

A PROSPECTIVE RANDOMISED TRIAL COMPARING TWO SURGICAL TECHNIQUES FOR POSTERIOR VAGINAL WALL PROLAPSE USING SUBJECTIVE AND OBJECTIVE MEASURES.

Hypothesis / aims of study

The prevalence of posterior vaginal wall prolapse ranges from 20 to 80%. Gynaecologists traditionally have advocated a transvaginal repair involving a levator ani muscle midline plication while coloproctologists advocate a transanal approach involving a transrectal resection of the prolapsed bowel. However the most appropriate technique and approach for repairing the posterior vaginal wall prolapse is still unclear to date. Long term success rate ranges from 76% to 97%. Nevertheless it has been reported that following both techniques up to 50% of women complains of postoperative pelvic pain as well as dyspareunia. Recently fascial repairs not involving the levator ani muscles have been advocated for repair of the posterior vaginal wall prolapse [1]. There are very few prospective randomised trials evaluating the different surgical techniques for the posterior vaginal wall prolapse repair using both subjective and objective measures. Therefore our aim was to evaluate standard posterior colpoperineorrhaphy versus fascial and vaginal epithelial plication of posterior vaginal wall in a prospective randomised trial using subjective and objective assessment tools.

Study design, materials and methods

Women with symptomatic posterior vaginal wall prolapse undergoing prolapse repair were recruited. Women were randomised using a block randomisation method to standard Posterior colpoperineorrhaphy or Fascial and vaginal epithelial plication of posterior vaginal wall. All women were studied using a Prolapse quality of Life (PQOL) questionnaire, Female sexual function index (FSFI), Bristol stool chart and The Birmingham Bowel and Urinary Symptoms Questionnaire (BBUSQ-22) preoperatively and at six months follow up. The degree of prolapse was assessed using the pelvic organ prolapse quantification system (POP Q) preoperatively and at six months follow up.

The General health perception, Prolapse impact, Role limitations, Physical limitations, Social limitations, Personal relationships, Emotions, Sleep/Energy and Severity measures were assessed using the PQOL questionnaire. Sexual function was assessed in six domains including desire, arousal, lubrication, orgasm, satisfaction and pain using the FSFI. Bowel function was assessed in the following domains using the BBUSQ-22: constipation, evacuation, incontinence and urinary symptoms.

The two groups of women were compared at baseline and at six months postoperatively using the Mann-Whitney U test. POP-Q findings, sexual and bowel function as well as QOL before and after surgery were compared before and after surgery in each of the two groups using the Wilcoxon signed rank test.

Results

Fifty two women with a mean age of 56 (range 35-83 years) were studied .26 women underwent standard Posterior colpoperineorrhaphy and the remaining 26 patients underwent Fascial and vaginal epithelial plication of posterior vaginal wall. Baseline characteristics including age, parity, body mass index and previous pelvic surgery were not significantly different between the two study groups. There was no statistical significant difference in the mean preoperative domain scores in all the three questionnaires and the mean preoperative POP Q measurements between the two study groups (P value > 0.05).

There was a statistical significant difference in the vaginal examination findings as well as QOL in both groups before and after surgery (P value <0.05). However there was no statistical significant difference in the sexual function assessment in both the groups before and six months after surgery.

Only in the group who underwent Facial and vaginal epithelial plication there was a significant improvement of the Bowel evacuation as shown in Table1

	Standard posterior colpoperineorrhaphy	Facial and vaginal epithelial plication	
	Mean preop score(+/- Standard deviation)	Mean post op score(+/-Standard deviation)	P value
Bowel evacuation domain	223(+/-186)	151(+/-122)	0.03

Table 1: Mean Bowel evacuation domain scores in women who underwent Fascial and vaginal epithelial plication of posterior vaginal wall

Objectively women who had a Facial and vaginal epithelial plication had better outcomes than those who underwent a posterior colpoperineorrhaphy at six months postop follow up as shown in table 2.

	standard posterior colpoperineorrhaphy	Facial and vaginal epithelial plication	

POP Q	Mean difference in score(+/- standard deviation)	Mean difference in score(+/- standard deviation)	P value
Ap	-1.33(+/- .73)	-2.01(+/- .73)	0.02

Table 2: Mean difference in POPQ score and the difference between the two groups

Interpretation of results:

Women who underwent Fascial posterior vaginal wall repair have better bowel evacuation scores as well better objective outcomes postoperatively when compared to standard Posterior colpoperineorrhaphy.

Concluding message

Fascial and vaginal epithelial plication of posterior vaginal wall produces better anatomical and functional results when compared to standard posterior colpoperineorrhaphy. Long term follow up is needed to determine if these findings persist.

References

1. Clin Obstet Gynecol 36:976, 1993

<i>Specify source of funding or grant</i>	none
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
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<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes