COMPLIANCE OF INTRAVESICAL BOTULINUM TOXIN-A INJECTIONS FOR OVERACTIVE BLADDER SYMPTOMS IN MEN

Hypothesis / aims of study
Intravesical injections with botulinum toxin A (BoNT-A) is an established treatment for patients with overactive bladder (OAB) symptoms. However, most studies have evaluated the efficacy of this treatment in women and patients with neurogenic bladder dysfunction. Furthermore, most trials evaluated short-term results and do not address the compliance of repeated injections with BoNT-A. In this study, we evaluated the long-term compliance of BoNT-A in a heterogeneous group of male patients.

Study design, materials and methods
This is a retrospective, single-centre study. In June 2016, we evaluated all patients who have been treated with BoNT-A from 2004 until 2010 in a large teaching hospital. Only male patients were included. Patients received 100-300U of onabotulinum toxin-A in 20 intradetrusor injections. Some patients received dose adjustment with repeated injections. Patients were instructed how to use clean intermittent self-catheterisation (CISC) before the start of treatment. We advised patients to commence CISC if post-void residual exceeded 150ml.

Results
In total, 88 patients were included. The mean follow-up was 69 months. Of all patients, 22 (25%) continued BTX treatment at last follow-up (success). Of the patients who discontinued treatment, 35 had insufficient effect and 27 had tolerability issues (e.g. urinary retention, self-catheterisation, voiding LUTS). Four patients abandoned treatment due to other reasons that were not related to BTX.

Table 1 shows the detailed results of all patients, stratified into four categories: idiopathic (n=24), neurogenic (n=25), post TURP (n=18) and post prostate cancer (PCA) treatment (n=21). Of the latter, 10 patients underwent radical prostatectomy and later salvage radiation therapy, 7 underwent radical prostatectomy alone and 4 underwent radiation therapy alone.

Of all patients, 24% had to use intermittent catheterisation (de novo) or indwelling catheters during follow-up. Yet, 19% percent of all patients were already using catheters before the start of the treatment.

<table>
<thead>
<tr>
<th>Category</th>
<th>success</th>
<th>insufficient effect</th>
<th>intolerability</th>
<th>other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>idiopathic</td>
<td>5 (21%)</td>
<td>8</td>
<td>10</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>neurogenic</td>
<td>9 (36%)</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Post-TURP</td>
<td>2 (11%)</td>
<td>10</td>
<td>6</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Post-PCA treatment</td>
<td>6 (29%)</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>21</td>
</tr>
</tbody>
</table>

Interpretation of results
In this real-life, heterogeneous cohort of men, the long-term compliance with BoNT-A was 25%. Patients with neurogenic OAB symptoms appear to have the best results in our study with 36% of patients who were still on active treatment during last follow-up.

Concluding message
Intravesical BTX can be an effective treatment for men with overactive bladder symptoms. In our study, only 25% of patients continued treatment during long-term follow-up. Larger, prospective trials are needed to confirm these results.

Disclosures
Funding: None Clinical Trial: No Subjects: HUMAN Ethics Committee: METC Zuyderland Heerlen Helsinki: Yes Informed Consent: No