Ghoreifi A¹, Taghavi R¹, Alborz H¹ 1. Imam Reza hospital, Urology Department

THE EFFECT OF ORAL DESMOPRESSIN FOR TREATMENT OF NOCTURIA IN BENIGN PROSTATIC HYPERPLASIA (BPH)

Hypothesis / aims of study

Nocturia is a common symptom of benign prostatic hyperplasia (BPH). It may be treated with alpha blockers and 5 alpha reductase inhibitors, but in some patients, nocturia remains as a bothering problem. The aim of this study is to evaluate the short term and long term effects of oral desmopressin (as Minirin Melt) in treatment of nocturia due to BPH.

Study design, materials and methods

50 adult men with BPH and bothering nocturia (≥2voids / night) who their nocturia did not respond to alpha blockers were treated with oral desmopressin at bedtime. Exclusion criteria included active urinary tract infection, history of myocardial infarction, congestive heart failure, angina and hyponatremia. Patients received desmopressin (as Minirin Melt) during a three week dose titration period and after one week washout period the effective drug dose continued for 1 year. Clinical responses in patients were evaluated after 6 to 8 weeks and 1 year.

Results

The mean age of patients was 65.5 ± 6.3 years. All patients improved with this treatment. Nocturia episodes decreased from a mean of 4 ± 0.45 episodes/ night before treatment to 1.4 ± 0.3 episodes/ night after treatment (P< 0.0001). Hyponatremia did not occur in short term but in long term follow up, hyponatremia occurred in two patients.

Interpretation of results

Oral desmopressin may be an effective and well tolerated treatment for patients with BPH and bothering nocturia. Long-term desmopressin therapy gradually decreases serum sodium and it might induce hyponatremia even in patients without initial hyponatremia. For long-term desmopressin administration serum sodium should be assessed carefully.

Concluding message

Oral desmopressin provide an effective and well tolerated treatment for nocturia due to BPH.

Disclosures

Funding: the authors declare no conflict of interest Clinical Trial: No Subjects: HUMAN Ethics Committee: Ethic Committee of Mashhad university of medical sciences Helsinki: Yes Informed Consent: Yes