

MANAGEMENT OF RECURRENT OR PERSISTENT STRESS URINARY INCONTINENCE: WICH ROLE FOR MID-URETHRAL SLING

Hypothesis / aims of study

Patients with recurrent or persistent stress urinary incontinence (SUI) constitute a difficult therapeutic challenge and up to now, there is no consensus on the procedure of choice for treating persistent or recurrent SUI because of the relatively low number of patients included in the studies with this issue and the variability of reported cure (1). The aim of this study was to determine the outcomes of Mid-urethral sling (MUS) after a failed primary surgery for SUI.

Study design, materials and methods

Our study included female patients with recurrent or persistent SUI (clinical and urodynamic diagnosis) treated with retropubic (TVT) or trans-obturator (TOT) MUS.

SUI was defined as persistent if it reappeared within 6 weeks of the first anti-incontinence procedure and recurrent if it developed more than 6 weeks afterwards. Postoperative evaluations were performed at 3, 6, 12 months and then annually. We report data collected at the last follow-up.

Objective cure was defined as negative stress test and no longer needing pads. Subjective cure was defined as an affirmative response to the question of no more urinary leakage during physical activity, coughing or sneezing and reported no pads use in any situation. Subjective improvement was an affirmative answer to the question: "Are you satisfied with the results of the operation?" and at least 50% diminished need for pad use. The results were divided in dry (subjective and objective cured), improved (subjective improvement) and failed. All definitions on the basis of the International Continence Society.

For statistical analysis, we used the McNemar chi-square test to compare categorical variables between pre- and post-operative periods, the paired t-test for continuous parametric variables, and the Fisher exact test for continuous non-parametric variables. We considered $p < 0.05$ to be statistically significant.

Results

We included 48 women with recurrent or persistent SUI who had previously undergone different surgical procedures. Table 1 shows type of surgery, and previous procedures. Seventeen patients underwent TOT and 31 TVT.

Table 1 – Type of surgery and previous procedure

SURGERY	N° PTS	PREVIOUS SURGERY
TOT	17	7 CS 2 INJ 1 SLING 1 TOT 3 TVT 3 US
TVT	31	8 CS 5 IN 18 TOT

CS: Colposuspension; INJ: Injectabile; US: Uretrosuspension; SIS: Single Incision Sling

The median follow-up was 120 months.

At the last follow-up our study showed an objective cure rate of 64.5%: basing on the grade of incontinence, using the Ingelmann-Sundgerb scale (1) the cure rate was 80% in patients with pre-op grade I SUI, 58.3% in patients with pre-op grade II SUI and 68.4% in patients with pre-op grade III SUI.

The subjective cure rate was 77.1% and the subjective improvement was 10.4%

In the TVT group the failure rate was 12.9% and in the TOT group it was 11.7% (no statistical significance). Beyond this, the TVT group showed "de novo" urge incontinence in 9.7% of cases and "de novo" urgency in 19.4% of patients; in TOT group we observed "de novo" urge incontinence in 5.9% of cases and "de novo" urgency in 11.7% of patients (no statistical significance). If we consider only the patients in which a MUS was implanted after a failed MUS (group 1) we had a cure rate of 54.5% and an improvement of 22.7%.

When a MUS was implanted after a non-prosthetic anti-incontinence surgery (group 2) we had a cure rate of 80.8% and an improvement of 15.4% (statistical significant- $p=0.03$ - in favour of group 2).

Interpretation of results

There are a paucity of data on repeat sling after a failed primary SUI surgery and few studies have aimed to compare the retropubic and the trans-obturator approach in the treatment of recurrent or persistent SUI (3). We found a subjective cure rate of 77.1% and an objective cure rate of 64.5%; with no significant differences between the TVT and the TOT groups. The grade of SUI was not a risk factor of recurrence, while we obtained the better results when MUS were used after non prosthetic anti-incontinence surgery.

Concluding message

Our study demonstrates that cure rates and improvement rates of MUS are favourable, also if lower than the cure rate for primary surgery, and MUS should be offered to patients with persistent or recurrent SUI. There is no consensus regarding the better approach to be used (retropubic or trans-obturator). Prospective, randomized studies on this subject are needed

References

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Disclosures

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