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## TREATMENT OF OBSTRUCTIVE VOIDING DYSFUNCTION AFTER TRANSOBTURATOR SLING SURGERY: RESULTS OF MULTICENTER STUDY

### Hypothesis / aims of study

Trans Obturator vaginal Tape (TOT) techniques are one of world-wide surgical procedures for female stress urinary incontinence. However, there are a few reports of complication after transobturator sling surgery. We reviewed our experience with treatment of postoperative voiding obstruction after transobturator sling surgery and report our results.

### Study design, materials and methods

Between July, 2004 and December, 2006, we reviewed 712 patients with mean age of 49 years (range 30-73) who underwent transobturator sling surgery in multi-center hospitals. 356 patients were operated by TTV-TOT™ (TVT obturator system, Ethicon), 163 by MONARC™ (MONARC subfascial hammock, American Medical System) and 193 by IRIS-TOT™ (B braun). Operation method was randomized selection. Thirty nine patients suffered with voiding dysfunction even after treated by proper conservative method. They were all treated by incision of tape mesh with local anesthesia.

### Results

Median time between sling placement and incision of tape mesh is 55 days (range 4-360). Median follow up period after sling incision was 13 months (range 1-24). Of 39 patients who were underwent by incision of tape mesh, there are 24/356 (6.7%) cases in TTV-TOT™, 9/163 (5.5%) in MONARC™, and 6/193 (3.1%) in IRIS-TOT™. The result is not statistically significant ( $p>0.05$ ). Main chief complaints are acute urinary retention ( $n=8$ ), irritative storage symptoms ( $n=30$ ), and obstructive voiding symptoms ( $n=20$ ). In 39 patients with voiding obstruction, mean maximal flow rate (MFR) and post-voiding residual urine volume (PVR) of patients were 21.4 ml/sec and 9.2 ml before undergoing transobturator sling surgery. After sling surgery, MFR and PVR were 9.0 ml/sec and 140.3 ml. After treated by incision of tape mesh, MFR and PVR were 16.5 ml/sec and 64.8 ml. 79.5% of patients (31/39) were continent but 20.5% (8/39) were incontinent after incision of tape mesh. 94.9% (37/39) of patients had no subjective voiding obstruction after sling incision. 5.1% of patients (2/39) had persistent obstructive voiding symptom after incision of tape mesh.

### Interpretation of results

After transobturator sling surgery, about 5% of patients needed incision of tape mesh because of voiding dysfunction. About 80% of patients will be continent and approximately 90% of patients recovered voiding dysfunction.

### Concluding message

Even If the patient shows irritative storage symptom, the study of voiding obstruction by subjective symptoms and urodynamic parameters is appropriate.

### References

**FUNDING:** NONE

**CLINICAL TRIAL REGISTRATION:** This clinical trial has not yet been registered in a public clinical trials registry.

**HUMAN SUBJECTS:** This study did not need ethical approval because this study is retrospective study by reviewing charts but followed the Declaration of Helsinki Informed consent was obtained from the patients.