

AUDIT OF GYNAECOLOGICAL HYSTERECTOMIES

Simi Fayyaz and Shamim S Majeed

*Department of Gynaecology,
Postgraduate Medical Institute,
Lady Reading Hospital, Peshawar.*

SUMMARY

One year audit of gynaecological hysterectomies was carried out in Gynae (B) department of Obstetrics & Gynaecology, Lady Reading Hospital. Among the patients admitted for major Gynaecological operations, those undergoing hysterectomy were entered in to study programme. The incidence of hysterectomy among major operations was almost 50%. The indications for hysterectomy were evaluated. Patients were studied and observed preoperatively, intraoperatively and postoperatively till their stay in hospital. The follow up visit was also recorded with histopathology report after 6 weeks. Ratio of abdominal to vaginal route was almost 2:1 with higher complication rate and postoperative hospital stay in former group. Most of the operations were done electively. Majority of indications were benign in which surgery could be avoided reflecting non availability of other effective medical and conservative surgical treatment modalities. Need to increase the number of vaginal hysterectomies was also noticed in the audit. With all these limitations in our setup hysterectomy proved curative and acceptable form of therapy to most of the patients.

INTRODUCTION

Hysterectomy means removal of uterus and is practiced both in Gynaecology and Obstetrics. Apart from being performed through abdominal and vaginal routes it is now laparoscopically performed which is

indeed a cost effective procedure in terms of less postoperative stay and analgesia.²² Hysterectomy is common gynaecological procedure carrying low morbidity and mortality.²⁴ This procedure provides the patients a quick relief of her symptoms and satisfaction⁵ of getting cure from the disease. Reducing morbidity and mortality

INCIDENCE OF HYSTERECTOMY

Total Gynae operations	Abdominal hysterectomy	Vaginal hysterectomy
1579	502	266

TABLE - 1

associated with this procedure has resulted in tremendous increase in the number of operations performed to the extent that it is commonest operation performed on the women of the reproductive age. In England rates for hysterectomy in 1989 - 90 were 30.4 per 10,000.⁶ It is estimated that 25% females in England will undergo hysterectomy before the age of 65,^{23,7} while for USA it is calculated that 01 out of 03 females will lose their uterus by the age 60.¹⁹ Modern anaesthesia and aseptic techniques contributes to its safety but the morbidity rates are still significant i.e. 25 to 50% with mortality rate between 4.1 to 14.6 per 10,000.¹ The ratio of abdominal to vaginal hysterectomy varies 01: 4 or less. In 1989 in all England 17.4% out of 73280 hysterectomies were performed vaginally.⁸

MATERIAL AND METHODS

This study was conducted in Gynae (B) unit of Lady Reading Hospital. Total 1583 patients were admitted for major Gynaecological list. Surgical treatment was deferred in 04 cases. 1579 had surgery out of

INDICATIONS FOR ABDOMINAL HYSTERECTOMY

Indications	Number
Dysfunctional uterine bleeding	266
Fibroids	140
Malignancies	24
Pelvic inflammatory disease	17
Endometriosis	13
Molar pregnancy	08
Other causes	34

TABLE - 2

which 768 had hysterectomies, making total incidence of them 48.6% among Gynaecological operations. Abdominal route was acquired in 502 cases while 266 cases were done vaginally. Thus ratio of abdominal to vaginal hysterectomy was 65.36% : 34.63%. Patients undergoing hysterectomy had evaluation in their preoperative, intraoperative and postoperative period. Their indications for hysterectomy were reassessed. Their hospital stay, cost of operation, amount of transfusion, postoperative analgesia requirement and operative complications were noted and compared. They were interviewed to evaluate psychological impact of operation and post treatment satisfaction. They were followed 06 weeks later with their histopathology report. While some of them presented with few problems for a longer time period.

RESULTS

Out of 1579 patients 502 had abdominal while 266 had vaginal hysterectomy. Abdominal hysterectomy was performed with conservation or removal of one or both ovaries depending upon age and indication. Table 1.

Major indication for abdominal hysterectomy was dysfunctional uterine bleeding followed by fibroid. Table 2 Reasons for doing such a large number of operations for these benign conditions were mostly due to failure of medical treatment and lack of

INDICATIONS FOR VAGINAL HYSTERECTOMY

Indications	Number
Uterovaginal prolapse	260
Uterovaginal prolapse with fibroids	04
Uterovaginal prolapse with dysfunctional uterine bleeding	01
Dysfunctional uterine bleeding	01

TABLE - 3

COMPLICATIONS OF HYSTERECTOMY

Complications	Abdominal	Vaginal
*Febrile morbidity	125	37
**Excessive intraoperative haemorrhage.	63	12
Respiratory infections	24	06
Anaemia	33	12
Haematomas	19	11
Wound dehiscence	11	0
Injury to urinary tract	03	03
Injury to gut	03	0
Ileus	19	04
Postoperative haemorrhage	09	03
Urinary retention	06	22
Deep vein thrombosis	03	0
Embolism	01	0
Dyspareunia	09	16

* Febrile morbidity was defined as temperature of 100.4 °F or more 24 hours after operation.

** Excessive haemorrhage was defined as blood loss of 1500 cc or more.

TABLE - 4

compliance by the patients. In case if malignancies more radical approach was applied to attain maximum clearance.

Major indication for vaginal hysterectomy was uterovaginal prolapse while few patients with small fibroid and dysfunctional uterine bleeding also had vaginal hysterectomy. Table 3.

Overall complications rate was higher in abdominal as compared to vaginal route e.g infection, haemorrhage, haematomas, ileus etc. Specific problems like urinary retention and dyspareunia were higher in vaginal cases. Table 4.

BLOOD TRANSFUSION

Amount of transfusion	Abdominal	Vaginal
One pint	291	183
Two pint	161	48
More than two pints	37	14

TABLE - 5

POST OPERATIVE ANALGESIA REQUIREMENTS

Time period	Abdominal	Vaginal
First 24 hours	499	259
24 hours - stay in hospital	361	56
After 6 weeks	32	07

TABLE - 6

Similarly number of transfusions, post-operative analgesia and hospital stay was longer in abdominal cases. Table 5,6,7. Routinely preoperative cases were admitted in evening before surgery. Simple abdominal cases were discharged on 5th postoperative day while vaginal cases were sent home on 3rd postoperative day.

DISCUSSION

Hysterectomy is highly effective in treating symptoms due to nonmalignant gynaecological conditions. Symptomatic relief with hysterectomy is associated with a considerable improvement in quality of life with very few problems reported.⁵ It avoids the need of long term medical treatment and approximately halves the risk of carcinoma ovary possibly by altering its blood supply or giving a chance to look at the ovaries.¹⁷ Removal of the uterus saves the women from future risk of malignancy. It is a safe procedure and most of the deaths occurring in such patients are associated with cancer and medical disorder. Though the abdominal route is used frequently than vaginal but now efforts are being made to increase the number of vaginal hysterectomy because it is associated with reduced

AVERAGE HOSPITAL STAY

Days	Abdominal	Vaginal
03 - 05	05	244
06 - 10	481	15
More than 10	16	07

TABLE - 7

morbidity. Hence the contraindications to vaginal route are now being revised. For a gynaecological surgeon it should be the preferred choice provided there are no contraindications. Ideally preoperative laparoscopy can be done to have a look at the pelvic viscera to support the decision.¹³ Laparoscopic hysterectomy performed by Reich et al in 1989 initially²⁰ is as safe as abdominal or vaginal hysterectomy. In this postoperative convalescence time is short and it is an acceptable alternative method.¹⁰

Hysterectomy is done for many conditions usually as an elective procedure. Myomas accounts for the commonest indications for hysterectomy. In series of studies 35% of hysterectomies were performed for myomas,⁵ while in Australian study they account for 2/5 of hysterectomies.¹⁶ Trial of use of gonadotrophin releasing hormone analogues showed that hysterectomy was technically easy and removal of myomas was possible through a smaller incision due to regression in size.² Dysfunctional uterine bleeding is another common indications but its management depends upon a lot of factors. Hysteroscopic resection for this is superior to hysterectomy in terms of less complications and faster recovery.¹⁸ Noble was of the opinion that hysterectomy has a worth while place in management of menorrhagia.¹⁵ It also removes any possibility of unsuspected malignancy.⁹ Prolapse is not a life threatening condition but severely affect quality of life. There fore, 20% of hysterectomy are done for prolapse.²⁵ Endometriosis, pelvic infections, premalignant and malignant conditions of uterus cervix and ovaries are other important indications. Hysterectomy for cervical intraepithelial neoplasia is considered an excessive form of therapy.¹² With all advantages there are some disadvantages associated with hysterectomy. It is a major operation and affects the patients

physically, psychologically and economically. Also there is loss of reproduction, libido and postoperative depression. In spite of its safety there is significant morbidity. The reported incidence of bladder injury is 1-2%.³ Bowel injury though uncommon occur when there are adhesions. Intestinal obstruction secondary to post hysterectomy adhesions is another recognized complications of hysterectomy.²²

Other alternative to hysterectomy are hysteroscopic resection and GnRh analogues. 70 - 90% patients treated hysteroscopically showed satisfactory response. Preoperative use of GnRh analogues reduces the size of uterus making a vaginal route possible.²¹ Resulting in potential saving indirectly in patient's medical care charges.

CONCLUSION

Hysterectomy is a major gynaecological operation and inspite of its safety it should only be performed when a proper indication is justified. Patients should be prepared properly both physically and mentally to reduce the impact of complication. In simple cases vaginal route should be preferred choice. Conservative form of treatment should be brought into practice to reduce the incidence of operative treatment.

REFERENCES

1. Bachmann GA. Hysterectomy. A critical review. *J Report Med*, 1990; 35: 839.
2. Balasch J, Mahau D, Mino J, Duran M, Puerto B, Vanrell JA. Trail of routine GnRh. Agonist treatment before abdominal hysterectomy for leiomyoma. *Acta Gynaecol. Scan.*, 1995; 74(7): 562.
3. Bedenoch DF, et al. Early repair of accidental injury to ureter of bladder following gynaecological surgery. *Br J Uro.*, 1987; 59: 516.

4. Braham DD, Stoval TG, Thompson CD. Use of GnRh against before hysterectomy. A cost simulation. *Obstet ADG. Accidents in gynaecological surgery.. Medoleyal. In litigation and Obstet. and Gynaecol. Proceedings at fourteenth study group of the Royal College of Obstet. and Gynaecol. (G.V.P Chamberlarn, C.J Orr and F. Sheneds). Royal College of Obstet. Gynaecol, London, 81-86.*
5. Carlson KJ, Miller BA, Fowler FJ. Outcome of hysterectomy, *Obst. Gynaecol., 1994; 83(4): 556.*
6. Coulter C, Klassen A, Mac Conzie IZ, MC Pherson K. Diagnostic dilatation and curettage. Is it used properly. *Br. Med. J, 1993; 306 : 236-239.*
7. Coulter A, Mc Pherson K, Vesseg M. Do British women undergo too many or too few hysterectomies? (Review *Soc Sci Med., 1988; 27: 987.*
8. Department of Health 1993 Hospital Episode Statistic volume I Finished consultants episode by diagnosis, operation and speciality. England 1989-90, HMSO London.
9. Dewhurst's text book of Obstet. and Gynaecol. for postgraduates. Fifth addition. Dysfunctional uterine bleeding. 590-607.
10. Horkki Siren P, Sjoberg J. Evaluation and the learning curve of the first 100 laparoscopic hysterectomies. *Acta. Obstet. Gynaecol. Scand, 1995 Sep: 74(8):638.*
11. Johns DA, Carrera B, Jones J, Deleon F, Vincent R, Safely C. The medical and economical impact of LAVH in a large metropolitan not for profit hospital. *Am Obst Gynaecol., 1995 Jun; 172(6): 170.*
12. Jordan JA. The management of pre-malignant condition of cervix. In *Studd J; ed. Progress in Obstet. Gynaecol, vol. 2, Edinburgh, Churchill Livingstone. 1982.*
13. Kovac SR. Guidelines to determine the routes of hysterectomy. *Obstet Gynaecol., 1995 Jan; 85(1): 18.*
14. Krebs HB. Intestinal injury in gynaecological injury. A 10 years experience. *Am J Obstet Gynaecol., 1987; 156: 264.*
15. Noble AD. Management of menorrhagia. *Br Med J. 1985; 291: 296.*
16. Opit LJ, Gadiel D. Hysterectomy in WSW Sydney. Office of health come finance. 1982.
17. Parazzini F, Neqri E, La Vacchia C, Luchini L, Mezza Pane R. Hysteretomy, oophorectomy and subsequent ovarian cancer risk. *Obstet. Gynaecol., 1993; 81(3): 363.*
18. Pinion SB, Parkin DE, Abramovich DR, Naji A, Alexendar DA, Russell IT, Kitchener HC. Randomized trial of hysterectomy endometrial laser ablation and TGER for dysfunctional uterine bleeding. *BMJ. 1994 15; 309: (6960): 979.*
19. Pokras R, Hufnagal VG. Hysterectomy in the United States, 1965-84, *Vital Health Stat, 1988; 13; 92.*
20. Reich H, De Capria J, Mc Glynn F. Laparoscopic hysterectomy. *J Gynaecol., Surgery. 1989; 5: 213.*
21. Stovall TG, Summit RL Jr, Washburn SA, Ling FW. Gonadotrophin releasing hormone agonist use before hysterectomy. *Am J Obstet Gynaecol., 1994; 170(6):1744-8, discussion 1748-51.*
22. Stricker B, Blanco J, Fox HE. The gynaecological contribution to intestinal obstruction in females. *J Am Coll Surg., 1994; 178(6): 1617.*
23. Vessey MP, Villard Mackintosh L, Mc Pherson K, Coulter C, Yeates D. The epidemiology of hysterectomy finding in large cohort study. *Br J Obstet Gynaecol., 1992; 99: 42.*
24. Virtanen HS, Makinen JI. Mortality after gynaecologic operations in Finland. *Brjog. 1995; 102(1): 54.*
25. Wongs P. Elective hysterectomy trends at Anghong hospital. *J Med Assoc Thor., 1994; 77(7): 384.*