

URODYNAMIC EVALUATION PRE AND POST TRANSOBTURATOR SLING IN PATIENTS WITH STRESS URINARY INCONTINENCE.

Hypothesis / aims of study

Transvaginal and transobturator slings present similar cure rates and impact on the quality of life. Despite the good clinical results, some studies had demonstrated an association between TOT procedures and post operative voiding dysfunctions such as urinary retention, transient voiding difficulty, De novo urgency and dysuria.

The aim of study is to evaluate the urodynamic pattern after TOT sling and eventual clinical impact in this population.

Study design, materials and methods

A prospective study in 20 patients with stress urinary incontinence (SUI) was performed. All patients had urodynamically proved stress urinary incontinence. After six months post-operative, urodynamic study was done to evaluate these patients. The analyzed parameters were the free maximum flow (Qmax), first sensation, Valsalva leak point pressure (VLPP), maximum cystometric capacity, detrusor pressure at maximum flow (Pdet Qmax) and residual volume.

In all women transobturator procedure were performed with Safyre sling placed at the middle urethra.

Results

The mean age was 54 (± 12.8) years, range from 35 to 77. No patients had significant pelvic organ prolapse, therefore no associated reconstructive procedure was necessary. There were no peri-operative complications. Post operative urinary retention was not present in these patients. At six months, 19 (95%) were dry and 1 (5%) the procedure failed.

Comparison of urodynamic findings pre and six months post operatively are show in table 1.

Table 1 – Urodynamic findings preoperatively and postoperatively.

| Urodynamic variables | Preoperative (mean \pm SD) | Posoperative (mean \pm SD) |
|-------------------------------------|---------------------------------|---------------------------------|
| Qmax (free uroflowmetry-ml/s) | 20 \pm 10.4 | 15.1 \pm 6.7 |
| First sensation (ml) | 133 \pm 53.9 | 237 \pm 94.01 |
| Maximum cystometric capacity (ml) | 365 \pm 88.5 | 372 \pm 97.8 |
| VLPP | 78.6 \pm 25.8 | 93.5 \pm 20.2 |
| Pdet max. flow (cmH ₂ O) | 22.2 \pm 10.6 | 27.8 \pm 17.09 |
| Residual urine (ml) | 35 \pm 25 | 30.3 \pm 34.8 |

According to the Blaivas-Groutz nomogram six (30%) patients were classified as mild and one (5%) as moderate obstruction, however no patient had obstructive voiding symptoms. The mean SD Qmax, Pdet max flow, and residual urine, 15.7(± 4.6), 33(± 12.2) and 39.7(± 57.7), respectively, were not significant different, comparing with non obstructed patients.

Interpretation of results

Comparing the urodynamic data pre and post TOT sling there is no significant changes.

Although some patients have been classified as obstructed in the nomogram, none complains of voiding symptoms. So, apparently there is no clinical correlation with the nomogram.

Concluding message

Transobturator slings are not associated with significant changes in urodynamic parameters. There was a unexpected high prevalence of mild obstruction, according to the Blaivas & Groutz nomogram, with no clinical impact.

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HUMAN SUBJECTS: This study did not need ethical approval because This study was retrospective. but followed the Declaration of Helsinki Informed consent was not obtained from the patients.