

EXPERIENCE IN TREATING VOIDING DYSFUNCTION FOLLOWING TENSION-FREE VAGINAL TAPE PROCEDURE FOR STRESS URINARY INCONTINENCE

Aims of Study

The aims of this study are to analyze the types of voiding dysfunction following a tension-free vaginal tape (TVT) procedure and to report our experience with diagnosing and treating post-TVT voiding dysfunction. We also attempted to determine whether or not the type of treatment in post-TVT voiding dysfunction affected the success rate and satisfaction of the TVT procedure.

Methods

From March 1999 to June 2003, TVT was performed on 201 patients, of which, 51 patients (25.4%) developed voiding dysfunction divided into the bladder irritation symptom group and the bladder outlet obstruction group. Initially, conservative treatment such as anticholinergics, alpha-blockers, and/or clean intermittent catheterization (CIC) was used as medication options to control voiding dysfunction. And a TVT incision or a release was done to increase uroflow and to decrease residual urine volume for those whose symptoms were not controlled by conservative treatment. We investigated the success rate and the degree of satisfaction for the correction of stress incontinence through a physical examination and a questionnaire.

Results

In 36 patients with normal maximal flow rate (MFR, 24.0 ± 8.5 ml/sec) and residual urine volume (RU, 27 ± 24.9 ml), voiding symptoms improved with conservative treatment at 16.5 ± 9.7 days. Another 15 patients required the TVT incision or release at a mean of 27 and 8 days, respectively. After the incision or release of the TVT sling, mean MFR increased from 9.3 ± 4.3 ml/sec to 21.7 ± 6.7 ml/sec and mean RU decreased from 277.9 ± 156.2 ml to 24.6 ± 16.0 ml. The success rate of the TVT procedure was 98.0%; and the satisfaction of the same was 90.3%. Lastly, 88.3% of the subjects reported that they would recommend the TVT procedure to people they know who had symptoms of stress urinary incontinence.

Conclusions

This study suggests that voiding dysfunction with normal uroflow and RU may be effectively controlled with conservative treatment. But when the voiding dysfunction is accompanied by a decreased MFR and increased RU, an additional procedure such as the TVT incision or release is recommended to correct a weak voiding stream, improving the quality of life.