

## TENSION-FREE VAGINAL TAPE: APPLICATION IN WOMEN WITH PELVIC FLOOR RELAXATION.

### Aims of Study

Tension Free Vaginal tape (TVT) has been proven to be effective in the treatment urodynamic stress incontinence (1). However, the majority of women with urinary incontinence present with variable degree and type of pelvic organ prolapse. With this study we attempt to evaluate the safety and efficacy TVT placement in conjunction with the restoration of normal pelvic anatomy in patients with pelvic floor relaxation.

### Methods

This study was designed as a prospective, open, nonrandomized study. A standardized protocol was used for pre- and postoperative evaluation. Follow-ups were performed after 2,6,12 and 24 months. The protocol included medical history, physical examination, urodynamic evaluation, including filling cystometry, uroflowmetry and urethral pressure profilometry, ICS grading for prolapse and quality of life assessment.

132 patients with urinary stress incontinence and pelvic organ prolapse of various degree and type participated in the study. Complete data are available for 102 patients. Of these, 96 had cystocele, 89 rectocele and 63 uterine or vault prolapse. In all patients tension-free vaginal tape TVT was placed. Forty seven (47) patients underwent vaginal hysterectomy, 34 pelvic floor repair (PFR), 13 anterior repair, 6 posterior repair, 1 Manchester operation and PFR, 1 total abdominal hysterectomy and 14 patients had vault suspension ( 10 cases iliooccygeous fascia suspensions, 3 high uterosacral ligaments suspension and 1 suspension using the posterior IVS). All procedures started with the introduction of the TVT without removing the protective plastic sheath. The adjustment of the tape was done at the end of the procedure after all pelvic floor defects were reconstructed.

### Results

Mean age was 62.75 years (range 42-88) and parity 2.40 (range 0-6). Eighty seven patients underwent surgery under epidural anesthesia and 15 under general anaesthesia. The median follow-up period was 13.69 months (range 3 months-3 years). In the postoperative urodynamic evaluation 89 (87%) women presented with normal continence mechanism. Of these 4 had mild voiding difficulties on urodynamics, but were asymptomatic. Two patients (1.96%) had significant voiding difficulties in the postoperative period. In one of these the tape was divided under local anaesthesia and remained continent. Eleven (10.7%) women had overactive bladder postoperatively of which 8 (7.8%) developed de novo detrusor overactivity. In the first 15 cases 2 bladder perforation occurred. In 3 patients a haematoma was recognized (2 retropubic and 1 vault haematoma) and were managed expectantly. Five patients developed an asymptomatic small vaginal erosion of the tape and one pyrexia (>38°C). Postoperative clinical evaluation revealed that 80 (79%) patients had physiologic support, 19 (18%) 1st degree and 3 (3%) 2nd degree vaginal relaxation.

### Conclusions

The study shows that TVT procedure is safe and effective when combined with surgical reconstructive procedures for pelvic floor relaxation.

### References

1. Int Urogynecol Journal (2001) Suppl: S2-4