

EFFICACY OF T.O.T.® FOR PATIENTS SUFFERING FROM SUI WITH MAXIMAL URETHRAL CLOSURE PRESSURE LESS THAN 30 CMH₂O.**Hypothesis / aims of study**

Patients with MUCP < 30 cm of water were followed in an prospective observational study after T.O.T.® surgery. Results on efficacy and voiding parameters of T.O.T.® surgery are reported here.

Study design, materials and methods

51 patients with Stress Urinary Incontinence (SUI) and MUCP < 30 cmH₂O were operated on with T.O.T.® from November 2001 to January 2004. Among these 51 patients, 13 had MUCP < 20 cm cmH₂O. Mean age was 65.9 years (34-87) and mean parity 2 (0-4). All patients underwent urogynaecologic examination, including a cough stress test, urodynamic investigation consisting of cystometry, urethral pressure profiles and urine flow measurements. The mobility of the urethra was evaluated by direct visualization at vaginal examination during stress test. 2 patients have had a negative Ulmsten test with a decreased mobility of the urethra. All the other patients had urethral hyper mobility. 27/51 (52.9%) patients had pure stress urinary incontinence, 7/51 (13.7%) reported also symptoms of overactive bladder (OAB) dry, and 17/51 (33.3%) had mixed incontinence. 44/51 (86.3%) patients were post-menopause, 11/51 (21.6%) had a previous hysterectomy, and 6/51 (11.8%) were previously treated for prolapse. 13/51 (25.5%) had previously subjected to different types of surgical treatment for incontinence, and 1 had been operated twice before T.O.T.®.

(see table 1). Anaesthesia was general for 37 patients, spinal for 13 patients and local for 1.

Table1

	N =14
Burch	5
Marschall-Marketti	1
Pereyra	1
TVT	5
Uratape	1
Other	1

Results

Mean follow up was 11 months (3-24). There were no intra-operative complications apart from one uneventful bladder perforation. In this patient the tape was reinserted without any problem. 3 patients demonstrated temporary post-operative voiding difficulties. 2 had tape release and 1 recovered spontaneously after 8 days. 2 patients complained from transient pain at the level of the obturator foramen.

The results on efficacy according to the MUCP are shown in table 2.

Table 2 : results and MUCP

MUCP	< 20 cmH ₂ O N=13	20 – 30 cmH ₂ O N=38
Cured	84.6%	78.9%
Improved	7.6%	7.9%
Failed	7.6%	13.1%

Although the percentage seems very different, the Yates Chi2 test shows that the difference is not statistically significant. The 2 patients with low mobility of the urethra were not cured.

Among the 24 patients suffering from Overactive Bladder (OAB), the OAB disappeared for 11 (45.8%) patients, improved for 4 (16.7%), was same for 8 (33.3%) and got worse for 1 patient (4.2%). 1/27 patients (3.7%) complained from *de novo* urgency.

All the patients had urine flow measurements pre and post-operatively but some were excluded because of a too low volume of micturition. Voiding parameters for 22 patients, both pre- and post-op, are presented in Table 2. Only 1 patient had $Q_{max} < 15 \text{ ml/s}$ (12 ml/s) but without any residual urine.

We didn't find any difference between pre and post-op maximum flow rate, residual urine and duration of micturition.

Table 2: Voiding parameters

	Pre-op	Post-op	p
Q_{max} (ml/s)	30+/-13.4	27+/-13.3	NS
RPM (ml)	2.5+/-10.7	7.5+/-13.3	NS
Duration of micturition (s)	37.7+/-39.1	35.9+/-30.3	NS

Interpretation of results

Retropubic tapes have demonstrated a decreased efficacy for patients with low MUCP (1), and for these patients, there is a temptation to stretch more the tape, in order to create an obstructive effect by suspending more the urethra. By its horizontal placement, T.O.T.® offers real support to the urethra and not suspension as retro-pubic techniques, and for that reason, some consider that the efficacy of T.O.T.® should be less for patients with poor MUCP. First observations show that it is not the case.

Concluding message

This study shows encouraging results which have to be confirmed with furthermore evaluations.

References

1. Tension-Free vaginal tape (TVT) in stress incontinent women with intrinsic sphincter deficiency (ISD) - a long term follow-up. Int-Urogynecol-J-Pelvic-Floor-Dysfunct.2001; 12 Suppl 2: S12-14.