

INSIDE-OUT TRANSOBTURATOR TAPE (TVT-O) SURGERY FOR TREATMENT OF RECURRENT STRESS URINARY INCONTINENCE.

Hypothesis / aims of study

Recurrent stress urinary incontinence (SUI) is responsible for one-third of all anti-incontinence surgeries¹. Less invasive surgeries with durable cure and minimal risks are constantly pursued. The aims of this study are to evaluate the subjective and objective success rates, the improvement in quality of life and the complications related to the TVT-O operation for treatment of female recurrent stress urinary incontinence.

Study design, materials and methods

This retrospective study evaluated 40 patients with urodynamic recurrent SUI that underwent TVT-O surgery between December 2004 and March 2006. The mean age was 58.1 years old (43-78) and 31 patients (77.5%) were menopausal. Preoperative evaluation concerned gynaecologic examination, urodynamic evaluation, 20-minute Pad-test and King's Health Questionnaire (KHQ); all of them were repeated at the time of postoperative evaluation. The mean follow-up was 15.3 months (11.6-25.7). Among the subjects, there were 5 patients (12.5%) just with SUI symptoms, 35 patients (87.5%) with urge urinary incontinence symptoms associated to the SUI, 5/35 patients (14.3%) also had detrusor overactivity in urodynamic. Ten patients (25%) with intrinsic sphincter deficiency (VLPP<60cmH₂O) and 12 patients (30%) with genital prolapse that required surgery correction were included as well. Exclusion criteria were neurological disease and post void residual greater than 100 ml. Three patients (7.5%) had two previous anti-incontinence procedures while 37 patients (92.5%) had one surgery before.

Results

Objective urodynamic SUI and Pad-test cure rates were 94.8% and 89.7% respectively. Subjective SUI cure was 90%. Two patients (5%) referred improved but persistent SUI and two patients (5%) described maintenance of SUI, one of those had a new TVT-O procedure and was cured over six months after the second TVT-O. Urge incontinence cure rate was 70.5%. One case of de novo urge incontinence was related. The mean operative time was 23 minutes (10-38). Intra-operative complications (5%) were one case (2.5%) of vaginal perforation in which the tape was taken off and replaced in the same procedure and one case (2.5%) of bleeding that was ceased with local compression. No case of bladder perforation, urethral injure, nerve lesion, haematoma, abscess or transfusion was noted. There were 6 cases (15%) of postoperative obstruction, four patients (10%) had ambulatory loosening of the tape but two of them (5%) needed a second surgical loosening of the tape. One patient (2.5%) had one side tape cut and one patient (2.5%) had the tape taken off due to urethral invasion. The King's Health Questionnaire has shown great improvement in the quality of life of 36/39 patients (92.3%). One patient with occult incontinence had no urinary symptoms before TVT-O surgery and maintained her quality of life scores. Two patients had decreased quality of life: one patient with de novo urge incontinence and one patient with subjective fail of TVT-O despite the objective cure of SUI in the urodynamic exam, this patient had detrusor overactivity before and after the surgery.

Interpretation of results

Cure rates of the TVT-O were high and comparable to the gold standards anti-incontinence surgeries. The results were maintained for cases of intrinsic sphincter deficiency and when associated to genital prolapse correction surgeries. Although there were cases of urinary retention, they were solved and did not induce surgery failure. The decrease of urge incontinence symptoms and the improvement of quality of life are statistically significant (p<0.05).

Concluding message

The inside-out transobturator tape (TVT-O) surgery was effective and safe for treatment of recurrent stress urinary incontinence, improved the quality of life and resulted in low complications rate.

References

1. Obstet Gynecol, 89:501, 1997

FUNDING: None

HUMAN SUBJECTS: This study was approved by the Ethics Committee of Hospital do servidor Público Estadual (CEP-HSPE) and Ethics Committee of University of São Paulo (CEP-UNIFESP) and followed the Declaration of Helsinki Informed consent was obtained from the patients.