

Short-term Clinical and Quality-of-life Outcomes in Women Treated by the Tvt-secur Procedure

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Introduction

The TVT-Secur (Ethicon, Somerville, NJ, USA) is a minimally invasive suburethral synthetic sling used in the treatment of female stress urinary incontinence. It claims to cause less postoperative pain and to enable performing in an office setting. However, this may be at the expense of a significant learning curve and a higher early failure rate.

Aims

To assess objectively the success rate of the TVT-Secur procedure in the 'U' configuration at six months. Secondary outcomes focussed on subjective success rates, complications, patient satisfaction and quality-of-life (QOL).

Methodology

A prospective observational study was undertaken at two tertiary referral urogynaecology centres. A cohort of 42 consecutive patients with urodynamic stress incontinence who underwent the TVT-Secur procedure in the 'U' configuration between November 2006 and August 2007 were followed up for six months. Three standardised QOL questionnaires were completed preoperatively and at six months. A urogenital history, visual analogue score (VAS) for patient satisfaction, uroflow and urinary stress test were performed at six months.

Results

Recruitment was ceased prematurely because of a high number of early failures. Objective and subjective success rates at six months were 58.3% and 51.3% respectively.

Results

Table 1 Comparison of pre- and postoperative outcomes

| Variable | Preoperative | Postoperative | P-value |
|-----------------------------|--------------|---------------|---------|
| SUI (%) | 100 | 48.7 | 1.47 |
| MUI (%) | 59.5 | 38.4 | 0.08 |
| UUI (%) | 59.5 | 61.5 | 1.00 |
| <i>De novo</i> UUI (%) | | 10.3 | |
| Flow rate, Q_{max} (mean) | 21.9 mL/s | 20.8 mL/s | 0.57 |
| Residual urine (mean) | 16.7 mL | 18.1 mL | 0.86 |
| Voiding difficulty (%) | 0 | 9.7 | 0.24 |
| Subjective cure (%) | | 51.3 | |
| Objective cure (%) | | 58.3 | |

MUI, mixed urinary incontinence; SUI stress urinary incontinence; UUI, urge urinary incontinence.

Table 2 Operative and postoperative complications

| Complication | No. cases | % |
|--------------------------|-----------|------|
| Voiding difficulty | 3 | 7.7 |
| Urinary tract infection | 5 | 12.8 |
| Haematoma | 3 | 7.7 |
| Groin discomfort | 8 | 20.5 |
| Vaginal tape erosion | 3 | 7.7 |
| Vaginal/suburethral pain | 3 | 7.7 |
| Tape dislodgement | 2 | 5.0 |
| Wound infection | 0 | 0 |

Conclusions

On the basis of this limited study, we are hesitant to recommend the 'U' configuration of the TVT-Secur over its more established counterparts, the TVT and TVT-O.

Complications included urinary tract infections, voiding difficulty, groin discomfort, haematoma, vaginal pain, tape erosion and intra-operative dislodgement of tape. Prevalence of de novo urge incontinence was 10.3%. Only symptom-specific QOL scores improved and only 48.6% indicated a high level satisfaction (VAS \pm 80%) with TVT-Secur.