

EFFICACY AND SAFETY OF DESMOPRESSIN ADD-ON THERAPY FOR PERSISTENT NOCTURIA IN MEN PREVIOUSLY TREATED WITH ALPHA BLOCKER FOR LOWER URINARY TRACT SYMPTOMS

Hypothesis / aims of study

Alpha blockers improve lower urinary tract symptoms (LUTS) in men with BPH. However, nocturia, one of the storage symptoms does not respond well to alpha blockers, because the pathophysiology of nocturia is multifactorial and complex. We evaluated the efficacy and safety of desmopressin add-on therapy for persistent nocturia in men previously treated with alpha blocker for LUTS.

Study design, materials and methods

Eligible patients were men with LUTS older than 50 years with nocturia (≥ 2 voids/night) and total International Prostate Symptom Score (IPSS) of 14 or higher (voiding subscore of 8 or higher and storage subscore of 6 or higher) despite of alpha blocker treatment for at least 4 weeks. All patients received 0.1 mg desmopressin orally at bedtime. Patients were required to visit the outpatient clinic from the first visit, and after 4, 12, and 24 weeks. The optimum dose of oral desmopressin was determined during a 4 week dose-titration period and the determined dose was maintained. Flow volume charts and diaries were used to record voiding data throughout the study. During follow-up, total IPSS and IPSS subscore (voiding and storage), quality of life, uroflowmetry and post-void residual urine volume were performed at each visit.

Results

A total of 215 patients were enrolled in the study and the mean number of nocturnal voids decreased significantly compared with baseline (2.3 to 1.8, $p < 0.0001$). IPSS total, subscores and quality of life significantly decreased at 4 weeks and were maintained for 24 weeks. In younger patients in the age category of under 65 years, IPSS voiding subscores were more significantly improved at 24 weeks compared to those in the category of 65 years or over ($p < 0.005$).

Interpretation of results

Desmopressin add-on therapy for persistent nocturia in men previously treated with alpha blocker for LUTS improved voiding symptoms as well as storage symptoms including nocturia, and improvement of voiding symptoms is more significant in young age.

Concluding message

Our results suggest that desmopressin add-on therapy is effective for persistent nocturia in men previously treated with alpha blocker for LUTS.

Disclosures

Funding: none **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** KCMC IRB Helsinki: Yes **Informed Consent:** Yes