INTRADETRUSOR INJECTIONS OF BOTULINUM TOXIN A IN 15 PATIENTS WITH OVERACTIVE BLADDER WITHOUT DETRUSOR OVERACTIVITY

Hypothesis / aims of study
To evaluate efficacy and tolerability of intradetrusor injections of 100 units (U) of Botulinum toxin A (BTA) in patients with overactive bladder (OAB) without detrusor overactivity (DO).

Study design, materials and methods
Eligible patients had frequent and urgent voiding (including the strong desire to void and episodes of urgent urinary incontinence (UUI)). Our research included 15 patients (6 men and 9 women) with a mean age of 41.5 ± 8.7 years old with OAB without DO who were treated by intradetrusor injections of 100 U of BTA. Participants were evaluated before, in 1 and 3 months after treatment. The next parameters were taken into account: data of voiding dairy (frequency of voiding, number of strong desire to void and amount of episodes of UUI), IPSS-QOL.

Results
Tab. 1 Objective results

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Before treatment</th>
<th>In 1 month</th>
<th>In 3 months</th>
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<tbody>
<tr>
<td>Frequency</td>
<td>15.6 ± 2.5</td>
<td>13.5 ± 2.8</td>
<td>13.4 ± 3.09</td>
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<tr>
<td>Episodes of strong desire to void</td>
<td>10.6 ± 3.4</td>
<td>8.2 ± 3.8</td>
<td>7.5 ± 3.8</td>
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<tr>
<td>Episodes of UUI</td>
<td>2.4 ± 1.4</td>
<td>1.3 ± 1.6</td>
<td>1.2 ± 1.06</td>
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</table>

Only 3 patients had very good results and significant improvement of subjective parameters in 1 and 3 months after treatment: IPSS-QOL – 5.7points vs. 1.3points.
3 participants had obstructive voiding. They had not any postvoid residual (PVR) but Qmax were 2.4, 7.2 and 7.7 ml/sec. In female patient who had the worst Qmax it had been occurred for 3 months.

Interpretation of results
There was no significant improvement of the amount of day-and night-time frequency and the number of strong desires to void after 1 and 3 months after treatment. As far as the number of episodes of UUI is concerned successful results occurred. (Tab 1).
Summarily 2 patients had increasing symptoms more than 75% in 1 and 3 months after treatment, and 2 patients had improvement symptoms more than 50% but less than 75% in 1 and 3 months after BTA injections. In the others there were not any positive results in all parameters.
3 patients had the long-term side effect due to decreasing of detrusor contraction activity after injections

Concluding message
Nowadays injections of BTA are one of the most effective in patients with OAB due to idiopathic DO (IDO) and neurogenic DO (NDO). This study demonstrated that intradetrusor injections of BTA in patients with OAB without DO is not very effective method of treatment. Moreover we can face long-term disorder of evacuation voiding function. Owing to this study we can propose that submucosal injections of BTA can be more effective and safety in patients with OAB without DO.

References

Disclosures
Funding: This study and its analysis were sponsored by Nike-Med, ofissial diller of Lantox in Russian Federation. **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** The Ethic Committee of Russian National Research Medical University named after N.I. Pirogov **Helsinki:** Yes **Informed Consent:** Yes