

## **TREATMENT OF DETRUSOR HYPERREFLEXIA WITH BOTULINUM TOXIN A ((DYSPOORT®))**

### **Aims of Study**

For the past few years, urinary incontinence in Detrusor hyperreflexia patients has been temporarily alleviated by injecting botulinum toxin A (BTX-A) transurethraly into the M. detrusor vesicae (1,2). In general, the product Botox® is injected at a dose of 300 mouse units (U). First reports using the BTX-A product Dysport® showed a lower response rate (1). This is possibly due to the use of dose-equivalents that were too low. In this study, the effect of a dose of 1000 U Dysport® was investigated.

### **Methods**

Between June 2000 and November 2001 thirteen Patients (3 women and 10 men) with urinary incontinence due to Detrusor hyperreflexia underwent a urodynamic examination. All the patients were taking high dose oral and/or transurethral anticholinergic medication. The underlying syndrome was spinal injury in 12 cases and multiple sclerosis in one case. The urodynamic examination was carried out under spinal or deep general anaesthesia. 1000 U Dysport dissolved in 20 ml saline were then injected into 40 different points (0.5 ml per injection) above the Trigonum using a flexible needle. The patients were followed up with clinical and urodynamic examinations. Five of the patients were treated a second time 6 to 13 months after the first injection.

### **Results**

The urodynamic examination showed reflex volumes between 50 and 350 ml and incontinence due to hyperreflexia at 110 to 400 ml filling volume under anticholinergic medication. No reflexia was seen under anaesthesia. The compliance was however below 15 ml/cm H<sub>2</sub>O in four cases. For these patients, continence was achieved for only 1 to 4 months after administration of Dysport®. For the other patients, continence was seen for 5 to 14 months. The effect of the second injection was no shorter than that of the first. No side-effects of the drug were observed.

### **Conclusions**

Our first experience with a small number of patients suggests that the injection of 1000 U of Dysport® (2 vials) can give a similar period of continence to that reported in the literature (1,2) after the injection of 300 U Botox® (3 vials).

### **References**

1. Schurch, B., Stöhrer, M., Kramer, G., Schmid, D.M., Gaul, G., Hauri, D.: Botulinum-A toxin for treatment detrusor hyperreflexia in spinal cord injured patients: a new alternative to anticholinergic drugs? Preliminary results. J Urol 2000, 164 (1): 692-7
2. Schurch, B., Schmid, D.M., Stöhrer, M.: Treatment of neurogenic incontinence with botulinum toxin A. N Engl J Med, 2000 Mar 2; 342(9):665