

LONG-TERM EFFICACY OF TENSION-FREE VAGINAL TAPE OBTURATOR (TVT-O) IN THE MANAGEMENT OF FEMALE URODYNAMIC STRESS URINARY INCONTINENCE: RESULTS OF 4- AND 7-YEAR FOLLOW UP

Hypothesis / aims of study

The surgical management of female urodynamic stress urinary incontinence includes a wide spectrum of minimally invasive procedures. The role of transobturator tension-free vaginal tape inside-out (TVT-O) placement is important. According to the published literature this method presents efficacy comparable to the classical TVT method avoiding at the same time the blind retropubic passage with the potential risk of bladder injury. The aim of this study was to investigate the long-term efficacy of tension-free vaginal tape obturator (TVT-O) placement for the management of female urodynamic stress urinary incontinence.

Study design, materials and methods

This was a prospective cohort clinical study approved by the Hospital's Ethics Committee. The study included women who underwent TVT-O placement with (Group A) or without (Group B) synchronous anterior repair in our Department and fulfilled the following criteria: i. diagnosis after clinical examination and preoperative urodynamic study of urodynamic stress urinary incontinence, and ii. no history of previous surgical procedures at the anterior vaginal wall. Surgical procedure was performed by the same experienced Urogynecology team in all cases. Written informed consent was obtained by all patients. Evaluation of the therapeutic outcome was made by clinical examination and urodynamic study at four and seven years after the initial procedure. Cure, improvement and failure rates were estimated.

Results

Group A consisted of 74 patients who underwent TVT-O method only, while Group B included 41 women who were managed with TVT-O placement and anterior colporrhaphy at the same surgical time. In Group A, the objective cure rate was estimated at 82.4% and 80% at 4- and 7-year follow up, respectively. The improvement rate for the same Group was 6.8% and 5.2%, respectively. Four-year postoperative follow-up showed an objective cure rate of 80.5% and improvement rate of 7.4% for Group B. At 7-year follow up the efficacy rate of the method among patients of Group B was 77%, while the improvement rate was 6%.

Interpretation of results

It seems that the TVT-O method presents satisfactory long-term efficacy, comparable to the results of the classical TVT technique, that remains the gold standard in the surgical treatment of urodynamic stress urinary incontinence. The slight decrease of the method's objective cure rate that was found during the postoperative follow up period could be characterized as clinically acceptable.

Concluding message

The TVT-O method alone or with synchronous anterior repair presents a high cure and improvement rate even seven years after the initial surgical management.

Disclosures

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