

## **TRANS OBTURATOR TAPE (OUTSIDE-IN) SUCCESS RATES, COMPLICATIONS AND PRE-OPERATIVE URODYNAMICS WITH URETHRAL PRESSURE PROFILES – CAN WE PREDICT SUCCESS? & WHO SHOULD BE DOING THE OPERATION?**

Abstract category = Incontinence

Key words = Female, Stress urinary incontinence, Surgery

### Hypothesis / aims of study

Most studies looking at Trans Obturator Tapes for female Stress Urinary Incontinence have looked at the inside – out surgical method. We practice the outside-in method and wished to evaluate the procedure, determine a success rate based on pre-operative urodynamics and urethral pressure profiles. We also wanted to determine if any patient conditions had an impact on the success rate i.e. BMI, age and smoking status. Finally we looked at experience of the surgeon and complications in the form of tape erosion, dyspareunia and thigh/groin pain.

### Study design, materials and methods

Retrospective review of cases performed between January 2006 and March 2010 with subsequent follow up of ~2 years. All case notes were reviewed and a patient telephone survey was conducted. Data was collected and analysed using Microsoft Excel.

### Results

Notes were available for 87 of the 92 cases performed during the period of January 2006 and March 2010. The mean age was 51.5 years old (range 29-77).

A quality of life survey was conducted pre-operatively and the mean score was 3 out of 4 (My bladder limits my activities at home, work and during leisure).

When looking at the grade and experience of surgeons performing the procedure, those conducted by the Urogynae specialist consultant surgeon 65/87 (75%) had a significantly better success rate 90.6% compared to those performed by the trainees 78% and general gynae consultants 75%. The urogynae specialist also had a significantly lower complication rate – no erosions, 1 urethral injury (1.9%), compared to the general consultants who had a 37.5% complication rate with 3 out of the 8 cases they did having tape erosions and one having a bladder/urethral injury.

All cases were performed under general anaesthetic and 74/87 went home the same day. Of those that stayed overnight 2 were due to feeling unwell post GA, 2 due to urethral injury and 4 due to retention of urine post op.

Urodynamic reports were available for 84 of the 87 cases. Of these 24 had detrusor over activity and urodynamic stress incontinence demonstrated, the remainder had urodynamic stress incontinence alone. Those with mixed incontinence did not have a significant difference in the success rates.

Post Urodynamics residual ranged from 0 – 127ml (mean 28ml) and this had no impact on success rates or post operative retention rates.

The volumes voided following Urodynamics ranged from 56-798 (337ml mean) and again this had no impact on success rates of continence or retention rates post operatively.

UPP results demonstrated a MUCP range of 14-115cm H<sub>2</sub>O with a mean of 44cmH<sub>2</sub>O, and a FUL of 3-92mm (mean 22mm). All procedure failures occurred in those with a MUCP <46cm H<sub>2</sub>O and a FUL <36mm.

Voiding cystometry demonstrated a peak flow rate of 8.5-81ml/sec (mean 26.8ml/sec) with all retentions occurring in those with a peak flow of <27ml/sec.

Our group of patients had a BMI of 19-45 (mean 29.1) and 17% of the group smoked. Smoking and BMI did not alter the success rates. However those with chronic lung disease did have a lower success rate of 75%

At first follow up mean 3.1months 91% described their SUI as Cured or significantly improved, this dropped slightly to 87% at there final follow up (mean duration 16 months range 1-61 months)

Unfortunately 3 of the group had a tape erosion which were all detected within the first year of follow up. All procedures that resulted in a tape erosion were performed by the non urogynae specialists.

Only 1 patient complained of Dyspareunia (1.5%) and two (3%) of thigh or groin pain, all resolved within 6 months of surgery.

#### Interpretation of results

The success rates drop slightly with time but >87% at final follow up still describe their symptoms as significantly better or cured. BMI, smoking and age did not have significant impact on success rates. Urodynamics with UPP even in the group of patients with SUI alone are useful in predicting success rates.

#### Concluding message

Our data confirms that only specialist trained consultants should be performing the TOT continence procedure as this has been shown to have a better success rate with a significantly lower complication rate. Urodynamics with UPP in particular do have a role to play in predicting success rate outcomes and are useful in counselling the patient appropriately. Long term Dyspareunia and thigh/groin pain have not been found to be a problem with the outside-in technique.

#### Disclosures

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