

TRANS-OBTURATOR TAPE PROCEDURE FOR FEMALE WITH STRESS URINARY INCONTINENCE AND CONCOMITANT PELVIC RECONSTRUCTION SURGERY FOR GENITAL PROLAPSE: ONE YEAR FOLLOW-UP

Hypothesis / aims of study

Urogenital prolapse is often associated with stress urinary incontinence, so it is important that pelvic reconstructive surgery can be done at the time of incontinence surgery. The aim of this prospective multicentre study was to evaluate the safety and efficacy of Trans-Obturator Tape (T.O.T.[®]) in patients treated for incontinence and genital prolapse repair.

Study design, materials and methods

Thirty-nine consecutive patients with stress urinary incontinence and associated genital prolapse were treated from November 2001 to January 2004 in 6 centres by combined T.O.T.[®] procedure (Uratape[®] and Obtape[®], non elastic polypropylene tapes, Mentor-Porgès, Le Plessis-Robinson, France) and prolapse repair. Pre and post-operative protocol included the following: a detailed urogynaecologic history, a physical examination to identify the presence of pelvic floor defects, an urodynamic evaluation including cystometry, urethral profilometry, uroflowmetry and residual urine measurement. Mean age was 56.2 years (31-85), most being postmenopausal (56.4%) at the time of surgery. The mean parity was 2.5 (range 1-6), and none was nulliparous. The average body mass index (BMI) was 25.2 (18-37), 14 patients had undergone a previous pelvic operation (hysterectomy (n = 7) or prolapse repair (n = 7)) and 4 patients a previous anti-incontinence surgery. All the 39 patients had urinary leakage during stress test. Intra and post-operative complications were also recorded on the case report form. 24/39 (61.5%) patients had pure stress urinary incontinence, 8/39 (20.5%) reported also OAB dry symptoms, and 7/39 (18%) had mixed incontinence. The surgical approach was abdominal for 13 patients, laparoscopic for 10 and vaginal for 16. Anterior repair was performed in 21 patients (53.8%), posterior repair in 19 (48.7%), and hysterectomy in 14 (35.9%) and only during vaginal approach. Anaesthesia was general for 37 patients and spinal for 2 patients.

Results

Mean follow-up was 12 months (3-24). Two intra-operative complications occurred: one latero-vaginal perforation (right sulcus) and one bladder perforation (2.6%). One patient had post-operative voiding difficulties lasting 3 months (intermittent self-catheterisation), and recovered normal micturition based on uroflowmetry. Three patients complained from transient pain (7.7%), all related to the position during the procedure. Thirty-four patients were completely dry (87.2%), 3 were significantly improved (7.7%), and the others were considered as failure 2/39 (5.1%). Among the 15 patients suffering from urgencies (n = 8) or urge incontinence (n = 7), urgencies disappeared for 8 patients (53.3%), improved for 4 (26.6%), was identical for 3 (20%) and got worse for none patient. Three patients out of 24 preoperative pure stress urinary incontinence complained from *de novo* urgencies (12.5%). Uroflowmetry, residual and duration of the micturition were analysed for 24 patients, both pre and post-operatively, as shown in Table 1. No statistical difference was observed between pre and post-operative values. Two patients had postoperative Qmax between 10 and 15ml/s, but without any residual urine.

Table 1 : Voiding parameters

Uroflowmetry parameters	Pre-operative n = 24	Post-operative at >12 months follow-up n = 24	p
Maximum Flow rate (ml/s)	25.3 ± 9.2	26.1 ± 7.42	NS
Voiding time (s)	35.6 ± 45.3	10.8 ± 28.1	NS

Data are presented as mean ± standard deviation, NS = not significant. Univariate analysis.

Interpretation of results

In our study the combined treatment of stress urinary incontinence and genital prolapse with the T.O.T.[®] procedure and prolapse repair, is not associated with a higher rate of voiding dysfunction, whatever the surgical route for prolapse repair. This could be due to the non elasticity of the tape and its horizontal position, acting as a support of the mid-urethra.

Concluding message

This study demonstrates that the T.O.T.[®] procedure is efficient and safe for the surgical treatment of stress urinary incontinence in women with an associated pelvic reconstruction surgery for genital prolapse, without any change on postoperative voiding parameter.