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1. Urology, 2. Urology

ANALYSIS OF OUTCOMES OF TENSION-FREE MIDURETHRAL SLING PROCEDURE IN WOMEN WITH MIXED URINARY INCONTINENCE

Hypothesis / aims of study

To evaluate the medium and long term outcomes of Tension-free midurethral sling in the treatment of female patients with Mixed Urinary Incontinence(MUI).

Study design, materials and methods

Twenty-six patients who underwent the Tension-free midurethral sling procedure for MUI from April 2010 to September 2016, were followed up. The mean age is 62 years old, with a range of 42-80 years old. The mean BMI is 26.82 Kg/m², with a range of 21.48~31.14 Kg/m². The mean follow-up time is 26 months, with a range of 8-69 months. Twelve patients never took M-blockers and the rest 14 patients took M-blockers within two weeks. Four of 26 patients underwent retropubic mid-urethral sling (TVT), and 22 of them underwent transurethral middle obturator sling (TOT). Scales were used in the follow-up, including Incontinence severity score (UISS), detrusor instability score (DIS), Quality of Life Scale Evaluation (I-QOL), Urogenital Distress Inventory short form (UDI-6), and the outcomes before and after procedure underwent were compared.

Results

None of the patients has complications including dysuria, injury of bladder, urethra, obturator vessel or nerve during the surgery. After pulling out the catheter, no one suffered moderate or severe pain or difficulty of urination. The overall cure rate for stress urinary incontinence (SUI) was 96.15% with 25 patients cured, for urge urinary incontinence (UUI) of 76.92% with 20 patients cured. The patients' life quality also improved significantly (P<0.05).

Interpretation of results

Tension-free midurethral sling procedure is an effective treatment for women with mixed urinary incontinence, which is verified by some researches in different countries. Even without taking the M-blockers, cure rate for urge incontinence reached 76.92% in our research. The efficacy of surgery remained stable in medium and long term, and the patients' quality of life improve significantly. But the reason why the procedure work for MUI wasn't discussed before. Combined with urodynamic study, we suppose that the origin some patients feel urine urgency come from can be urethra instead of bladder. In our study, only 10 patients in 26 showed an overactive detrusor or unstable contraction. And those complained remained UUI syndrome were all diagnosed by urodynamic study as SUI combined with OAB. Urodynamic study is necessary for MUI patients before treatment strategy made, to figure out whether the urine urgency originate from bladder.

Concluding message

Without detrusor unstable contraction, Tension-free midurethral sling procedure can be the first choice of MUI patients.

figure 1 scales score comparison $\bar{x} \pm s$

Scale	UISS	DIS	I-QOL	UDI-6
Preoperational	13.15±3.77	11.77±3.82	30.77±19.63	10.50±3.06
Postoperational	1.23±2.42	2.12±3.01	88.00±14.94	1.62±2.47
P value	0.00	0.00	0.00	0.00

References

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