

TWO YEAR OUTCOMES OF TRANSOBTURATOR TAPE (TOT) SLING CONCOMITANT WITH TENSION-FREE VAGINAL MESH (TVM) SURGERY FOR THE TREATMENT OF STRESS URINARY INCONTINENCE ACCOMPANIED WITH PELVIC ORGAN PROLAPSE.

Hypothesis / aims of study

Concomitant transobturator tape (TOT) procedure is often performed with tension-free vaginal mesh (TVM) surgery for cases with stress urinary incontinence (SUI) accompanied with pelvic organ prolapse (POP). However, medium-term outcomes of the concomitant TOT procedure remain unclear. We prospectively evaluated clinical efficacies of the TOT concomitant with TVM, compared to those of TOT alone for clinical SUI cases without POP.

Study design, materials and methods

Between Apr. 2006 and Dec. 2009, we experienced 142 women who underwent TOT concomitant with TVM surgery (TOT/TVM group), and 38 patients with TOT alone (TOT alone group) (Table 1). All cases showed clinical SUI, which was preoperatively confirmed by pad tests and/or urodynamics with a vaginal tampon. According to POP quantification (POP-Q) system, 23, 71, and 48 cases in TOT/TVM group were qualified as grade II, III and IV respectively. We performed all procedures after obtaining written informed consent. We evaluated the outcomes using International Consultation on Incontinence Questionnaire Short-Form (ICIQ-SF), International Prostate Symptom Score (IPSS) and IPSS-QOL score at 2 years after surgery. As objective parameters, we also evaluated Qmax (ml/sec) and postvoid residual (ml) at 2 years after surgery.

“Social continence” was defined as negative 1 hr pad test and none or 1 pad-use/day.

Results

Presurgical ICIQ-SF of TOT alone group were significantly higher than that of TOT/TVM group. In contrast, presurgical PVR of TOT/TVM group was significantly larger than that of TOT alone group (Table 1). “Social continence” was obtained in 97% of TOT/TVM group and 95% of TOT alone group at 2 years. Two years after the surgeries, all questionnaires of ICIQ-SF, IPSS and IPSS-QOL showed significant improvement in two groups. However, no significant inter-group difference was found in all the scores at 2 years after surgery. Although the baseline PVR was different, we observed no significant difference in postsurgical PVR between the two groups (Table 2). Postoperative complications included de novo OAB in 3 cases (2%) of TOT / TVM, and in 2 cases (5%) of TOT alone. No case with urinary retention or erosion of wound was observed in both groups.

Interpretation of results

The 2 year outcomes of TOT sling concomitant with TVM surgery are equivalent for those of TOT alone. The incidences of postoperative complications seemed minimal. Limitations of this study is no randomized study.

Concluding message

TOT sling concomitant with TVM surgery is a reasonable option for the treatment of clinical SUI concurrent with POP.

Table 1. Patient characteristics

Procedure (No. of cases)	TOT / TVM (n=142)	TOT alone (n=38)	P value
Age	66.7 ± 8.7	67.0 ± 8.4	NS
No. of delivery	2.2 ± 0.8	1.9 ± 0.9	NS
ICIQ-SF	7.7 ± 6.3	13.8 ± 4.8	<0.05
IPSS(SD)	13.2 ± 8.2	12.8 ± 10.5	NS
QOL	4.36 ± 1.32	4.06 ± 2.29	NS
MFR (ml/sec) (SD)	22.6 ± 10.9	26.0 ± 12.1	NS
PVR (ml) (SD)	45.0 ± 81.0	9.5 ± 24.6	<0.05

Table 2. Parameters at 2 years after surgery

	TOT / TVM (n=142)	TOT alone (n=38)	P value
Percentage of socially continent cases	97%	95%	NS
ICIQ-SF	4.1 ± 5.9	4.5 ± 6.6	NS
IPSS	7.5 ± 8.9	6.2 ± 8.9	NS
QOL	1.8 ± 1.5	1.5 ± 3.0	NS
MFR (ml/sec) (SD)	13.6 ± 7.4	13.9 ± 6.8	NS
PVR (ml) (SD)	24.2 ± 45.7	1.6 ± 4.8	NS

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