

## **TRANSOBTURATOR SUB-URETHRAL SLING WITH PROLENE TAPE FOR THE TREATMENT OF STRESS URINARY INCONTINENCE IN WOMEN WITH AND WITHOUT PELVIC ORGAN PROLAPS: THE PRELIMINARY RESULTS**

### **Aims of Study**

For the last few years a TVT procedure is the operation most often performed for the treatment of female urinary incontinence. The most frequently reported complication of this operation is bladder perforation. In order to prevent bladder injury E. Delorme [2] and D. Dargent [1] suggested transobturator sub-urethral sling with prolene tape. Transmuscular insertion of the prolene tape through the obturator and puborectalis muscles reproduces the natural suspension fascia of the urethra while preserving the retropubic space. Our aim was to evaluate the results and morbidity of transobturator sub-urethral sling (TOT procedure) with prolene tape for the treatment of stress urinary incontinence in women with and without pelvic organ prolapse.

### **Methods**

22 women aged 37-68 years submitted to the department of operative gynecology during January 2002-January 2003, were enrolled in the study. All patients had urodynamically confirmed genuine stress urinary incontinence (GSUI) and were treated with TOT procedure. Preoperative evaluation included history, complete physical examination and urodynamic study (simple uroflowmetry, provocative cystometry and urethral pressure profilometry). All patients gave their informed consent to be operated and to participate in the study. Follow-up at 1, 6, 12 months were scheduled after surgery.

### **Results**

4 patients had history of previous insufficient incontinence surgery (3 - anterior colporrhaphy+perineorrhaphy, 1 – periurethral gel injection) and recurrent stress urinary 1 year after previous operations. Perineorrhaphy (5 cases), perineorrhaphy+levatorplasty (3 cases), anterior colporrhaphy+perineorrhaphy+levatorplasty (4 cases), vaginal hysterectomy+anterior colporrhaphy+perineorrhaphy+levatorplasty (3 cases), genital hernioplasty+anterior colporrhaphy+perineorrhaphy+levatorplasty (4 cases) were performed simultaneously with TOT procedure. 3 patients were treated by TOT procedure alone. In 4 cases the TOT procedure was carried out under local anesthesia, in 16 cases under local anesthesia+spinal anesthesia, in 4 cases under local anesthesia+general anesthesia. All patients received intraoperative intravenous antibiotics. The total mean operative time was  $77.5 \pm 36.6$  min, the mean operative time for TOT procedure alone was  $28.3 \pm 4.9$  min. The mean hospital stay in the case of TOT procedure with the vaginal operations for pelvic organ prolapse was  $8.7 \pm 5$  days and 3 days for TOT operation alone. One patient experienced urinary retention requiring intermittent catheterization and bladder electrostimulation during 6 days. Bladder injuries, severe bleeding, pathologic healing or rejection of prolene mesh didn't occur in our study. No cases of recurrent SUI or other complications were revealed in our group of patients during 1 year of dynamic follow-up.

### **Conclusions**

Our early results demonstrate that TOT procedure is effective and safe operation in the treatment of GSUI in women with and without pelvic organ prolapse. The short-term results of the TOT procedure are comparable with the results shown with the TVT method. More studies and a longer follow-up are seem essential.

### **References**

1. Dargent D. Pose d'un ruban sous urétral oblique par voie obturatrice dans le traitement de l'incontinence urinaire féminine Gynécol Obstét Fertil 2002; 30: 576-82
2. Delorme E. La bandelette trans-obturatrice: un procédé mini-invasif pour traiter l'incontinence urinaire d'effort de la femme Progrès en Urologie (2001), 11, 1306-1313