analgesia administered was same in all patients and foley's catheter was removed after 24 hours. Haemoglobin level was repeated on third postoperative day. The average hospital stay was 4 - 6 days. All the patients were followed 3 and 6 monthly up to one year . The analysis was performed by using SPSS version-10. Frequency and percentages were computed for presentation of all categorical variables like (pain, menstrual flow, mass in abdomen).

RESULTS:

A total of 205 hysterectomies were done during the study period and only 60 patients underwent sub total abdominal hysterectomy due to various benign conditions. The mean ± SD of age was 44±5.07 years, mean ± SD of parity 6.03± 1.89 and mean ± SD of weight 62.3 ± 6.4 kgs . The most common complaint was excessive menstrual loss unresponsive to medical treatment. Fibroid uterus was found in 15 (25%) cases, dysfunctional uterine bleeding in 18 (30%), pelvic pain and menorrhagia in 7 (11.6%), ovarian cyst with adenomyosis in 12 (20%) and repeated pelvic infections refractory to medical treatment in 8(13.3%) cases.(table1) The duration of operation was 30 - 50 minutes and blood loss was lesser than 250 mls in 47(78.3%) patients. Only 8(13.3%) of the patients were transfused blood during surgery. Hospital stay was 4-6 days and haemoglobin level on 3rd post operative day mean was 10.5 gm/ dl. Bilateral salpingo-oophorectomy was done in 25 cases while right sided ovary was removed in 19 and left sided ovary was removed in 11 cases. Pre-operatively the haemoglobin level was raised by blood transfusion. There was no injury to the adjacent viscera in either of the cases. Early complications like temperature was noted in 5(8.3%) cases while wound infection, urine infection and wound haematoma were not seen in any of the patients. Late complications like cyclical menstrual bleeding was seen in 1 (1.6%) and vaginal discharge in 3 (5%) patients. The commonest pathology found on histopathological examination of the specimen was leiomyoma, followed by adenomyosis as shown in Table 2. The results of 3 - 6 monthly follow-up about the sexual activity, bowel habits and urinary complaints were satisfactory till the last follow-up and all of them are still under follow-up.

DISCUSSION:

The increasing trend towards subtotal abdominal hysterectomy reflects a more conservative surgical approach in gynaecological surgery.[4,5] It is clear from this study that operation method and proper selection of cases is very important to obtain favourable results. The indication for hysterectomy for majority of cases in this study was excessive menstrual bleeding, alone or in combination with pelvic pain. The pathology found in majority of cases was leiomyoma and adenomyosis. There was no mortality associated with hysterectomy in this study. The reported incidence of urinary tract injury during gynaecological procedures range from 0.5%- 3%[7] in simple hysterectomy for benign diseases and upto 1.6% following laparoscopic cases, which is the most frequent cause of litigation in gynaecological practice. Haemorrhage in such cases range from 0.2- 2% which is a serious complication.[8,10] Such injuries are not seen in subtotal hysterectomy as it requires less mobilization of bladder and minimizes the risk of injury to the ureters. It is also associated with lower incidence of wound infection, haematoma and symptomatic vault granulation.[9] The life time risk of cervical carcinoma following subtotal abdominal hysterectomy[10] may require a second operation to avoid such risk. In this series only those women were selected whose 3 consecutive smears were negative before the surgery. The modern legal theory and practice consider doctors and patients to be partners. Medical practitioners performing surgical procedures are obliged to obtain informed consent. They are also required to inform their patients about indications, course of the operation and also complications.[11]

The detrimental effect on sexual function like superficial dyspareunia and vaginal shortening was seen in total abdominal hysterectomy. These were not noted in subtotal hysterectomy group, rather increased sexual activity was noted and also symptoms of disease were cured. Vander *et ai.* and Vanbeek *et ai*[12,5] reported that 10% of women who had laparoscopic supracervical hysterectomy suffered from vaginal discharge and 25% of cases continued to menstruate. This study showed cyclical bleeding in 2% and vaginal discharge in 4% of cases, while when we look up other side of subtotal hysterectomy resulted in more rapid recovery, few side effects and less short-term complications, but rarely caused cyclical bleeding or cervical prolapse.

The genitourinary functions were not disturbed at all in subtotal hysterectomy rather urinary complaints like frequency of micturation pre-operatively in case of myomas of uterus was reduced. There was higher incidence of abscess and wound infection following total hysterectomy[13] which is often attributed to contamination of abdominal cavity by vaginal flora during the procedure. It is not encountered following subtotal hysterectomy. With total hysterectomy much of the time, cost and morbidity are associated with removal of cervix and also the chances of vault prolapse are there with an incidence around 3.6/1000. [14,6]The operation time, morbidity and blood loss is significantly less in subtotal hysterectomy.[15]

Leiomyoma appears to be the commonest pathology in our study in contrast to other studies done in Karachi, Pakistan[16,17], where the commonest pathology was adenomyosis. The study by Jones *et al.* states that supracervical hysterectomy by mini-laparotomy can be adopted by gynaecologists as short stay surgery, which is a cost effective alternative for a variety of gynaecological conditions.[18] While on the other hand subtotal hysterectomy is not popular in U.K. just because either the gynaecologists do not consider the bladder/bowel/sexual effects important, or that the risk of cancer of cervical stump and/or sheer habit have an over-riding impact on practice.[19] The concern that cancer might develop in the cervical stump is no longer considered a justification for routine use of total abdominal hysterectomy. Screening reduces the incidence of invasive cancer[20] and the risk of cervical cancer after subtotal abdominal hysterectomy is less than 1% as shown by Thakar *et al*[21] Similar results were seen in the study conducted by Parikh *et al.*, where the incidence of stump cancer was negligible with the advent of papanicolaou smear.[22] It is debate between the gynaecologists and patients worldwide arise the questions about the routine removal of the benign cervix. The dispute for conserving cervix is less disturbance to bladder, bowl and sexual function. When observed, there was no significant differences were found in the clinical data including complications. A considerable number of women experienced constant cyclic vaginal bleedings after sub-total hysterectomy. When observed the minor or major postoperative complications and serum concentration of sex hormones, were associated with general psychological wellbeing 12 months after the operation. General psychological comfort is equally improved after both sub-total hysterectomy and total hysterectomy within 12 months of the operation, so it does not seem to be associated with the occurrence of peroperative complications or serum concentration of sex hormones[23].Day-by-day recovery of general wellbeing is no faster in subtotal opposed to total abdominal hysterectomy. When operation methods

performed independently there is an interaction between preoperative psychological wellbeing, postoperative recovery of general wellbeing and the duration of sick leave.s[24]

CONCLUSION

There were rapid recovery in Sub-total Hysterectomy short-term complications and few cases of cyclical bleeding and vaginal discharge. The operative time, morbidity and blood loss was less in subtotal abdominal hysterectomy. The quality of life following such procedure was found to be improved, however, long term follow-up needs to be done.

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