

NEXT SURGICAL MANAGEMENT OF FAILED MIDURETHRAL SLING FOR FEMALE STRESS URINARY INCONTINENCE: TAPE TIGHTENING OR REPEAT SLING?

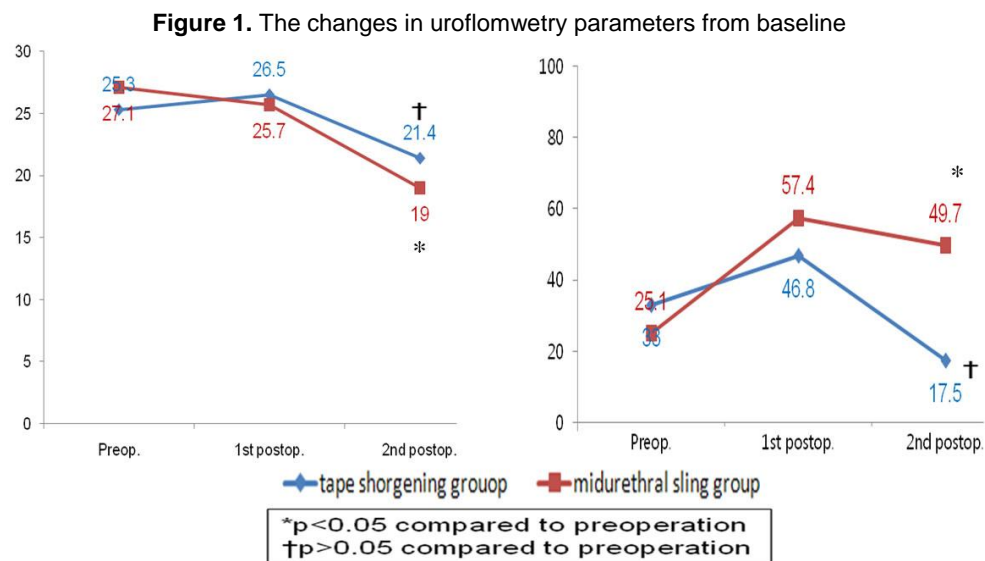
Hypothesis / aims of study

Since the introduction of midurethral sling (MUS) its widespread use accumulated failed cases and increased the interest of an appropriate secondary surgical procedure. To date there is no treatment principle of the managing failed sling procedures. So we compared outcomes of repeat MUS and shortening of pre-implanted tape for patients with recurrent or persistent SUI after initial MUS.

Study design, materials and methods

We analyzed 66 female patients who had received second surgical procedure due to recurrent or persistent SUI (36 patients, repeat MUS: 30 patients, shortening of the pre-implanted tape). All patients were followed up at least 12 months after the second procedure.

The efficacy was measured by cure and success rates on the stress cough test. Safety was evaluated by urine flow rate, residual urine volume and procedure related complications.



Results

Between the two groups, there were no significant differences in patients' age at operation, body mass index (BMI) and urodynamic parameters. The mean interval from initial surgery to secondary procedure were 16.7±21.5 month in repeat MUS group and 4.2±3.7 months in shortening of tape group (p=0.002).

The cure rates were higher in repeat MUS group than shortening of tape group (72.2% vs. 46.7%, p=0.034). The success rates (cure/ improved) were not significantly difference in both group (repeat MUS group: 83.3% vs. Shortening of tape group: 70.0%, p=0.198). The MFR significantly decreased in repeat MUS group but not in tape shortening group. The PVR significantly increased after repeat MUS but not in tape shortening group (figure 1). There were no significantly difference in cure rate according to the types of first MUS (retropubic vs. transobturator approach) and VLPP<60cm H₂O between two groups. In case of the reason for secondary procedure, among the patients underwent secondary operation due to persistent SUI the cure rates were significantly higher in repeat MUS group than in shortening of tape group (76.5% vs. 40.9%, p=0.028), however, there were no significant differences in the cure rates of the patients with underwent secondary operation due to recurrent SUI between two methods (82.4% vs. 68.2%, p=0.321).

The mean interval from initial surgery to secondary procedure in repeat MUS group and the presence of urgency incontinence in tape shortening group were associated with cure rate. De novo urgency developed 30% only in repeat MUS group. De novo urgency incontinence developed 17.4% in repeat MUS group and 10.5% in tape shortening group (p=0.532). After repeat MUS two patients complained of recurrent urinary tract infection and one patient underwent tape cutting because of postoperative voiding difficulty. After tape shortening the mesh erosion was developed in one patient.

Interpretation of results

The repeat MUS has higher cure rate than shortening of a pre-implanted tape in the treatment of failed SUI.

Concluding message

Both the repeat MUS and pre-implanted tape procedure are the efficacious surgical procedure for failed SUI with low complication rates even if the repeat MUS has higher cure rate than shortening of a pre-implanted tape.

<i>Specify source of funding or grant</i>	none
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	1. This is not a clinical trial 2. We retrospectively analyzed the medical record of the patients
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No