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Abdominal sacrohysteropexy for uterine vaginal prolapse and preservation of reproduction.

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ABSTRACT... Objectives: The purpose of this study was to assess the safety of sacrohysteropexy by determining intraoperative and post-operative complications and its effectiveness by pelvic organ prolapse recurrence on follow up. **Study Design:** Prospective study. **Setting:** Department of Gynecology and Obstetrics Unit-II DHQ Hospital PMC, Faisalabad. **Period:** Jan-2014 to Jan-2017. **Material & Methods:** Patients with uterovaginal prolapse, admitted through OPD were selected for abdominal sacrohysteropexy. Variables of study including duration of surgery, any intra-operative and post operative complications, need of intra operative blood transfusion, post operative hospital stay; recurrence of POP, number of pregnancies in 06 moths follow up were recorded. **Results:** During this study period, 319 patients were admitted with uterovaginal prolapse. 32 (10.03%) cases were selected for abdominal sacrohysteropexy. In these 32 patients, 03 (9.37%) were <30years of age, 21(65.62%) were between 30-35 years and 8 (25%) were between 35-40 years of age. About 2(6.25%) were unmarried, while 30(93.7%) were married. In these married women 14(43.75%) were multiparas, another 14(43.75%) were para 1 or 2, while 4(12.5%) were para 3 or more. Duration of surgery was 40-45 minutes in 31(96.87%) patients. In 28(87.5%) cases per operative blood loss was <150ml while in 4(12.5%) it was estimated to be >150ml but less than 300ml. Post operatively only 1(3.12%) case developed wound sepsis and it was the only one (3.12%) who was discharged on 7th post operative day, while rest 31(96.87%) were discharged on 3rd post operative day. No recurrence was noticed in 06 moths follow up, while 2(6.25%) patients became pregnant. **Conclusion:** Abdominal sacrohysteropexy is a safe and an effective treatment in terms of overall anatomical and functional outcome, complications, post operative recovery, length of hospital stay and sexual functioning, in women who desire uterine and hence fertility preservation.

Key words: Abdominal sacrohysteropexy, uterovaginal prolapse

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INTRODUCTION

Millions of women are affected by uterovaginal prolapse worldwide.[1] It is a disorder characterized by the pelvic floor dysfunction in which vagina becomes everted followed by descent of uterus in case of apical defect and bladder or rectum in case of anterior wall and posterior wall defects respectively. As the world population increases in age, the prevalence of pelvic floor dysfunction is likely to increase. However it is estimated that the lifetime risk of requiring at least 1 operation to correct incontinence or prolapse is approximately 11%.[2] Multiparous women are more likely to develop pelvic floor defects due to repeated child births. Congenital differences in collagen behaviour (like increased joint elasticity) may manifest as development of UV prolapse in young nulliparous women.[3] The usual treatment for UV prolapse is hysterectomy followed by pelvic support repair.[4,5] In young reproductive age group women suffering from uterovaginal prolapse, abdominal sacrohysteropexy is safe and effective.[6] Besides achieving durable anatomical restoration and normal vaginal axis, sexual function is also maintained by this procedure with excellent success rate and minimal complications.[7] The purpose of our study was thus to find out the complications of abdominal sacrohysteropexy in young women in whom uterus is conserved and to report its success rate.

MATERIAL & METHODS

This prospective non randomized study was carried out in the Department of Obstetrics and Gynecology at DHQ Hospital, affiliated with Punjab Medical College, Faisalabad, from 2014 to 2017. 32 women of childbearing age with uterovaginal prolapse who wanted uterine preservation underwent abdominal sacrohysteropexy during this period. Complete pre operative assessment can prevent many post operative complications, therefore all the women were thoroughly evaluated through detail urogynaecological and sexual history, physical examination, site specific assessment of pelvic floor defect and investigations.

Method for noting pelvic floor relaxation included pelvic organ prolapse quantification (POP-Q) system. Regarding the surgery, it was done under general anesthesia. After entering the peritoneal cavity, an area as large as required for fixing the mesh was incised on the sacral promontory slightly dextrolateral to the midline. The peritoneal incision was extended along the rectosigmoid colon towards the deepest part of the cul-de-sac opening the recto vaginal space. Both the lateral and caudal incisions were extended to form a proper mesh compartment. A partially absorbable mesh (ultrapro ®, ethicon Inc) was inserted into this compartment. The mesh was stitched to the anterior longitudinal ligament of sacrum on one end and to the cervix on the other end in order to suspend the uterus. Using a non absorbable sutures; i.e. prolene-1. The opened rectovaginal space was reperitonised, using a running suture. Per operative blood loss; duration of surgery, any intra operative and post operative complication were recorded. The patient was discharged on third day with no physical complaints. The clinical follow up which consisted of a physical evaluation of pelvic floor was scheduled after 6 moths of sacrohysteropexy; to find out any recurrence with the same POP-Q measurements as the pre operative staging.

RESULTS

About 2384 gynecological case were admitted through OPD during this study period out of which, there were 319 (13.3%) cases of UV prolapse. Amongst these 319 cases, 32(10.03%) cases were selected for sacrohysteropexy. The characteristics of study population including age, marital status and parity were recorded, as shown in Table-I. Study variables including duration of surgery, per-operative blood loss, any intra-operative and post-operative complication (like infection); pelvic organ prolapse (POP) recurrence and pregnancy on follow up were also recorded, as shown in the Table-II.

In most of the cases, surgery was unremarkable with no significant intraoperative complication and minimal blood loss <150ml (87.5%). The post operative stay was also uneventful. Only one patient had post operative infection (3.12%) that was treated with I/V antibiotics, and this was the only patient who was discharged on 7th post operative day (3.12%). Otherwise most of the patients remained admitted for a maximum of 03 days (96.87%) post operatively. On follow up of 06 months, no recurrence of POP was noticed and 02 patients became pregnant (6.25%).

Result	Number	Percentage
Per=Operative blood loss (ml) 100-150 ml 150→ 300ml >300ml	 28 04 None	 87.5% 12.5% 0%
Duration of surgery (in min) 40-45 min >45 min	 31 1	 96.87% 3.12%
Intra operative blood transfusion	None	0%
Post operative complication like infection	1	3.12%
Post operative hospital stay. Upto Day- 3 Day-5 Day-7	 31 None 1	 96.87% 0% 3.12%
Recurrence in follow up of 06 months	None	0%
Pregnant in follow up	2	6.25%

Table-II. Results of surgery in patients having Sacrohysteropexy (n=32).

Variables	Number	Percentage
Age (Years)		
< 30	3	9.37%
30-35	21	65.62%
35-40	8	25%
Parity		
Nulliparous	14	43.75%
Para1-2	14	43.75%
Para 3 or >	4	12.5%
Marital Status		
Unmarried	2	6.25%
Married	20	93.7%

Table-I. Chractristics of patient having sacrohysteropexy (n=32).

DISCUSSION

Uterogenital Prolapse is common gynecological condition associated with a high degree of morbidity and effect on quality of life. Epidemiological factors include increasing age, high parity, Caucasian ethnicity, congenital fascial hyperelasticity, obesity and chronically raised intra-abdominal pressure. Many women will be asymptomatic, however 2nd degree or greater order prolapse is found in approximately 40% symptomatic women upon routine pelvic examination.[8,9,10,11] About 11%-19% of women will need a surgery for prolapse or incontinence by the age of 80-85 years, and an additional prolapse repair procedure will be required in about 30% of these women.[12,13] Though vaginal Hystrectomy is the most commonly performed procedure for uterine prolapse worldwide,[14,17] but uterine sparing surgery like sacrohysteropexy has found to be associated with shorter operating time, lesser blood loss, faster recovery and fewer complications like infection and recurrence. Furthermore in recent years, it has become more trendy to preserve uterus, due to an equal outcome with hysterectomy, by doing sacrohysteropexy, so women usually opt for this uterine preservation procedure.[20,21] Therefore abdominal sacrohysteropexy is thought to be an effective option for females considering preservation of fertility. By this procedure female sexual identity is preserved and the role of uterus in orgasm and female sexuality is also not compromised. All these functional preservations which have been discussed above make abdominal sacrohysteropexy a reasonable and acceptable surgical choice in young females of reproductive age group even with advanced degree uterovaginal prolapse.

CONCLUSION

Young women with wishes to conceive and advanced degree genital tract prolapse should be treated with Abdominal Sacrohysteropexy; as it is a safe option in terms of surgical complications, as well as have good results in terms of anatomical restoration and function preservation.

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AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author(s) Full Name	Contribution to the paper	Author(s) Signature
1	Robina Ali	Proposed And designed the study, made final commandments.	
2	Riffat Ehsan	Collected data, entered and critically revised the study.	
3	Ghazala Niaz	Analyzed and interpreted the data.	
4	Fatima Abid	Helped in data collection and literature study for discussion and review.	