

## TENSION-FREE VAGINAL TAPE – TRANSOBTURATOR (TVT-O): SIX MONTHS RESULTS

### Hypothesis / aims of study

TVT-O is a minimally invasive procedure. It is placed under the middle urethra through the obturator foramen. The aim of this study was to prospectively assess the efficacy of TVT-O in the treatment of female stress urinary incontinence (SUI).

### Study design, materials and methods

A total of eighty five patients with clinical evidence of SUI underwent TVT-O from 19<sup>th</sup> July 2004 through 31<sup>st</sup> July 2005. Seventy five patients had come for six month follow up. The default rate was 11.8%. The preoperative evaluation included a detailed urogynaecology history taking, physical examination, erect stress test, a comprehensive urodynamic examination and urine analysis. The postoperative evaluation included a history taking, physical examination and a comprehensive urodynamic examination. Cure was defined as no leakage based on symptoms, physical examination and urodynamic test at 6 months. Improvement was defined as  $\geq 50\%$  decrease in symptoms. All patients had undergone TVT-O only. This is to exclude any beneficial effects that may arise from anterior repair or Kelly's stitch.

### Results

All patients were followed up for 6 months. The mean age was 54 years (range 38 to 81). The median parity of patients was 3(range 0 to11). Forty-four patients (59%) were menopausal and only 10 (23%) were taking hormone replacement therapy. Seventeen patients (23%) had hysterectomies. Five patients (7%) had a previous failed anti-incontinence surgery, 4 had Burch colposuspension and 1 had tension free vaginal tape. Erect stress test (EST) was positive in 61 patients (81%). The average EST was 24 gram (range from 1 to 300 gram). Fifty two (69%) patients had pure SUI. Twenty three patients (31%) had mixed incontinence. The procedure was done under general anaesthesia in 58 patients (77%) while 17 patients (23%) had regional anaesthesia. The mean operative time was 13 minutes (range 6 to 36). The average blood loss was 28 ml (range from 5 to 300). There was no vaginal wall, urethral and bladder perforation. There was no hematoma, vaginal or urethral erosion and no neurological complication was observed. The mean duration of bladder catheterization was 0.9 day (range from 0 to7). Thigh discomfort or pain was noted in 62 patients (83%). On average, the pain lasted for 3 days (range 1 to 30). Half of them had thigh pain of 3 days or more. One patient (1.3%) underwent tape release 2 weeks post surgery for acute urinary retention. Seventy three patients (97%) were cured of their SUI while 1 (1.3%) patient had improved. One patient (1.3%) had persistent stress urinary incontinence without any improvement. Three patients (4%)developed de novo urgency and 2 patients (3%) developed de novo detrusor overactivity. There was no mesh erosion during the 6 months period. Two patients (3%) had poor urine flow (max flow rate less than 15 ml/s).

### Interpretation of results

This study suggested that TVT-O has very high cure rates, is a fast procedure and associated with few peri- and post-operative complications.

### Concluding message

TVT-O should be considered as a good alternative method in the surgical management of female stress urinary incontinence.

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**HUMAN SUBJECTS: This study was approved by the KK Ethics Committee and followed the Declaration of Helsinki Informed consent was obtained from the patients.**