

THE POSSIBILITIES OF USE OF ALPHA1-ADRENOBLOCKERS FOR TREATMENT OF FUNCTIONAL BLADDER OUTLET OBSTRUCTION IN WOMEN.

Aims of Study

Alpha1-adrenoblockers are commonly used to treat LUTS suggestive of BPH in men. It's well known that LUTS are also usual in females. The true prevalence of bladder outlet obstruction (BOO) in women is unknown. Multiple reviews of women presenting to urogynecologists or urologists with LUTS revealed that 2.7%-30% demonstrated obstructive voiding by various urodynamic criteria [1-5]. Based on the analysis of 3000 urodynamic studies we performed in women with voiding disorders, about 15% showed functional BOO. So we tried to investigate the possibilities of use of alpha1-adrenoblockers for treatment of functional BOO in women. Several studies confirmed the presence of alpha1-adrenoreceptors in spinal cord, bladder neck, urethra and periurethral tissue in women – so-called “female prostate” [6-7]. Therefore we have got grounds to hope on effectiveness of alpha1-blockers for treatment of functional BOO in women.

Methods

118 females (mean age 36,5 years, range 18-65) with functional BOO took terazosin course after clinical and urodynamic examination. Primary condition and final results were evaluated by three-days micturition diary, IPSS, uroflowmetry with pelvic floor EMG and cystometry at the beginning and the end of the study. So, the patients were divided into three groups: 42 - detrusor-sphincter dyssynergia (35,6%), 17 – primary BOO (14,4%), 59 – learned voiding dysfunction (dysfunctional voiding - 50%). 39 females (33%) had “dry” urgency (micturition diaries, cystometry). Patients with urethral stricture, pelvic organ prolapse, detrusor hypotonia or bacteriuria were excluded. The initial dose of terazosin was 1 mg/day (3 days), then it was increased to 2 mg/day (1 week) and finally to 5 mg/day. The treatment course lasted 12 weeks.

Results

All patients were satisfied with the results of the treatment. We noticed the statistically significant increasing of maximum flow rate (55,4%), decreasing of delay time (48,9%) and nocturia episodes (52,9%). The changes of IPSS score were not significant. The normalisation of uroflowmetry curve forms were observed in patients majority. 25 of 39 females (64,1%) with “dry” urgency showed significant clinical and urodynamical improvement. 12% of patients had stress incontinence episodes at the dose of 5 mg/day terazosin. This group was not incontinent before. That is why the dose was decreased to 2 mg, but in such cases effectiveness was still significant.

Conclusions

Functional BOO in women seems to be common problem. About 15% of females with voiding disorders have functional BOO. Alpha1-adrenoblockers in low doses may be effective in women with dysfunctional voiding in case of careful and comprehensive evaluation of functional BOO.

References

1. Groutz, A., Blaivas, J.G., Chaikin, D.C. // *Neurourol Urodyn* 2000, 19: 213-20.
2. Rees, D.L.P., Whitfield, H.N., Islam, A.K.M.S. et al // *Br J Urol* 1976, 47: 853-60.
3. Farrar, D.J., Osborne, J.L., Stephenson, T.P. et al. // *Br J Urol* 1976, 47: 815-22.
4. Massey, J.A., Abrams, P.H. // *Br J Urol* 1988, 61: 36-9.
5. Stanton, S.L., Ozsoy, C., Hilton, P.// *Obstet Gynecol* 1983, 61: 144-7.
6. Takahashi H. et al. // *Neurourol Urodyn* 1996, 15: 342-43.
7. Zaviachich M. // *Eur Urol* 2000, 37, S2: 281.