

## THE CORRELATION BETWEEN PREOPERATIVE VOIDING MECHANISM AND SURGICAL OUTCOMES OF THE TVT PROCEDURE ---- WITH REFERENCE TO QUALITY OF LIFE MEASUREMENTS

### Aims of Study

To determine the relationship between preoperative voiding mechanism and surgical outcome of the TVT procedures which were performed on 79 women with urinary stress incontinence.

### Methods

A retrospective study conducted by reviewing the charts of 79 consecutive women diagnosed with or without obstructive voiding based on proposed criteria was performed. The Kings Health Questionnaire which consisted of 3 sections (9 domains) was used to evaluate the women's quality of life both before and 12 months after the operation.

**Table 1. Comparison between pre- and postoperative urodynamic results in the 2 groups.**

	Preoperation		Postoperation		P <sub>1</sub>	P <sub>2</sub>
	Unobstructed (n=49)	Obstructed (n=30)	Unobstructed (n=49)	Obstructed (n=30)		
<b>Volume voided (ml)</b>	349.9 ± 185.4	386.4 ± 163.4	299.0 ± 151.1	314.9 ± 163.2	0.083	0.056
<b>FreeQmax (ml/sec)</b>	25.5 ± 10.82	10.5 ± 5.1	21.2 ± 9.4	8.6 ± 2.7	0.009	0.001
<b>Residual urine (ml)</b>	59.4 ± 60.4	44.0 ± 36.6	59.4 ± 97.5	40.2 ± 30.9	0.999	0.657
<b>Pdetmax (cmH<sub>2</sub>O)</b>	36.6 ± 28.4	28.5 ± 22.7	32.0 ± 19.8	42.2 ± 27.45	0.346	0.058
<b>PdetQmax (cmH<sub>2</sub>O)</b>	10.5 ± 9.5	19.7 ± 10.6	14.6 ± 12.9	24.5 ± 11.1	0.086	0.131
<b>Urethral resistance</b>	0.038 ± 0.069	0.103 ± 0.156	0.069 ± 0.190	0.191 ± 0.295	0.307	0.071

\*: using paired t-test (P<sub>1</sub> and P<sub>2</sub>) or two-sample t-test (P<sub>3</sub>, P<sub>4</sub>, P<sub>5</sub>)

P<sub>1</sub> and P<sub>2</sub> denote p-values for testing the difference between pre- vs post-operative unobstructed and obstructed groups, respectively.

P<sub>3</sub> denotes p-value for comparing the changes (postsurgery minus presurgery) of unobstructed and obstructed groups.

P<sub>4</sub> and P<sub>5</sub> denote p-values for testing the difference between unobstructed and obstructed groups in pre- and post-operative status, respectively.

## **Results**

The preoperative patient characteristics are similar in age, parity, body weight and number of menopausal women in the 2 groups. The comparison between pre- and postoperative urodynamic results is tabulated as follows. The subjective outcome measure revealed that the cure rates were 85.7%(42/49) and 73.3%(22/30) in the unobstructed and obstructed groups respectively ( P= 0.173, Fisher's exact test). The objective outcome measure showed the cure rates were 91.8%(45/49) and 70%(21/30) in the unobstructed and obstructed groups, respectively ( P=0.025, Fisher's exact test). Analysis of the total scores for all domains revealed that the number of women improved by over 25% in the unobstructed group is significantly greater than that in the obstructed group ( 85.1% vs. 60%, P=0.016, Fisher's exact test) However, for those improved by over 50%, there is no difference between the 2 groups ( 6.1% vs. 6.7%, P=1.00, Fisher's exact test).

## **Conclusions**

The objective cure rate of the unobstructed group undergoing the TVT procedure is significantly higher than that of the obstructed group. In addition, subjective measures assessed by the disease specific quality of life questionnaire indicated that the unobstructed group had a better quality of life compared with that of the obstructed group.