

TRANSABDOMINAL TENSION FREE TAPES AND TRANSOBTURATOR TAPES IN THE TREATMENT OF STRESS URINARY INCONTINENCE: A COMPARISON STUDY

Hypothesis / aims of study

For the last 10 years minimal invasive sub urethral slings are becoming very popular in the surgical treatment of stress urinary incontinence (SUI) in women. This study was performed to compare the surgical efficacy and the satisfaction of those who underwent tension free tapes (TVT) procedure or transobturator tapes (TOT) insertion.

Study design, materials and methods

247 consecutive patients with SUI or mixed urinary incontinence underwent insertion of either TVT or TOT between 2000 and 2006 were enrolled in the study. Preoperatively, all cases were diagnosed as genuine stress incontinence or mixed urinary incontinence by the evidences in history, physical examination, Q-tip test and urodynamic study. Daily pad usage, short versions of Urogenital Distress Inventory (UDI-6) and Incontinence Impact Questionnaire (IIQ-7) were administered pre and postoperatively as mail surveys. Patients also responded to the International Symptom Score Quality of Life Question (IPSSQoL) to determine the overall impact of urinary incontinence on their lives.

Results

Complete data based on clinical investigation, chart reviews and response to mail surveys was available in all patients: 81 patients in TVT group and 166 patients in TOT group. The mean age was 56±9 years in the TVT group and 57.4±8.1 years in the TOT group. Body mass index was significantly higher in the TOT group (28.27±2.9) than in the TVT group (25.96±1.77; p<0.05). Preoperatively, there were no differences between the groups in regards to urodynamics and previous anti-incontinence procedures. Both TVT and TOT patients used a mean of 6-7 pads/day. Postoperatively, 79 (97.5%) of the TVT patients were completely dry and 2(2.5%) were using 1-2 pad/day. Similarly, 160 (96.4%) were completely dry in the TOT group and 6 (3.6%) were using 1 pad/day.

76 (93.8%) of the TVT patients reported that were cured; 5 (6.2%) improved. In the TOT group 161 (97%) of patients reported as being cured; 5 (3%) as being improved. There was no statistical difference between the TVT and TOT groups. Preoperative UDI-6 and IIQ-7 scores were 56.1 and 49.5 for the TVT group and 51.2 and 51.9 for the TOT group with a statistical significant reduction to 18.5 and 10.3 (p<0.01); 22 and 14.7 (p<0.01) respectively. All patients were "unhappy" preoperatively in response to the IPSSQoL and equally "pleased" postoperatively in both treatment groups.

Interpretation of results

There were significant improvements post operatively for the TVT and TOT groups in terms of clinical investigation, daily pad usage, subjective perception of surgical outcome, symptom distress and impact of urinary Incontinence on lifestyle based on validated questionnaires. There was no significant difference in the measured outcomes between the TVT and TOT groups.

Concluding message

Both TVT and TOT have similar short to medium term efficacy in the treatment of both stress and mixed urinary incontinence in terms of anti-incontinence procedures, improving patient quality of life and patient satisfaction.

FUNDING: no

CLINICAL TRIAL REGISTRATION: This clinical trial has not yet been registered in a public clinical trials registry.

HUMAN SUBJECTS: This study did not need ethical approval because This study did not need ethical approval because it was not required, but followed the Declaration of Helsinki Informed consent was obtained from the patients. but followed the Declaration of Helsinki Informed consent was obtained from the patients.