

URODYNAMIC CONTROL AND THE ICE WATER TEST AT ONE MONTH AFTER THE TREATMENT PREDICT THE ADEQUACY OF RESPONSE WITH ONABOTULINUM TOXIN A IN PATIENTS WITH NEUROGENIC BLADDER.

Hypothesis / aims of study

: Though Onabotulinum toxin A has been shown to be effective in the management of neurogenic detrusor overactivity, but its effect is variable in different individuals and appears to be dose related. High preoperative detrusor pressures seem to correlate adversely with the likely response. No reliable parameters exist to predict the adequacy of detrusor relaxation after the treatment.

Study design, materials and methods

Records of thirty six spinal cord injured patients with suprasacral injury, who had been given intra-detrusor injection of Onabotulinum toxin A, 200 units were studied. Clinical profile, urodynamic studies and ice-water tests done at one, six and twelve months after the treatment were reviewed.

Results

All those patients who showed low storage detrusor pressure(<20cm. of water) and a negative ice water test at one month after treatment with onabotulinum toxinA, fared better and had longer effective control at one year. Those patients who showed incomplete suppression of detrusor overactivity and higher storage pressure or a positive ice water test at one month showed frequent leaks, less effective control and shorter lived response with a median effective time of 6.8 months.

Interpretation of results

Complete suppression of detrusor overactivity or a negative Ice-water test at one month after treatment with Onabotulinum toxin are good predictors of adequacy of response and indicate a longer (median time 11.8 months) effective time after the injection.

Concluding message

Degree of control and duration of efficacy following the treatment with Onabotulinum toxin can be predicted by the response at one month after the treatment.

References

1. J Urol. 2011 Jun;185(6):2229-35. doi: 10.1016/j.juro.2011.02.004. Epub 2011 Apr 16. Efficacy of botulinum toxin A injection for neurogenic detrusor overactivity and urinary incontinence: a randomized, double-blind trial. Herschorn S, Gajewski J, Ethans K, Corcos J, Carlson K, Bailly G, Bard R, Valiquette L, Baverstock R, Carr L, Radomski S.
2. Nat Rev Urol. 2010 Dec;7(12):661-7. doi: 10.1038/nrurol.2010.187. Repeat botulinum toxin-A injections for treatment of adult detrusor overactivity. Dowson C, Khan MS, Dasgupta P, Sahai A.

Disclosures

Funding: none **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** it was a retrospective review of the records of already treated patients. **Helsinki:** Yes **Informed Consent:** No