Efficacy of desmopressin in treatment of nocturia in elderly men

Author(s): Rezakhaniha, B (Rezakhaniha, Bijan); Arianpour, N (Arianpour, Nahid); Siroosbakhat, S (Siroosbakhat, Soheila)

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Abstract: BACKGROUND: Nocturia may be due to urological and non-urological diseases and some of the possible underlying non-urological diseases may be life-threatening. We investigated the efficacy and safety of lowest dose of oral desmopressin in treatment of nocturia in elderly men.

METHODS: 60 old men referring to urology clinic of Imam Reza hospital in Tehran, Iran from 2008-2009 for treatment of nocturia were included in a double-blind placebo-controlled study. Patients were randomly divided into 2 study groups (30 patients in each group). Care was taken to match the patients of the 2 groups by age and clinical criteria. They complained of about 2 voids per night. We divided the patients into 2 study groups. Patients belonging to group A (n = 30) received placebo and patients of group B (n = 30) received 0.1 mg desmopressin at bed time for 8 weeks. Patients were assessed after 4 and 8 weeks of treatment. The means were compared using paired sample t-test and chi-square test for time of nocturia before and after treatments and also between the two groups. ANOVA test was used for assessment of statistical differences between outcomes of the two groups.

RESULTS: Mean number of nocturia before and after receiving desmopressin were 2.6 and 1.6 respectively which differed significantly (p < 0.001). Mean number of nocturia before and after receiving placebo were 2.5 and 2.3 respectively with no significant difference (p = 0.344). After 4 weeks of treatment with desmopressin, 17 patients (56.7%) had less than 2 voids, 5 patients (16.7%) had 2 voids and 8 (26.7%) had more than 2 voids per night (p < 0.05). After 8 weeks, patients were evaluated and it was noticed that in group B, 4 patients (13.3%) had 2 voids, 24 (80%) had less than 2 voids and 2 patients (6.7%) had more than 2 voids per night (p = 0.004).

CONCLUSIONS: Oral administration of desmopressin is an effective and well-tolerated treatment for nocturia in elderly men.