

RESULTS OF ADJUSTABLE SLING (TRT-REMEEX SYSTEM®) FOR THE TREATMENT OF RECURRENT FEMALE STRESS URINARY INCONTINENCE; PRELIMINARY REPORT

Hypothesis / aims of study

Since the development of integral theory by Ulmsten and Petros, in the past decade, the suburethral slings are the procedure of choice for the treatment of most patients with stress urinary incontinence. The main goal is to achieve complete continence without significant obstruction to urine flow, which is sometimes a complex task. Besides recent achievements in the treatment of stress urinary incontinence repeat surgery is requested one in six transobturator slings and one in sixteen retropubic/suprapubic slings (1). The effectiveness of surgeries decreases if they are performed in the recurrent cases. The TRT Remeex Female system® (Neomedic International, S.L. Barcelona, Spain) is an adjustable sling system that treats female stress urinary incontinence and allow us to regulate the level of continence of the patient in its natural position, stand up, and making the movements that usually cause urinary incontinence in patients. Once implanted, Remeex system permits us to readjust the continence level any time during patients life under local analgesia without associated side effects of implanting a new sling. Aim of the study was to evaluate the efficacy and safety of adjustable slings in the treatment of recurrent female stress urinary incontinence.

Study design, materials and methods

In a retrospective analysis of 2 years of use of the adjustable sling, 9 patients with recurrent stress urinary incontinence after previous anti-incontinence procedure were treated with TRT-Remeex system®. Preoperatively, all women underwent urodynamic evaluation included non-invasive uroflow, cystometrogram, complex EMG. Preoperative and postoperative standardized 24-hour pad test, voiding diaries and King's health quality of life questionnaire were performed. Patients that had urge incontinence were taken treatment tailored for these issues.

Results

The mean age was 54.3 ± 7.3 (43-65). Mean abdominal leak pressure was 129.1 ± 31.5 cmH₂O (78-164). All patients had resolution of their stress incontinence. One patient (11.1%) with diabetes had infection in the suprapubic region that resolved with oral antibiotic therapy. One patient (11.1%) required tightening after 13 months. One patient (11.1%) had erosion of mesh that required primary repairment of vaginal mucosa. One patient (11.1%) had refractory retention who required self- intermittent catheterization. There was no significant change in preoperative and postoperative Qmax values in uroflowmeter. There was mild improvement in mean leakage episodes in the bladder diaries in the postoperative period. The total score of the King's health questionnaire in the preoperative and postoperative period were 544.55 ± 228.29 and 148.47 ± 96.38 respectively which was statistically significant ($p < 0.05$). The pad test was significantly reduced in the postoperative period from 63.33 ± 31.48 to 9 ± 18 ($p < 0.05$).

Interpretation of results

All patients were considered as cure; none of the patients suffered from urinary incontinence in the postoperative period. There was statistically significant improvement in total score of King's health quality of life questionnaire and urine loss in pad test postoperatively. Improvement in voiding diaries, and other domains of the King's health quality of life questionnaire were documented but the results were not statistically significant due to restricted number of patients.

Concluding message

TRT-Remeex System is highly effective, minimally invasive and safe in patients with recurrent stress urinary incontinence. Advantages of this procedure are; maximal effectiveness with minimal postoperative obstruction and it allows readjustment of sling tension after the surgery. However, longer follow-up and large case series is required to ascertain its safety and long-term efficacy.

References

1. 1. Latthe PM; Foon R; Toosx-Hobson P. TOT and Retropubic Tape Procedures In Stress Incontinence: A Systematic Review and Meta-analysis of Effectiveness and complications. BJOG, 2007;114:522-31.

Disclosures

Funding: NONE **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** It is a restrospective case study **Helsinki:** Yes
Informed Consent: Yes