

TENSION FREE VAGINAL TAPE (TVT) AND SACROSPINOUS LIGAMENT FIXATION OF THE VAGINA IN THE SURGICAL TREATMENT OF PROLAPSE IN PATIENTS WITH GENUINE AND MASKED STRESS URINARY INCONTINENCE: TO COMBINE OR NOT THAT IS THE QUESTION.

Aims of Study

Genital prolapse often is associated with genuine stress incontinence (GSI) or masked stress incontinence. As a consequence single prolapse repair without anti-incontinence surgery may result in the onset or persistence of GSI in these patients. In this prospective study we analysed the outcome of patients undergoing combined pelvic floor reconstructive and tension-free vaginal tape (TVT) surgery in patients with prolapse associated with genuine or masked stress urinary incontinence.

Methods

From February 2000 until December 2002, 37 patients (mean age: 66 years; range: 43 – 80 yrs.; parity: 2.0; range: 0 – 6) with genital prolapse and genuine or masked stress urinary incontinence underwent sacrospinous fixation of the vagina and TVT-procedure. Patients having associated defects of the anterior and/or posterior vaginal wall (n = 24) received additional anterior and/or posterior colporrhaphy. Hysterectomy was carried out in 11 women (29.7%), whereas 26 patients (70.3%) had prior hysterectomy. 5 women had prior incontinence procedure and 10 patients already had been treated by prolapse repair, previously.

All patients underwent a full urogynecological assessment prior to and 19.7 months (range: 3 - 37 months) after surgery. Using a questionnaire, patient satisfaction was scaled from 0% (very dissatisfied) to 100% (very satisfied). Pre- and postoperative urogynecological assessment comprised exclusion of urinary tract infection, residual urine measurements, uroflowmetry, filling cystometry, urethral pressure measurements (Andromeda, Unterhaching), a clinical stress test in the lying and supine position, and introital ultrasound (Toshiba). To assess masked stress incontinence reposition of the prolapse was carried out during urethral pressure measurements and the clinical stress test.

Results

14 patients (37.8%) demonstrated masked stress incontinence, whereas 23 women revealed GSI at urogynecological investigation. 8 patients (21.6%) demonstrated residual urine > 100ml before operation.

Surgery was successfully carried out except one corrected bladder perforation, and a bleeding >200 mls in one patient. After surgery urinary tract infections occurred in 15 women (40.5%), 5 patients (13.5%) had a prolonged bladder training because of > 100 mls residual bladder volume. In 2 patients (5.4%) incision of TVT was necessary after 6 weeks because of complete obstruction. One GSI grade I occurred in these patients.

At postoperative urogynecological investigation GSI was cured in 29 patients (78.4%), 7 patients (18.9%) had grade I recurrent GSI and 1 patient (2.7%) an overflow urinary incontinence. At follow-up 10 patients (27.0%) demonstrated de-novo urgency. 5 patients (13.5%) showed residual urine volume of > 100 mls.

All patients were cured from prolapse at the apical segment of the vagina, whereas recurrent cystocele and rectocele were found in 9 women (24.3%) and 5 patients (13.5%), respectively. Patients with genuine (n = 23) and masked stress urinary incontinence (n= 14) showed a cure rate of GSI in 69.6% and 92.9%, respectively, and no differences in respect to postoperative residual bladder volume, de-novo-urgency, rate of urinary tract infections, and the outcome of reconstructive pelvic surgery.

Following combined reconstructive, and anti-incontinence surgery, subjective improvement of bladder, anorectal and vulvovaginal function increased from 47% to 72%, 73% to 82% and 46% to 81%, respectively.

Conclusions

Beside its safety and feasibility, our medium-term results of combined reconstructive surgery of genital prolapse and GSI , justify a single-term approach of sacrospinous ligament fixation of the vagina and TVT-procedure, irrespective of genuine or masked stress urinary incontinence. Insurances and health care systems should take into account our results and respect the benefits of a combined approach.