Introduction and objective

Currently, the most commonly used mode of anaesthesia for the ambulatory intra-detrusor injection of BoNTA is intra-vesical lidocaine solution, but many other cystoscopic procedures are performed under lidocaine gel, which provides good anaesthesia. We aim to assess the anaesthetic efficacy of the intra-vesical lidocaine solution compared to the intra-urethral lidocaine gel in the ambulatory injection of BoNTA.

Material and methods

Women with idiopathic overactive bladder.

Ambulatory BoNTA injection with flexible cystoscope and 4 mm length and 0.4 mm calibre needle

n = 45

Primary outcome:

• VAS referred to the procedure.
• VAS before discharge.

Secondary outcomes:

• Adverse effects attributable to the local anesthetic and the procedure itself.

Results

Figure 1. VAS at the end of the procedure

Group 1: mean 3.09, SD 2.83
Group 2: mean 2.23, SD 2

Mean VAS at the end of the procedure.

No statistically significant differences

Table 1. Adverse effects of the procedure and the anaesthetic.

<table>
<thead>
<tr>
<th>Anesthetic</th>
<th>Procedure</th>
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</thead>
<tbody>
<tr>
<td>Statistically significant differences (p&lt;0.05)</td>
<td>No statistically significant differences.</td>
</tr>
<tr>
<td>Hypotension (0%)</td>
<td>Urinary tract infection (21.7% group 1 and 22.7% group 2)</td>
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<tr>
<td>Bradycardia (0%)</td>
<td>Voiding difficult (13% and 0%)</td>
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<tr>
<td>Confusion (0%)</td>
<td>Urinary catheter needed (4.9% and 0%)</td>
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<tr>
<td>Fatigue (0% and 10.6%)</td>
<td>Haematuria (13.3% and 9.1%)</td>
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<tr>
<td>Blurry vision (0%)</td>
<td>Vomits (0%)</td>
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<tr>
<td>Dysuria (27.4% and 40.9%)</td>
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Interpretation of results

Avoiding systemic effects of the lidocaine solution (with a significant and clinically relevant decrease in the percentage of adverse effects in the group 1.13% vs 40.9%) and decreasing the total duration of the procedure itself.

The key points that allow us to perform the procedure with this anaesthetic protocol were: 1) Changing the operating room for our Urodynamics Unit, 2) Changing the rigid cystoscope for the flexible and 3) Changing our needle for a thinner (0.4 mm) and shorter (4 mm) one.

Conclusions

Intra-detrusor injection of BoNTA can be performed safely and ambulatory, with lidocaine gel as anaesthesia without an increase of pain or complications of our patients compared to the lidocaine solution group.