

DOES 'TENSION-FREE' SOLVE ALL STRESS INCONTINENCE? OUR EXPERIENCE OF USING A RE-ADJUSTABLE SLING (REMEEX) IN 58 COMPLICATED CASES.

Hypothesis / aims of study

'Tension-free' sling is a solution for stress urinary incontinence (SUI) with hypermobile urethra, but results are not as good without hypermobility or when there is an intrinsic sphincteric deficiency (ISD). In recent articles, re-adjustable sling has been presented as a useful technique in different subsets of patients [1,2,3]. We present our results employing a re-adjustable sling (Remeex system) in complicated cases of SUI. The Remeex device consists of a 3 x 1,25 cm polypropilene sling mesh with 2 sutures attached to a prosthesis (*varitensor*), located over the rectus fascia. The sling is left tension free at surgery, but this mechanical device permits the sling tension regulation afterwards, if necessary. The sling is placed under the urethra and the sutures are passed through the hypogastric field with needles. The sutures are then passed through the varitensor and knotted, leaving the manipulator showing through the skin, allowing sling tension adjustment, if necessary. During the two postoperative days, the patient is asked to cough, a pad-test is performed, and the post-void residual volume is measured. According to these parameters, the tension is adjusted. By rotating the manipulator clockwise, the sutures wind-up into the varitensor, elevating the sling. By rotating it counter-clockwise, the sling tension is decreased. (Figures 1,2). Once the tension is adjusted, the manipulator is disconnected from the varitensor, leaving the varitensor in the subcutaneous tissue, ready to be used in the future after a little incision under local anaesthesia.

Study design, materials and methods

Fifty-eight patients with an average age of 63 years (43-81) were evaluated prospectively following Remeex sling surgery. Patients were classified by clinical criteria, Q-tip and urodynamics, into ISD (34 cases, 59%) or recurrent hyper-mobility SUI after other anti-incontinence procedures (24 cases, 41%). (This technique was not performed in any case of non-recurrent grade I or II SUI). Patients had been considered as having an ISD when there was no urethral mobility in Q-tip test (<15° during coughing), the maximal urethral closure pressure during profilometry was lower than 20 cm of water, and valsalva leak point pressure was lower than 60 cm of water. Clinically, 44 patients (76%) presented SUI, whereas 14 patients (24%) complained of mixed urinary incontinence. The patients with neurological disorders or detrusor overactivity have been excluded from this protocol. Outcome is evaluated using clinical charts, physical examination, pre-operative and post-operative urodynamics, and satisfaction questionnaire.

Results

After a mean follow-up period of 12 months, 57 patients (98%) have been cured, with 7 of them (12%) presenting urge incontinence (4 with detrusor overactivity). One patient (1,7%) has presented recurrent SUI but refuses re-adjustment. Five cases (8,6%) required long-term regulation of the sling tension, under local anaesthesia, during the follow up. In those patients, 'long-term regulation' of the sling tension were done between 5 and 12 months after the surgery. Tension was increased in 4 cases due to recurrence of SUI after a mean period of 7 months, and reduced in 1 case due to high residual volume. Eighteen patients (87%) are satisfied with the result of the surgery.

Results:

	n	%
Continent at stress	57	98,2
Incontinent	1	1,7
De novo urge incontinence	7	12

Concluding message

Remeex provides a good cure rate of recurrent SUI and ISD. The device is well tolerated without any case of withdrawal or infection. The right sling tension is easily achieved during the early postoperative period, according to pad test and postvoid residuals. The appearance of high residual volume or recurrent incontinence during the follow up has been solved successfully in every case, re-adjusting sling tension under local anaesthesia when necessary.

References

1. "Externally Readjustable Device to Regulate Sling Tension in Stress Urinary Incontinence: Preliminary Results". *J Endourol* 2003,17: 515-521.
2. "Surgical treatment of urinary stress incontinence using a method for postoperative adjustment of sling tension (Remeex System)". *Int Urogynecol J* 2003, 14: 326-330.
3. "Analysis of retropubic colpourethrosuspension results by suburethral sling with Remeex prosthesis". *Eur J Obstet Gynecol Reprod Biol* 2003, 106: 179-183.

Figure 1

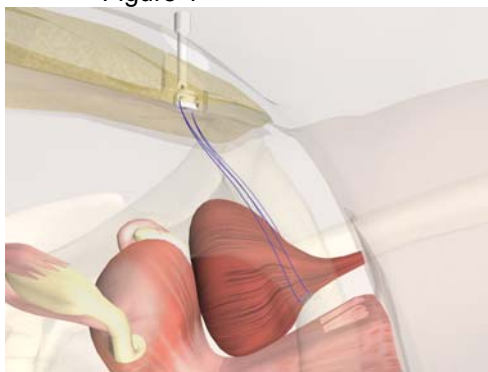


Figure 2

