

SHORT TERM COMPLICATIONS FOLLOWING TENSION-FREE VAGINAL TAPE™ VS TRANSOBTURATOR TAPE (OBTRYX™)

Hypothesis / aims of study

The management of urinary stress incontinence (USI) has been deeply transformed by the introduction in 1996 of the Tension free Vaginal Tape (TVT), which involves the placement of a synthetic polypropylene tape under the mid urethra. A new way of insertion of suburethral slings through the obturator foramen(Transobturator Tape- Obtryx™) has been described with a supposedly reduced risk of serious complications and a similar efficacy to treat USI. The aim of this study is to evaluate the short term complications between these two techniques.

Study design, materials and methods

A prospective analysis was made of 40 consecutive patients who underwent the TVT and TOT – Obtryx™ procedure in each group. All patients had stress urinary incontinence (SUI) or mixed urinary incontinence confirmed by a pre-operative urodynamic study. This prospective observational study was conducted at a tertiary referral urogynaecology unit involving 80: 40TVT vs 40 TOT (Obtryx) women who were prospectively assessed pre-operatively and at 6-8 weeks following the procedure. Information collected included patient demographics, concomitant surgery were recorded in British Society of Urogynaecology database supplied to the member. Parameters used to assess voiding function included symptoms of voiding difficulty (incomplete emptying and irritative symptoms) as well as objective parameters including post-void residual (PVR) using Bladder Scan BVI 3000™.

Results

At baseline, the cohorts were similar with respect to age, parity, body-mass index, menopausal status, prior incontinence surgery, and any prior pelvic surgery. Intra operative complications such as Bladder injury 2.7% & Urethral injury 1% in TVT group whereas no such complication was present in TOT- Obtryx group. There was no difference in either median estimated blood loss (150cc vs. 200cc.) Post-operative haemorrhage was noted in 2%. Urinary retention which required catheterisation for upto a week was noted in 20% of cases with TVT group whereas it was noticed in 3% of TOT group (p<0.01). Voiding difficulty which required urethral dilatation in 4 weeks was noted in 13% of TVT group whereas none of TOT patients required urethral dilatation. 4% of TVT patients required Clean Intermittent Self-Catheterisation (CISC) but none of TOT patients required CISC. Vaginal erosion was seen in 2(5%) and 1 (2.5%) case of urethral erosion was noted in TVT group. 3(7.5%) cases of vaginal erosion were seen and no urethral erosion was noted in TOT group. De-novo detrusor overactivity was noted in 6(15%) of TVT group whereas 2(5%) of TOT group at 6 months' followup.

Interpretation of results

Perioperative urinary tract injury, voiding dysfunction, and detrusor overactivity are higher in TVT group vs TOT group. There is no significant difference was noted in erosion risk. The study was limited by the fact that it was a randomised study.

Concluding message

The trans-obturator tape procedure has less post-operative complications than TVT in particular reference to voiding dysfunction and detrusor overactivity.

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DISCLOSURES: NONE

HUMAN SUBJECTS: This study was approved by the Sandwell & West Birmingham Local Research Ethics Committee and followed the Declaration of Helsinki Informed consent was obtained from the patients.