

Nocturia in Male Patients with Obstructive Sleep Apnea: Efficacy of Medication for Benign Prostatic Hypertrophy

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Abstract: Background and objectives: Nocturia, which is one of the symptoms in patients with benign prostatic hypertrophy (BPH), is also a well-known symptom in patients with obstructive sleep apnea (OSA). The prevalence of nocturia in OSA patients following nasal continuous positive airway pressure (nCPAP) treatment has not been investigated thoroughly, neither has the prevalence of BPH in OSA patients who need nCPAP treatment. Thus, the objective of this study was to investigate the overall prevalence of BPH that required treatment and the contribution of BPH or OSA to nocturia in OSA patients who needed nCPAP treatment.

Methods: Among 50 consecutive male patients with moderate to severe OSA over the age of 50 years who were treated by nCPAP treatment, 22 had been already examined by urologists. Therefore, 28 males with moderate to severe OSA were prospectively studied.

Results: NCPAP significantly decreased the number of nocturnal voids (2.4 ± 1.6 to 1.3 ± 1.0 , $p=0.0002$) in 28 patients. In 18 of 28 patients requiring medication for BPH even after nCPAP treatment, the treatment further significantly decreased the number of nocturnal voids (1.5 ± 1.0 to 0.9 ± 0.8 , $p=0.026$). Of the 22 patients seen by urologists before nCPAP, 12 had BPH requiring treatment. Thus, 30 of 50 patients (60%) had BPH requiring treatment.

Conclusions: BPH is prevalent in patients with moderate to severe OSA. Additional medication for BPH might be considered for the treatment of nocturia in them, when nCPAP is insufficient in treating their nocturia.

Key words : Obstructive sleep apnea, Benign prostatic hypertrophy, Nocturia, Nasal continuous positive airway pressure