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

St. Mary’s Hospital, London

Hypothesis/Aims

The prevalence of posterior vaginal wall prolapse ranges from 20 to 80%. 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%. 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 randomized 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 colpopерineorrhaphy versus fascial and vaginal epithelial plication of the posterior vaginal wall in a prospective randomized trial using subjective and objective assessment tools.

Results

Fifty two women with a mean age of 56 (range 35-83 years) were studied. 26 women underwent standard posterior colpoperineorrhaphy and 26 women underwent fascial and vaginal epithelial plication of posterior vaginal wall. 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 > 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 <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 fascial and vaginal epithelial plication there was a significant improvement in bowel evacuation as shown in Table1. Objectively women who had a facial and vaginal epithelial plication had better outcomes than those who underwent a standard posterior colpoperineorrhaphy at six months postoperative follow up as shown in table 2.

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

Study design, materials and methods

Women with symptomatic posterior vaginal wall prolapse undergoing prolapse repair were recruited. Women were randomized using a block randomization method to standard posterior colpopерineorrhaphy or fascial and vaginal epithelial plication of posterior vaginal wall as shown in the images below.

Fascial (image 1) and vaginal epithelial plication (images2-4)

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 6 months follow up. The degree of prolapse was assessed using the pelvic organ prolapse quantification system (POP Q) preoperatively and at 6 months follow up.

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.

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.

Conclusion

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