A RANDOMIZED STUDY COMPARING TRANSVAGINAL AND TRANSOBTURATOR MID-URETHRAL SLING SURGERIES IN WOMEN WITH STRESS URINARY INCONTINENCE

Hypothesis / aims of study

The aim of this study is to compare the results of retropubic and transobturator slings for surgical treatment of female stress urinary incontinence (SUI) and their effects on quality of life(QoL).

Study design, materials and methods

We randomized 45 patients with urodynamically proven SUI to undergo either transobturator tape(TOT) surgery(n:22) or transvaginal tape(TVT) surgery(n:23). Patients were assessed before treatment and 1,6 and 12 months after treatment on the basis of clinical history, physical examination and quality of life questionnaire(SEAPI). Pad test and urodynamic evaluation were performed only preoperatively. The postoperative pain was evaluated by a Visual Analog Scale one hour and 24 hours after surgery. The groups were homogenous in terms of age, body mass index(BMI), parity, menopausal status and type of incontinence prior to surgery. The Advantage® Transvaginal MUS System was used in all TVT operations and The Obtryx® Transobturator MUS System was used in all TOT operations.

Results

The median age was 54,4(min:31 max: 76). Prior to surgery, stress urinary incontinence (SUI) was diagnosed in 10 of patients and mixed incontinence with a predominant SUI in 35. Concurrent cystocele repair was performed to 6 patients and rectocele repair to one patient. The mean follow- up was 10 months. The mean operative time for TOT and TVT were $31,6(\pm7,7)$ minutes and $32,6(\pm16,6)$ minutes, respectively(p:0,8). The mean VAS scores for TOT and TVT postoperatively were 7,9 and 8,1(1st hour) and 3,2 and 3,5(24th hour) respectively. The objective cure rates, assessed with stress test postoperatively were 84,2% and 88,8% respectively in TOT and TVT groups(p>0,05). The subjective cure rates of patients who underwent TOT and TVT was 91,3% and 86,4%, respectively(p>0,05). The SEAPI scores improved significantly in both TVT and TOT groups(26,6(\pm 9,9) and 21,9(\pm 10,3) respectively preoperative; 9,0(\pm 8,9) and 5,6(8,2) respectively postoperative, (T test p: 0,000). There was no significant difference between groups in terms of postoperative complications.

Interpretation of results

Patients who underwent MUS surgery achieve a better QoL postoperatively and there is no difference between TVT and TOT in this regards. The objective and subjective cure rates are indifferent. The operative time, postoperative VAS scores and complication rates are also similar between two groups.

Concluding message

There were no significant differences between the two types of procedures in terms of continence results and quality of life.

Specify source of funding or grant	No disclosures
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Marmara University Ethics Committee
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes