

## A PROSPECTIVE RANDOMIZED STUDY COMPARING TVT AND TRANSOBTURATOR SUBURETHRAL TAPE (T.O.T.) FOR THE SURGICAL TREATMENT OF STRESS INCONTINENCE

### Aims of Study

To report the results of a prospective randomized trial comparing the TVT and the Trans-Obturator suburethral Tape (T.O.T.), for the treatment of stress incontinence in women.

### Methods

Sixty one women with genuine stress incontinence were assigned to either TVT (n = 31), or Trans-Obturator suburethral Tape (n = 30), between January and November 2002. The T.O.T. (Uratape;Mentor-Porges) were implanted, according to the technique of Delorme<sup>1</sup>. The pre-operative evaluation included a stress test, a quality of life questionnaire and a full urodynamic study with uroflowmetry. The post-operative evaluation included a stress test, a quality of life questionnaire and a detrusor pressure-uroflow study at 6 months, in order to compare bladder outlet obstruction according to the the nomogram of Blaivas<sup>2</sup>.

### Results

Patients characteristics (mean age, mean parity, BMI, previous surgery for GSI, grade of GSI), pre-operative quality of life and urodynamic evaluation were similar in the two groups. Mean operative time was significantly shorter in the T.O.T. group (15 min.  $\pm$ 4 vs 27 min.  $\pm$ 8,  $p < 0.001$ ). No bladder injury occurred in the T.O.T. group, versus 9.7% (n = 3) in the TVT group ( $p > 0.05$ ). The rate of post-operative urinary retention was 25.8% (n = 8) in the TVT group, versus 13.3% (n = 4) in the T.O.T. group ( $p > 0.05$ ). The rates of cure (83.9% vs 90%), improvement (9.7% vs 3.3%) and failure (6.5% vs 6.7%) were similar for the TVT and T.O.T. groups, respectively. Six months outcome was obtained in 25 women of the TVT group (80.6%) and 27 women of the T.O.T. group (90%). No vaginal erosion occurred in both groups. One patient in the TVT group required revision due to urethral erosion. One patient in the T.O.T. group had obturator haematoma, which resolved spontaneously. In terms of bladder outlet obstruction, no differences were found following TVT and T.O.T. in the nomogram of Blaivas<sup>2</sup> (Table 1).

Table 1 – Comparative bladder outlet obstruction at 6 months, according to the nomogram of Blaivas (pdet.max / free Qmax).

	TVT n = 25	T.O.T. n = 27	p
No obstruction	15 (60%)	18 (66.7%)	> 0.05
Mild obstruction	6 (24%)	6 (22.2%)	> 0.05
Moderate obstruction	4 (16%)	3 (11.1%)	> 0.05
Severe obstruction	0	0	> 0.05

### Conclusions

In patients with GSI, the implantation of the Trans-Obturator suburethral Tape appears to be faster than the TVT, with a decreased risk of both bladder injury and post-operative urinary retention, even if these differences are not statistically significant. Both TVT and T.O.T. show highly favourable objective and subjective outcomes, with no differences in voiding function at an average follow-up of 6 months.

### References

1. E Delorme. [Transobturator urethral suspension: a minimally invasive procedure to treat female stress urinary incontinence]. *Prog Urol* 2001;11:1306-13.
2. JG Blaivas, A Groutz. Bladder outlet obstruction Nomogram for women with lower urinary tract symptomatology. *Neurourol Urodyn* 2000;19:553-64.