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QUALITY OF LIFE AND SEXUAL FUNCTION FOLLOWING TENSION-FREE VAGINAL TAPE VERSUS THE "IN-TO-OUT" TENSION-FREE VAGINAL TAPE OBTURATOR

Hypothesis / aims of study

Improvements in validated quality of life measures following the retropubic tension-free vaginal tape (TVT-R) procedure have been well documented[1,2], but many surgeons have shifted to obturator slings, given a potential increased safety profile of this approach. We sought to compare perioperative morbidity, quality of life, sexual function, and patient-assessed cure in women treated with the TVT-R versus the "in-to-out" TVT Obturator (TVT-O) approach.

Study design, materials and methods

This was a multi-center, ambidirectional cohort study of 329 women without prolapse treated for stress urinary incontinence between January 2004 and March 2006. Selection of TVT-R versus TVT-O was left to the individual surgeon, but given some early reports of outcomes with "out-to-in" obturator slings[3], the authors tended to minimize the use of TVT-O in patients with closure pressures (MUCP) that were <40cmH_2O. Preoperative demographics, perioperative morbidity, and responses to the Urogenital Distress Inventory (UDI-6) and Incontinence Impact Questionnaire (IIQ-7) were collected in a retrospective chart review. We then mailed the same questionnaires, as well as the Pelvic Organ Prolapse/Incontinence Sexual Questionnaire (PISQ-12), to these subjects postoperatively. Two additional questions regarding cure and effect of surgery on sexual function were included in the mailing.

Results

239 (73%) patients completed the questionnaire with a mean follow-up time of 14.7 (±6.9) months. Demographics were comparable between responders and nonresponders as well as between the two surgical arms with the following exceptions; mean age and preoperative incontinence severity were statistically greater in the TVT-R (n=97) vs the TVT-O (n=232) group. There were fewer intraoperative complications (0% vs 2.5%, *P*=.02) in the TVT-O arm. Mean operative (OR) time (27.0 vs 33.0, *P*<.01) and return to normal voiding (0.5 vs 1.1 days, *P*<.01) were also shorter in the TVT-O arm. Postoperative PISQ-12 scores and changes from the pre- to post-operative UDI-6 & IIQ-7 were comparable between groups (Table 1). There were no statistically significant differences in patient-assessed cure (86.6 vs 77.5%, *P*=.08) or de novo sexual dysfunction rates (1.9 vs 8.3%, *P*=.07), although both these measures showed a trend toward more favorable outcomes in the TVT-O group. However, in a sub-analysis of patients with intrinsic sphincter deficiency (ISD) (MUCP≤20 &/or LPP ≤60), a trend towards higher cure rates were seen in the TVT-R group (84.6% vs 50.0%, *P*=.15).

Table 1. Mean pre- to post-operative change in the IIQ-7 & UDI-6 and post-operative PISQ-12 score.

Instrument	**TVT-R**	**TVT-O**	***P***
IIQ-7	26.0 (±31.1)	25.4 (±29.6)	.92
UDI-6	36.5 (±26.2)	32.5 (±22.9)	.34
UDI-Stress Subscale	61.2 (±26.2)	59.6 (±34.6)	.79
PISQ-12	96.5 (±16.9)	97.6 (±14.2)	.75

Interpretation of results

In stress incontinent women without ISD, TVT-O appears to be as effective as TVT-R in improving incontinence-related quality of life and maintaining good sexual function while minimizing complications, OR time, and return to normal voiding. On the other hand, use of the obturator approach in women with ISD should be carefully considered until randomized trials demonstrate equal efficacy this sub-population.

Concluding message

TVT-O appears to be as effective as TVT-R in improving incontinence-related quality of life and maintaining good sexual function at greater than one year of follow-up.

References

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