

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

Hypothesis / aims of study

Minimal invasive sub urethral slings are becoming very popular in the surgical treatment of stress urinary incontinence (SUI) in women. This study aims to compare the surgical efficacy and the satisfaction of those who underwent insertions of either tension free tapes (TVT) or transobturator tapes (TOT).

Study design, materials and methods

Between 2001 and 2005, 197 consecutive patients with SUI or mixed urinary incontinence underwent insertion of either TVT or TOT. Patients who underwent concurrent prolapse surgery were excluded from the study. Preoperatively, patients were assessed clinically and underwent videourodynamics, and cystoscopy. 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. In addition, patients also responded to the International Prostate Symptom Score Quality of Life Question (IPSSQoL) to determine the overall impact of urinary incontinence on their lives.

Results

Complete data was available in 141 (TVT = 66 vs TOT = 75) patients based on chart reviews and response to mail surveys. A mean follow up period of 28.2 (9 – 54) months for the TVT group and 22.7 (6 – 63) months for the TOT group. The median age was 58 (33 – 90) in the TVT group and 55 (23 – 92) in the TOT group. 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 5 pads/day. Postoperatively, 34/66 (52%) of the TVT patients were completely dry and 12/66 (18%) were using 1 pad/day. Similarly, 39/75 (52%) were completely dry in the TOT group and 9/75 (12%) were using 1 pad/day. Subjectively, the TVT patients reported that 36/66 (55%) to be cured; 21/66 (32%) improved; 7/66 (11%) unchanged and 1/66 (2%) to be worsened. Similarly, 36/75 (48%) of the TOT patients reported as being cured; 27/75 (36%) as being improved; 7/75 (9%) to be unchanged and 5/75 (7%) to be worsened. There was no statistical difference between the TVT and TOT groups. Preoperative UDI-6 and IIQ-7 scores were 57.1 and 50.5 for the TVT group with a statistical significant reduction to 19.5 ($p < 0.01$) and 11.3 ($p < 0.01$) respectively. In comparison, TOT patients also had their UDI-6 and IIQ-7 significantly reduced from 51.2 and 51.9 to 22 ($p < 0.01$) 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 daily pad usage, patient 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.

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DISCLOSURES: NONE

HUMAN SUBJECTS: 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.