

## TREATMENT OF STRESS URINARY INCONTINENCE WITH REMEEX SLING (EXTERNAL MECHANICAL REGULATION SYSTEM)

### Aims of Study

We present our initial results employing the technique of adjustable sling (Remeex system) for the treatment of stress urinary incontinence (SUI). The Remeex device consists of a 5 cm. polypropilene sling with 2 traction sutures attached to a prosthesis (*varitensor*), that is located subcutaneous at the hypogastric level. This mechanical device permits the sling tension regulation during the surgery, and afterwards if necessary. The sling is placed under the urethra through a vaginal incision, and the sutures are passed through the hypogastric field with needles. The sutures are passed through the varitensor and knotted. During the two postoperative days, the patient is asked to cough, a pad test is performed, and the postvoid residual volume is measured. According to these parameters the tension is adjusted. The varitensor is operated by a manipulator. By rotating it clockwise, the sutures wind up into the varitensor elevating the sling. By rotating it counter clockwise the sling tension is decreased. Once the tension is adjusted, the manipulator is disconnected of the varitensor, leaving it in the subcutaneous tissue, available to be used in the future with a little incision under local anaesthesia.

### Methods

Twenty two patients (ages: 43-81, average 63) were evaluated prospectively following Remeex sling surgeries. Patients were classified by clinical criteria, Q-tip test and urodynamic evaluation into intrinsic sphincter deficiency (ISD) (9 cases) or recurrent hyper mobility SUI (13 cases). Any case of non-recurrent grade I or II SUI was performed. Outcome is evaluated by using clinical charts, preoperative and postoperative urodynamics, physical examination, and satisfaction questionnaire.

### Results

After a mean follow up period of 10 months, 20 patients (95%) are cured, presenting 3 of them (13%) urge incontinence due to de novo detrusor overactivity. One patient (4.5%) presents recurrent SUI and refuses re adjustment. Six patients report urgency without incontinence. Three cases (13%) required regulation of the sling tension under local anaesthesia during the follow up. The tension was increased in 2 cases due to recurrence of SUI after a mean period of 7 months, and reduced in 1 case due to high postmicturition residual volume. Eighteen patients (81%) are satisfied with the result of the surgery.

### Conclusions

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 residuals. The appearance of high residual volume or recurrent incontinence during the follow up has been solved successfully in every case, re adjusting the sling tension under local anaesthesia when it was necessary.