

VARIABILITY OF RESPONSE TO THE STANDARD DOSE OF 200 UNITS OF ONABOTULINUM TOXINA TREATMENT IN THE MANAGEMENT OF NEUROGENIC BLADDER AFTER SPINAL CORD INJURY: CLINICAL IMPLICATION

Hypothesis / aims of study

Duration of response following the intravesical injection of onabotulinum toxinA among the SCI patients with neurogenic detrusor overactivity (NDO) is quite variable. Variations in the magnitude of maximum detrusor pressure of NDO represent differing severity of NDO. Time to request for retreatment is an important indicator of the longevity of clinical response in a given patient.

We reviewed the relevance of the severity of pre-treatment NDO on the duration of response to the standard dose of onabotulinum toxinA treatment.

Study design, materials and methods

Records of 180 SCI patients receiving onabotulinum toxinA (200Units) for the control of their NDO were reviewed. Timing of their request for repeat onabotulinum toxinA injection treatment was noted. The pre-treatment UDS findings were correlated to the duration of effective clinical response.

Results

After the standard dose of onabotulinum toxinA (200 units), 50 patients with pre-treatment maximum detrusor pressure of NDO (of more than 80 cm. of water) tended to request for re-treatment significantly earlier at 148 days (range 120-174 days) compared to a mean of 240 days (range 210-282 days) for the 70 patients with the pre-treatment maximum NDO detrusor pressure between 40-80 cm. Sixty patients with maximum NDO detrusor pressure of less than 40 cm. had the longest duration of effective response with the time to retreatment request at 322 days(range 280-362 days).

Interpretation of results

Standard dose (200 units) of onabotulinum toxinA tends to remain effective for significantly much shorter duration in patients with higher pressures NDO with maximum detrusor pressure more than 80cm. of water as compared to those with lower pressure NDO.

Concluding message

Time to request for retreatment appears to be inversely proportional to the initial severity of neurogenic detrusor overactivity, as manifested by its maximum detrusor pressure. This may encourage reconsideration of differential dosing schedule among patients with varying severity of NDO, indicating possibly the need to use higher doses for more severe NDO.

Disclosures

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