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**Introduction & Objectives:** The aim of this study was to compare the efficacy of two types of botulinum toxin A (onabotulinum and abobotulinum toxin) in treating patients with neurogenic detrusor overactivity refractory to anticholinergic medication.

**Materials & Methods:** A prospective, single center study was conducted between 2014 and 2017, which included 47 patients presenting with detrusor overactivity with an underlying neurological cause, non-responsive to anticholinergic medication. Twenty six of the patients received intradetrusor injections with 200U of onabotulinum toxin A and 21 patients were treated with abobotulinum toxin A 750U. Clinical and urodynamic parameters obtained were compared between the two groups.

**Results:** Data evaluation conducted at 12 weeks after the procedure revealed that the reflex volume, maximum detrusor pressure during the first involuntary contraction and bladder compliance were significantly improved compared to baseline (p value<0,05) for both groups. In terms of clinical outcomes, an important decrease of urinary incontinence episodes was obtained (p value<0,001) in both groups. The most common adverse event in both groups was urinary tract infection. The obtained results were similar for both study groups.

**Conclusions:** The efficacy of 200U of onabotulinum toxin A proved to be similar with 750U of abobotulinum toxin A in our study.