

CHANGES OF VOIDING PATTERN AFTER TRANSOBTURATOR TAPE OPERATION IN PATIENTS WITH FEMALE STRESS URINARY INCONTINENCE

Hypothesis / aims of study

A lot of patients with stress urinary incontinence (SUI) have lower urinary tract symptoms such as frequency, nocturia, urgency and urge incontinence. So we evaluated the changes of voiding pattern following transobturator tape (TOT) operation, and investigated the factors for predicting persistent urinary frequency after operation.

Study design, materials and methods

The items of preoperative evaluations consisted of history taking, physical examination, cystometrography, 3 day frequency-volume chart and symptoms questionnaire. Patients with anticholinergics or any neurologic diseases that affect the voiding pattern were excluded. Between January to December 2006, 55 patients with TOT operation were enrolled, and were reevaluated with physical examination, 3 day frequency-volume chart and symptom questionnaires, postoperatively.

Results

The patients who voided 8 or more times per day had shorter symptom duration and higher body mass index (BMI) than those who voided under 8 times per day (each $p < 0.05$). In 37 patients who void 8 or more times per day preoperatively, 22 (59.5%) patients became void under 8 times, postoperatively. In each patient who had urgency or urge incontinence symptoms preoperatively, respective 59.5 and 73.08% resolved their symptoms, postoperatively. No one complained de novo urgency or urge incontinence, postoperatively. In a multivariate analysis, the patient with a history of previous pelvic surgery or moderate to severe urge incontinence was tightly associated with an increased likelihood of persistent urinary frequency after TOT operation (odd ratio [OR] 38.35, 95% confidence interval [CI] 2.887-509.577, $p = 0.006$ and OR 20.92, 95% CI 1.836-238.419, $p = 0.014$, respectively).

Interpretation of results

The patients who have SUI and voided 8 or more times per day can be improved successfully by the TOT operation without medication of anticholinergics. But the patients who have previous pelvic surgery or moderate to severe urge incontinence are highly associated with the risk of persistent urinary frequency after TOT operation.

Concluding message

The TOT operation can improve the symptoms of urinary frequency, urgency and urge incontinence in patients with SUI. However, the patients who had previous pelvic surgeries or moderate to severe urge incontinence should be fully advised for the risk of sustaining frequency, postoperatively.

Specify source of funding or grant	None
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	IRB committee of Chungbuk National University Hospital
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes