

## **TOLERABILITY OF INTRAVESICAL INJECTION OF BOTULINUM TOXIN TYPE A IN PATIENTS WITH REFRACTORY IDIOPATHIC DETRUSOR OVERACTIVITY UNDER LOCAL ANESTHESIA IN CORRELATION WITH SITES OF INJECTIONS**

### Hypothesis / aims of study

Intravesical Botuline toxin A(BoNT/A) is a well known therapy for neurogenic and idiopathic detrusor overactivity that is refractory to current antimuscarinic agents. At our hospital we use an endoscopic technique of intradetrusor injections of BTA under local anesthesia. Very little is known about the tolerability of BTA under local anesthesia in conjunction with sites of injection

### Study design, materials and methods

Experimental study. We included 10 female patients with refractory idiopathic detrusor overactivity. 50 ml of 2% lidocaine was used as a local anesthetic. The lidocaine was instilled into the bladder with a 14 Fr catheter 15 minutes prior to the injections BoNT/A dysport was injected at 10 locations in the detrusor muscle, 500 E in 10ml 0,9 Nacl. The sites were 2 injections in the trigonum, 2 injections in the left wall of the bladder, 2 in the dorsal wall, 2 in the right wall and 2 injections in the bladder dome. Every 30 seconds a new injection was given. Pain tolerance was noted with every injection using a VAS score. In 5 patients we started the injections at the trigonum, in five patients we ended the injections at the trigonum we also took a VAS score 2 hours after the procedure

### Results

In 10 patients the mean pain score was 2.1(range 0 to 8) during the procedure, 0.4(range 0 to 2) after 2 hours. There was no significant correlation found between a higher VASscore and the subsequent sites of injections. We found no significant correlation between the VASscore and the different injection sites including the trigonum. There was no significant difference in VASscore between the trigonum injections performed 15 minutes after installing the lidocaine, and the trigonum injections performed 19 minutes after installing the lidocaine. Injections who started in the trigonum(n=5) had a mean VASscore of 2.0(0-5), Injections who ended in the trigonum(n=5) had a mean VASscore of 2.2(0-6)  
All 10 patients stated that they would undergo the same procedure next time, regarding the discomfort of the procedure.

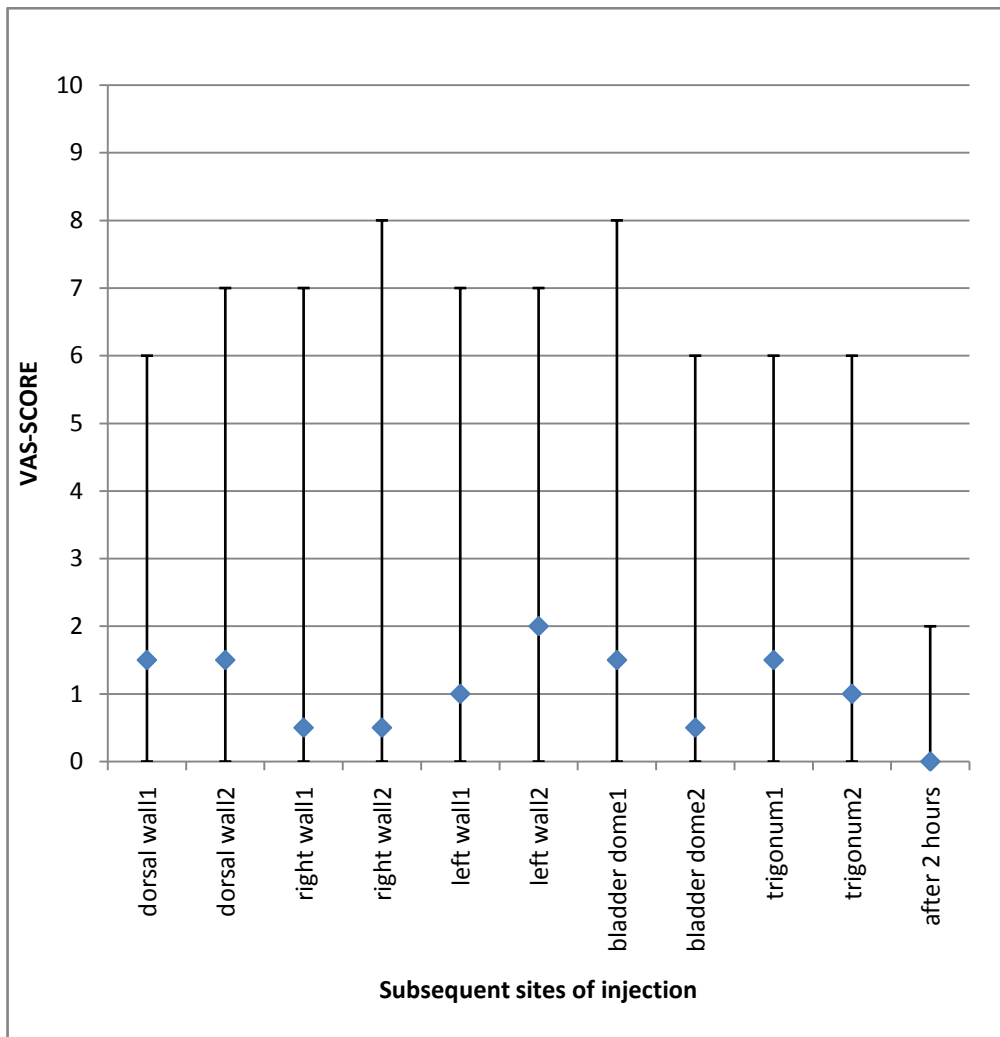


Fig1. Mediaan and range of the VASscore at the different, and subsequent sites of injection

#### Interpretation of results

In our study population we found no difference in pain score of intravesical injection of botulinum toxin type A under local anaesthesia regarding the different and subsequent sites of injection. This means that the trigonum is not more sensitive than the other injection sites regarding this procedure. Subsequent injections do not have an elevated VAS score at the end of the procedure, compared to the start of the procedure. There is no difference in VAS score of the trigonum injections, between the group in which we started at the trigonum and the group in which we ended at the trigonum.

#### Concluding message

Intravesical injection of botulinum toxin A in female patients with refractory idiopathic detrusor overactivity under local anaesthesia is very well tolerated. There is no correlation between the VAS score and the different, or subsequent sites of injection.

<b>Specify source of funding or grant</b>	<b>none</b>
<b>Is this a clinical trial?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>No</b>
<b>This study did not require ethics committee approval because</b>	<b>was not required for this study</b>
<b>Was the Declaration of Helsinki followed?</b>	<b>Yes</b>
<b>Was informed consent obtained from the patients?</b>	<b>Yes</b>