

Low Dose Oral Desmopressin in Treatment of Nocturia in Elderly Men

Introduction and Objective: To investigate the efficacy and safety of lowest dose of oral desmopressin in treatment of nocturia in elderly men.

Materials and Methods: There were 60 old men referred to urology clinic of Beijing Tongren Hospital from 2009-2010 for treatment of nocturia included in a randomized controlled study. Patients were randomly divided into 2 groups (30 patients in each group). Care was taken to match the patients of the two groups by age and clinical criteria. They complained of about 2 voids or more per night. Control group (n = 30) received liquid restriction during nighttime and patients of Experimental group (n = 30) received 0.1 mg desmopressin at bed time for 8 weeks. Patients were assessed after 4 and 8 weeks of treatment. All patients were evaluated by nocturia cure rate, mean number of nocturia, mean duration of the first period and sleep quality.

Results: After 4 weeks of treatment with desmopressin, 17 patients (56.7%) had less than 2 voids, 13 patients (43.3%) had ≥ 2 voids per night ($p < 0.05$). After 8 weeks, 22 patients (73.3%) with desmopressin had less than 2 voids and only 8 patients (26.7%) had more than 2 voids per night ($p < 0.01$). After 8 weeks, mean number of nocturia before and after receiving desmopressin were 2.8 and 1.5 respectively which differed significantly ($p < 0.001$). Mean number of nocturia before and after in control group were 2.6 and 2.4 respectively with no significant difference ($p > 0.05$). The mean duration of the first sleep period increased by 60% (from 2.5 to 4h) in the desmopressin group, compared with an increase of 25% (from 2 to 2.5 h) in the placebo group ($p < 0.05$). There was 83.3% of patients in desmopressin group satisfied with sleep quality compared with only 30% of patients in control group who were satisfied.

Conclusion Low dose oral administration of desmopressin is an effective and well-tolerated treatment for nocturia in elderly men.