

BLADDER NECK HYPERTROPHY IN BOYS WITH POSTERIOR URETHRAL VALVES – THERAPEUTIC MANAGEMENT

Hypothesis / aims of study

Abnormal function of hypertrophic bladder neck after incision of posterior urethral valves has influence on persistent infravesical obstruction with residual urine and deterioration of upper urinary tract. The authors evaluated results of transurethral electroresection of bladder neck as optimal management in cases with poor compliance on treatment with alpha-receptor blocking agents after posterior urethral valves incision

Study design, materials and methods

Until 2005 were treated 1970 boys with posterior urethral valves aged from newborn period to fourteen.

In 431 boys during endoscopic evaluation of urethra and bladder with incision of cold knife of urethral valves, bladder neck hypertrophy was diagnosed. In two children hypertrophy of the bladder neck made cystoscope impossible to be introduced into bladder. In these cases electroresection of the bladder neck simultaneously with incision of urethral valves was performed.

Remaining 429 boys were treated with alpha blocker agents as additional management to incision of posterior urethral valves. In 31 boys out of 429 children treated with alpha blocker agents, the large residual urine was observed, as well as recurrent urinary tract infections and deterioration of the upper urinary tract. In these children, urodynamic studies showed overactive bladder and high micturition pressure. In these 31 patients with poor compliance on alpha blocker agents therapy, the transurethral electroresection of the bladder neck was applied.

Results

First evaluation of residual urine, upper urinary tract examination and urodynamic study was performed after one month following the endosurgery in all boys with transurethral electroresection of the bladder neck. The next examination was applied after six months and one year from endoscopic treatment.

In 31 patients improvement of upper urinary tract and in 32 boys decrease of bladder pressure were observed. In one out of two without improvement of upper urinary tract performed incontinent urinary diversion. We did not observe residual urine in 26 boys, in other 4 residual urine decreased, but in three, residual urine did not change. In these cases additionally alpha blockers agents were used and in consequence, the decrease of residual urine was observed.

Concluding message

1. Removal of bladder neck obstruction allows not only to improve the function of the bladder but also of the upper urinary tract. This management also allows to achieve good results during urological operations.
2. Persistent bladder neck obstruction in spite of pharmacological treatment using alpha blocker agents should be removed by transurethral resection of the bladder neck.

Disclosures

Funding: without funding or grant **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics not Req'd:** retrospective study providing according to our clinical standard in treatment of patients with posterior urethral valves **Helsinki:** Yes **Informed Consent:** Yes