

Clinical Audit of Hysterectomies

N KHAWAJA B ZAHID R TAYYEB

Department of Obstetrics & Gynaecology, Fatima Jinnah Medical College/Sir Ganga Ram Hospital, Lahore
Correspondence to Dr. Bushra Zahid, np_khawaja@hotmail.com

This descriptive study was carried out at Gynae unit II Sir Ganga Ram Hospital, Lahore from 1st January 2004 to 31st December 2004. All patients who underwent hysterectomy due to various gynaecological reasons were evaluated; objective was to determine frequency of different types of hysterectomies, indications and correlation with age and parity. During the study period 78 hysterectomies were performed out of which 77% were abdominal. Vaginal route was opted in 23% of cases and all patients were having uterovaginal prolapse of various degrees. Fibroid uterus was the commonest indication of abdominal hysterectomies (55%) followed by dysfunctional uterine bleeding (25%). Majority of cases of fibroid were in low parity group and prolapse was observed in women of high parity. About 70% of hysterectomies were performed in patients above 40 years of age and about 67% were para three and above. Overall there was positive trend of hysterectomies with increasing age and parity. Medical management of many conditions can be a good alternative provided there is earlier consultation from trained professionals about gynaecological problems, ultimately decreasing the rate of hysterectomies.

Key words: Hysterectomy, Clinical audit, fibroid, prolapse

Hysterectomy is the most common non-pregnancy related surgical procedure performed on women worldwide.¹ In United States 550,000 and in U.K 100,000 women undergo hysterectomy each year.^{2,3} Prevalence is variable from 5.4/1000 women in USA² to 3.7 in Italy⁴.

The subject has a considerable public health importance because of large female population undergoing this procedure and effected by its associated morbidity, mortality and financial strain. It is a focus of much debate and controversy because of significant impact in terms of financial, psychological and sexual factors. Being such a controversial issue, it needs periodical audit at institutional level.

Limited data is available in our community regarding trends of hysterectomy. This study was conducted to evaluate frequency of different types of hysterectomy for gynaecological reasons, indications and correlation with age and parity in our hospital. Data obtained will be critically analyzed so that strategies can be formulated to minimize the surgical option in favor of alternative management.

Subjects & methods: A descriptive study was conducted over a period of one year from 1.1.2004 to 31.12.04 at Gynae unit II, Sir Ganga Ram hospital Lahore. It is a tertiary care hospital attached with Fatima Jinnah medical college. All patients who underwent hysterectomies due to various gynaecological reasons were included in study for analysis. Outcome measured were frequency of various types of hysterectomies, indications and correlation with age and parity.

Results:

During study period 78 patients underwent hysterectomy. Majority (77%) was performed through a abdominal route. (Fig) Out of these abdominal hysterectomies 32 (53.3%) patients had bilateral salphingo-oophorectomy as well.

About 92% of abdominal hysterectomies were due to benign lesions. Major indication was fibroid uterus (55%) followed by Dysfunctional uterine bleeding (DUB) (25%) and carcinoma (8.3%) (Table I) Among genital tract malignancy one case was of endometrial cancer, three had ovarian malignancy and one was cervical carcinoma. (Ib). Werthiems' hysterectomy was carried out for this problem.

Vaginal route was opted only for cases of utero vaginal prolapse of various degrees (Table II) Maximum cases were of second-degree prolapse. As far as the relationship of age was concerned maximum patients who underwent hysterectomy were among 41-50 years of age (Table III) followed by 31-40 years. About 70% of hysterectomies were carried out in patients who were above 40 years

Major indication of hysterectomy in age group of 41-50 years was fibroid uterus, DUB and prolapse. One hysterectomy was performed on 19-year-old girl who was mentally retarded and had DUB as well.

Regarding parity majority of women was Para three and four. Out of them commonest indication was fibroid and prolapse. (Table IV). On the whole maximum cases of fibroid were among low parity group (Para 1-2) and prolapse in high parity (Para 5 and above) in operated subjects.

Fig. Frequency of abdominal vs vaginal hysterectomies

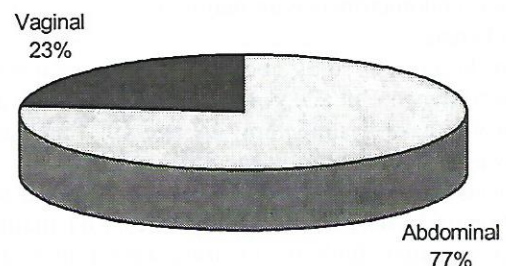


Table I: Indications for abdominal hysterectomy

Indications	n=	%age
Fibroids	33	55
DUB	15	25
Carcinoma	5	8.30
Adenomyosis	4	6.70
Endometriosis	2	3.30
PID	1	1.70

Table II: Indications for vaginal hysterectomy

Indications	n=	%age
Uterovaginal prolapse		
1 st degree	1	5.50
2 nd degree	15	83.30
3 rd degree	2	11.20
Total	18	100

Table III: Indications for hysterectomy in relation to age.

Indications	<20	21-30	31-40	41-50	51-60	>60
Abdominal	1(1.1.3%)	2(2.6%)	21(27%)	28(35/8%)	8(10.2%)	
Fibroids		1(1.3%)	12(15.4%)	16(20.5%)	4(5.1%)	
DUB	1(1.3%)		3(3.8%)	8(10.2%)	3(3/8%)	
Carcinoma			2(2.6%)	2(2.6%)	1(1.3%)	
Endometriosis		1(1.3%)	1(1.3%)			
Adenomyosis			2(2.6%)	2(2.6%)		
PID			1(1.3%)			
Vaginal				9(11.5%)	6(7.7%)	3(3.8%)
Total	1(1.3%)	2(2.6%)	21(27%)	37(47.4%)	14(17.9%)	3(3.8%)

Discussion:

In this study abdominal approach was the predominant route of hysterectomy (77%) out of which about 92% were due to benign lesions. Vaginal route was opted only for prolapse uterus.

Weaver F quoted 74% hysterectomies by abdominal approach⁵ while it was 83% as revealed by Mackenzie⁶ and 63% quoted by Farquhar².

Vaginal hysterectomy is considered beneficial in terms of hospital stay and postoperative recovery, revealed by our study as well but randomized controlled trials are small to determine definitive safety.⁷ Different pathologies require different surgical approach and technical feasibility of vaginal hysterectomy has to be assessed for non-prolapsed uteri.

Selection of abdominal route for even a normal size uterus in our set up is because of number of reasons such as previous history of pelvic inflammatory disease, very common in our community, previous surgery, presumed adhesions following these problems, endometriosis and non descent of uterus.

The major indication of hysterectomy in our study was fibroid uterus, DUB, carcinoma and prolapse uterus. Uterine fibroid was the commonest indication of hysterectomy in study of Farquhar², Alex Bottle⁸, Debodinance⁹ and Weaver⁵ while menstrual disturbance including endometriosis was major indication as revealed by Mackenzie⁶.

In the present study about 48% of women who had hysterectomy were in age group of 41-50. In USA 20% of women will have hysterectomy by age 40¹⁰ increasing to 33% by age 65¹ and 43% by age 85¹¹.

Decision of ovarian conservation was based on age, indication of hysterectomy, family history of malignancy and per operative findings. Ovaries were removed in all cases of malignancy.

As far as relation of parity was concerned, fibroid was more important reason of hysterectomy in para1-4 in this study in contrast to nullipara as revealed by M.P.Vessey¹⁰.

There was a steady increase of hysterectomy rate for prolapse with advancing parity in our study. As expected, no hysterectomy was performed for prolapse in nullipara similar to study of M.P.Vessey¹⁰.

Majority of our patients report to hospital after prolong treatment by non-professionals, when all conservative management has failed. Awareness should be created for proper medical advice at appropriate time. Alternative methods of medical management can be tried at that time instead of definitive surgical treatment ultimately reducing rate of hysterectomies.

The predominant use of abdominal versus vaginal approach should be addressed thoroughly by competent personnel. In view of enhanced morbidity associated with abdominal hysterectomy and cost, residents should be trained in proper techniques of vaginal hysterectomy. Necessary equipment of laparoscopic assisted hysterectomy and laser for ablation of endometrium should be made available at least in tertiary care hospitals and consultants in those hospitals should be given hands on training by holding workshops by experts of these techniques.

References:

1. Wilcox LS, Koonin LM, Pokras R et al. Hysterectomy in the United States, 1988-1990. British journal of Obst & Gynaecol 1994; 83:549-55.
2. Farquhar C, Steiner CA. Hysterectomy rates in the United States. 1990 - 1997. Obstet Gynaecol 2002; 99(2): 229-34.
3. Cosson M, Lambaudie E, Boukerroum M et al. Vaginal, Laparoscopic or abdominal hysterectomy for benign disorders immediate and early post operative complications. Eur J Obstet Gynaecol Reprod Biol 2001; 98:231-6.

4. Matera E, Rossi L, Spadea T et al. Hysterectomy and socioeconomic position in Rome, Italy. *J Epidemiol Community Health* 2002; 56:461-5.
5. Weaver F, Hynes D, Goldberg JM et al. Hysterectomy in Veterans Affairs Medical Centers. *Obstet Gynaecol.*2001; 97(6): 880-4.
6. MacKenzie IZ, Naish C, Rees M et al. 1170 consecutive hysterectomies: indications and pathology. *J Br Menopause Soc.*2004; 10(3): 108-12.
7. Garry R. The Future of hysterectomy. *BJOG.*2005; 112(2): 133-9.
8. Bottle A, Aylin P. Variations in vaginal and abdominal hysterectomy by region and trust in England. *BJOG.*2005; 112(3): 326-8.
9. Debodinance P. Hysterectomy for benign lesions in the north of France: epidemiology and postoperative events. *J Gynaecol Obstet Biol Reprod.* 2001; 30(2): 151-9
10. Vessey MP, Villard-Mackintosh L, McPherson K et al. The Epidemiology of Hysterectomy: findings in a large cohort study. *Br J Obstet Gynaecol* 1992; 99:402-7.
11. Merrill RM, Prevalence corrected hysterectomy rates and probabilities in Utha. *Ann Epidemiol* 2001; 11:127-35A