THE EFFECT OF MIDURETHRAL SLING PROCEDURES ON THE POSTOPERATIVE VOIDING PATTERN IN THE PATIENTS WITH FEMALE STRESS URINARY INCONTINENCE WITH WEAKER URINE STREAM

Hypothesis / aims of study
The aim of this study is to evaluate the effect of midurethral sling procedures on the postoperative voiding pattern in the patients with female stress urinary incontinence and a lower urine stream preoperatively.

Study design, materials and methods
We retrospectively reviewed 22 patients who underwent midurethral sling procedures for female stress urinary incontinence from May 2006 to April 2010. These 22 patients had weak urine stream (less than 15ml/s of peak flow rate). We excluded the patients who had neurologic deficits and the patients whose voided volumes were less than 150ml on uroflowmetry. The age, parity and the postoperative follow-up periods were 59.7±11.5 years, 2.9±1.9, and 6.3±4.5 years, respectively.

Results
Postoperatively the mean Qmax was improved from 11.4±2.5ml/s to 18.0±7.1ml/s (p=0.05). The voided volume was increased from 196.3±61.2ml to 240.1±92.3ml (p=0.03). The frequency score of the IPSS was significantly decreased from 3.7±1.3 to 2.0±1.7 (p=0.047). Incontinence was improved in all the patients postoperatively.

Interpretation of results
The postoperative improvement of Qmax was thought to be due to the increase of the voided volume. It may be results of decrease of incontinence, and decreased urgency episodes.

Concluding message
Peak flow rate was improved after midurethral sling procedures in the patients with female stress urinary incontinence with lower urine stream.

Table 1. Overall results of the sling procedures in patients with lower uroflow.

<table>
<thead>
<tr>
<th></th>
<th>preoperative</th>
<th>postoperative</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qmax (ml/s)</td>
<td>11.4±2.5</td>
<td>18.0±7.1</td>
<td>0.05</td>
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<tr>
<td>Voided volume (ml)</td>
<td>196.3±61.2</td>
<td>240.1±92.3</td>
<td>0.03</td>
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<tr>
<td>Residual volume (ml)</td>
<td>25.8±19.7</td>
<td>20.0±6.8</td>
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<tr>
<td>IPSS Frequency</td>
<td>3.7±1.3</td>
<td>2.0±1.7</td>
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<tr>
<td>Urgency</td>
<td>3.8±1.8</td>
<td>1.9±1.9</td>
<td>0.066</td>
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<td>Nocturia</td>
<td>2.7±1.2</td>
<td>1.9±1.0</td>
<td>0.084</td>
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</table>

References
1. none

Specify source of funding or grant

Is this a clinical trial? Yes
Is this study registered in a public clinical trials registry? No
Is this a Randomised Controlled Trial (RCT)? 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 Eulji medical center
Was the Declaration of Helsinki followed? Yes
Was informed consent obtained from the patients? No