

SECONDARY MID-URETHRAL SLING (MUS) SURGERY IN PREVIOUS FAILED CONTINENCE SURGERY

Hypothesis / aims of study

To evaluate the continence and complication rates of repeat mid-urethral sling (MUS) procedure in patients who had previous failed continence surgeries.

Study design, materials and methods

We retrospectively analysed data on patients who had undergone a tension-free vaginal tape (TVT) or TVT-O procedure, for recurrent stress urinary incontinence (SUI) or urodynamic stress incontinence (USI), after a failed Burch Colposuspension, or TVT surgery or both. All patients had a minimum follow-up of at least one year (1st January 2001 to 31st July 2005).

Results

Out of 940 MUS procedures, 26 patients were reviewed, comprising of 19 previous Burch colposuspensions, 7 TVT and 1 TVT-O, with one patient had 2 previous surgical procedures (Burch then TVT). Twelve (46.2%) had TVT inserted and 14 (53.8%) had TVT-O. Other concomitant surgeries included one vaginal hysterectomy, one anterior Prolift *TM, 1 anterior and 4 posterior colporrhaphy.

The overall cure rates were 93.7%, with a 6.3% recurrence rate, for 16 patients available for 1-year review. There was no statistical difference between TVT and TVT-O cure rates (100.0% vs 88.9%) at 1 year. The only significant finding was that of short-term trocar exit-site pain in the TVT-O group (7 vs 1, p=0.036). Otherwise, there were minimal complications for both MUS procedures, with no bladder perforations, significant intra-operative haemorrhage, or increase in de novo urgency, urgency incontinence or voiding dysfunction in either group. There was 1 (14.3%) mesh erosion in the TVT group at 1 year, which was successfully managed conservatively.

Interpretation of results

The cure rates for both the TVT and the TVT-O as a secondary continence procedure for SUI appear to be excellent. This should be tempered with the fact that the 1-year cohort of patients was significantly reduced due to defaulters, despite a recall system that involves telephone reminders and letters to indicate further review dates.

TVT fared better than the TVT-O as a secondary continence procedure. This could be attributed to the U-shaped sling design of the TVT tape, which may have producing a more obstructive continence mechanism in comparison to the 'hammock-shaped' sling of the TVT-O tape. Unfortunately, no significant difference was observed in the two MUS groups due to the small numbers available for the study, and the fact that there were a substantial number of defaulters in the study as well.

The lack of peri-operative and post-operative complications attests to the excellent design of the TVT and TVT-O, the unique properties of Gynecare's polypropylene tape, and the experience of our centre's surgeons.

Concluding message

Secondary MUS appears to be an excellent surgical option for previous failed continence surgeries. Larger studies are required to elucidate which MUS procedure is better in such cases, and long-term durability of cure.

References

Curr Opin Urol. 2003 Jul;13(4):301-7

Int Urogynecol J Pelvic Floor Dysfunct 1996; 7: 81

Obstet Gynecol 2004; 104: 1259

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What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
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Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	No