

Medium Term Results of Female Pelvic Floor Reconstruction with Synthetic Meshes: A Clinical Comparison of the Efficacy, the Operating Time and Complications - Our 6-Year Experience

Introduction and Objective: Pelvic organ prolapse is a major health care problem especially in the aged population. We present our 6-year experience and medium term results of female pelvic floor reconstruction using synthetic meshes via transobturator foramen (prolift™) without suture and self-retaining meshes (elevate™). We prospectively evaluated and compared clinical efficacy, operating time and complications between tension-free vaginal mesh through transobturator foramen (prolift™) and self-retaining meshes (elevate™) in 120 patients and 3.2 years mean follow up.

Materials and Methods: From January 2006 to December 2011, 71+39 female patients with pelvic organ prolapse underwent tension-free (1st group) and self-retaining (2nd group) vaginal meshes procedure in our department. In the 1st group 46 patients were treated for cystocele, 12 for rectocele and 13 for recto-cystocele using tension-free without suture vaginal meshes (prolift™). In the 2nd group 26 patients were treated for cystocele, 6 for rectocele and 7 for recto-cystocele using self-retaining vaginal meshes (elevate™). The mean age was 64.5 yrs (35-88) in the 1st group and 62.4 yrs (43-83) in the 2nd group respectively. The efficacy at 1, 3, 6, 12 months, the mean operating time and complications were evaluated and compared. Statistical analysis was performed using t-test and χ^2 -test.

Results: Peri-surgical complications as hemorrhages were minimal with no rectal or bladder injury in both groups. The mean operating time was 28min vs 20min respectively for anterior procedures and 45min vs 35min for both anterior and posterior procedures. Anatomical success rate at 3, 6, 12 months was 92%, 90.5%, 89.3% (1st group) and 93.6%, 91.5%, 90.1% (2nd group) respectively. Post-surgical complications were: vaginal mesh extrusion 2 patients (1st group) 0 patients (2nd group), pelvic pain 10 patients (1st group) 2 patients (2nd group), stress urinary incontinence 2 patients (1st group) 0 patients (2nd group) and no recurrence of prolapse in both groups.

Conclusions: The female pelvic floor reconstruction with synthetic meshes presents high efficacy without significant differences between tension free and self-retaining meshes. The operating time, the vaginal mesh extrusion and post-operative pain were higher in the tension free group. There were not any significant differences with respect to the other complications.