

QUALITY OF LIFE FOLLOWING TVT AND COLPOSUSPENSION: A CASE-CONTROLLED STUDY

Hypothesis / aims of study

Urinary incontinence has a huge impact on a women's quality of life. The major aim of any treatment is not only to restore continence but substantially improve quality of life.

There are over 100 operations for urodynamic stress incontinence of which the Burch colposuspension has well-known proven efficacy and could be considered the gold standard (1). Over the last 5 years the tension-free vaginal tape (TVT) has replaced the colposuspension as procedure of choice due to its relative lower morbidity and comparable short-medium term results (2,3).

The purpose of this study was to assess the patient's perception of their quality of life after the Burch colposuspension and TVT.

Study design, materials and methods

The King's Health Questionnaire was administered to a consecutive group of women who underwent colposuspension and 30 women who underwent TVT for urodynamic stress incontinence. The colposuspension was performed in a unit where it was the procedure of choice whereas the TVT was performed in another unit where this operation was the procedure of choice. Patients were subjectively assessed on the following domains: 1. General health perception; 2. Incontinence impact; 3. Role limitations; 4. Physical limitations; 5. Social limitations; 6. Personal relationships; 7. Emotions; 8. Sleep/Energy; 9. Severity measures. Data on urinary symptoms was not presented as we were interested in the QoL impact only, irrespective of cure as both procedures were known to have similar short-term cure rates for stress incontinence (2,3). To estimate the quality of life according to King's Health Questionnaire before and after surgery the mean values were used in the above parameters. The results in both groups were then compared using the Wilcoxon test. The pre-op scores for both operations were first compared statistically using the Mann-Whitney U test in order to determine that there was no significant difference in the condition of both patient groups pre-operatively. This then enabled us to use the Mann-Whitney U test again to assess the percentage change in the quality of life between the two operations.

Results

83 women underwent the Burch colposuspension and 30 women underwent the TVT.

Table One- Pre-operative scores for TVT and colposuspension..

	TVT Pre-op mean score	Colposuspension Pre-op mean score	p-value
General Health perception	34	38	0.738
Incontinence impact	63	90	0.003*
Role limitations	73	56	0.011*
Physical limitations	70	61	0.449
Social limitations	47	37	0.164
Personal relationships	44	37	0.861
Emotions	55	58	0.615
Sleep / Energy	57	49	0.236
Severity measures	71	64	0.437

* p<0.05 (using Mann-Whitney U test)

There was no significant difference pre-operatively between the two groups, although the incontinence impact and role limitations were significantly worse in the women undergoing colposuspension

Table Two- Pre-operative and Post-operative scores of women undergoing TVT and colposuspension

	TVT			Colposuspension			TVT			Colposuspension		
	Preop mean score	Postop mean score	p-value	Preop mean score	Postop mean score	p-value	Percentage Change in score	Percentage Change in score	p-value	Percentage Change in score	Percentage Change in score	p-value
General health perception	34	25	0.029*	38	25	0.000*	-23	-38	0.342			
Incontinence impact	63	17	0.000*	90	32	0.000*	-71	-57	0.061			
Role limitations	73	5	0.000*	56	12	0.000*	-93	-76	0.153			
Physical limitations	70	6	0.000*	61	12	0.000*	-93	-80	0.077			
Social limitations	47	4	0.000*	37	6	0.000*	-90	-74	0.342			
Personal relationships	44	0	0.003*	37	14	0.001*	-100	-67	0.048**			
Emotions	55	11	0.000*	58	15	0.000*	-72	-71	0.284			
Sleep / Energy	57	19	0.001*	49	33	0.000*	-69	-28	0.003**			
Severity measures	71	15	0.000*	64	23	0.000*	-81	-66	0.096			

* p<0.05 (using Wilcoxon signed rank)

**p<0.05 (using Mann-Whitney U test)

Interpretation of results

The results showed that both operations significantly improved patients' quality of life as shown by the large percentage change in the quality of life for some of the parameters. Patients, for example, following a TVT operation, showed a 100% improvement in their personal relationships. It was also shown that, although both operations significantly improved all the parameters measured, improvements in personal relationships and sleep/energy were significantly better in the TVT group.

Concluding message

Continence surgery for urodynamic stress incontinence results in marked improvement in quality of life. The TVT procedure in the short-term for which this data was collected, showed a trend to greater improvement in quality of life than colposuspension. This may be related to the lower short term morbidity of the TVT and therefore quicker return to normal activities. This should be investigated by longer follow up.

References

1. BJOG.1995;105:740.
2. BMJ 2002;325:67
3. BJOG 1999;106(4):345-50.