

Evaluation of the Effect of Oral Desmopressin in Treatment of Nocturia in Patients with Benign Prostatic Hyperplasia

Introduction and Objectives: Nocturia, which commonly occurs with aging, could be due to different reasons. The most common causes are benign prostatic enlargement and reduced production (or emancipation) of nocturnal vasopressin, diabetes mellitus and increased fluid intake. Obstructive symptoms improve with the administration of alpha-blockers, and alpha reductase inhibitors, in many patients with urinary symptoms, but nocturia may continue to exist. The aim of this study is to evaluate the therapeutic effects of oral Desmopressin as such will be dealt with nocturia.

Materials and Method: This interventional descriptive study was done on 25 adult men suffering from nocturia after 3 month taking tamsulosin 0.4 mg daily for treatment of prostate enlargement. Treatment started with oral Desmopressin 0.2mg tablet every night used for 2 weeks. Data were collected before and after intervention. Possible side-effects of desmopressin on patients during treatment were screened. T test was used for statistical analysis.

Results: The count of nocturia decreased in 92% of patients after 2 weeks of intervention. The average rate of nocturia was 3.32 times before treatment and decreased to 1.56 times after intervention ($p=0.004$). Mean first voiding distance after night sleeping increased from 2.5 to 4.5 hours (rising of 43%) ($p<0.001$). Mean IPSS score of patients was 17.1, before intervention and declined to 15.3 after intervention. Total daily voiding count decreased 26% ($p<0.001$).

Conclusions: Oral tablet of Desmopressin is an effective agent for patients with benign prostatic enlargement who present with nocturia, after treatment of obstructive symptoms of benign prostatic hyperplasia. Such treatment in carefully selected patients is safe and effective.