222

Anneleen V[1], Dirk D R[1], Frank V D A[1]
1. *KULeuven*

A REPEAT MID URETHRAL SLING IS A VALUABLE TREATMENT FOR PERSISTENT OR RECURRENT STRESS URINARY INCONTINENCE

Hypothesis / aims of study

To evaluate the outcome of repeat mid urethral slings (MUS) after failed primary sling surgery in women with persistent or recurrent stress urinary incontinence (SUI). To report our pooled experience of the largest series of repeat MUS. There is a paucity of data on repeat sling after a failed primary MUS. A few small studies with relatively short follow-up have previously addressed this issue (1,2,3).

Study design, materials and methods

We reviewed the medical records of 80 women (mean age 62 +/- 12.3 years) who underwent repeat MUS surgery from January 2000 till January 2009 in a single tertiary academic center. The assessment included comprehensive medical history, lower urinary tract symptoms evaluation, bladder diary, physical examination, urinalysis, urine culture, uroflowmetry, post-void residual urine measurement and urodynamic study. All definitions used are according the recommendations of the International Continence Society. Persistent SUI was defined as SUI within 6 weeks after the first MUS procedure. SUI occurring later than 6 weeks after the initial success of the first MUS was defined as recurrent SUI. 26 (33%) transobturator (TOT), 25 (31%) retropubic (TVT) and 16 (20%) minislings were placed as secondary slings. 13 (15%) slings were biological (Pelvicol™). The type of sling was chosen according to the surgeons' preference, reflecting current standard of care in the institution. In 4 (5%) patients a release of the primary sling was performed, in 6 (7,5%) patients the sling was totally excised prior to secondary sling placement. Postoperative evaluation was performed at 2, 6 and 14 months, and annually thereafter. Whenever insufficient info was present for the current study, patients were contacted by telephone interview for further investigation of urinary symptoms. Subjective cure was defined as an affirmative response to the question of no more urinary leakage during physical activity, coughing or sneezing. Subjective improvement was considered in those women who responded yes to the question: 'Are you satisfied with the results of the operation?'. Objective cure was defined as no more need for pad use. Objective improvement was defined as 50% diminished need for pad use.

Results

We found 80 women with recurrent or persistent SUI who underwent a repeat MUS after failed primary MUS. Mean follow-up was 43,9 months (range 2-104). Average time between primary and repeat MUS was 24 months (range 3-184 months). Average time between the initial consultation in the tertiary academic center and the repeat MUS was 5.6 months (range 1-39). The repeat sling was performed with a mean blood loss of 27.5 ml (0-300ml). Spinal anesthesia was administered in 7 cases. The other 73 repeat MUS were performed under general anesthesia. Complication rate was 18% (15 patients). This included retention (catheterization needed for longer than 4 days) in 12 patients, erosion in 2 patients, 1 case of postoperative retropubic hematoma which was managed by conservative treatment. In the retention group 1 release of the secondary MUS was performed. The overall subjective cure rate was 68,5%. Of the study group 76% reported subjective improvement. The amounts of pads reduced from a mean 3.8 pads a day to a mean of 0.75 pads a day postoperatively. The objective cure rate was 64%. The incidence of de novo urgency was 8% (10 patients). When comparing different secondary sling types no difference was found in overall continence rate, except for the biological sling (p=0.01, Chi square test). More than half (7/13) of the patients from whom the secondary sling was a biological sling, were not satisfied. The subjective improvement rate in patients with recurrent or persistent SUI was 73,8% and 78,1% respectively. This difference is not statistically significant (p=0,876, Chi square test). Excision versus release of the MUS showed a showed a slightly higher satisfaction rate after excision, 84,6% and 71,4% respectively. This difference is not statistically significant (p=0.69 Chi square test).

Interpretation of results

A repeat MUS is a valid option for recurrent or persistent SUI after failed primary MUS. This study in 80 patients shows that repeat MUS has a subjective improvement rate of 76% and an objective cure rate of 64%. This report adds the largest series to previous published reports (1,2,3) confirming the value of repeat MUS for persistent or recurrent SUI. A previous release or excision of the primary sling does not seem to affect outcome. There is also equal outcome in persistent or recurrent SUI. The incidence of de novo urgency in this series was only 8%. Limitations of this study are its retrospective nature, the different types of slings that were used as primary or repeat MUS and the absence of validated questionnaires in the follow-up. Nevertheless this series represents a clinical reality from our center.

Concluding message

A repeat MUS should be offered to patients with persistent or recurrent SUI after a failed primary sling, even after previous release or excision.

References

1. Lee KS, Doo CK, Han DH et al: Outcomes following repeat mid urethral synthetic sling after failure of the initial sling procedure: rediscovery of the tension-free vaginal tape procedure. J Urol 2007; 178:1370.
2. Liapis A, Bakas P, Creatsas G: Tension-free vaginal tape in the management of recurrent urodynamic stress incontinence after previous failed mid urethral tape. Eur Urol 2009; 55:1450.
3. Stav K, Dwyer PL, Rosamilia A et al: Repeat synthetic mid urethral sling procedure for women with recurrent stress urinary incontinence. J Urol 2010; 183:241.

Specify source of funding or grant **None**

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	**None needed**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**No**