

# #427 Midurethral tape shortening, as a secondary surgery in the treatment of recurrence of stress urinary incontinence in women – a preliminary report.

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### Introduction & objectives

The use of polypropylene midurethral tape has become a standard in the surgical treatment of stress urinary incontinence (SUI) in women [1]. Despite great care in performing the operation and very thorough examination of this treatment method, failures can occur. For example, overactive bladder (OAB) develops "de novo", bladder emptying disorders or recurrence of SUI. The aim of this study was to find a minimally invasive method for treating recurrences of SUI.

## Materials & methods

A group of 6 patients, suffering from SUI relapse after the primary surgery, using the polypropylene midurethral tape inserted retropubically, was included in this study. The mean age of patients, who underwent primary surgery was 63.5 and at secondary surgery -66.8. The mean BMI was 30.6 at primary surgery and 30.3 at secondary surgery. In the follow - up after the primary and secondary surgery, the patients completed the Urogenital Distress Inventory (UDI-6) short form, a questionnaire of severity of lower urinary tract symptoms (LUTS: pelvic pain, frequency, nocturia, urgency, incontinence, SUI, hesitancy, dysuria, recurrent UTI) ranging from 0 to 3 (0: not at all, 1: slight, 2: moderate, 3: severe complaints). The visual analogue scale (VAS) of subjective assessment of lower urinary tract function, ranging from 0 to 100 (0: very bad, 100: perfect function), was also rated. The tape localization and residual volume were assessed by introital ultrasound [2]. If the tape was displaced (lower edge above 37.5% of the urethral length) or if the residual volume was above 50 ml together with recurrent urinary tract infections (UTI), the tape was always removed. Patients, whose lower edge of the tape was below 37.5% of the urethral length, and whose main complaint was the recurrence of SUI, were qualified for repair surgery using midurethral tape plication. The procedure was performed under general anaesthesia. Due to the small group of analyzed patients, mean values obtained from questionnaires before and after secondary surgery were compared. This is a retrospective observational study.

#### Results

All patients were cured of the recurrence of SUI. Also the patient satisfaction with the lower urinary tract function, rated on the VAS after the secondary surgery, was much better. The secondary surgery was not associated with any serious complications.



Figur 3: Tape preparation.

Table 1: Patient characteristics.

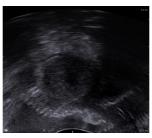


Figure 4: US image of the shortened left arm of the tape

Table 2: Results

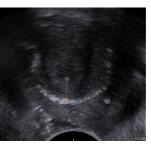


Figure 1: Tape visualisation in transverse plane. The image is correct as expected.



Figure 2: Ultrasound image of the loose right arm of the tape.



Figure 5: Ultrasound image of the shortened right arm of the tape

| Nr of pts:<br>6                    | ВМІ  | Age               | OP  | Results                   | Frequency | Nocturia | SUI  | UDI 6 | VAS  |
|------------------------------------|------|-------------------|---|---------------------------|-----------|----------|------|-------|------|
| at the day of primary surgery      | 30.6 | 63.5<br>(52 – 80) | TVT (100%)<br>(2 pts after<br>TOTex)          | before<br>sec OP          | 2.0       | 1.34     | 2.67 | 7.5   | 32.3 |
| at the day of<br>secondary surgery | 30.3 | 66.8<br>(59 – 82) | shortening:<br>on the R 4 pt<br>on the L 2 pt | after sec<br>OP<br>1.4mo. | 0.5       | 0.3      | 0.0  | 1.0   | 85.7 |

#### Interpretation of results

Patients after tape plication surgery assessed their quality of life as much better than before the secondary surgery. Conclusion

If the follow-up examination confirms that the tape arms have been lowered and SUI recurs, corrective treatment should be performed by plication of the lowered tape arms.

### References.

1. Ulmsten U, Petros PE. Intravaginal slingplasty (IVS): an ambulatory surgical procedure for treatment of female urinary incontinence. Scand J Urol Nephrol 1995;29:75-82.

2. Pawlaczyk A, Wąż P, Matuszewski M. Introital ultrasound in the diagnosis of lower urinary tract symptoms following antiincontinence surgery using a synthetic midurethral tape. Int Urogynecol J 2019;30:1503-1508.