

## TENSION-FREE VAGINAL TAPE (TVT) PROCEDURE IN STRESS INCONTINENT WOMEN WITH INTRINSIC SPHINCTOR DEFICIENCY(ISD)

### Aims of Study

The results of TVT procedure in stress urinary incontinence (SUI) with ISD were compared to those in SUI without ISD.

### Methods

A total 157 women were followed for a means of 1 year after TVT procedures. Women with associated detrusor instability were excluded in the analysis. SUI patients were divided into four categories: non-ISD (N=39), mild ISD (N=54), moderate ISD (N=38) and severe ISD (N=26). Mild ISD was defined as a 40cmH<sub>2</sub>O < VLPP < 60 cmH<sub>2</sub>O, moderate ISD as a MUCP<20cmH<sub>2</sub>O or 30cmH<sub>2</sub>O<VLPP<40cmH<sub>2</sub>O and severe ISD as a MUCP < 10 cmH<sub>2</sub>O or VLPP<30cmH<sub>2</sub>O respectively. Demographic data, symptom questionnaire, physical examinations and urodynamic studies were done at pre- and post-operative evaluation.

### Results

At the preoperative evaluation, there were no significant differences in the clinical and urodynamical data except symptom grade : grade II and III were more frequent in ISD than in non-ISD group. At the postoperative evaluation, 122 (78%) were completely cured, 25 (16%) significantly improved, but 10 (6%) were failed. There were no significant differences in success rate between ISD and non-ISD group. There is significantly more decrease of peak flow-rate after TVT in ISD than in non-ISD group (0.005). Postoperatively, the number of the women complaining strain to void was more frequently noted in ISD than in non-ISD group (p<0.05).

	Non-ISD	ISD(mild)	ISD(mod)	ISD(severe)	P value
Number (157)	39	54	38	26	
Age(yrs)	49.56	52.63	53.71	55.81	0.060
SUI grade(%)					
I	19(48.7)*	14(25.9)	5 (13.2)	1 (3.8)	
II	20(51.3)	39(72.2)*	30(78.9)*	21(80.8)*	
III	0 (0)	1 (1.9)	3 (7.9)	4 (15.4)*	
Q tip angle	51.79	50.93	51.32	49.92	0.976
Preop. Q max	27.24	24.39	25.54	24.28	0.718
Preop. PVR	12.78	9.89	14.08	11.68	0.562
Postop. Results(%)					
Cure	30(77)	44(81)	28(74)	20(77)	
Improved	7 (18)	7 (13)	7 (18)	4 (15)	
Fail	2 (5)	3 (6)	3 (8)	2 (7)	
voiding difficulty (%)	(10)	(4)	(16)	(15)	
Postop. Q max	24.29	22.86	13.86	18.40	0.053
Postop. PVR	31.42	38.12	40.72	32.55	0.946
Decrement rate of Qmax after TVT(%)	(10.8)	(6.3)	(45.7)*	(24.2)*	

\* P < 0.05, Qmax: peak flow rate

### Conclusions

There were no significant differences in the cure rates of incontinence after TVT between women with pure SUI and those with ISD. The rate of voiding difficulty were shown to be more frequent in women with ISD. According to our results, it can be suggested that TVT can be undertaken safely in stress incontinent women with associated ISD.