

## 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  $41.5 \pm 8.7$  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 diary (frequency of voiding, number of strong desire to void and amount of episodes of UUI), IPSS-QOL.

### Results

**Tab. 1** Objective results

Parameters	Before treatment	In 1 month	In 3 months
Frequency	$15,6 \pm 2,5$	$13,5 \pm 2,8$	$13,4 \pm 3,09$
Episodes of strong desire to void	$10,6 \pm 3,4$	$8,2 \pm 3,8$	$7,5 \pm 3,8$
Episodes of UUI	$2,4 \pm 1,4$	$1,3 \pm 1,6$	$1,2 \pm 1,06$

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

1. Abrams P, Cardozo L, Fall M, et al. The standardization of terminology of lower urinary tract function: report from the Standardization Sub-committee of the International Continence Society. *Neurourol Urodyn* 2002; 21:167-178
2. Irwin DE, Milsom I, Hunskaar S. et al. Population-Based Survey of Urinary Incontinence, Overactive Bladder, and Other Lower Urinary Tract Symptoms in Five Countries: Results of the EPIC Study. *Eur Urol* 2006;50:1306-15

### Disclosures

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