

OUTCOME FOLLOWING TENSION-FREE VAGINAL TAPE (TVT) FOR THE TREATMENT OF STRESS URINARY INCONTINENCE: INITIAL REVIEW OF A PROSPECTIVE CASE SERIES.**Aims of Study**

Interim review of our experience, operative complications and success rate for tension-free vaginal tape (TVT) procedure in the treatment of stress urinary incontinence (SUI) at our institution.

Methods

A retrospective chart review of the first sixty-two women who underwent TVT from June 1999 to the end of Dec. 2001. All women are evaluated with complete history and physical examination, 2-day voiding diary, urine culture, ultrasound residual urine volume, uroflowmetry and multi-channel urodynamic (UDS) testing confirming the diagnosis of SUI. Patients are seen at 6-weeks, 3, 6, and 12-months after surgery and yearly follow-up thereafter. Multi-channel UDS is repeated at 12-months visit.

Results

Sixty-two patients underwent TVT from June 1999 to the end of Dec. 2001. Mean age: 62 (range: 34-83). Mean parity: 2.5 (range: 0-7). 44 (71%) women were post-menopausal, of which 31 (71%) were using hormone replacement. Pre-operatively 9 (14%) had fecal incontinence, 6 (10%) had a previous anterior colporrhaphy, 22 (36%) had detrusor instability as well as SUI. 8 (13%) patients had minor complications during the procedure (4 recognized bladder penetrations which were managed by repositioning the needle, 1 retro-pubic hematoma and 3 mild bleeding from para-urethral tunnels), and all were treated conservatively with no long term sequels. 29 (47%) had short term voiding dysfunction, almost all resolved by the 6-week follow-up. Follow-up ranged from 6 weeks to 25 months. At the time their last recorded visit, the overall subjective success rate is 92%, objective success rate is 91%, and combined success rate (subjective SUI, objective SUI or both) is 88%. Pre-operatively, 13 women had intrinsic sphincter deficiency (ISD is defined as maximum urethral closure pressure of less than 20 cm H₂O); subjective failure rate was 8%. There were no objective failures in this group of women.

Conclusions

TVT has a good short-term success rate in women with SUI with or without ISD. There is low incidence of minor complications, and thus far there have not been any major complications. There is a significant incidence of short-term voiding dysfunction, which has not been published previously. Ongoing long-term evaluation of these patients is planned.