

## **SUBJECTIVE EVALUATION OF OVERACTIVE BLADDER SYMPTOMS BEFORE AND AFTER TRANSOBTURATOR TENSION-FREE VAGINAL TAPE FOR CORRECTION OF URODYNAMIC STRESS URINARY INCONTINENCE.**

### Hypothesis / aims of study

The objective of this study was to evaluate the persistence, alteration in intensity or emergence of overactive bladder symptoms after transobturator tension-free vaginal tape surgery (TVT-O) for women presenting urodynamic stress incontinence, and also to assess global satisfaction regarding the procedure.

### Study design, materials and methods

In the period from October 2004 to October 2005 a prospective, case series study, involving 43 patients who submitted to TVT-O surgery for correction of urodynamic stress urinary incontinence was conducted. Before surgery, all patients were submitted to anamnesis, physical examination, urodynamic study, pad test and quality of life questionnaire. Postoperative follow-up was performed during the first week, thereafter monthly up to three months and then at six months. In the study, questions regarding overactive bladder symptoms of the quality of life questionnaire were used before and after surgery. Clinical cure criteria (resolution of previous symptoms) were based on the subjective evaluation by the patients through answers to the questionnaire.

### Results

The mean age of the study population was  $55,2 \pm 9,3$  years. All of the 43 patients presented some degree of overactive bladder syndrome (urgency, urge incontinence, nocturia, increased daytime frequency) and had urodynamic stress incontinence. In only five patients detrusor overactivity was demonstrated. Ten patients had valsalva leak-point pressure under 60 cm of H<sub>2</sub>O. Sixty seven percent of patients were menopausal, 27,9% had body mass index (BMI) between 25 and 29,9, and 62,8% had BMI between 30 and 39,9. Thirteen patients had previous urinary incontinence surgery, and seven had previous pelvic organ prolapse repair. One patient have been treated with radiotherapy for endometrial cancer.

During the six month follow-up, four (9,3%) patients had urinary retention on the immediate postoperative period and were treated with urethral catheterization for thirty days. Afterwards, two patients had no difficulty in voiding, but one needed section of the tape, and in the other, loosening of the tape was performed. One patient had vaginal mucosa erosion and the tape was then covered surgically. All these patients remained continent.

Six months after TVT-O surgery, twenty seven patients (62,8%) presented cure regarding all overactive bladder symptoms and sixteen (37,2%) reported improvement. All patients presented no further stress urinary incontinence symptoms. There wasn't worsening or persistence of symptoms in the same intensity. De novo overactive bladder symptoms did not occurred. Forty one (95,4%) patients were satisfied with TVT-O procedure.

### Interpretation of results

Overactive bladder symptoms strongly impair quality of life, perhaps more than stress urinary incontinence symptoms. Other surgical procedures like colposuspension and pubovaginal slings can cause de novo overactivity bladder symptoms, as well as retropubic tension-free vaginal tape procedure (TVT). Nevertheless, the tension-free surgery, mainly TVT-O, seems to be more anatomical and physiological, promoting cure and improving preoperative symptoms without creating new ones.

### Concluding message

The TVT-O procedure reached high-degree satisfaction, with cure and improvement of overactive bladder symptoms in all patients, without worsening or persistence of the symptoms in the same intensity at the short-term follow-up. There was not emergence of bladder overactivity after the surgery. Long-term surveillance for persistence of cure and improvement of symptoms is required.

### References



**FUNDING:** None

**HUMAN SUBJECTS:** This study was approved by the Ethics committee of "Hospital do Servidor Público Estadual de São Paulo" and followed the Declaration of Helsinki Informed consent was obtained from the patients.