Lee J G¹, Kim H C¹

1. Dept. of Urology, Korea University Anam Hospital

LONG-TERM FOLLOW-UP OF TENSION-FREE VAGINAL TAPE (TVT) FOR FEMALE STRESS URINARY INCONTINENCE

Hypothesis / aims of study

The aim of this study was to assess the long-term results of TVT for the treatment of stress urinary incontinence (SUI).

Study design, materials and methods

We reviewed the 124 women with SUI operated by TVT procedure from mid of 1999 to end of 2000. Preoperative evaluation included clinical and urodynamic examinations. Surgery was performed by one(LJG) surgeon according to Ulmsten technique under regional anaesthesia with monitored anesthetic control(MAC). The mean age of patients was 56.97years (range 30~81) and the mean follow up period was 51 months (3-5,5 years). 16 women had previous incontinence surgery. 40 women underwent a concomittant prolapse repair. Collected data included intra et post operative complications. A self evaluation questionnaire was sent to the patients to assess the results.

Results

| | | Incontinence | | Previous pelvis surgery | | Cystocele | | | Stamey grade | | | VLPP [†] | |
|----------|---|--------------------|-------|-------------------------|------|--------------------|----|---|--------------------|------|----|--------------------|------|
| | | Stress | Mixed | (-) | (+) | I | П | Ш | I | II | Ш | <60 | ≥60 |
| Cured | n | 68 | 20 | 81 | 8 | 33 | 12 | 0 | 23 | 59 | 6 | 47 | 41 |
| | % | 76.4 | 57.1 | 74.3 | 53.3 | 75 | 75 | 0 | 63.9. | 73.7 | 75 | 72.3 | 69.5 |
| Improved | n | 21 | 15 | 28 | 7 | 11 | 4 | 1 | 13 | 21 | 2 | 18 | 18 |
| +Failed | % | 23.6 | 42.9 | 25.7 | 46.7 | 25 | 25 | | 36.1 | 26.3 | 25 | 27.7 | 30.5 |
| þ | | <0.05 ^b | | <0.05 ^b | | >0.05 ^c | | | >0.05 ^c | | | >0.05 ^b | |

^a student t-test ^b chi-square test ^c Fisher's exact test VLPP[†]: Valsalva leak point pressure

Interpretation of results

Preoperative patient's symptom was classified into Grade I(29%), II(64.5%), and III(6.5%). Of the total, 65(52.4%) had intrinsic sphinctor deficiency (ISD). 71% of women were considered as cured and 24.2 % as significantly improved. At long-term follow up (3-5,5 years), 92.7% of women expressed global satisfaction. There were no significant differences in the success rate according to the symptom grade, combined cystocele or presence of ISD. However, presence of mixed incontinence and of previous incontinence surgery had negative effects on the long-term results. Complications were: 4 urinary retentions, 2 pelvic pain, 2 urinary tract infection. 17out of 35 (48.6%) patients with preoperative OAB were resolved with their OAB symptoms postoperatively, otherwise 4 women developed *de-Novo* urgency.

Concluding message

TVT shows good long-term cure rate for stress urinary incontinence. In women with mixed incontinence, and presence of previous incontinence surgery the overall success rate is less favorable. A good selection of patients remains mandatory.