

A COMPARATIVE STUDY OF OUTSIDE-IN AND INSIDE-OUT TRANSOBTURATOR TAPE PROCEDURES FOR STRESS URINARY INCONTINENCE: 5-YR OUTCOMES

Hypothesis / aims of study

To our knowledge, the long-term surgical outcomes and complications of the 'inside-out' (TVT-O) and 'outside-in' (TOT) transobturator tape procedures for the treatment of female stress urinary incontinence (SUI) have not been reported. Short-term studies showed that TVT-O and TOT were equally effective and safe for women with SUI (1,2). So we compared the long-term clinical outcome of patients undergoing TOT and TVT-O procedures for female SUI.

Study design, materials and methods

We retrospectively analyzed data of 336 women (TOT 184/ TVT-O 319) underwent transobturator tape procedure between January 2004 and December 2006 and followed up for at least 5 years. The evaluation included Sandvik questionnaire, voiding symptoms, satisfaction with surgery, and other questionnaires (recommendation to other patients who have same symptoms, willingness to receive the same procedure) and late complications. The cure was defined as no leakage on Sandvik questionnaire.

Results

The mean age at operation was 53.5 (31-83) years, and symptom grade was I 32.4%, II 57.8%, III 9.8%. At the time of final contact, 70.8% were cured, 20.8% had improved and 8.3% had failed according to the Sandvik questionnaire. The satisfaction rate in terms of the surgical result was 77.1%. Sixty nine percents of all patients want to recommend this procedure to other patients who have same symptoms, and 68.5% were willing to receive the same procedure if same symptoms recur. According to procedure, TOT was much better than TVT-O in cure rate, satisfaction with surgery, questionnaires (recommendation to other patients who have same symptoms, willingness to receive the same procedure) (79.9% vs. 59.9%, 87.0% vs. 65.1%, 87.5% vs. 75%, 77.2% vs. 57.9%, all p value < 0.05). There was a significant higher cure rate in TOT with patients of VLPP<60cm H₂O, MUCP< 40cm H₂O, BMI≥25 kg/m², and the SUI grade≥2 than TVT-O (fig.1). The late complications were de novo urgency (11.4%), frequent urinary infection (4.1%), and inguinal pain (0.3%).

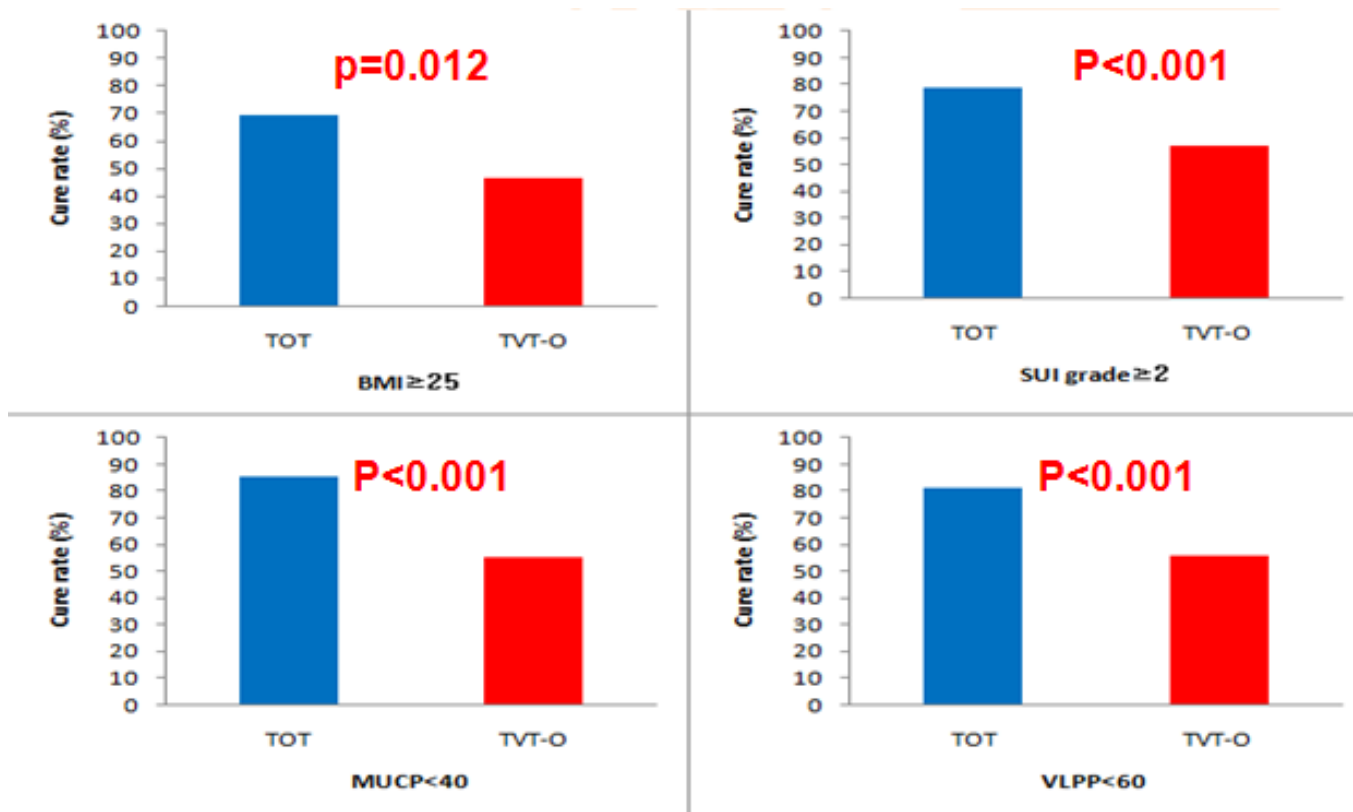
Interpretation of results

TOT procedure has higher cure rate & satisfaction than TVT-O in the long term follow-up for more than 5 years.

Concluding message

The both TOT and TVT-O procedures appeared to be clinically effective and safe in treatment of female SUI. Even though the success rates of both procedures are similar TOT procedure has higher cure rate & satisfaction than TVT-O in the long term follow-up for more than 5 years.

fig.1. Cure rate according to BMI, SUI grade, MUCP, and VLPP



References

1. But I, Faganelj M. Complications and short-term results of two different transobturator techniques for surgical treatment of women with urinary incontinence: a randomized study. Int Urogynecol J Pelvic Floor Dysfunct 2008;19:857-61.
2. Lee KS, Choo MS, Lee YS, et al. Prospective comparison of the 'inside-out' and 'outside-in' transobturator-tape procedures for the treatment of female stress urinary incontinence. Int Urogynecol J Pelvic Floor Dysfunct 2008;19:577-82.

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Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require ethics committee approval because	1. this study is not a clinical trial 2. we retrospectively analyzed the medical record of the patients
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	No