

IS THE MAXIMUM URETHRAL CLOSURE PRESSURE A PREDICTOR IN OUTCOMES OF TRANSOBTURATOR SLINGS FOR FEMALE STRESS URINARY INCONTINENCE?

Hypothesis / aims of study

The aims of the study was (1) to assess subjective and objective outcomes after the transobturator tape (TOT) using the Monarc™ in stress urinary incontinence (SUI) women and (2) to evaluate whether the surgical outcome is different for women according to their preoperative maximum urethral closure pressure (MUCP), (3) to evaluate if preoperative urgency or urge urinary incontinence (UUI) improves after the TOT in mixed urinary incontinence (MUI) women.

Study design, materials and methods

This prospective study included women with pure stress urinary incontinence (SUI) or mixed urinary incontinence (MUI) that SUI is predominant. One-hundred and thirteen consecutive patients with SUI underwent TOT using the Monarc™ (October 2006 to December 2008). The patients were examined 3 months after the surgery. The pre- and postoperative protocol included the following: detailed urogynecologic histories, a physical examination, cough test, 60 min pad test and an urodynamic evaluation. The IIQ-7, UDI-6, KHQ and ICIQ-SF questionnaires were used to evaluate the impact of incontinence and voiding dysfunction on QoL and to measure patient's perception of incontinence severity. Advanced pelvic organ prolapse (POP) (>stage II by POP-Q) were excluded. No patients received any combined operation. Criteria for cure were urinary leakage < 2g / 60 min pad test and QoL improvement \geq 90%. Improvement was 2-5g / 60 min pad test and QoL improvement of \geq 75% but less than 90%.

Results

Median age was 61 years (range 37-80). Ninety (79.6%) patients were pure SUI and 23 (20.4%) had MUI without detrusor overactivity in urodynamic study before surgery. At 3 months follow-up 88.5% (n=100/113) were cured and 5.3% (n=6/113) were improved and 6.2% (n=7/113) failed.

The MUCP had a median of 27 ± 6 cmH₂O in the failures and 39 ± 13 cm H₂O in the successful patients (p<0.001). The MUCP in the improved patients was 26 ± 4 cm H₂O.

UUI disappeared completely in 8 (34.8%) of MUI cases, improved in 4 of them (17.4%) and persisted in 11 of them (47.8%) at 3 months after TOT. 63.6% (n=7/11) of the MUI persisting UUI hoped to take the anticholinergic drugs.

The IIQ-7, UDI-6, KHQ and ICIQ-SF questionnaires showed a high statistical decrease at 3 months after surgery.

Interpretation of results

There was a significant difference in the preoperative MUCP value between success and failure after TOT.

Preoperative urgency or UUI improved in 56.5% of MUI women after TOT.

Concluding message

The MUCP is one of parameters to predict continence rate after TOT.

TOT is effective for both SUI and MUI, with urgency improving.

<i>Specify source of funding or grant</i>	No funding or grant
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Ethics Committee in Tokyo Women's Medical University
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes