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SWITCH FROM BOTOX TO DYSPORT AFTER FAILURE OF BOTOX INTRADETRUSOR INJECTIONS IN PATIENTS WITH NEUROGENIC DETRUSOR OVERACTIVITY : RESULTS OF THE SWIBODY STUDY

Hypothesis / aims of study

The aim was to evaluate the outcomes of botulinum toxin type A switch (from Botox[®] to Dysport[®]) in case of failure of intradetrusor injections (IDI) of Botox[®] in the treatment of neurogenic detrusor overactivity (NDO).

Study design, materials and methods

A retrospective multicenter study was conducted, collecting datas of patients with NDO refractory to anticholinergics who failed Botox[®] IDI (200 U or 300 U) and who underwent a switch to Dysport[®] IDI (500 U or 750 U or 1000 U). Failure of botulinum toxin injections was defined as persistent urinary incontinence or detrusor overactivity 6 weeks after the injections. The main endpoints were urinary incontinence (assessed through bladder diary), the Qualiveen score and 3 urodynamic parameters: maximum cystometric capacity (MCC), maximum detrusor pressure (PDET max), persistence/resolution of detrusor overactivity and volume at first uninhibited contraction (UC). Data were compared before and after treatment with Botox[®] and Dysport[®], using Stuar, Wilcoxon and T-paired tests for paired samples (significance level: p <0.05).

Results

In 6 centers, 57 patients were identified. Neurological conditions were mostly spinal cord injury (54.4 %), multiple sclerosis (12.3 %) and spinal dysraphism (10.5 %). 24.5% were primary non-responders to Botox[®] (failure or efficacy <3 months of the first injections). After the first injection of Dysport[®], no adverse events were reported. A significant decrease in daily leakage was observed for 52.63% of patients (p <0.0001) and resolution of detrusor overactivity was seen in 50.9 % of patients. The PDET max significantly decreased after toxin switch ($8.1 \pm 5,3$ cmH20 on average; p <0.003), while MCC significantly increased ($+ 41.2 \pm 35.2$ ml; p <0.02). Hence, 56.1% of patients draw clinical and/or urodynamic benefits from the switch of toxin. The efficacy of toxin switch was maintained after up to 9 reinjections. A third of patients (19/57) had undergone urinary diversion or bladder augmentation because of failure of the Dysport[®] injections at the end of the study period.

Interpretation of results

These results confirm in a large multicenter cohort the effectiveness of botulinum toxin switch in about a half of NDO patients who failed intradetrusor injections of Botox[®]

Concluding message

More than half of the patients refractory to Botox[®] (56.14%) draw clinical and/or urodynamic benefits from botulinum toxin switch (Botox[®] to Dysport[®])

Disclosures

Funding: none **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** locals ethics committees **Helsinki:** Yes **Informed Consent:** Yes