Objectives: Narcolepsy and sleep-related breathing disorders are both associated with excessive daytime sleepiness (EDS) and may coexist in the same patient. However, the frequency and clinical significance of this association remain unclear. The presence of obstructive sleep apnea (OSA) in a patient with narcolepsy may complicate the diagnosis of narcolepsy. This study aimed to determine the prevalence of sleep-related breathing disorders in patients with type 2 narcolepsy (NT2).

Methods: Eight patients with NT2 (four female) underwent nocturnal polysomnography (PSG) and the Multiple Sleep Latency Test (MSLT). According to pediatric and adult criteria, comorbid OSA was defined as an obstructive apnea-hypopnea index (AHI) ≥ 1 or ≥ 5 , respectively, including obstructive and mixed events.

Results: The mean age of the patients was 21.88 ± 14.89 years, with a mean body mass index (BMI) of 23.45 ± 4.09 . One patient (12.5%) was diagnosed with severe obstructive sleep apnea (OSA), six patients (75%) exhibited snoring, and one patient (12.5%) had no sleep-related breathing disorder. The mean scores were 23.45 ± 4.09 on the Epworth Sleepiness Scale (ESS), 5.58 ± 0.90 on the Fatigue Severity Scale (FSS), and 7.25 ± 2.49 on the Pittsburgh Sleep Quality Index (PSQI). The mean snore index was 139.20 ± 212.68 , and the mean apnea-hypopnea index (AHI) was 4.44 ± 11.83 . Body weight and BMI showed a significant positive correlation with both the snore index and AHI, but a significant negative correlation with average oxygen saturation (P<0.05 or P<0.01).

Conclusions: Sleep-related breathing disorders, including OSA and snoring, are common in NT2 and may delay the diagnosis of narcolepsy and interfere with its management. Addressing both narcolepsy and sleep-related breathing disorders is crucial for improving EDS and enhancing patients' quality of life.

中文題目:第2型猝睡症患者的睡眠相關呼吸障礙

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