

RETROSPECTIVE STUDY ON THE USE OF TVT-O FOR FEMALE STRESS URINARY INCONTINENCE MANAGEMENT: A THREE-YEAR FOLLOW-UP REVIEW

Hypothesis / aims of study

To evaluate the effectiveness and complications of Tension-free Vaginal Tape-Obturator (TVT-O) in the treatment of female stress urinary incontinence (SUI) over a 3-year observation period.

Study design, materials and methods

This is a retrospective study which involved 140 patients who had completed a 3-year follow-up after TVT-O surgery performed between May 2004 and December 2005. Pre-operative evaluation such as symptoms, erect stress test, uroflowmetry, filling and voiding cystometry and urethral pressure profilometry were recorded. Data detailing operative time, blood lost, concomitant surgery, intra and peri-operative complications were also taken note of. Patients were observed and assessed over 3 years post-operatively for symptoms, complications, and to determine the subjective and objective cure rates concerning SUI.

Results

Of the 140 patients recruited in this study, 121 (86.4%) were diagnosed as pure SUI and 19 (13.6%) had mixed urinary incontinence. The mean age was 53.39 ± 10.18 years. Sixty-four (45.7%) were menopausal, 7 (5%) had previous incontinence surgery and 10 (7.1%) had previous hysterectomy. Sixty-two patients (44.3%) underwent only TVT-O surgery and 78 patients (55.7%) had concomitant surgeries, mainly for uterovaginal prolapse. The objective cure rate at 3 years was 93.6%, subjective cure rate was 87.9%. There were 8 patients (5.7%) who had voiding difficulty, of which 4 underwent conservative treatment, 2 underwent tape loosening and another 2 underwent tape release. There was an incidence of bladder perforation reported during vaginal hysterectomy which was not due to TVT-O insertion. Thigh pain was observed in 16.4% of the study subjects on early-follow-up, but none of them had persistent thigh pain on 3 years follow-up. *De novo* urge incontinence and mesh erosion were reported at 3.6% and 1.4% of the study subjects respectively at 3-year follow-up.

Interpretation of results

This review affirmed that TVT-O is a very effective procedure for treating female SUI, even after 3 years of follow-up. It is also a relatively safe surgery with only minimal complications. Thigh pain incidences, although significant, was a self-limiting complaint.

Concluding message

TVT-O procedure with or without concomitant surgery has demonstrated desirable subjective and objective cure rates with minimal incidences of complications at our 3-year review.

References

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| <i>Specify source of funding or grant</i> | NIL |
| <i>Is this a clinical trial?</i> | No |
| <i>What were the subjects in the study?</i> | HUMAN |
| <i>Was this study approved by an ethics committee?</i> | Yes |
| <i>Specify Name of Ethics Committee</i> | Institutional Review Board, KK Women's & Children's Hospital |
| <i>Was the Declaration of Helsinki followed?</i> | No |
| <i>This study did not follow the Declaration of Helsinki in the sense that</i> | It is a retrospective study therefore does not involve human experimentation. |
| <i>Was informed consent obtained from the patients?</i> | No |