

BOTULINUM TYPE A INJECTIONS INTO THE DETRUSOR IN SPINAL CORD INJURED PATIENTS

Hypothesis / aims of study

To evaluate the effects of intravesical injection of 300 U of botulinum toxin A (BTX-A) on use of oral rescue medication, bladder compliance, continence and subjective well-being in patients with neurogenic detrusor overactivity.

Study design, materials and methods

Randomized, placebo-controlled, double-blind study. A total of 30 patients with urinary incontinence due to spinal cord injury, were randomized to intravesical injections of either 300 U of BTX-A or placebo (saline solution % 0,9 NaCl) with 18 patients and 12 patients respectively. Intake of tolterodine and episodes of urinary leakage were noted daily. Cystometry was performed after 6, 12 and 24 weeks and quality of life was assessed.

Results

Patients in the BTX-A group had a significantly lower intake of tolterodine throughout the study compared to those in the placebo group ($p=0.003$). Cystometric capacity was significantly higher at 6 ($p<0.001$) and 12 weeks ($p=0.026$) and maximum detrusor pressure and frequency of urinary leakage were significantly ($p<0.01$) lower during follow-up in the BTX-A group compared to the placebo group. In addition, subjective well-being parameters were significantly improved in the BTX-A group compared to the placebo group.

Interpretation of results

Intravesical injections of 300 U of BTX-A was shown to be an effective treatment that reduce the need for oral medication, decrease high detrusor pressure and decrease the frequency of urinary leakages during the overall study period of 24 weeks. Quality of life was also significantly improved.

Concluding message

Botulinum toxin injection into the detrusor is a useful method to improve quality of life and reduce oral medication.

Disclosures

Funding: no **Clinical Trial:** Yes **Public Registry:** No **RCT:** Yes **Subjects:** HUMAN **Ethics Committee:** gulhane deneyssel arastirmalar etik komitesi **Helsinki:** Yes **Informed Consent:** Yes