ORIGINAL ARTICLE

ABDOMINAL SACROHYSTEROPEXY-A CONSERVATIVE SURGICAL TREATMENT OF UTERINE PROLAPSE

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Background: The traditional surgical treatment of utero-vaginal prolapse is vaginal hysterectomy. In recent years, the procedure of sacral hysteronpexy is gaining popularity. This study was conducted to determine the frequency of uterine prolapse in young women and to analyze the results of abdominal sacrohysteropexy. **Methods:** This descriptive case series was conducted in department of Gynaecology and obstetrics Unit-II, Liaquat University of Medical and Health Sciences form October 2008 to October 2011. All those women admitted during the study period with uterine prolapse and requiring uterine conservation surgery were included in the study. After evaluation and pre- operative assessment, abdominal sacrohysteropexy was performed. Results of surgery were analyzed in terms of duration of surgery, intra-operative and post-operative complications, need for blood transfusion during surgery and duration of hospital stay. After discharge they were followed for a period of 6 months. **Results:** A total of 210 cases of uterine prolapse were admitted during the study period. Out of these, abdominal sacrohysteropexy was performed in 33 cases (15.71%). In these 33 cases, 4 (12.12%) were unmarried and 29 (87.87%) were married. In 29 married women, 10 (34.48%) were nulli-para, 12 (41.37%) were para 1 or 2 and 7 (24.13%) were para 3–5. Regarding the age of these women, 7 (21.21%) were less than 25 years, 16 (48.48%) were between 25–34 years and 10 (30.30%) were between 35–45 years. Duration of surgery was between 30–45 minutes in most of the cases (96.96%). Blood loss during surgery was <100 ml, only in 1 case it was between 100–300 ml, where one unit of blood was transfused. Regarding postoperative complications only 1 case had wound sepsis. Most of the cases (93.93%) were discharged at 3rd or 4th postoperative day. No complaints were found during follow up period of 6 months. **Conclusion:** Abdominal sacrohysteropexy can be considered as a safe and effective treatment of uterine prolapse in young and in those women who desire to retain the uterus.

Keywords: Uterine prolapse, frequency, abdominal sacrohysteropexy, young women

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INTRODUCTION

Utero-vaginal prolapsed (UVP) is a common, often disabling condition experienced by women of varying Ages.[1] The prevalence of UVP is not well known, age and parity are undoubtedly risk factors for its occurrence.[2] However, some young nulliparous women may occasionally develop pelvic organ prolapse while many multiparous bear many children without developing clinically significant pelvic floor disorders. Intrinsic collagen abnormalities are said to be related to the development of UVP particularly in young women.[3] Kean *et al* studied 52 nulliparous women, found a decrease in collagen content in women who were less than 30 years of age.[4] Some studies also found a racial factor in its aetiology, as pelvic organ prolapse is more frequent among white than black women.[5,6]

The traditional surgical treatment of UVP is vaginal hysterectomy. Hysterectomy for prolapse often leads to removal of non-diseased uterus and may result in increased morbidity.[1] In young individuals, hysterectomy may also influence sexual and personal identity that may result in psychological problems.[7] As women are becoming more knowledgeable, they are opting to avoid hysterectomy and may desire treatment of prolapse with uterine preservation. Uterine preservation techniques include the Manchester procedure and the sacrohysteropexy. The optimal procedure depends on specific defect that is present, as well as patient's age, desire for future fertility as well as skill and comfort level of the surgeon with the particular procedure and the particular route.[8]

In recent years, the procedure of sacral hysteropexy has gained popularity. Sacral hysteropexy has a long history dating back to 1800 and has gone through many changes.[9] Arthur and Savage described this procedure in 1957.[10] The aim of our study was to determine the frequency of uterine prolapse in young women and to analyze the results of abdominal sacrohysteropexy.

MATERIAL AND METHODS

This descriptive case series was carried out in the Gynaecology department Unit-II of Liaquat University of Medical and Health Sciences, from October 2008-2011. All those women admitted in ward during study period with complaints of uterine prolapse and requiring surgical treatment of prolapse

with conservation of uterus were included in the study. They were evaluated through history, physical examination, pelvic examination and appropriate investigations. After pre-operative assessment and evaluation, sacrohysteropexy was performed under general or spinal anaesthesia by the same surgeon. The procedure of sacrohysteropexy involved the attachment of uterus using prolene-1 suture to the anterior longitudinal ligament of the sacrum. Results of surgery were analyzed in terms of duration of surgery, need for blood transfusion during surgery, intra-operative and postoperative complications and duration of hospital stay. All the patients were followed for a period of six months.

RESULTS

Out of 2949 gynaecological cases, admitted in ward during the study period, there were 210 cases of UVP (17.12%). Out of these 210 cases, sacrohysteropexy was performed in 33 cases (15.71%), their characteristics are shown in Table-1. Results of surgery are shown in Table-2. Most of the patients didn't have any intra operative complications, only in one case there was troublesome haemorrhage which was controlled.

Table-1: Characteristics of patients having sacrohysteropexy (n=33)

Variable	Number	Percentage
Marital Status		
Unmarried	4	12.12
Married	29	87.87
Age (years)		
<25	7	21.21
25–34	16	48.48
35–45	10	30.30
Parity (n=29)		
Nulliparous	10	34.48
Para 1–2	12	41.37
Para 3–5	7	24.13

Table-2: Results of surgery in patients having sacrohysteropexy (n=33)

Results	Number	Percentage
Duration of surgery		
30–45 minutes	32	96.96
60–75 minutes	1	3.03
Blood loss during surgery		
<100 ml	32	96.96
100–300 ml	1	3.03
Need for blood transfusion during surgery	1	3.03
Post operative Infection	1	3.03
Duration of hospital stay		
3–4 days	31	93.93
5–7 days	2	6.06
Recurrence during follow up period	None	0

Regarding the post-operative complications, only one patient had post-operative infection that subsided after treatment. Most of the patients remained in ward for 3–5 days (93.93%), one patient was discharged on 6th (3.03%) and another on 7th (3.03%) postoperative day. All the patients were discharged in satisfactory condition. Follow up period was of six months that remained uneventful. There was no complaining of recurrence of prolapse during follow up period.

DISCUSSION

Symptomatic pelvic organ prolapse (POP) comprises a large portion of gynaecological practice but only 10–15% seek surgical treatment.[11] In the United Kingdom, genital prolapse accounts for 20% of women on the waiting list for major gynaecological surgery.[5]

In this study, frequency of genital prolapse in all gynaecological cases admitted in ward with different pathology, was found to be 7.12%. A population based study by Mant *et al* found a prevalence of 3.9% which increased with age.[12] Although, the chance for a women having prolapse increases with age, some young women in their reproductive life and even some unmarried girls may have genital prolapse due to some underlying predisposing factors.[13] As in this study, we found that in total cases of genital prolapse, 15.71% were below the age of 45. All these women were in their reproductive age. In all these young women, 21.21% were below the age of 25 and 12.12% were unmarried.

For many years, hysterectomy was the ultimate solution of symptomatic genital prolapsed, apart from the presence or absence of uterine disease and remarkably independent of patient wishes[14] and fertility potential. Now, with the evolution of uterine conservation procedures, women may desire uterine preservation for retaining their fertility. Even, when fertility is not concerned, uterine conservation surgery is associated with lesser morbidity than hysterectomy. Van Brummen *et al* found three times higher risk of urinary problems with vaginal hysterectomy.[15] At present, hysteropexy either through abdominal or vaginal route, seems to be a safe procedure with acceptable results in women who desire uterine preservation.[9]

This study was carried out to report the results of abdominal sacrohysteropexy performed in those women who desired uterine preservation for retaining fertility. Abdominal sacrohysteropexy has favourable cure rates ranging from 91–100%.[9] Other studies also found sacrohysteropexy more effective with abdominal approach.[16]

Results of this study are very promising for this technique as a safe and effective treatment of genital prolapse in women who desire uterine preservation. We found minimal risk of intraoperative (3.03%) and postoperative (3.03%) complications, less need of blood transfusion during surgery and reduced hospital stay (6.06%). Similar

observations were found in numerous studies which described short term and long term results after sacral hysteropexy, carried out abdominally or vaginally.[17,18]

Yet our follow-up period was short, no recurrence was found and no pregnancy was reported during this follow-up period of six months. In many studies, recurrence risk after sacrohysteropexy was also reported very low.[5,7,9,18] Study by Dietz *et al* reported a recurrence risk of 2.3% with sacrospinous hysteropexy.[19]

Recent data are insufficient to determine the safety profile of vaginal delivery and the outcome of surgery after pregnancy because of the limited number of pregnant cases reported in the literature. The findings of this study and the similar observations of other studies revealed that uterine preservation with abdominal sacrohysteropexy may become the new standard in treatment of genital prolapse and the indications for concomitant hysterectomy will need to be better justified.[14] However, this study is limited by the relatively small number of patients and with limited follow-up period. Therefore, questions related to surgical durability, outcome following pregnancy and complications related to uterine pathology will likely be answered.

CONCLUSION

Abdominal sacrohysteropexy can be safely offered to appropriately selected women with symptomatic genital prolapsed who desire to preserve the uterus and have child bearing potential. In addition, even when fertility is not concerned, advancing age of a woman should not serve as a barrier in maintaining her sexuality and personal identity, as possessing a uterus is valued by many women as an integral part of being a whole woman.

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