

OUTCOME OF MIXED URINARY INCONTINENCE AFTER TENSION-FREE VAGINAL TAPE SURGERY

Hypothesis / aims of study

Mixed urinary incontinence (MUI) encompasses patients with a component of detrusor dysfunction that may be motor or sensory associated with stress urinary incontinence (SUI) in the same patient. Several US and European epidemiologic studies suggest 40% prevalence for urinary incontinence and show that approximately one third of incontinent women have MUI. MUI generally responds less favorably than SUI to therapy, including behavioral, pharmacologic, or surgical. The tension-free vaginal tape procedure (TVT) has gained widespread acceptance as an easily performed, effective procedure for the treatment of SUI since its description in 1995 (1). In various studies the cure rate after the TVT procedure in women with MUI has been shown to be lower than in those with SUI.

The aim of our study was to evaluate the outcome of tension-free vaginal (TVT) surgery in the treatment of MUI regarding cure and improvement of its symptoms and complications.

Study design, materials and methods

This is a retrospective study of patient with MUI who underwent surgery with TVT (Ethicon, USA). Patient with the following conditions were identified:

1.- Surgery with TVT between August 2000 and July 2005.

2.- Complete pre-surgery evaluation including medical history, complete medical evaluation and multichannel urodynamic study;

3.- History and urodynamic diagnostic of MUI;

4.- Follow up for at least 12 months.

Hospital records were reviewed to determine patient characteristics, surgical outcomes and follow up evolution. Data were summarized using means and percentages and compared with Fisher exact test P values less than .05 were considered statistically significant.

Results

Fifty two women met the study criteria. The average follow up was 38.9 months (range 12-51). Mean age of the patients was 57.1 years (range 38-80). 11 patients (21.15%) had prior anti incontinence procedures.

Urodynamic evaluation found 29 patients with stable detrusor function, 22 patients were diagnosed with detrusor overactivity, and one patient was diagnosed with sensory urgency. TVT surgery was performed with 15 concomitant procedures in 12 patients: 9 anterior colporrhaphies, 3 transvaginal hysterectomies, 1 posterior colporrhaphy, 1 abdominal hysterectomy and 1 meatal dilatation. After the follow up period, 30 patients (57.7%) were cured of their SUI and overactive bladder symptoms and 15 patients (28.9%) had no change in their overactive bladder symptoms. There was no difference in the outcome between patients with TVT alone and TVT with concomitant procedures (P=0.432). Six patients experienced recurrent incontinence. Of them, 5 patients manifested recurrent SUI and overactive bladder symptoms and one experienced with overactive bladder symptoms alone. The mean time to recurrence was 13 months (range 6-21).

There were 7 postoperative complications in 7 patients (13.5%). The most common complication was bladder outlet obstruction in 4 cases (7.7%) requiring surgical correction. Two patients (3.9%) had vaginal erosions. One was managed conservatively and the other had partial excision of the tape. We had one (1.92%) uncomplicated bladder perforation.

Interpretation of results

TVT is a safe and effective treatment for patients with MUI. After a single procedure 30 patients (57.69%) were cured of their SUI and overactive bladder symptoms including urge incontinence and 15 patients (28.85%) were cured of their SUI symptoms but had residual overactive bladder symptoms during a mean follow up of 38.9 months. The primary complication in our series was postoperative bladder outlet obstruction.

Concluding message

TVT appears simple, safe and effective in the treatment of MUI, with symptomatic improvement of overactive bladder symptoms at mean followup of 38.9 months.

References

1. Ulmsten U, Petros P. Intravaginal slingplasty an ambulatory surgical procedure for treatment of female urinary incontinence. Scand J Urol Nephrol 1995; 29:1; 75:82

<i>Specify source of funding or grant</i>	None
<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>	No
<i>This study did not require ethics committee approval because</i>	It was a retrospective audit
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No