

THE EFFECT OF INTRA-DETRUSOR DYSPORT® (ABOBOTULINUMTOXIN-A) INJECTION ON PATIENTS WITH SPINAL CORD INJURY AND LONG TERM SUPRAPUBIC CATHETER

Hypothesis / aims of study

We studied the effect of intra-detrusor dysport (I.D.D) injection on patients with spinal cord injury and long term suprapubic catheter (SPC), who had neurogenic bladder dysfunction (NBD) with urinary incontinence.

Study design, materials and methods

In this retrospective study of 30 patients of spinal cord injury on long term suprapubic catheter with urinary incontinence secondary to neurogenic detrusor over activity (NDO)/ loss of compliance (LOC) despite maximum dose of anticholinergic medication & were treated with I.D.D. injection to control their symptoms of urinary incontinence.

In this study 18 patients were male and mean age of the patients was 51.53 years (range 17-86). Male to female ratio was 1.5:1. All patients had prior documented NDO/ (LOC) on video-urodynamics (VCMG) secondary to either spinal cord injury /spinal cord deformity/spinal degenerative disease. They were followed up with repeat urodynamic study at variable intervals to monitor their bladder functions. The results of VCMG done before the first I.D.D. injection were compared with the one after their last I.D.D. injection.

Results

All patients were operated as day case & no patient had any intra or post operative complications. All the 30 patients reported improvement in their symptom of urinary incontinence after the I.D.D. injections. The mean time interval between I.D.D. injection & urodynamic study was 8.88 months (range 4-18). The average dosage of dysport was 896.55 I.U. (range 500-1000).

The VCMG results comparison revealed that mean maximum detrusor pressure (MDP) increased by 4.23 cm of H₂O i.e. from 32.31 cm of H₂O (range 7-87) to

36.89 cm of H₂O (range 6-95). This was statistically not significant (p value 0.439).

The mean decrease in maximum cystometric capacity (MCC) was 2.16 cc i.e. from 170.93 cc (range 43-395) to 168.68 cc (range 31-438). However, this was not statistically significant (p value 0.939). The bladder management of all the patients remained unchanged after I.D.D. injection.

Interpretation of results

We conclude that I.D.D. injections is beneficial in controlling symptoms of urinary incontinence secondary to NDO/LOC, in patients with spinal cord injury with long term SPC, despite maximum dose of anticholinergic medication, but it does not result in significant changes in VCMG findings

Concluding message

I.D.D. injections is beneficial in controlling symptoms of urinary incontinence secondary to NDO/LOC, in patients with spinal cord injury with long term SPC.

Disclosures

Funding: Nil **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Royal National Orthopaedic hospital **Helsinki:** Yes **Informed Consent:** Yes