

Consequences of Comorbid Insomnia Symptoms and Sleep-Related Breathing Disorder in Elderly Subjects

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Background The prevalence of sleep-related breathing disorder (SRBD) and insomnia symptoms increases considerably with advancing age, but little is known about their cooccurrence and their effects on daytime functioning when present together.

Methods Older adults with (*cases*, n = 99) and without (*controls*, n = 100) symptoms of insomnia underwent 2 nights of in-laboratory polysomnography, daytime nap, and neurobehavioral testing and completed study questionnaires. Predictors of SRBD were identified (apnea-hypopnea index [indicating number of events per hour], ≥ 15). Participants were divided into 4 groups—with and without insomnia and with and without SRBD—and the groups were compared on measures of daytime functioning.

Results Cases had a lower rate of SRBD (29.3%) than controls (38.0%). Body mass index (calculated as weight in kilograms divided by height in meters squared) of 30 or higher, neck circumference greater than 15.5 inches, and a history of "loud snoring" or "stops breathing, chokes, or struggles for breath" were independently predictive of SRBD in participants with insomnia symptoms. Having both insomnia symptoms and SRBD was associated with significantly lower daytime functioning and longer psychomotor reaction times compared with having neither condition.

Conclusion Because insomnia comorbid with SRBD is associated with the greatest functional impairment, and SRBD is commonly found in the elderly population, health care providers should also consider SRBD in elderly patients with insomnia symptoms.

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