

VOIDING DIFFICULTY FOLLOWING TENSION-FREE VAGINAL TAPE PROCEDURE

Aims of Study

Among complications after the tension-free vaginal tape (TVT) procedure for female stress urinary incontinence, the voiding difficulty is one of the most frequent complaints of the patients. The aim of the study was to assess the incidence of objective voiding difficulty and evaluate clinical and urodynamic risk factors predisposing to voiding difficulty following the TVT procedure.

Methods

Between March 1999 and March 2002, 285 women who underwent the TVT procedure for stress urinary incontinence in our institution were included in this study. Follow-up uroflowmetry was done at 6 months postoperatively. Objective voiding difficulty was defined as a peak flow rate less than 12mL/s or residual urine volume greater than 150mL, on two or more readings. Before the operation all the patients had no obstructive symptom and peak flow rate greater than 15mL/s. We divided the patients into two groups; postoperative voiding difficulty group (n=42, 14.7%) and well-voiding group (n=243, 85.3%). Clinical and urodynamic parameters such as age, parity, obesity (body mass index), presence of concomitant urge incontinence and cystocele, symptom grade, peak flow rate, MUCP, VLPP, maximal detrusor pressure, 1 hour pad test, and global satisfaction were analyzed and compared between the two groups.

Results

Two hundred sixty-one patients (91.6%) answered "satisfied" by the global satisfaction questionnaire. Subjective and objective cure rates were 97.1% and 92.3% at least 6 months follow-up. Among parameters, patient's mean age, peak flow rate, and 1 hour pad test showed significant differences between well-voiding group and voiding difficulty group (mean age: 50.8 vs 55.0 year-old, $p=0.008$, peak urinary flow rate: 30.9 vs 25.4 ml/sec, $p=0.008$, 1 hour pad test: 53.1 vs 80.2 gm, $p=0.023$). There was no statistically significant difference in subjective and objective cure rates between the two groups, but satisfaction rates showed significant difference between them (93.4% satisfaction vs 81.0% satisfaction, $p=0.007$).

Conclusions

The age, peak urinary flow rate, and 1 hour pad test are the risk factors related to the voiding difficulty compromising patient's global satisfaction after TVT procedure. Patients with these risk factors should be given more warning about post-operative voiding difficulty before the surgery to elevate patient's satisfaction.