

DESMOPRESSIN AND TOLTERODINE IN THE TREATMENT OF NOCTURIA AFTER TRANSURETHRAL RESECTION OF PROSTATE (TUR-P)

Hypothesis / aims of study

Despite significant decrease in the frequency of nocturia after TUR-P, it does not completely disappear. The present study compared the efficacy of desmopressin and tolterodine in the treatment of nocturia, which did not completely disappear after TUR-P.

Study design, materials and methods

Patients, who underwent TUR-P between 2009 and 2012, completed postoperative 6th month and presented to our clinic with 2 or more nocturia, were included in the study program. Patients were enabled to keep a micturition diary; number of nocturnal polyuria and nocturia was assessed. Uroflowmetry was performed. Sixty patients aged between 50 and 87 years, who had not nocturnal polyuria but 2 or more nocturia, maximum urinary flow rate over 15, no concomitant chronic disease, were included in the study. IPSS and QOL scores were obtained prior to and after the study, basic biochemical analyses were done. Urinary system was examined via ultrasonography and postvoiding residues were measured. Patients were divided into two groups; the 1st group received 60 mcg desmopressin and the 2nd group received 4 mg tolterodin. Serum sodium levels were measured on the 3rd and 15th days of treatment and the drug side effects were questioned. On the 30th day, number of nocturia, uroflowmetry, IPSS and QOL scores, and amount of postvoiding residue were measured.

Results

Four of the patients in the Desmopressin (1st) group were excluded from the study because of hyponatremia and headache, whereas the others conformed to the study. Results are summarized in Table 1.

Table 1

	Before Desmopresin	After Desmopresinden	Before Tolterodin	After Tolterodinden
IPSS	7.03±1.25	4.80±1.24	6.83±1.39	7.23±0.97
QOL	3 (2-4)	2 (1-3)	3 (2-3)	2 (1-3)
Number of nocturia	3.73±1.17	2.07±1.25	3.23±1.0	1.93±1.14
Residue Urine	34.6±15.44	22.90±10.67	38.76±14.95	62.23±24.15
Qmax	18.64±2.01	19.23±2.01	17.58±1.36	15.05±1.39

Concluding message

Although nocturia substantially decreases after TUR-P, it may be so persistent that require treatment. Despite higher side effects, Desmopressin was more effective than tolterodine in the treatment of nocturia that did not regress after TUR-P.

Disclosures

Funding: No **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Ethics Committee of Sakarya University, Medicine Faculty **Helsinki:** Yes **Informed Consent:** Yes