

THE INFLUENCE OF PREOPERATIVE BLADDER OUTLET OBSTRUCTION ON THE CONTINENCE RATE AND SATISFACTION AFTER MIDURETHRAL SLING IN FEMALE PATIENT WITH STRESS URINARY INCONTINENCE

Hypothesis / aims of study

Recently, interests in female bladder outlet obstruction (BOO) have grown up. And coexistence of BOO and stress urinary incontinence (SUI) was observed in female patient. Midurethral sling is considered as a successful treatment option for SUI and also, it can be done carefully for female patient with BOO and SUI. Underlying BOO is seemed to influence the results of midurethral sling and postoperative voiding pattern in female patient with SUI. Therefore, we studied the influence of underlying BOO on the postoperative continence rates and satisfaction in female patients with SUI after midurethral sling.

Study design, materials and methods

This study included total 159 female patients with SUI who had undergone midurethral sling procedure and were followed up more than 12 months. The patients who had grade II or higher cystocele were excluded from this study. The preoperative evaluation included a careful history taking, physical examination, consecutive voiding diaries for 3 days and an urodynamic study. By the standard of Blaivas-Groutz nomogram [1], a total of 159 patients were assigned to group I (n=37, no obstruction), group II (n=89, mild obstruction) and group III (n=33, moderate to severe obstruction). The postoperative evaluation included a continence rates, questionnaire regarding patient satisfaction (5: very satisfied, 1: very unsatisfied), urinary sensation scale, uroflowmetry and residual urine volume.

Results

The mean patient age was 55.6 (39-72). The mean follow up period was 24.3 (15-33) months. There was no significant difference in the continence rates among the three groups (group I: 89.2%, group II: 88.8% group III: 84.8%). Also there was no significant difference in patient satisfaction. There was no significant difference in changes of preoperative and postoperative maximum flow rate (Qmax) within each group. However, significant changes of preoperative (20.5±5.7 ml/s) and postoperative (20.3±9.9 ml/s) Qmax were noted in group III by comparison with preoperative (24.5±5.7 ml/s) and postoperative (26.8±9.1 ml/s) Qmax in group I (p<0.05). The preoperative and postoperative urgency grade by urinary sensation scale was 3.1±1.5 and 1.5±1.0 in Group I, 2.9±1.5 and 1.8±0.9 in Group II, and 20.5±5.7 ml/s and 20.3±9.9 ml/s in group III. The postoperative symptom of urgency was significantly improved after midurethral sling operation in group I and II (p<0.05, each). However, there was no improvement of urgency in group III.

Interpretation of results

Continence rates and patients satisfaction after midurethral sling were similar regardless of the grade of underlying BOO in female patients with SUI. Both of preoperative and postoperative Qmax were low in female patients showed higher grade of BOO compared with those of patients without BOO. However, there was no difference between preoperative and postoperative Qmax in each group. The postoperative symptom of urgency was significantly improved in patients without BOO or with low grade of BOO, but no improvement of urgency was noted in patients with higher grade of BOO.

Concluding message

These results shows that preoperative BOO in patients with SUI may not influence to the postoperative continence rates and patient satisfaction. However, because urgency was not easily improved postoperatively in patients with higher grade BOO, it should be considered as a potential factor of persistent urgency after midurethral sling procedure.

References

1. Neurourol Urodyn (2005) 24; 237-247

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 eithics committee approval because	This study is a retrospective study. I will receive the IRB before submission of article.
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	No