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VAGINAL REPAIR OF SEVERE CYSTOCELE WITH PORCINE XENOGRAFT MATRIX (PELVICOL[™]) COMBINED WITH TENSION-FREE VAGINAL TAPE (TVT).

Aims of Study

Severe pelvic organ prolapse associated with stress urinary incontinence is commonly encountered. Moreover, up to 25% of continent women undergoing vaginal repair for large cystocele develop SUI after surgical repair (1-3). TVT has achieved widespread acceptance as a treatment for stress incontinence (4). However, very little data exists on the safety and efficacy of combined TVT insertion and prolapse surgery, specifically with usage of porcine acellular xenograft matrix (Pelvicol[™]). We studied the safety and efficacy of the combination of TVT and prolapse repair with or without porcine xenograft matrix (Pelvicol[™]) in patients with severe cystoceles with or without overt SUI.

Methods

From April 2001 to October 2002, 24 patients underwent transvaginal grade III or IV cystocele repair combined with TVT placement. 19 patients underwent anterior colporraphy with porcine xenograft matrix (PelvicolTM) overlay and 6 had simple anterior colporraphy. All the patients were available for follow-up. Mean age was 63 years (range 40 to 87 years). Presenting symptoms included frequency/urgency in 19 (79%), obstructive symptoms in 15 (63%), vaginal mass in 12 (50%), bowel complaints in 9 (38%), stress urinary incontinence (SUI) in 8 (33%) and urge urinary incontinence (UUI) in 8 (33%). Patients were prospectively evaluated using validated Stress, Emptying, Anatomy, Protection and Instability (SEAPI) scores. Associated procedures were the following: rectocele in 19 (79%), enterocele in 5 (21%), and hysterectomy in 2 patients (8%). TVT was carried out according to the technique originally described by Ulmsten⁴. The tape was inserted at the beginning of the procedure, was placed loosely, and a tissue bridge was left between the anterior colporrhaphy (overlaid or not by PelvicolTM) and the incision of the tape. All procedures were performed under general anesthesia.

Results

Mean follow-up was 8 months (range from 4 to 18). Preoperative and postoperative 0 (no complaints) scores were: S0=17%, E0=46%, A0=0%, P0=21%, I0=21% and S0=96%, E0=92%, A0=92%, P0=79%, I0=71% respectively. Comparison of pre and postoperative SEAPI scores showed a statistically significant improvement in all the SEAPI domains (p<0.01) using Mc Nemar's analysis. Cystocele recurred in 2 patients (8%) while SUI persisted in 1 patient (4%). De novo urge incontinence occurred in 2 patient (8%). No retention, infection, erosion, fistula or vaginal stenosis was noted. Mean operative bleeding was less than 150 ml and mean hospital stay inferior to 24 hours.

Conclusions

TVT can be combined safely with prolapse surgery, especially with other type of bio-material similar to Pelvicol[™]. More research is needed to evaluate the long-term safety and efficacy of this combined procedure.

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