

OBSERVATIONS ON THE DIFFERENCES IN RESPONSE TO ICE WATER TEST AFTER TREATMENT WITH TOLTERODINE-ER AND ONABOTULINUM TOXIN A IN PATIENTS WITH NEUROGENIC BLADDER.

Hypothesis / aims of study

Though both Tolterodine-ER and Onabotulinum toxin A have been shown to be effective in the management of neurogenic detrusor overactivity, but whether they show equivalent efficacy especially in neutralising the response of the detrusor to Ice water is not known.

Study design, materials and methods

Records of thirty six spinal cord injured patients with suprasacral injury were evaluated. Eighteen patients who were taking Tolterodine-ER (8mg daily) and Eighteen, who had been given intra-detrusor injection of Onabotulinum toxin A 200 units) were studied. Urodynamic studies and Ice-water tests done at baseline and at one month were reviewed.

Results

Though it provided good subjective improvement (70%), Tolterodine-ER inhibited the neurogenic detrusor overactivity at slow fill rates in only 50 % and at rapid fill states in only 30% of cases. Oral drug treatment suppressed the Ice water test in only 30% of cases.

Onabotulinum toxin A demonstrated more complete subjective response (94%) and better suppression of neurogenic detrusor overactivity at slow fill rates (100%) as well as at rapid fill rates (90%). It also showed complete suppression of Ice water response (100%) in all cases.

Interpretation of results

Compared to Tolterodine, Onabotulinum toxin A provides comprehensive protection against neurogenic detrusor overactivity at rest as well during states of stimulation with Ice water test.

Concluding message

Appreciation of such differences in the level of protection may have bearing on the selection of primary treatment modality in the management of neurogenic detrusor overactivity.

References

1. Maedica (Buchar). 2012 Jun;7(2):125-30. The Place of the Ice Water Test (IWT) in the Evaluation of the Patients with Traumatic Spinal Cord Injury. Steanu ID, Albu SE, Persu C.

Disclosures

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