Nocturia: Why do People Void at Night?

Blaivas J¹, Hirsch Z M², Weiss JP³, Weinberger J M⁴, Kashan M⁵
1. Weil Cornell Medical College of Cornell University, 2. Institute for Bladder and Prostate Research, 3. SUNY Downstate College of Medicine, 4. University of California, Los Angeles

Hypothesis/ Aims of Study

• There are two reasons patients have nocturia – they are awakened by an urge to void or they awaken for some other reason and then void before going back to sleep.
• The aim of this study is to determine the relative contribution of each type of night-time void.

Study Design/ Materials and Methods

• This is a retrospective review of patients who completed the Lower Urinary Tact Symptom Score (LUTSS) and a 24-hour bladder diary (24H BD) on a mobile app (Figure 1) or website.
• Each nocturnal void was designated primary or secondary nocturia:
  • **Primary nocturia** – patient was awakened by an urge to void; subdivided based on the Urge Perception Score (UPS) into:
    • urgency voids: severe urge or desperate urge (UPS = 3 or 4)
    • non-urgency voids: no urge, mild or moderate urge (UPS = 1 or 2).
  • **Secondary nocturia** - patient was awakened by something else and then voided (UPS = 0).

Results

• 594 patients (204 women, 390 men) ages 12-99 (average 64, SD 18) completed 1,586 bladder diaries.
• 264 diaries were excluded leaving 1,321 diaries for analysis.
• 14,234 voids of which 3,014 (21%) were night-time voids.
• 109 excluded due to missing data leaving 2,905 nocturia voids (Figure 1).
• 846 female voids (29%) and 2,059 male voids (71%) (Figure 2).

Interpretation of Results/ Concluding Message

• Primary nocturia was seen in 92% of patients (patient is awakened by an urge to void).
• Secondary nocturia was seen in 8% (patient was awakened by something other than an urge to void).
• Primary nocturia requires a diagnostic and therapeutic approach directed at the lower urinary tract.
• Secondary nocturia is likely to be a sleep disorder requiring a different evaluation and treatment program.

Disclosure Statement

Dr. Blaivas is co-founder of Symptelligence Medical Informatics, LLC.