

Jeong S J<sup>1</sup>, Kim D<sup>2</sup>, Lee W K<sup>2</sup>, Doo S H<sup>3</sup>, Park H<sup>4</sup>, Ku D H<sup>1</sup>, Abdullajanov M<sup>1</sup>, Yoon C Y<sup>1</sup>, Kim J H<sup>4</sup>, Hong S K<sup>1</sup>, Byun S<sup>1</sup>, Lee S E<sup>1</sup>

1. Department of Urology, Seoul National University Bundang Hospital, 2. Department of Urology, Hallym University Medical Center, 3. Department of Urology, Soonchunhyang University Hospital, 4. Department of Urology, Kangwon National University Hospital

## EARLY EXPERIENCE OF TRANSVAGINAL/OBTURATOR ADJUSTABLE (TVA/TOA) TAPE IN FEMALE STRESS/MIXED URINARY INCONTINENCE

### Hypothesis / aims of study

When applying a sling mesh to female patients with SUI, the judgment of appropriate sling tension for the continence is usually deferred to the surgeon's experience. However, even though in small portions of patients, some may experience continuous incontinence or retention after surgery due to inappropriate sling tension [1]. We present our experience of transvaginal/obturator adjustable (TVA/TOA) tapes that can be readjusted postoperatively in the treatment of female stress/mixed urinary incontinence.

### Study design, materials and methods

Fifty-eight patients who underwent mid-urethral sling with TVA (n=49)/TOA (n=9) (Agency for Medical Innovations, Austria) tape and were followed for > 3 months after surgery by a single surgeon were included. When the leakage was detected on cough test or a patient complained of continuous incontinence, the sling tension was strengthened postoperatively, while the tension was released when Qmax was  $\leq$  10ml/sec or residual urine volume was  $\geq$  150ml. Treatment success was defined as absence of subjective complaint of leakage and objective leakage on the stress test (cure) or rare leakage but satisfactory to the treatment regardless of the stress test (improvement). The patients were interviewed regarding the treatment satisfaction. We analyzed the results according to the readjustment (Group I: no readjustment; Group II: readjustment). Mean follow-up duration was 6.8 months (3.3-15.5).

### Results

Mean age was 57.7 years (35-75). Thirty-eight patients had pure SUI and 20 patients had stress predominant mixed incontinence. Twenty-seven patients were in Stamey grade 1, 30 in grade 2, and 1 in grade 3. Mean MUCP and VLPP was 53.8cmH<sub>2</sub>O (22.0-122.0) and 92.3cmH<sub>2</sub>O (48-118), respectively and mean amount of 1-hour pad test was 39.7g (0.2-150.2). The sling tension was readjusted postoperatively in 9 (15.5%) patients (tension strengthening 8 cases; tension releasing 2 cases). In Group I and II, treatment success was 100% (49/49) and 88.9% (8/9) and satisfaction rate was 89.8% (44/49) and 77.8% (7/9), respectively; not significantly different between groups.

### Interpretation of results

The present study demonstrated that the sling operations with TVA/TOA tapes were effective for the treatment of female stress/mixed urinary incontinence in our early experience. The sling tension could be readjusted with no difficulty during immediate post-operative period.

### Concluding message

TVA/TOA tapes could be readjusted within a few days following surgery. In our short-term follow-up, 15.5% of patients needed readjustment and the treatment success of the readjustment group was relatively high. Additional comparative studies with the operation with a conventional tape may be needed.

### References

1. BJU Int (2004) 94; 110-113.

<b>Specify source of funding or grant</b>	None
<b>Is this a clinical trial?</b>	Yes
<b>Is this study registered in a public clinical trials registry?</b>	No
<b>Is this a Randomised Controlled Trial (RCT)?</b>	No
<b>What were the subjects in the study?</b>	HUMAN
<b>Was this study approved by an ethics committee?</b>	Yes
<b>Specify Name of Ethics Committee</b>	Institutional Review Board of Seoul National University Bundang Hospital
<b>Was the Declaration of Helsinki followed?</b>	Yes
<b>Was informed consent obtained from the patients?</b>	Yes