ORIGINAL

MENORRHAGIA;

OUTCOME OF HYSTERECTOMIES AFTER 40 YEARS OF AGE.



DR. NAILA IQBAL MBBS, MCPS, FCPS Graded Gynaecologist C.M.H. Murree DR. FARIHA ALTAF MBBS,MCPS,FCPS Graded Gynaecologist C.M.H. Kohat

PROF-1185

DR. ABEERA CHOUDHRY MBBS, FCPS, MRCOG, FRCOG Military Hospital, Rawalpindi

ABSTRACT... fariha_altaf@hotmail.com. This was a prospective study on out come of hysterectomies performed for menorrhagia after 40 years of age. **Objective** To determine the symptom profile, indications, route of surgery, intra and post operative complications, histopathological results and satisfaction rate of women who underwent hysterectomy for menorrhagia. **Design:** A prospective observational study, **Setting:** CMH Peshawar. **Period:** From June 2002 to May 2003. **Materials & Methods:** Hundred women with menorrhagia undergoing hysterectomy after 40 years of age were selected for this study. Inclusion criteria were determined and patients were regularly followed starting from their inclusion in the study till six weeks after surgery. **Results:** A questionnaire was designed to record the relevant information. DUB was the main cause of menorrahgia in 68% of patients followed by leiomyoma uterus in 25%. These results were confirmed by histopathology reports. Ninety eight percent of our patients were satisfied with the surgery. Their symptom profile and quality of health was much improved after hysterectomy. Hysterectomy is the most common major gynaecological operation. Intra and post operative complications rate was less in our patients when compared with other international studies. This was due to proper selection of the patients and experience of the surgeons, as 100% hysterectomies were done either by consultant or senior registrars.

Key words: Menorrhagia, Hysterectomy, Hysterectomy Complications.

INTRODUCTION

Menorrhagia is a common gyaecological problem that affects women not only physically but also their social, economic and psychological well being and accounts for 20% of general practice gynaecological referrals^{1-6,16,19}. The initial treatment is usually medical⁷ but despite a number of available options, they are not always

successful. As a consequence 60% of women are referred into secondary care and usually surgical treatment in the form of hysterectomy is carried out with in five years. The operation is not without complications. If cases associated with pregnancy and malignancy are excluded, the mortality rate is 6 per 10,000-procedures^{11,13-15}. In Combined Military Hospital

Peshawar the annual number of out door patients for gynaecological consultation is about 11000, and more than 60% consult for menstrual problems, menorrhagia being the most common. Therefore a study was conducted from 1st June 2002 to 31 May 2003, to analyze the operative findings, procedure done, mode of surgery, complications during surgery and in postoperative period, histopathological results and patients were followed up till 06 weeks after surgery.

STUDY OBJECTIVE

The aim of my research work was to study the:-

- Indications
- Route of surgery
- Intra and post operative complications.
- Confirmation of indication by histopathology report.
- ► Follow up 06 week after surgery.
- Late complications
- Bowel and bladder problems.

MATERIAL AND METHODS

It was prospective observational study conducted at CMH Peshawar from 1st June 2002 to 31 May 2003. More than 60% of patients in Gynaecological OutPatients Department consult for menstrual problems, menorrhagia being the most common. Most of the patients are managed medically as the first line of treatment. I selected 100 patients who were undergoing hystrectomy as the cure for menorrhagia.

EXCLUSION CRITERIA

All the patients under 40 year of age, and patients who had blood clotting defects.

INCLUSION CRITERIA

Patients above 40 years age with menorrhagia selected for hysterectomy were included in my study .

In this study hysterectomies were conducted as definitive cure for menorrhagia. The indications, route of surgery, complications during surgery and in post operative period, confirmation of indication on histopathology were analyzed. Patients were followed up till 6 weeks after surgery.

PREOPERATIVE PREPARATIONS

Detailed history was recorded and thorough physical examination was conducted. Consent to follow up, relevant past history, previous gynaecological management and indication for hysterectomy was noted down.

For this purpose a questionnaire was made covering all aspects of the study. (Annex No 1).

ANNEX No 1 QUESTIONNAIRE

Name

Age

Marital History History and relevant investigation Operative Finding Findings at Laparatomy State of Uterus and Ovaries

- Organ damage
- Blood loss
- **Post-operative Complications**

Haematoma

Infection

Histopathology Report

Follow-up 6 weeks after surgery

Delayed complications

Bowel and bladder problems.

Necessary investigations were carried out.

Patients got anaesthesia fitness and were admitted in the ward one day before operation . Informed written consent was taken.

RESULTS

CHARACTERISTICS OF WOMEN

Ninety two patients were between 45 - 50 years of age.

98% of patients were married. Only two unmarried patients under went hysterectomy operation. Five patients had primary or secondary infertility but their menorrhagia did not respond to medical treatment.

OPERATORS

100 % of hysterectomies were performed by consultant or registrars.

INDICATIONS FOR SURGERY

Menorrhagia was the indication for surgery in 100% of cases, 25% of these patients also had uterine fibroid diagnosed on ultrasonography or pelvic examination (Table No.I). One patient who presented with menorrhagia was diagnosed as having leiomyosarcoma.(Table No. II)

Table-I. Indications for hysterectomy			
Group	No. of cases	%age	
Menorrhagia	100	100%	
Idiopathic menorrhagia	69	69%	
Fibroid uterus	25	25%	
Endometriosis	02	02%	
Cervical Polyp	02	02%	
Endometrial Carcinoma	01	01%	
Endometrial hyperplasia	01	01%	

SURGICAL TECHNIQUE

Seventy Five percent of patients had total abdominal hysterectomy. Vaginal hysterectomy was performed in 25% of patients, including those patients who had cystocle, rectocele or uterine descent along with menorrhagia. Vaginal route was also selected for patients who had normal sized uterus with no history of previous abdominal surgery.

CONSERVATION OF OVARIES

Both ovaries were conserved in 55 % of cases. Mostly patients were between 40-46 years of age. (Both ovaries were removed in 40 % of patients with age group around 50 years. While one ovary was removed due to unilateral

pathology in 5% of the cases).

Table-II. Operative findings			
Pelvic and abdominal finding	No. of cases	%age	
Normal parous size uterus	64	64%	
Uterine leiomyoma	30	30%	
Adhesions in the pelvis	20	20%	
Adenomyosis	06	06%	
Ovarian cyst	05	05%	
Endometriosis	04	04%	
Bowl adhesions	01	01%	
Cervical polyp	03	03%	
Endometrial carcinoma	01	01%	
PID	03	03%	
Total	137	-	
PID: Pelvic Inflammatory Disease			

LENGTH OF STAY IN THE HOSPITAL

The average hospital stay was 2-5 days in 80 % of patients irrespective of route of surgery. Fifteen percent of patients stayed longer then five days. Three percent of cases stayed for longer then two weeks duration. (Table No. III)

Table-III. Post operative hospital stay			
Group	oup No. of cases %ag		
1-5 days	80	80%	
5-10 days	15	15%	
10 days or more	04	04%	
Readmission	01	01%	

OPERATIVE COMPLICATIONS

These included intraoperative haemorrhage requiring one or more pints of blood transfusion and visceral damage diagnosed during surgery or soon after surgery so that cases were shifted back to operation theatre immediately. (Table No IV and V) $\,$

Table-IV. Operative complications			
Complications	No. of cases	%age	
Severe intraoperative haemorrhage (1 pint or more blood transfused)	15	15%	
Visceral damage	0	0%	
Returned to operation theatre to control haemorrhage	01	01%	

Table-V. Postoperative morbidity		
Complications	Abdominal hysterectomy	Vaginal hysterectomy
Fever	20% (n=15)	12% (n=3)
Wound infection	16% (n=12)	12% (n=3)
Sepsis (one patient with necrotizing fascitis)	03% (n=2)	0%
UTI	13% (n=10)	12% (n=3)
Urinary tract injury Ureteric VVF	0%	0%
Gastrointestinal ileus	1.5% (n=1)	0%
Respiratory problems Mild Severe	20% (n=15)	0%
Vault Haematoma	03% (n=2)	0%
Reexploration	03% (n=2)	0%
DVT	0%	0%

UTI: Urinary Tract Infection, VVF: Vesico Vaginal Fistula DVT: Deep Vein Thrombosis, n = No. Of pts. Having problems

USE OF ANTIBIOTIC

Antibiotics were given to 100 % of patients.

EARLY POST OPERATIVE COMPLICATIONS

These included fever lasting more than 48 hours after

surgery(Table No.V), Wound infection, Sepsis, U T I, Cellulitis, Vault haematoma or respiratory complications.

DELAYED COMPLICATIONS

These included urinary tract injury i.e ureteric injury or VVF, DVT, re-exploration or gastro intestinal ileus. (Table No.V)

HISTOPATHOLOGICAL RESULTS

All the tissues (uterus + cervix, ovaries or ovarian cyst) were sent in formaldehyde for histopathological evaluation. (Table No VI)

Table-VI. Histopathological result			
Group	No. of cases	%age	
Chronic nonspecific cervicitis	52	52%	
Squamous metaplasia of cervix	52	52%	
Simple cystic hyperplasia	52	52%	
Leiomyoma uterus	30	30%	
Adenomyosis	08	08%	
Endometrial polyp	04	04%	
Endometritis	01	01%	
Autolysed specimen	02	02%	
Late secretory endometrium	02	02%	
Serous cyst adenoma	01	01%	
Brenner's tumour	01	01%	
Leiomyosarcoma	01	01%	

FOLLOW UP 6 WEEKS AFTER SURGERY

Ninety eight percent of patients were satisfied with the operation. Two percent of patients had complaint of generalized weakness, constipation and urinary symptoms.

POST OOPHORECTOMY HRT

Bilateral oophorectomy was done in forty patients. Out of these five patients had endometriosis. Thirty five patients were advised HRT two weeks after surgery. HRT was started one month after surgery in patient who had endometriosis.

DISCUSSION

The results of my study showed that DUB was indication for hysterectomy in sixty eight percent of patients with menorrhagia. Uterine Leiomyoma was diagnosed in 25 % of patients^{16,18}. These results are comparable to the results of the VALUE national hysterectomy study By Maresh. J.A et al². Their result showed 46% of patients had hysterectomy for DUB and 35% of females had fibroid uterus, out of the total number of hysterectomies performed due to any cause. In my study we did not perform any subtotal hysterectomy. This was because we managed to remove uterus and cervix together in all patients. Abdominal hysterectomy was done mostly in patients with previous abdominal surgery, uterine leiomyoma or endometriosis¹⁰.

Laparoscopic assisted vaginal hysterectomy was not done. During vaginal hysterectomy we did not change to abdominal route in any patient. This was due to proper selection of patients for route of surgery. While Marsh M .J. A et al, presented that 2% of planned total abdominal hysterectomies were changed to subtotal, the most common reasons for change were endometriosis or adhesions. Out of the planned vaginal hysterectomies 2 % were changed to abdominal route.

Operative findings were according to the pre-operative diagnosis except few patients with endometriosis and extensive pelvic adhesions.(Table No. II)

In my study 15 patients had blood loss more than 500 ml and they received blood transfusion intraperatively. In my study no patient had intestinal or bladder injury and severe complication rate was 2%. In the VALUE national hysterectomy study the operative complications for supervised and non-supervised procedures were 4% and 3.4% respectively. In advertent bowel injury is uncommon in the absence of adhesions or malignant disease, occurring in 0.3% of vaginal and abdominal hysterectomies¹¹. The incidence of bowel damage during laparoscopic surgery is 0.5%^{9,12}. In my study 80 patients were discharged from hospital in less than five days after hysterectomy. There was no difference in the post operative recovery between abdominal and vaginal surgery. In the VALUE study the median length of hospital stay for the majority of women was five days. Over all post operative complication rate was more in abdominal hysterectomy as compared to vaginal hysterectomy group¹³.

Vault haematoma was diagnosed in two patients after abdominal hysterectomy. Thomsom AJM and Sproston ARM found 25% incidence of vault haematoma²¹. Significant increase in febrile morbidity, post operative haemoglobin drop, need for blood transfusion, representation to hospital and length of hospital stay was seen in the haematoma group.

In my study both ovaries were conserved in 55 patients, mostly they were between 40-45 years of age. One ovary was conserved in five patients. Other ovary was removed due to local pathology in the single ovary like ovarian cyst. Seven percent had ovarian cysts and three percent had endometriosis identified before or during surgery²².

Farquhar CM⁸ found no difference, in symptom profile and satisfaction rate for women undergoing hysterectomy with or without oophorectomy.

HRT was started one month after surgery in-patients who had endometriosis²³.

FOLLOW UP SIX WEEKS AFTER HYSTERECTOMY

Ninety eight patients were satisfied with the surgery as they were relieved from their previous problems¹⁷. Only two patients had complaint of generalized weakness, constipation and urinary problems.

CONCLUSION

From the results of this study it is concluded that:

Hysterectomy is the most common major gynaecological operation. Approximately 20% of women have had the procedure by the age of 60 years. About 40% are for dysfunctional uterine bleeding with no gynaecological

pathology.

Hysterectomy is the definitive treatment and has high rate of patient's satisfaction. However it is a major operation with all the attendant morbidity and mortality.

Vaginal hysterectomy is associated with less intra operative, intermediate and late complications rate then total abdominal hysterectomy.

Patients with bilateral oopherectomy should be advised HRT post operatively.

There is improvement in the psychological behaviour and sexual life after hysterectomy performed for benign pelvic diseases.

REFERENCES

- Cameron IT menstrual disorders, Keith D, Edmoands Dewhurst's, Text book of obstetrics and gynaecology. 6th ed. London; Black-well Science, 1999. P 410 – 13.
- Maresh M J A, Metcalfe MA, Mcpherson K, Overton C, Hall V, hargreaves J. The Value national hysterectomy study : description of the patients and their surgery. BJOG 2002: 109: 302–12.
- 3. Sutton S. Hysterectomy: a historical perspective. Bailliere's Clin Obstect Gynaecol 1997; 11:1-22.
- Howkins J, Stalworthy j. Bonney's Gynaecological Surgery. London: Bailliere Tindall, 1974; 282.
- Thakar R, Manyonda I, Robinson G, Clarkson P, Stanton S. Total versus Subtotal hysterectomy; a survey of current views and practice amongst British Gynaecologists. J Obstet Gynaecol 1998; 18;: 267-69.
- Lumsden M., Norman F, Menstruation and menstrual abnormality. In: Shaw RW, Soutter WP, stanton SL, Gynaecology: 2nd ed. Edinburgh, Churchill Livingstone: 1997: 421.
- M_c Gavigan Cj. Cameron IT: Medical therapy for menorrhagia, In Studd J, Progress in Obst and Gynaecol. London Churchill Livingstone: 2000: 271-77.
- 8. Farquhar CM,Sadler L,Harvey S,Mc Dougall J,Yazdi G,Meuli K. A prospective study of the short-term outcomes of hysterectomy with and without

oophorectomy. Aust NZJ Obstet Gynaecol 2002 May;24(2):197-204.

- 9. Hawe JA. Clayton R. Whittaker M. Kucukmetin A. Garry R. Philips G. Laparoscopic-assisted Doderlein hysterectomy: retrospective analysis of 300 consecutive cases: BJOG Oct 1999: 106: 1083-88.
- 10. Kovac SR. Guidelines to determine the route of hysterectomy in Obstet Gynaecol 1995 Jan; 85 (1): 18-23.
- 11. Dicker R C, Greenspan J R, Strauss L T et al. Complications of abdominal and vaginal hysterectomy amongst women of reproductive age in the United States: the collaborative review of sterilisation. Am J Obstet Gynecol 1982; 144 ;841-848.
- Phipps J H, John M, Nayak S. Comparison of laparoscopically assisted vaginal hysterectomy and bilateral salpingo-oophorectomy with conventional abdominal hysterectomy. Br J Obstect Gynaecol 1993;100;698-700.
- Davies A, Hart R, Magos A, Hadad E, Morris R. Hysterectomy: Surgical route and complications. Eur J Obstet Gynecol Reprod Biol 2002; 104 (2): 148-51.
- 14. Makinen J, et al. Morbidity of 10 110 hysterectomies by type of approach. Hum Reprod 2001; 16 (7): 1473-8.
- 15. Tyler A, Current minimal access techniques for dysfunctional uterine bleeding In Studd J, progress in obstetrics gynaecol London Churchill Livingston. 2003; 259-267.
- Royal College of Obstetricians and Gynaecologists. The Management of Menorrhagia in Secondary Care. Evidence-based Clinical guidelines No. 5.London:RCOG;1995.
- Hawkins A.P. Domoney C. L Studd J. W. W Sexuality after hysterectomy. In studd J progress in Obstet and Gynaecol, 15; 2003; 300-12.
- Sachdev P S, Munir A Obstetric hysterectomy, Pakistan J Obstet Gynaecol 96; 9 (1): 31-34.
- Coculter A, Bradlow J, Agass M, Martin-Bates C, Tulloch A. Outcome of referrals to gynaecology outpatient clinics for menstrual problems; an audit of general practice records. Br J Obstet Gynaecol 1991; 98 ;798-796.

MENORRHAGIA

- 20. Bridgman S, Dunn K. Has endometrial ablation replaced hysterectomy for the treatment of dysfunctional uterine bleeding? National figures. Br J Obstet Gynaecol 2000; 107 ;531-534.
- 21. Thomson A.J.M, Sproston A. R. M, Farquharson R. G. Ultrasound detection of vault haematoma following vaginal hysterectomy. In BJOG February 1998, 105, pp. 211-215.
- 22. Mather R Fox R, **Bilateral oophorectomy and hormone** replacement therapy for women with endometriosis; In Studd J progress in Obst and Gynaecol, London Churchill Livingston 2003; 15; 338.
- 23. Coppen A, Bishop M, beard RJ, barnard GJR, Collins WP. Hysterectomy, hormones and behaviour, a prospective study, Lancet 1981;1:126-128.

THE INTEGRITY OF MEN IS TO BE MEASURED BY THEIR CONDUCT, NOT BY THEIR PROFESSIONS.

Junius