



## UTEROVAGINAL PROLAPSE; USE OF AUTOLOGOUS RECTUS SHEATH TO REPAIR A GOOD CHOICE NEEDING MORE FOLLOW-UP

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**ABSTRACT... Objectives:** To follow post-op patients after autologous rectus sheath repair of utero-vaginal prolapsed. **Study Design:** Observational study. **Place & Duration of study:** Services Hospitals, SIMS, LHR & Bhatti International Hospital, Central Park Medical College LHR. 2008-2012. **Methods:** Pts from 28to38 yrs of age with utero-vaginal prolapse were selected. Due to their younger age group uterus retaining procedure was planned whether they had completed their family or not ,So autologous rectus sheath graft was used with abdominal approach to suspend the uterus along with plication of round ligament These patients were then observed for immediate post op complications & 6 months onwards follow up was also noted. **Results:** 10 pts were included in the study. Only one pt had dysurea & 1 pt had 1st Degree cystocele on discharge. Long term follow up showed that 2 pts had 1st degree cystocele & only 1 pt had 1st degree uterovaginal prolapse. **Conclusions:** An easier procedure for utero-vaginal prolapse that can be easily performed in a regular hospital set-up without the need of Laparoscope, mesh or high surgical expertise.

**Key words:** Uterovaginal prolapse, autologous rectus sheath

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### INTRODUCTION

Uterovaginal prolapse is a distressing condition affecting mostly the old age ,menopausal women According to statistics about half of the women will develop utero-vaginal prolapse during their life time. Twenty percent of these women will be symptomatic requiring treatment<sup>1</sup>.

As this condition affects the older age group women who have mostly completed their families, the choice of treatment is easy. The treatment then is usually definitive surgery doing vaginal hysterectomy with anterior colporrhaphy & posterior colpo- perrineorrhaphy. But the issue arises when younger women who are less than 40 yrs of age & either they have yet to complete their family or they do not want to resort to hysterectomy so early in their life. These younger women are also at a higher risk of prolapse recurrence but are at a lower risk from surgical procedures as compared to the older women. They are best treated with procedures with better efficacy (abdominal sacral colpopexy rather than vaginal sarospinous ligament suspension)<sup>2</sup> .These patients may have

certain associated problems as well like urinary incontinence ,coital difficulty & dissatisfaction, sub fertility etc experiencing after the procedure.

The general approach to the choice of procedures in patients with pelvic organ prolapse (POP) is:

1. Reconstructive or obelitrative—women who are symptomatic with POP are treated with a reconstructive procedure. Obelitrative procedures (colpoclesis) are reserved for women who cannot tolerate more extensive surgery & who are not planning future vaginal intercourse
2. Concomitant Hysterectomy—when apical prolapse is repaired, the decision must be made whether to perform hysterectomy as a part of the procedure. This is one usually when the women have either completed their family or they are menopausal
3. Surgical route for repair of multiple sites—reconstructive surgery for POP often involves repair of multiple anatomic sites of prolapse(apical, anterior, posterior) .The choice of surgical route depends on the

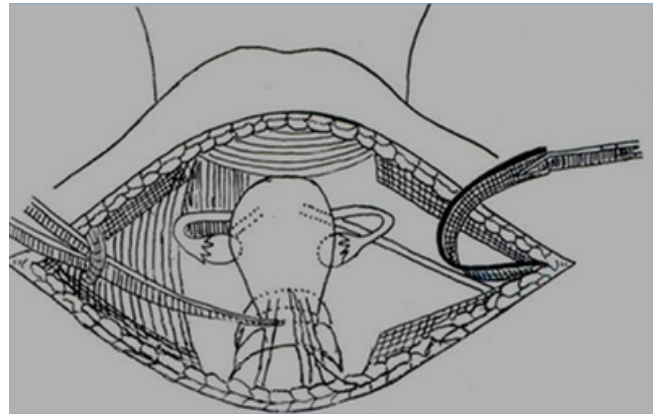
optional approach for the combination of prolapse site.

4. Concomitant anti -incontinence surgery . Symptomatic POP often coexists with stress incontinence. POP repair must be coordinated with treatment of incontinence
5. Use of surgical mesh which is used in abdominal POP repair .Its use in transvaginal procedures has increased but the question remains about the safety of procedure
6. An alternate to mesh usage, which can either be through Laparoscopic approach or the use of autologous slings

Out of these procedures, reconstructive surgery for POPs performed often at multiple anatomic sites (apical, anterior, posterior). Repair of each prolapse site & how to best perform a combined reconstruction must be considered when choosing an overall approach .Common teaching is that all procedures should be performed using one route (vaginal/abdominal).Since it is generally preferred to avoid both abdominal & vaginal incisions. However in some circumstances the surgeon may combine the routes.

Choice of surgical routes is mainly of concern in women who require apical prolapse isolated repair of anterior & posterior vaginal wall prolapse typically performed transvaginally. Repair of apical prolapse abdominally with sacral colpopexy results in lower rate of recurrence while trans vaginal repair (sacrospinous ligament fixation, uterosacral ligament fixation) has shorter recovery & less morbidity. Patients with apical prolapse has a high rate of anterior prolapsed and lower rate of posterior prolapse<sup>3</sup>. It is controversial whether repair of apical prolapse is sufficient to support anterior & posterior vaginal walls or if additional procedures are required to address anterior & / posterior prolapse. It has been observed that If the vaginal muscularis is well suspended at the apex , many anterior defects (55%) & few posterior defects will resolve<sup>4</sup>.

Most of the operations correcting apical prolapse abdominally require the use of mesh or involves anchoring of anterior longitudinal ligament which



may require skillful surgeons or may create some unwanted complications<sup>5</sup>. Hence a newer method was used. The rectus sheath was given a transverse incision and was dissected to make at least one inch broad strip which was cut horizontally in the centre to make two flaps or strips. The peritoneum was opened & on each side the strips entering the peritoneal cavity through lateral abdominal wall using internal inguinal ring. The prolapsed uterus was then held upright and the two fascial strips are attached to the posterior aspect of upper cervix at the level of internal os. The fascial strips are tied to each other using prolene No 1. The round ligament are also plicated to create anteversion of the uterus. The closing of the rectus sheath may be a little difficult & hence dissection to free the rectus sheath may be required .The rectus sheath is then closed routinely.

### Objective

To follow up post op patients after autologous rectus sheath sling repair in pts with apical prolapse preserving uterus

### MATERIALS & METHODS

Patients from 28 to 38 yrs age were included .These patients were either had incomplete families or were unwilling for definitive surgery or younger age group . The patients were explained about the need of a repeat procedure due to higher chances of failure & they were willing for it. These patients had no obvious signs & symptoms of connective tissue disorders, Diabetes Mellitus, or any other medical problem. A total of 10 patients were included. Seven patients were between 28-32 yrs, 3 patients were between 33-38. All of them were parous. On discharge, patients were

followed up for improvement of symptoms by questioning them, doing speculum and vaginal examination. Patients were followed up after six months onwards

**A. Immediate post op complications**

- a. blood loss
- b. pain
- c. urinary complains
- d. failure of improvement of symptoms of prolapse

**B. Delayed complications**

- a. Urinary complains
- b. Cystocele recurrence
- c. Rectocele recurrence
- d. Uterovaginal prolapse

**RESULTS**

Although the sample size was small, however the results were assuring. The immediate post op recovery was good in all the patients. No patient required blood transfusion. On discharge, the patients were examined vaginally to assess the improvement in the prolapse, cystocele & rectocele. Patients were questioned regarding urinary complains & pain lower abdomen. Only one patient had dysurea & 1 pt had 1<sup>st</sup> degree cystole .But overall the patients were satisfied as far as their complain of prolapse was concerned

Patients were followed up after six months & 2 pts had cystocele & 1 pt had 1<sup>st</sup> degree uterovaginal prolapse. All the patients had mixed or overlapping symptoms as shown in Table-II.

28-32 yrs	33-38 yrs
7 pts	3pts
<b>Table -I. Pt Profile</b>	

Symptoms	No. of Pts
Cystocele	6
Rectocele	5
Utero-vaginal Prolapse	9
Back ache	8
Debecutis Ulcers	2
<b>Table-II.</b>	

Pts had overlapping symptoms

Symptoms	Immediate complications	Delayed complications
Cystocele	None	2
Rectocele	None	None
Apical Prolapse	1	1
Dysurea	1	None

**Table-III**

**DISCUSSION**

Uterovaginal Prolapse is a distressing condition affecting women of all age group. The problem of utero-vaginal prolapse & its potential treatment is described in oldest documented medical literature. The Ebres Payrus recommends “To correct a displaced womb; with oil of earth(petroleum),with fedder(manure) & honey;rub the body of the patient”<sup>6</sup>. Ethnicity also plays an important role in POP with African women having lesser risk & Hispanic women are more at risk<sup>7</sup>.

Although currently in developed countries, the surgical management of apical prolapse has taken a major shift with the introduction of mesh & endoscopic surgery. Use of graft in reconstructive surgery is as early as 1900.Over the years, a number of auto, allo & xeno-grafts have been used for pelvic floor repairs. The use of mesh has become popular due to their use by surgeons for repair of hernias and as utero-vaginal prolapse is also a weakness causing herniation of pelvic floor, mesh is being also used for utero-vaginal prolapse. However several warnings have been issued regarding the use of mesh for prolapsed & incontinence repair due to its causing mesh erosion through vagina, pain, infection, bleeding, dysparunia, organ perforation& urinary problems .While many of these complications are common to all pelvic floor repairs, mesh erosion & organ perforation are surely unique to mesh repairs & the trocars used for its placement<sup>8</sup>. Presently, with respect to apical prolapse, a review of 56 trials including 5954 women with a variety of prolapse available on line states that the use of graft or mesh reduces the risk of anterior vaginal wall prolapsed on examination. However, these benefits must be weighed against increased operating time, blood loss,& re-operations because of mesh complications<sup>9</sup>. Hence a better choice would be to avoid these complications.

Our country, Pakistan has certain issues which affect the overall treatment & management options of these young women. In our country where early marriages, pressure to produce son, increased domestic work load on women & poor women health with wishes to retain fertility & sexual wellbeing causes increased chances of apical prolapse in younger age group and seeking of treatment becomes difficult in these women. Usually these women belong to middle or poor socio-economic status where their importance is felt as long as they are healthy to reproduce & work (10). Any health issue is reluctantly dealt with. So it is not easy for these women to reach hospitals & then most of our hospital are not either well equipped or surgical expertise are also not available to perform a successful mesh repair or laparoscopic surgery. Hence there is a need to perform an operation which has less morbidity, is easily performed & is relatively cost effective. It may help women to regain their reproductive, sexual & general health quicker & at manageable cost.

As regards mesh operations, these are associated with graft rejections & erosions. Secondly the mesh repairs are more successful when using the abdominal route which itself causes more morbidity when a mesh is part of the procedure<sup>12</sup>.

Use of autologous graft is also found useful by Nisa et al<sup>13</sup>. This procedure is easy to perform, needs routine theatre equipment & the surgical skill can also be developed easily. This procedure is not associated with bladder handling & mesh complications are also avoided. Although sparse data is available long follow ups sometimes become difficult in our country due to poor data availability & compliance of the patients.

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