

## LONG TERM EFFICACY OF INTRA-DETRUSOR ABOBOTULINUMTOXIN-A (DYSPORT®) INJECTION, ON URODYNAMIC PARAMETERS OF PATIENTS WITH NEUROGENIC BLADDER DYSFUNCTION.

### Hypothesis / aims of study

We studied the long term efficacy of repeated intra-detrusor Dysport® (IDD) injection on urodynamic parameters in patients with neurogenic bladder dysfunction (NBD).

### Study design, materials and methods

This was a retrospective study of 51 patients, who had 3 or more IDD injections for treatment for NBD between 2004 - 2011. There were 33 males patients. The mean age was 45 years (range 17-84). The male to female ratio was 1.8:1.

Thirty-seven patients were managing the bladder by intermittent self catheterization, 9 had a suprapubic catheter, 3 patients had an indwelling catheter whilst 2 patients were voiding by tapping.

All patients had prior documented NBD on video-urodynamics (VCMG) secondary to either spinal cord injury/spinal cord deformity/spinal degenerative disease. They were followed with repeat VCMG at variable intervals to monitor their bladder functions.

The repeat injection of IDD was administered when the patient's symptoms reappeared.

The VCMG results before the first injection of IDD were compared with the urodynamic results after the last injection. The intervals between the IDD injections were also analyzed.

### Results

All the patients were operated as day case and none required prolonged stay for any intra or post operative problems. The mean interval between the any two IDD was 13.19 months (range 3-26). The mean interval between an injection and urodynamic study was 7.39 months (range 2-21). The mean number of IDD was 3.94 (range 3-10) and the mean dose of abobotulinumtoxin-A was 868.62 units (range 500-1000).

### Interpretation of results

The VCMG comparison revealed that mean maximum detrusor pressure (MDP) decreased by 19.10cm.of H<sub>2</sub>O (-35.29%), from 54.11cm of H<sub>2</sub>O (range 7-123) to 35.01cm.of H<sub>2</sub>O (range 2-111). This was statistically significant (p value 0.002).

The mean increase in maximum cystometric capacity (MCC) was 40.27cc (15.84%) from 213.17cc. (range 39-514) to 254.1cc (range 31-515). However, this was not statistically significant (p value 0.11). There was no change in the bladder management after repeated injections of IDD.

### Concluding message

We conclude that repeated injections IDD in patients with NBD is safe and efficacious over the longer term. The benefits are sustained over a prolonged period as demonstrated on VCMG.

### Disclosures

**Funding:** None **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** It is an established procedure for this condition.

**Helsinki:** Yes **Informed Consent:** Yes