

In Nephrology

Nocturia is a common symptom in older individuals (especially men) and may be associated with sleep disruption, poor quality of life, and falls at night. It generally arises in relation to reduced bladder capacity, increased nocturnal urine volume, or some combination of the two. Bladder causes include BPH, detrusor instability, and (less often) infection or tumor.

Nocturnal urine volume in healthy individuals is much less than daytime output owing to decreased meal-related solute at night and a natural increase in vasopressin (antidiuretic hormone). This circadian increase in nocturnal antidiuretic hormone is blunted in elderly individuals and is one of many factors predisposing them to nocturia. Specific diseases may also increase nocturnal urine volume, including diabetes mellitus, congestive heart failure, renal disease, and hypercalcemia.

More recently, OSA has been strongly linked to nocturia, which may occur in as many as 50% of patients with OSA. Levels of atrial natriuretic factor (ANF) have been documented to be significantly elevated in patients with OSA, and this is thought to be the mechanism of the nocturia. (CPAP) therapy has been shown to improve nocturia in concert with reducing the levels of ANF. Nocturia is a common symptom in OSA and is substantially improved after initiation of CPAP therapy.

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