

## EFFECT OF TAMSULOSIN HYDROCHLORIDE WITH PROLONGATED RELEASE ON NEUROGENIC LOWER URINARY TRACT DYSFUNCTION

### Hypothesis / aims of study

The therapeutic role of alfa-blokera in the treatment of voiding disorders due to benign prostatic hypertrophy is known and extensively examined. Currently, the alfa-blokera are used in voiding dysfunction in patients with central nervous system deteriorations with developed neurogenic bladder.

We evaluated the efficacy of tamsulosin hydrochloride, which has prolonged release in patients with neurogenic lower urinary tract dysfunction secondary to damage of central nervous system due to different reasons.

### Study design, materials and methods

Thirty-four patients (22 boys and 12 girls) ranging from 4 to 17 years of age (mean age 12 years) with neurogenic bladder and using tamsulosin were analyzed. Urodynamic studies including cystometry and uroflowmetry with evaluation of post voiding residual urine in ultrasound scan were performed in all patients.

### Results

In uroflowmetry, the bladder voiding volume (29 patients), residual urine rate (33 patients) and maximum flow rate (20 patients) improved significantly. In cystometry, we observed decreased LPP in 8 patients and spontaneous decrease of overactive contractions in two children. In five patients overactivity of detrusor was resolved after using anticholinergic agents additionally.

Nine children required clean intermittent catheterization, but this changed during treatment with tamsulosin. Only one of them required emptying of the bladder after each micturition by catheterization.

### Interpretation of results

This management improves bladder voiding volume and emptying of the bladder due to reduced urethral resistance during voiding.

### Concluding message

Long term treatment with tamsulosin hydrochloride is well-tolerated and effective in patients with neurogenic lower urinary tract dysfunction.

### Disclosures

**Funding:** No any funding or grant **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** Because alfa-blokera agents are in pediatric fields not only in neurogenic patients, but also in children after treatment posterior urethral valves and in patients with dysfunctional voiding **Helsinki:** Yes **Informed Consent:** No