

LONG-TERM OUTCOME OF THE TENSION-FREE VAGINAL TAPE FOR TREATMENT OF STRESS URINARY INCONTINENCE IN SOUTHEAST OF CHINA: RESULTS OF EFFICACY AND ANALYSIS OF FAILURE

Hypothesis / aims of study

We evaluated the long-term cure rates, surgical complications and postoperative recurrence of the tension-free vaginal tape (TVT) sling procedure for stress urinary incontinence (SUI) with or without pelvic organ prolapse.

Study design, materials and methods

A retrospective analysis by the same surgeon was performed on 83 consecutive patients undergoing TVT for genuine SUI between January 2000 and November 2003 at our Hospital. We reported the long-term (five years) and the short-term (one year) cure rates and analysed the postoperative recurrence of urinary incontinence. The TVT procedures were performed in accordance with the technique by Ulmsten et al[1]. The peri-operative and post-operative complications were recorded. The UDI-6 and IIQ-7 were used both preoperatively and at 1 or more years follow-up. A cough stress test and 1-hour pad test were used both preoperatively and at 1 year follow-up.

Results

Eighty-three female patients with stress urinary incontinence with/without pelvic organ prolapse who have been operated with TVT procedure have been included in the study. Among these patients, 80 were followed up for least 5 years. The mean follow-up interval was 65.1 +/- 2.1 (range 60-96) months. Assessment included a 1-hour pad test, a stress test, Incontinence Impact Questionnaire (IIQ-7) and Urogenital Distress Inventory (UDI-6). At 1-year follow-up, both the objective and subjective cure rate were 91.5%. At 5-year follow-up, the subjective cure rate was 93.7%. Bladder purulent infection (1/83), interstitial cystitis (1/83), bladder overactivity (3/83), fracture of the connective tissue cord (1/83) and tape migration (1/83) resulted in recurrent stress urinary incontinence, were significantly associated with failure of the TVT procedure in our study.

Table 1 the peri-operative and post-operative complications

Total number of patients (n)	83
Mean operation time ± SD (TVT alone)	21 ± 1.3
Mean operation time ± SD (combined)	79.3 ± 11.3
Mean operation time ± SD	2.2 ± 0.6
Mean blood loss ± SD	40 ± 23.6
Bladder perforation (%)	3.0
Short-term voiding problem (%)	10/83 (12%)
Pain (%)	4/83 (4.83%)
Tape erosion (n)	2

Table 2. The reasons related to recurrent stress incontinence

Total number of patients (n)	83
Bladder purulent infection (n)	1
Interstitial cystitis (n)	1
Bladder overactivity (n)	3
Fracture of the connective tissue cord (n)	1
Tape migration (n)	1

Table 3 Mean postoperative quantity-of-life scores with subjects at 1- and 5-year follow-up

	Preoperative (n=83)	1 year follow-up (n=82)	5-year follow-up (n=80)	significance	Interpretation of results It appears that the TVT is a relatively safe and effective, minimally invasive surgical
UDI-6	49±21 (3-100)*	15±15 (0-66)	18±14 (0-68)	P < 0.01	
IIQ-7	40±28 (0-100) **	10±17 (0-76)	12±17 (0-76)	P < 0.01	
Subjective cure rate		91.5%	93.75%		
Objective cure rate		91.5%			
Subjective improvement rate			6.25%		
Subjective failure rate		8.5%			

technique for the treatment of female urinary stress incontinence. Also, it can be done safely and effectively in association with vaginal surgery without racial difference. Recurrent stress urinary incontinence resulted from various reasons was significantly associated with failure of the TVT procedure.

Concluding message

The TVT procedure is a relatively safe and effective, minimally invasive surgical technique for the treatment of female urinary stress incontinence in our country. Recurrent stress urinary incontinence resulted from various reasons was significantly associated with failure of the TVT procedure in our study.

References

1. International Urogynecology Journal and Pelvic Floor Dysfunction. 1996; 7: 81–85

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<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>	the Health Sciences Center of Fujian Medical University
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes