

QUALITY OF LIFE AFTER COMBINED GENITOURINARY PROLAPSE REPAIR AND TVT.

Aims of Study

To determine the changes in Quality of Life (QoL) in women with stress incontinence and vaginal prolaps undergoing TVT and concomitant vaginal prolaps surgery.

Methods

From March 2000 until September 2001 59 women with urinary stress incontinence and vaginal prolapse underwent a TVT procedure combined with a vaginal hysterectomy for uterine descent (n=7), with an anterior repair (n=15), with posterior repair (n=28) and with anterior & posterior repair (n=9). They are compared to 750 women with a TVT procedure only.

Pre- and postoperative data regarding history, physical and urodynamic data were collected prospectively from the 53 participating Dutch gynecologists and urologists according to ICS standards (1). Participating women received the QoL questionnaires prior to and 12 months after surgery at their home address. The processing of these questionnaires was anonymously and all physicians are blinded to individual results. The response rate is 70%.

Disease-specific health-related quality of life questionnaires, the short form of the Incontinence Impact Questionnaire (IIQ-7) and the short form of the Urogenital Distress Inventory (UDI-6), were used (2). These questionnaires are translated and validated for the Dutch language and population (3). The UDI-6 is subdivided in three domains or subscales: irritative symptoms, stress symptoms and obstructive/discomfort symptoms. The range in score of IIQ-7, UDI-6 and its domains is from 0 to 100, where a higher score indicates more impact or bother.

Table 1. QoL scores prior to and 12 months after TVT and TVT combined with different types of prolaps surgery

	IIQ-7		UDI-6		UDI subscale					
					irritative		stress		obstructive	
	prior	after	prior	after	prior	after	prior	after	prior	after
TVT only	59	12*	58	22*	67	30*	77	14*	32	23*
<i>TVT combined with:</i>										
vaginal hysterectomy	63	11	54	26	52	42	64	12	42	25
anterior repair	56	3*	59	15*	63	22*	64	7*	45	11*
posterior repair	60	21*	68	33*	76	46*	76	18*	52**	32*
anterior & posterior repair	51	6*	63	18*	66	30	64	10*	58**	13*

Numbers represent mean values (standard deviation values are omitted for the sake of simplicity of the table).

* Statistically significant differences between pre- and postoperative values ($p < 0.05$, Wilcoxon Signed-Rank test).

** Statistically significant difference between pre-operative values compared to TVT only ($p < 0.05$, Kruskal-Wallis test).

Results

These results are from the Netherlands Multicenter TVT study, which primary goal is to assess the outcome of TVT as a treatment of stress incontinence. It was left to the discretion of the participating physicians to combine TVT with prolaps surgery and this was performed in 59 cases (7% of the total group).

There is a statistically significant decrease in IIQ-7 and UDI-6 scores (and hence improvement in quality of life) among TVT only and TVT procedures combined with prolaps surgery, except for vaginal hysterectomy. The latter is most likely due to the relative small number of women in this group as it is also observed in all UDI subscales.

In the UDI subscale stress symptoms there is a statistically significant improvement after surgery and no differences exist between the groups, except again for vaginal hysterectomy. The same improvement is seen for the subscale irritative symptoms, only not for TVT combined with anterior and posterior repair (significance 0.06). This might be due to the low number of TVT combined with a posterior and anterior repair.

Women with TVT and posterior and/or anterior repair have a significant higher obstructive symptoms score prior to surgery while after surgery these scores decrease significantly. Apparently a posterior vaginal wall prolaps may contribute to obstructive symptoms and the combination of TVT with a posterior repair results in not only improvement of stress incontinence, but also alleviates obstructive symptoms.

Conclusions

Improvement in Quality of Life and stress incontinence not only occurs after TVT only procedures, but also if TVT is combined with vaginal prolaps surgery. Therefore TVT is a useful additional method in prolaps surgery to treat stress urinary incontinence.

References

1. Abrams P, Cardozo L, Fall M, et al. Neuro Urolyn 2002;21:167-178.
2. Uebersax JS, Wyman JF, Shumaker SA, McClish DK, Fantl JA, et al. Neuro Urolyn 1995;14:131-139.
3. Vaart van der CH, Leeuw de JRJ, Roovers JPWR, Heintz APM. Neuro Urolyn 2003;22:97-104.