

SAFETY AND EFFICACY OF TWO SURGICAL MESHES ON ANTERIOR VAGINAL WALL PROLAPSE.

Hypothesis / aims of study

Pelvic organ prolapse (POP) occurs when the tissues that hold the pelvic organs in place become weak or stretched. Surgical mesh is a medical device that is generally used to repair and reinforce weakened tissue. In urological procedures, surgical mesh is permanently implanted to reinforce the weakened vaginal wall to repair POP. However, there are a few concerns about using surgical mesh to correct POP, because of post-operative complications.

There are several methods of surgical repair using surgical mesh for POP. The aim of this study is to compare the long term efficacy and safety of Prolift[®] and Easycele[®] for anterior vaginal wall prolapse repair.

Study design, materials and methods

A total of 63 female prospective patients enrolled. All enrolled patients had an anterior vaginal wall prolapse classified higher than stage II according to the POP-Q system. Patients with vaginal atrophy, previous pelvic radiation history, or plans for future pregnancy were excluded. Among these patients, 36 patients had stress urinary incontinence. Patients with urinary incontinence underwent mid urethral sling operation with concomitant TVT[®]. The Easycele[®] procedure is designed to penetrate the internal obturator muscle and obturator foramen without penetrating the arcus tendineus fasciae pelvis. Symptoms and quality of life (QoL) of patients were evaluated with a Pelvic Floor Distress Inventory (PFDI) score. Cure, improve and fail were defined as stage 0, I, and II respectively, according to the POP-Q stage system.

Results

Among the total 63 patients, 32 patients received the Prolift[®] procedure and 36 patients received the Easycele[®] procedure. The mean age of patients was 59.6±8.3 and 63.5±13.0 years of age for Prolift[®] and Easycele[®] respectively. History of delivery, body mass index and post-menopause state did not differ between both groups. The mean follow up period was 23.2±12.3 months, and 48 post-operative patients were included in the final analysis. There were no intraoperative complications in either procedure. Immediate surgical outcome was stage 0 (cure) in both groups. At final follow up, the operative outcomes of cure, improve and fail were achieved in 39, 7 and 2 patients, respectively. The PFDI showed significant improvement in UDI scores for both procedures. Vaginal erosion was observed in one patient who received the Easycele[®] procedure.

Interpretation of results

After repair of anterior vaginal wall prolapse using Prolift[®] and Easycele[®], anterior compartment descent was corrected for most patients. After the operation, final follow ups were conducted for 48 patients. A successful surgical outcome was achieved for 39 of these patients. Their symptoms of pelvic organ prolapse significantly improved over preoperative statuses. One patient with vaginal erosion was treated with vaginal estrogen cream, and vaginal erosion was covered with normal vaginal tissue.

Concluding message

Anterior vaginal wall prolapse repair using Prolift[®] and Easycele[®] is an effective procedure. These procedures had a low complication rate and a high success rate. For anterior vaginal prolapse patients, surgical repair using surgical mesh was effective and safe. The type of surgical procedure selected by surgeons will depend upon the type of POP observed.

Table 1. Results of follow up after cystocele repair with both methods.

Number of patients	Cure (%)	Improve (%)	Fail (%)	Total
Prolift [®]	21 (77.8%)	5 (18.5%)	1 (3.7%)	27 (100%)
Easycele [®]	18 (85.8%)	2 (9.5%)	1 (4.7%)	21 (100%)
Total	39 (81.3%)	7 (14.6%)	2 (4.1%)	48 (100%)

Table 2. Pelvic Floor Distress Inventory score change between pre and post operation

	Pre operation		Post operation		p-value
	Prolift	Easycele	Prolift	Easycele	
UDI score	110.3	115.7	63.2	23.1	0.013
POPDI score	104.9	125.7	62.4	18.9	0.005

UDI: urinary distress inventory, POPDI: pelvic organ distress inventory

Disclosures

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