

DOES CONCURRENT PELVIC ORGAN PROLAPSE SURGERY AFFECT THE OUTCOME OF A TVT?Hypothesis / aims of study

There is a paucity of data regarding the incidence of coexisting urodynamically proven stress urinary incontinence (USI) and pelvic organ prolapse (POP) as well as long term prospective data following concurrent incontinence and POP surgery¹. The aim of our study was to prospectively evaluate the urinary symptoms and quality of life one year following insertion of a tension free vaginal tape (TVT) compared to concurrent (POP) and TVT surgery (POP/TVT).

Study design, materials and methods

We conducted a prospective study between January 2003 and January 2005 in a tertiary referral urogynaecology unit. Women undergoing TVT for urodynamically proven stress urinary incontinence (USI) with or without concurrent surgery for symptomatic POP were included in the study. Women who had previous surgery for USI and those who had previous surgery for POP were excluded. All completed the Bristol Female Lower Urinary Tract Symptom Questionnaire – Scored Form (BFLUT-SF)² pre and 12 months post-surgery. Pre and 12 months post-surgery responses were compared within and between the TVT and the POP/TVT group. The Mann-Whitney test was used to compare the scores in each domain between the two groups and the Wilcoxon signed rank test was used to compare the change of score in each domain pre and 12 months post-surgery within each group.

Results

There were 32 women in the TVT group and 21 in the POP/TVT group who completed 12 months follow-up. The mean age was 59.1 (SD 11.6) and 58.8 (SD 12.1) respectively. The median parity, ethnicity and post-menopausal state were comparable in both groups.

Within each group, compared to pre-surgery scores, Filling symptoms, Incontinence symptoms, Sexual symptoms and Quality of life domains showed a significant improvement 12 months post-surgery. However there was no change in voiding score within both groups pre and 12 months post-surgery.

Before surgery, the Filling symptom score in the TVT group (Median: 6, range: 2-11) was significantly higher than the POP/TVT group (Median: 5, range:1-10) (p=0.03). There was no significant difference in other domains before surgery (Table 1).

At 12 months post-surgery there was no significant difference in all domains between TVT and POP/TVT groups (Table 2). No woman had bladder perforation and none had any significant post-operative morbidity. None had mesh erosion 12 months post-surgery.

Table 1: Median BFLUTS-SF score before surgery

BFLUTS Domain	TVT (n=32) Median (range)	POP/TVT (n=21) Median (range)	p*
Filling symptoms	6 (2-11)	5 (1-10)	0.03
Incontinence symptoms	10 (3-17)	10.5 (6-15)	0.24
Voiding symptoms	1 (0-7)	2.5 (0-4)	0.64
Sexual symptoms	1 (0-5)	2 (1-4)	0.66
Quality of life	6 (1-15)	9.5 (5-13)	0.15

* Mann-Whitney test

Table 2: Median BFLUTS-SF score 12 months post-surgery

BFLUTS Domain	TVT (n=32) Median (range)	POP/TVT (n=21) Median (range)	p*
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Filling symptoms	4 (2-12)	3 (2-6)	0.11
Incontinence symptoms	2 (0-18)	1.5 (0-13)	0.35
Voiding symptoms	2 (0-5)	1 (0-6)	0.70
Sexual symptoms	0 (0-4)	0 (0-2)	0.43
Quality of life	3 (0-14)	3 (0-8)	0.75

* Mann- Whitney test

Interpretation of results

Compared to pre-surgery, both TVT and POP/TVT surgery are associated with an improvement in Filling, Incontinence and Sexual symptoms and Quality of life but no significant change in Voiding symptoms. The improvement in symptoms at 12 months post-surgery was similar in both groups. The findings of this study provide reassurance that the concern regarding efficacy and complications especially the risk of mesh erosion is unfounded. Longer term follow-up is underway to establish whether these findings can be sustained.

Concluding message

Insertion of a TVT during concurrent repair of symptomatic POP is effective and safe.

References:

1. The effect of continence surgery on urogenital prolapse. BJU International 2004;93:25-30.
2. A scored form of the Bristol Female Urinary Tract Symptoms questionnaire: Data from a randomized controlled trial of surgery for women with stress incontinence. Am J Obstet Gynecol 2004;191:73-82.

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HUMAN SUBJECTS: This study was approved by the Croydon Local Research & Development Committee, and followed the Declaration of Helsinki Informed consent was obtained from the patients.