547

Park K[1], Kim Y S[1], Yang S[2]

1. *National Health Insurance Corporation Ilsan Hospital, department of urology, Koyang, Korea,* ***2.*** *Konkuk University, College of Medicine, Chungju, Korea*

UROFLOWMETRIC EVALUATION PRE AND POST TRANSOBTURATOR SLING IN PATIENTS WITH PURE AND MIXED STRESS URINARY INCONTINENCE.

Hypothesis / aims of study

To date, most studies have shown findings exclusively in select groups of women who underwent surgery as the primary procedure for pure stress urinary incontinence (SUI). We evaluated the outcome after TOT procedure in women with mixed UI and pure stress urinary incontinence. The aim of study is to evaluate the postoperative uroflowmetric difference between pure and mixed SUI.

Study design, materials and methods

From September 2006 to march 2008, total 122 women 35 to 76 years old (mean age 52.6) were included in the study. The mean follow-up time was 10.5 months (range 6 to 22). All cystometry studies were performed when the patients were not taking anticholinergics. Uterine prolapse and prior pelvic surgery were excluded. Pre and post 2weeks operative uroflowmetry was done to evaluate these patients. In all women transobturator procedure (MONARC^{tm} sling) were performed by a single surgeon. All patients were divided into pure stress urinary incontinence (pSUI) group and mixed stress urinary incontinence (mSUI) group. Preoperatively a postvoiding residual >150 ml in patients without prolapse was an exclusion criteria for study. Preoperative non invasive uroflowmetry (NIF) study was performed in all women using a standardized protocol. Inclusion criteria for the NIF study included a void of at least 150 mL, and recorded values for maximum flow rate (Qmax), average flow rate (Qmean), time to maximum flow, voided volume, and postvoid residual (PVR). Cure was defined as the absence of subjective complaint of urine leakage.

Results

There were no peri-operative complications. Post operative urinary retention was not present in these patients. At 2weeks, 115 (94%) were dry and 7 (6%) the procedure failed. In the mSUI group, 6/55 (11%) patients were failed. But, in the pSUI group, 1/67 (1.4%) patients were failed. Comparison of NIF findings pure and mSUI are show in table 1. & 2.

Table 1 – Patients profiles

	pSUI (mean ± SD)	mSUI (mean ± SD)	p
Number	67	55	
AGE	51 ± 1.4	63.5 ± 26.1	0.43*
BMI (kg/m^2)	26.8 ± 2.6	22.5 ± 3.5	0.53*
Parity	2 ± 0	3 ± 0	0.58*
Cure of incontinence	66 (98.5%)	49 (89%)	0.05†

*:Student t-test, †: Fisher's Exact Test

Table 2 – NIF findings pSUI and mSUI

	pSUI			mSUI		
Urodynamic variables	Preoperative (mean ± SD)	Postoperative (mean ± SD)	p*	Preoperative (mean ± SD)	Postoperative (mean ± SD)	p*
Maximum flow rate (ml/s)	25.4 ± 10.3	21.1 ± 8.8	0.004	28.0 ± 11.7	25.5 ± 11.3	0.250
Average flow rate (ml/s)	13.9 ± 5.8	10.5 ± 4.7	<0.001	14.8 ± 6.3	12.0 ± 6.0	0.026
Voiding volume (ml)	23.4 ± 13	27.7 ± 15.1	0.098	22.4 ± 9.1	29.2 ± 16.5	0.063
Time to Maximum flow (s)	7.8 ± 5.4	6.4 ± 5.8	0.232	7.3 ± 3.9	8.5 ± 6.5	0.370
PVR (ml)	10.2 ± 8.4	27.5 ± 30.8	0.004	13.5 ± 17.1	46.7 ± 47.0	<0.001

*: Student t-test

Interpretation of results

Comparing the urodynamic data pre and post TOT sling, there are low procedure failure rates, decreased maximal urine flow and mean flow rate and increased residual volume in the pSUI group. In the mSUI group, there are higher failure rate rather than the pSUI group and no significant difference of maximum flow rates. Decreased Qmax and Qmean may be good sign for success in pSUI.

Concluding message

The cure rates are lower for women with mixed than with pure SUI. Our findings suggest that significant change of Qmax and Qmean may be considered to be good sign for success in pSUI. This has important clinical relevance because patient should be informed of its possibility.

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?	**Yes**
Specify Name of Ethics Committee	**institutional review board of national health insurance corporation ilsan hospital**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**Yes**