A REVIEW OF INDICATIONS OF ABDOMINAL HYSTERECTOMY PERFORMED FOR BENIGN GYNAECOLOGICAL CONDITIONS IN A TERTIARY CARE HOSPITAL WAH CANT PAKISTAN

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ABSTRACT

Objective: To review the indications of abdominal hysterectomy for benign gynaecological conditions in a tertiary care hospital in Wah Cantt, Pakistan.

Study Design: Cross-sectional study

Setting: Gynaecology & Obstetrics department of Wah Medical college and allied Pakistan Ordnance Factory hospital (POF) Wah Cantt, for eighteen months, from January 2007 to June 2008.

Patients and Methods: Retrospective review of the medical record of 159 patients was done. Convenience sampling was done and data analysed in the form of frequency and percentages by using SPSS version 10. Patients having abdominal hysterectomy for benign gynaecological conditions during the study period were included. Exclusion criteria included uterovaginal prolapse, malignancies and hysterectomy for obstetrical reasons.

Results: Review of the indications showed that out of 165 patients undergoing abdominal hysterectomy, benign conditions were present in 159 (96.4%) patients.

Conclusion: The large number (96.4%), of hysterectomies being performed for benign lesions emphasizes the need to periodically review the indications for which hysterectomies are being performed in a unit. This will reduce the burden on the ancillary staff, hospital budget and also reduce the psychological trauma of a woman, associated with the loss of an organ.

Keywords: Hysterectomy, Benign uterine lesions, Leiomyoma, Dysfunctional uterine bleeding.

INTRODUCTION

Abdominal hysterectomy was the second most common surgical procedure performed after Caesarean section, in 1990's in the United States[1]. Hysterectomy rates have been the subject of controversy also in Australia since the 1970's[2]. With periodic audits and availability of more advanced medical options like Levonorgestril containing intrauterine devices or surgical techniques, like endometrial ablative procedures, the situation has changed in developed countries but in developing countries the scenario is more or less the same. This rise in the hysterectomy rates made the gynaecologists to look for the factors that were responsible for abdominal hysterectomy being performed more frequently than other surgical procedures. The simple explanation was that the physicians are trained to perform abdominal hysterectomy than alternate procedures[3], therefore they continue to perform abdominal hysterectomy in clinical practice[4].

The commonest benign conditions, for which abdominal hysterectomy is performed are, leiomyomas and dysfunctional uterine bleeding (DUB). The alternate procedure for curing leiomyoma is myomectomy which allows for the retention of the uterus. According to one study, myomectomy is associated with a longer operating time, greater blood loss and greater post operative morbidity (including pelvic adhesions) and pain than abdominal hyseterectomy[5]. However, 20% to 25% of myomectomy patients require future uterine surgery for recurrences[5]. Myomectomy , therefore, is performed only in those who wish to retain their fertility. Hysterectomy, for leiomyoma, is the treatment option for those who have completed their family and want to avoid long term follow up required in such cases.

Dysfunctional uterine bleeding is the other benign condition that is treated by hysterectomy. It affects 20-30%[6,7] of women and 60% have to undergo hysterectomy within 5

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Received: 20 Apr 2009; Accepted: 21 Dec 2009

years of diagnosis[8]. Dysfunctional uterine bleeding is not associated with any organic pathology of the genital tract therefore, hysterectomy can be avoided in these cases by adopting other treatment options. The aim of this study was to review the indications for hysterectomy for benign conditions and where feasible offer alternate options for the patients after thorough evaluation.

PATIENTS AND METHODS

Study was conducted in the Gynaecology and obstetrics department of POF hospital, affiliated with Wah medical college Wah Cantt. The study period extended for duration of eighteen months, from January 2007 to June 2008. Retrospective analysis of the patients' record was done to review the indications for which abdominal hysterectomies were performed. A cross sectional study was carried out and convenience sampling technique was used. Exclusion criteria included malignancies, uterovaginal prolapse and hysterectomies done for obstetrical reasons.

Results were analysed in the form of frequencies and percentages by using SPSS version 10.

RESULTS

During the study period, 1860 patients were admitted in the department. Of these, 967(52%) had gynaecological problems. Out of them surgery was performed in 429 (44%). Major surgery was done in 195 (45.4%). In the remaining 234 (54.5%) patients, other procedures, like dilatation and curettage, diagnostic laparoscopy and cervical biopsy etc. was performed (Table).

Out of the 195 patients who underwent major operative procedures, abdominal hysterectomy was done in 165 (84.6%), vaginal hysterectomy was done in 24 (12.3%) and myomectomy in six (3.1%) (Fig. 1).

Of 165 abdominal hysterectomies, benign pathology was present in 159(96.4%). Figure 2 highlights various indications for abdominal hysterectomy for benign gynaecological conditions. Amongst the benign lesions, dysfunctional uterine bleeding was the leading cause in 132 (83%) cases followed by leiomyoma in 14(8.8%). Adenomyosis was diagnosed in 10(6.3%) after histopathology and endometriosis was the reason for hysterectomy in only 1(0.6%) patient. Two (1.3%) hysterectomies were done for ovarian cysts in women who had completed their families, these, after histopathology were confirmed to be benign. Age of these 159 patients ranged between 33-60 years with Mean ± SD (46.245 ± 6.14) years.

DISCUSSION

Menorrhagia is the commonest gynaecological cause of iron deficiency anaemia in premenopausal women9. By definition menorrhagia is diagnosed when the duration of bleeding is equal to or greater than six days or blood loss is at least 80 ml. Dysfunctional uterine bleeding is bleeding from the genital tract in the absence of organic pathology of the genital tract.

In our setup dysfunctional uterine bleeding was the leading indication for performing abdominal hysterectomy. This is in contrast to a study conducted in Jamshoro Sindh Pakistan[10], where leiomyoma was on the top of the list. Dysfunctional uterine bleeding is one indication, which managed appropriately, can reduce the hysterectomy rate.

The treatment options available for the management of menorrhagia are medical and surgical. These options have been thoroughly evaluated by conducting large trials over the past few years. Different analysis and conclusions have been drawn from these studies comparing and contrasting the one treatment option with the other. Medical management includes conventional use of tranexamic acid and more recently Mirena, Levonorgestrel intrauterine system (LNG IUS), is in vogue. Mirena is a progestogen containing contraceptive device, introduced in the United Kingdom in May 1995, and has a side effect of a reduction of menses[11]. A recent review by the Royal College of Gynaecologists has recommended that a progestogen releasing intrauterine device is an effective treatment for reducing heavy menstrual blood loss and should be considered as an alternate to surgical treatment[12]. Medical management, should, therefore, be the first treatment option. In case

the medical management fails, surgical management becomes mandatory. The surgical treatment modalities include ablative procedures and hysterectomy. No doubt hysterectomy is the definitive treatment for menorrhagia, but the fact remains that it is a major surgical procedure associated with physical and emotional complications and social and economic costs. The other less invasive, endometrial ablative techniques, aim at the complete removal of the endometrium. The main advantage is reduced morbidity, mortality, cost effectiveness and quick return to normal physical activity. Endometrial ablation (EA), as treatment modality, was introduced in late 1980's. There have been randomized trials comparing two modes of ablation[13], ablation and hysterectomy[14] and ablation and medical management[7]. These conclude that EA may have useful role in gynaecology and a review by the Royal College of Obstetrics and Gynaecology concluded that these procedures are an effective treatment for menorrhagia[15]. Economic evaluation alongside randomized trials indicates that even allowing for the risk of treatment failure, endometrial ablation has a lower cost per patient than abdominal hysterectomy[16,17].

The second commonest reason for abdominal hysterectomy, in our study was leiomyoma. These patients had no further fertility desire. They wanted abdominal hysterectomy to avoid long term follow up required in such cases. This trend was also observed in a study conducted at Khyber hospital NWFP[18]. Myomectomy is associated with a longer operating time, greater blood loss and greater post-operative morbidity (including pelvic adhesions) and pain than abdominal hysterectomy5. Despite this fact myomectomy is still the operation of choice for those who want to retain their child bearing ability.

Adenomyosis, diagnosed after histopathology, is invariably treated by hysterectomy.

CONCLUSION

Among the bening gynaecological conditions dysfunctional uterine bleeding is the major reason for which abdominal hysterectomies are being performed in our setup. Need of the day is to have periodic audit of the indications and also collaboration between gynaecology departments at local and national level to see the trends of the indications for which surgical procedures are being performed. Medical options should be tried first and only in cases of failure surgical options should be considered. Even then, conservative surgical techniques to be tried first, before resorting to more extensive and definitive treatment by hysterectomy.

ACKNOWLEDGEMENTS

The author wishes to thank the help of Nadia Khalida Waheed, Colonel® Muhammad Ashraf Chaudary and Mr. Muhammad Afzal for their helpful and constructive comments.

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Table-1: Surgical procedures performed from January 2007 to June 2008 (n=429)

Surgical procedures	Number	Percentage
Major procedures	195	45.4
Other procedures	234	54.5

Fig. 1 Major Operative Procedures Performed During the Study Period

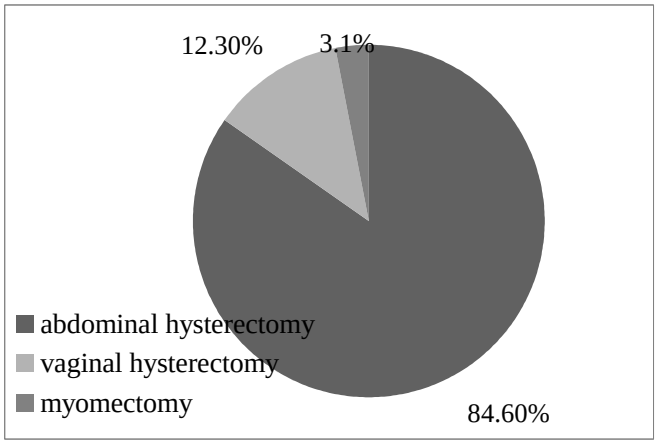

Fig. 2 Benign Lesions treated with abdominal hysterectomy *(n=159)*