

A COMPARISON OF THE VOIDING FUNCTIONS AFTER MONARCTM TRANSOBTURATOR SUBURETHRAL SLING PROCEDURE WHICH WAS CLASSIFIED BY TENSION ADJUSTMENT

Hypothesis / aims of study

Transobturator suburethral sling has been performed for treating women with stress urinary incontinence(SUI). Currently, there was no consensus about the adequate tension for female patients with SUI treated with Transobturator suburethral sling. The aim of this study is to compare voiding functions following insertion of the Monarc™ transobturator tape using different strength of tension applied to midurethra prospectively.

Study design, materials and methods

From May 2005 to April 2006, 72 women having SUI without associated prolapse were treated with Monarc™ transobturator tape. In 40 patients (group A), the transobturator tape was inserted tension-free behind the urethra leaving visible space between the tape and the urethra (a few centimetres) using Babcock forceps. In 32 patients (group B), the tape was placed tension-free leaving no space between the tape and the urethra. To assess the voiding functions, the patients were asked if voiding had changed after surgery and objectively uroflowmetry and postvoid residual urine(PVR) measurement were compared preoperatively, one day, one week, 1,12 months postoperatively.

Results

There was no significant difference in the preoperative clinical parameters. At the 12 months follow-up, 90.0%/90.6% women were objectively cured and 5%/9.4% improved in group A and B, respectively. The subjective cure rate was 90.0%/96.9%. There was no permanent urinary retention in both groups. 2 patients of group A and 3 patients of group B had urinary difficulty requiring intermittent catheterization for less than 1 day respectively. Postoperative peak flow rates were not different between the groups on one day, one week, 1, and 12 months after surgery. On one day (27.3±26.0 vs 42.8±32.1) and one week (16.0±13.9 vs 25.2±20.6) after surgery, the group B patients showed significantly increased PVR than those of the group A patients (p<0.05), but 1 and 12 months after surgery, there were no differences between the groups. Subjectively, 47.5%/53.1% of patients considered that their voiding had become more difficult one year after surgery, respectively.

Interpretation of results

On one day and one week after surgery, there were statistically significant PVR differences between the groups. But each tension adjustment technique had no effect on the subjective and objective cure rates.

Concluding message

The strength of tension of Monarc™ transobturator suburethral sling might influence on early PVR, but, not on PVR and patients' satisfactions about the procedure over one month ever till a year after surgery.

	Pre-op	Post-op	1wk	1m	12ms
Group A (n=40)					
Qmax (ml/sec)	27.1±6.3	17.4±5.3	17.3±5.9	16.5±5.4	14.9±5.0
PVR (ml)	13.8±17.1	27.3±26.0	16.0±13.9	12.9±10.9	14.2±12.8
Subjective voiding difficulty		28(70.0%)	28(70.0%)	24(60.0%)	19(47.5%)
Group B (n=32)					
Qmax (ml/sec)	28.5±6.1	16.6±4.7	16.1±4.6	15.5±4.1	15.0±4.0
PVR (ml)	18.1±16.2	42.8±32.1	25.2±20.6	17.5±13.4	15.7±12.2
Subjective voiding difficulty		25(78.1%)	24(75.0%)	22(68.8%)	17(53.1%)
P value (Group A vs B)					
Qmax (ml/sec)		NS	NS	NS	NS
PVR (ml)		0.026	0.036	NS	NS
Subjective voiding difficulty		NS	NS	NS	NS

*NS: no significance

Specify source of funding or grant	no
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	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	it was not required
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes