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## SURGICAL OUTCOME OF TVT AND TVTO- A SINGLE INSTITUTE EXPERIENCE

### Hypothesis / aims of study

The Tension free Vaginal Tape (TVT) (1) was modified with the transobturator approach (TVTO) (2) to provide less surgical risk. Questions were raised, however, whether the hammock like shape of the TVTO is as effective as the "U" shape retropubic placement of the TVT around the urethra. This retrospective study compares the outcome of the TVTO to TVT in women with Stress Urinary Incontinence (SUI) and women with mixed urinary incontinence (MUI) who were operated on at the same institute by the same surgeon, thus eliminating technical and management differential.

Study design, materials and methods 236 women with both SUI and MUI underwent TVTO. Of these 142(60.2%) had MUI and 94(39.8%) had SUI. Their charts were reviewed and the surgical outcome with regard to the resolution of SUI in both groups and the symptoms of overactive bladder (OAB) among those with MUI. These results were compared to the outcome of 513 women who underwent TVT (these data were previously presented) (3).

### Results

The surgical outcome of our TVT patients revealed 70% resolution of OAB symptoms among those with preoperative symptoms of MUI and 4.2 % denovo OAB among the women who had preoperative SUI symptoms alone. The overall resolution of SUI was 92 % and there was no statistical difference in the cure of SUI among the women with preoperative SUI alone and those with MUI.

The surgical outcome of the TVTO revealed 72.5% resolution of OAB symptoms among those with preoperative symptoms of MUI and 2.1% denovo OAB among the women who had preoperative SUI symptoms alone. The overall resolution of SUI was 86% and there was no statistical difference in the cure of SUI among the women with preoperative SUI alone and those with MUI.

#### Interpretation of results

The surgical outcome in curing SUI was lower following the TVTO when compared to the TVT. The resolution of the preoperative OAB was the same after TVT and TVTO. These findings suggests that the hammock shape placement of the midurethral tape may provide less SUI cure rate in patients with coexistence of Intrinsic Sphincteric Deficiency (ISD) but similar resolution of OAB symptoms when compared to the U shape of the retropubic TVT.

## Concluding message

Both the TVTO and TVT provide effective surgical outcome to cure SUI and OAB in patients with MUI. When preoperative ISD is suspected the surgeon should consider the choice of TVT instead of the TVTO.

# References

- Ulmsten U, Henriksson et. all- An Ambulatory Surgical Procedure for Treatment of Female Urinary Incontinence. Int. Urogynecological J, 1996; (7), 81-85
- 2. deLeval J.- Novel Surgical Technique for Treatment of Female urinary Incontinence; Transobturatot Vaginal Tape, inside-out. Eur Urol. 2003, Dec, 44(6); 724-30
- Berger Y, Castillo P- The Effect of Preoperative Detrusoe Instability on outcome of TVT in women with SUI. SUFU (abstract), Bahama, 2005

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	Procedure Under Local Aneshesia for Treatment of Female
	Urinary Incontinence; Int. Urogynecological J. 1996; (7), 81-85
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require eithics committee approval because	Charts review, no names mentioned
Was the Declaration of Helsinki followed?	No
This study did not follow the Declaration of Helsinki in the sense	Charts review, no names mentioned
that	
Was informed consent obtained from the patients?	No