SWITCH FROM BOTOX TO DYSPORT AFTER FAILURE OF BOTOX INTRADERTRUSOR 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 data 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 Stuart, 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 ± 5.3 cmH20 on average; p <0.003), while MCC significantly increased (+ 41.2 ± 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