

## THE OUTCOME OF TVT ANALYSED WITH DISEASE-SPECIFIC QUALITY OF LIFE QUESTIONNAIRES: RESULTS FROM THE NETHERLANDS MULTICENTER TVT STUDY.

### Aims of Study

To determine the changes in Quality of Life (QoL) in women with urinary stress incontinence undergoing TVT, assessed with the IIQ-7 and UDI-6 questionnaires.

### Methods

From March 2000 until September 2001 635 women with urinary stress incontinence and without any previous incontinence or prolapse surgery, underwent a TVT procedure as described by Ulmsten et al. (1). 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 (2). Participating women received the QoL questionnaires prior to and 2, 6, 12 and 24 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 Incontinence Impact Questionnaire (IIQ-7) and the short form Urogenital Distress Inventory (UDI-6), were used (3). These questionnaires are translated and validated for the Dutch language and population (4). 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. The scores are also classified as no complaints (scores 0), slightly bothered (scores up to 33), moderately bothered (scores from 33 to 67) or greatly impaired (scores from 67 to 100).

**Table 1. Pre- and Postoperative QoL scores**

	preoperative	postoperative			
		2 months	6 months	12 months	24 months
IIQ-7	58 ± 21 (57)	15 ± 22* (5)	12 ± 19* (0)	11 ± 18* (0)	12 ± 20* (5)
UDI-6	58 ± 19 (55)	25 ± 19* (22)	24 ± 18* (17)	22 ± 18* (17)	23 ± 20* (22)
<i>UDI domains</i>					
irritative	66 ± 26 (67)	32 ± 25* (33)	30 ± 25* (33)	28 ± 24* (33)	30 ± 25* (33)
stress	75 ± 19 (83)	16 ± 23* (0)	14 ± 21* (0)	13 ± 20* (0)	16 ± 22* (0)
obstructive	31 ± 29 (33)	27 ± 24 (17)	24 ± 23* (17)	23 ± 23* (17)	24 ± 23* (17)

data represent mean ± standard deviation with median value in brackets.

\* Statistically significant differences between pre- and postoperative values ( $p < 0.01$ , Wilcoxon Signed-Rank test).

### Results

The results are listed in table 1. There is a 65% follow-up of all patients at 24 months. There is a statistically significant decrease in IIQ-7 and UDI-6 scores, indicating a clinically relevant decline in the impact respectively bother of stress incontinence. The median scores indicate that most of women have either no complaints or are slightly impaired only. Improvement in IIQ-7 respectively UDI-6 were observed in 93% and 92% of women, scores remained equal in 2% (IIQ-7) and 3% (UDI), while in both in 5% the scores indicate a worsening of the impact and bother of stress incontinence.

From the UDI subscales it becomes obvious that women with stress incontinence have considerable irritative symptoms prior to TVT, but they disappear significantly. This phenomenon was also observed by Vassallo et al. who used the same QoL instruments (5).

The subscale stress incontinence shows a tremendous decline in score and alleviation of the primary complaint. Improvement in this score was seen 94% of women, while the score

remained equal in 4% and worsened in 2%. These values are in accordance to the cure rate of 86% that women report to their physician.

There are no major changes in the subscale obstructive symptoms after 2 months, but the values are significantly lower after 6,12 and 24 months, indicating a more easier voiding over time.

### **Conclusions**

Objective cure rates of stress incontinence surgery are often determined by physical examination, pad tests or urodynamic investigation. These investigations only reflect the continence state at that single moment in time. A Quality of Life analysis provides different information over a longer period in time and shows perhaps more sensitive the outcome of incontinence surgery. It may therefore more accurately reflect the true effect of TVT. These results indicate a clinically important improvement of Quality of Life and cure of stress urinary incontinence after TVT.

### **References**

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