

COMPARISON OF LONG TERM OUTCOME OF TWO DIFFERENT METHODS OF TRANSOBTURATOR TENSION FREE VAGINAL TAPE FOR WOMEN WITH URODYNAMIC STRESS INCONTINENCE

Hypothesis / aims of study

As the data comparing the long term outcome of outside-in versus inside-out technique of transobturator tension free vaginal tape is limited (1,2), this study aimed to compare the objective and subjective 5-year outcome of patients received outside-in versus inside-out techniques of transobturator tension free vaginal tape for urodynamic stress incontinence.

Study design, materials and methods

A prospective cohort study was conducted on 149 patients who received transobturator tension free vaginal tape for urodynamic stress incontinence (USI). All patients underwent standard urodynamic study and confirmed the diagnosis of USI before the operation. Patients then had yearly follow-up and urodynamic study were repeated five years after the operation. Subjective outcome was assessed by using the terms: 'better', 'same', 'worsen' described by patients while objective outcome was assessed by the severity of urine leak at the urodynamic study. The demographic data and the outcome measurement are compared between patients with outside-in versus inside-out technique procedures.

Results

Total of 149 patients received transobturator tension free vaginal tape in 2005-2006 in our center. 102 (73%) of them received outside-in technique (Monarc, America Medical Systems) while 37 of them had inside-out technique (TVT-O, Johnson & Johnson) procedures. There was no difference in demographic parameters between the two groups (Table 1). Seven patients died during the follow-up period, all were not related to the surgery. 18 (19.6%) and 4 (11.1%) patients did not turn up for follow up after one year in each group (p=0.32). The mean follow up for them are 51.5 (12.8) months and 42.5 (19.7) months respectively; and 55 (59.8%) and 17 (47.2%) of them completed the 5-year urodynamics study. There was no significant difference between the subjective and objective outcome among these two groups as shown in Table 2.

Interpretation of results

There was no significant difference in both subjective and objective outcome for patients received outside-in versus inside-out technique of transobturator vaginal tape for urodynamic stress incontinence at average of 48 months.

Concluding message

This study demonstrated the outside-in and inside-out technique of transobturator vaginal tape achieved similar subjective and objective outcome at mean of 48 months time.

Table

Table 1. Demographic parameters of patients received transobturator vaginal tape in 2005-2006.

	Outside-in technique N = 102	Inside-out technique N =37	P-value
*Age at operation (years)	60.1 (12.4)	63.6 (14.9)	NS
*Body mass index (unit) BMI	25.1(5.2)	24.7 (2.8)	NS
Menopausal	64 (62.7%)	25 (67.6%)	NS
*No. of vaginal delivery	3.4 (1.7)	3.8(2.3)	NS
*Heaviest birth weight delivered	3.3(1.7)	3.7(0.8)	NS

*Value is presented in mean (standard deviation)

Table 2. Long term subjective and Objective outcome of patients received transobturator vaginal tape.

	Outside-in technique N = 78	Inside-out technique N=32	P-value	
Objective outcome				
	Normal	48 (87.3%)	13 (76.5%)	0.327
	Mild USI	1 (1.8%)	2 (11.8%)	
	Moderate USI	4 (7.2%)	1 (5.9%)	
	Severe USI	2 (3.6%)	1 (5.9%)	
5 year subjective outcome	N = 55	N =17		
	Better	70 (92.1%)	30 (93.8%)	0.806
	Same	5 (6.6%)	2 (6.25%)	
	Worsen	1 (1.3%)	0	

References

- Lee KS, Choo MS, Lee YS et al. (2008) Prospective comparison of the 'inside-out' and 'outside-in' transobturator tape procedure for the treatment of female stress urinary incontinence. *Int Urogynecol J*.19 (4):577-82.

2. Liapis A, Bakas P, Creatsas G et al. (2008) Monarc vs TVT-O for the treatment of primary stress incontinence: 1 randomised study. *Int Urogynecol J* 19:185-90.

Disclosures

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