

INTRAVESICAL ONABOTULINUMTOXINA INJECTIONS IN PATIENTS WITH URINARY INCONTINENCE DUE TO NEUROGENIC DETRUSOR OVERACTIVITY

Hypothesis / aims of study

Many neurologic diseases predispose patients to neurogenic detrusor overactivity (NDO). First-line pharmacotherapy for NDO is an antimuscarinic drug. We evaluated patients, refractory or intolerant to oral antimuscarinics, before and after treatment with intradetrusor OnabotulinumtoxinA injection.

Study design, materials and methods

Between 01/2008 and 12/2012, 62 patients with NDO (24 women, 38 men: 47 patients affected by spinal cord injury (SCI), 10 by multiple sclerosis (MS), 3 by meningoencephalitis, 2 patients with neuromyelitis optica - Devic Syndrome) were examined by voiding diary, QoL questionnaires (IPSS QoL) and urodynamic testing. Before treatment urodynamic testing showed: detrusor overactivity with incontinence in all patients (mean DLPP 50,16 cmH₂O); voiding diary showed high daytime urinary frequency (mean 14/daily) and mean IPSSQoL 5. They were treated via cystoscopic detrusor injections of onabotulinumtoxinA 300 Units mixed with 20 ml of normal saline at the rate of 1 ml at each site for 20 sites sparing the trigone and ureteric orifices. Follow up at 12, 18 and 24 weeks.

Results Interpretation of results

The primary efficacy parameter appreciate was daily urinary incontinence frequency on 3-day voiding diary at week 12 that showed effective reduction in daytime frequency (from 14 to 7 voids per 24 hours). All patients became completely dry 12 weeks after treatment.

3 patients, with NDO due to MS, required self-catheterization de novo post treatment.

After 18 weeks: cystometric capacity increased from 170 to 300ml, DLPP decreased from 50,16 to 28,3 cmH₂O, IPSS QoL changed from 5 to 2. At 20 weeks 58% of patients took antimuscarinic drugs as support therapy for new increase of daily frequency; they were treated with a new injection of botulinum toxin after 24 weeks. Median interval between re-treatments was 7,47 months; mean number of treatment for patient: 2,13.

Concluding message

OnabotulinumtoxinA improves QoL for patients with neurogenic detrusor overactivity refractory to oral antimuscarinic. It shows decrease of detrusor pression during filling and reduce incontinence episodes. Patients treated with botulinum neurotoxin type A did not take, approximately for 4 months, support therapy antimuscarinic.

References

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Disclosures

Funding: PubMed **Clinical Trial:** No **Subjects:** NONE