

PRELIMINARY EXPERIENCE WITH TVT-O PROCEDURE IN TREATMENT OF FEMALE STRESS URINARY INCONTINENCE

Hypothesis / aims of study

The tension free vaginal tape has become the most commonly used technique for the treatment of female stress urinary incontinence. However, its blind needle passage has been associated with complications. At the end of 2003, a novel surgical technique was described, with the passage of the tape through the obturator foramens from inside to outside, which was called tension free vaginal tape–outside(TVT–O). The aim of the study was to evaluate the efficacy and safety of the TVT-O for the surgical treatment of female stress urinary incontinence.

Study design, materials and methods

From July 2004 to December 2004, 35 patients underwent TVT-O procedure under spinal anesthesia. We reviewed 30 patients who had been followed up for more than 3 months. All were preoperatively assessed with past history, physical examination, voiding diary, 1-hour pad test, urinalysis, urodynamic study. All patients were admitted the day before operation and had TVT-O procedure. Post-operatively a 16 Fr Foley catheter was left for 24 hours. The mean follow up period was 6.01 months, with all patients assessed for the procedural outcome, subjective satisfaction and complications.

Results

The mean age of patients was 49.0 years(range 34-68), the mean parity was 3.1(range 0-6), and the average duration of symptoms was 6.0 years(range 1-20). 1 patient(3.3%) had undergone previous incontinence surgery. The mean operative time was 15 minutes(range 12-20). Average hospital stay was 3.5 days(range 2-14)(including patients having concomitant surgery such as colporrhaphy, transvaginal hysterectomy, hemorrhoidectomy). 29/30 patients(96.6%) were cured and 1/30(3.3%) were improved. One patient had immediate voiding difficulty which resolved after 2 weeks of clean intermittent catheterisation. One patient had transient postoperative left groin site pain and motor weakness. However, there was no neurological abnormality and two weeks later her problem disappeared. No intraoperative or other postoperative complications were noted. Subjective cure is present in 29(96.6%). Urge incontinence persisted in 7(70%) of 10 patients while 3(30%) resolved. There were no postoperative de novo urgency.

Interpretation of results

TVT-O results in continence rate of 96.6%, with less complications relative to traditional TVT. The TVT-O procedure can be easily performed and operative time is short.

Concluding message

These early results demonstrate that the TVT-O procedure is a simple, safe and effective surgical treatment for female stress urinary incontinence. However, a longer follow up will be necessary to determine its long term effects and efficacy.