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# PROLONGED FOLLOW-UP SHOWS CONTINENCE DETERIORATION AFTER TRANS-OBTURATOR TAPE : RESULTS FROM A RANDOMISED CONTROLLED STUDY

## Hypothesis / aims of study

Retropubic and transobturator Tension-Free Midurethral Slings (TVT, TOT), the most effective and popular surgical procedures for stress urinary Incontinence (SUI), are currently considered the gold standard. Lack of long-term outcomes is a major debating point in urogynecology and, at present, since the different techniques are linked to controversial results, evidence is still limited. Data on the long-term durability of anti-incontinence procedures is needed, particularly as life expectancy is lengthening significantly in developed countries. This study reports the long-term results of a group of patients who were previously included in a prospective randomised study designed to compare the safety and success rate of tension-free vaginal tape (TVT) and transobturator tape (TOT- obtape) in the treatment of female Stress Urinary Incontinence.

#### Study design, materials and methods

A detailed description of study design, setting, centres and patients was published in 2007 (1). To assess long-term results 95/148 women (73 TVT and 75 TOT) who had been included in the original study, underwent a telephone interview in October 2012. The patients refer to one of the 3 centres that participated in the multi-center study. At the interview the patients were invited to subjectively assess 1) incontinence status (dry or not) with success defined as no leakage in any condition (neither stress nor urgency) and no use of pads; 2) the presence of storage symptoms and 3) voiding symptoms (ICS terminology and classification). They also reported 4) any further intervention they had undergone; 5) their satisfaction on a scale from 0 to 10 and finally 6) whether they would repeat surgery. The Chi square and Mann-Whitney tests were used to analyze categorical and discrete independent data; the McNemar and Wilcoxon signed rank tests were used respectively to compare categorical and discrete paired data. Statistical analysis was performed by using IBM SPSS rel. 21.0, 2012.

## Results

Two of the 95 patients (51 TOT and 44 TVT) had died and 10 were lost to the follow up (5 TOT;5 TVT) At a median follow-up of 98.9 months (mean 99±19 months) 83 patients were interviewed (45 TOT; 38 TVT). In the TOT group the UI success rate was 60% (27/45 dry), voiding symptoms were present in 7 (15.5%) and storage symptoms in 20 (44.4%). 4 patients had undergone reintervention for recurrent UI, 2 for POP and 7 for mesh revision. 37 (82.2%) would repeat surgery. The mean VAS score was 7.6±2.2 (median 8- range 0-10). In the TVT group the UI success rate was 78.9% (30/38 dry), voiding symptoms were present in 7 (18.4%) and storage symptoms in 16 (42.1%). 2 patients had undergone re-interventions: 1 for POP and 1 for paraincisional hernia. 34 (89.5%) would repeat surgery. The mean VAS score was 8.4±1.8 (median 9; range 3-10). When long- and medium- term results were compared, a downward tendency emerged in the continence rate after mid-urethral slings. It was more marked after TOT than TVT (60% vs 78.9%; p=0.106 (Fig. 1). No significant difference emerged between TOT and TVT for Voiding symptoms (p=0.839), Storage symptoms (p=0.240). UDI6 (p=0.874) and IIQ7 (p=0.902) scores.

#### Interpretation of results

At a longer follow-up the continence rate after trans-obturator mid-urethral slings tends to drop from 77.3 to 60%. The results after TVT remain stable over time (2). The difference between the two procedures (TVT and TOT) is not statistically significant probably because of the low number of patients who were evaluated at the longer follow-up. Some important factors help account for these results: 1) advancing age with comorbidities can lead to a deterioration in continence outcome and 2) the poor results in the TOT group might have been due to obtape mesh which is no longer available because of its high revision rate. We should however bear in mind that patients who were treated for this complication were distributed equally in the failure and dry groups. The results of this study advise caution and indicate the need to focus particular attention on the long-term outcomes after MUS.

## Concluding message

The long-term results of this study demonstrated that mid-urethral slings are an effective option for treatment of SUI but outcomes after TOT tend to decline over time. This is of paramount importance for correct patient counselling.



## **References**

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#### **Disclosures**

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