

BOARD REVIEW CORNER

Sleep Talking and Noisy Grinding

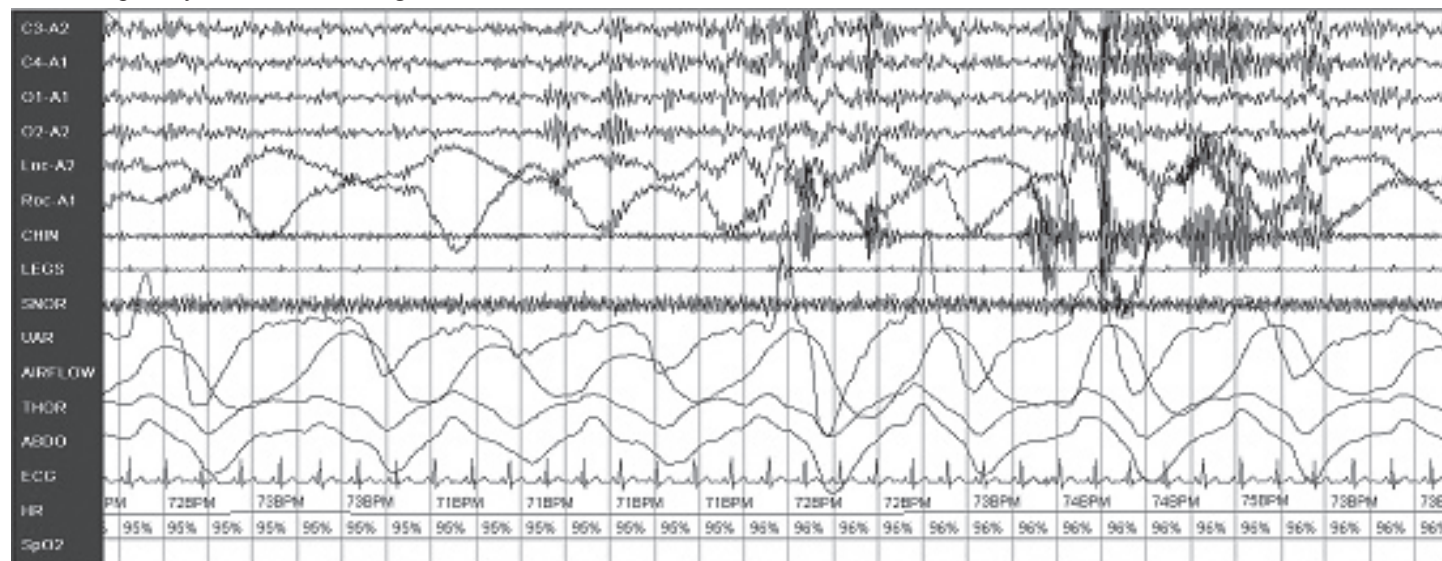
John D. Roehrs, M.D.

Pulmonary and Critical Care Medicine Section, Carl T. Hayden VA Medical Center, Phoenix, AZ

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A 23-year-old male presents to the sleep center with a 6-month history of sleep talking. It disrupts the sleep of his spouse and apparently occurs several times per week. She indicates that the talking is disruptive with occasional insulting remarks. She occasionally hears grinding noises along with the talking during sleep. The patient has no recollection of these events. They have become more frequent since a recent job change. Four years ago, he was started on dextroamphetamine for attention deficit hyperactivity disorder (ADHD) manifesting as inattentiveness. However, he has not used the medication for one year and has had no recurrence of his symptoms of inattentiveness. Additional sleep history reveals daytime fatigue but no snoring or observed apneas. His time in bed is between 8 and 9 hours and he falls asleep within 5 minutes. The Epworth score was 16/24. The physical examination was unremarkable for any pathology. His BMI is 20 and his Mallampati Score is 1. He is on no medication at this time and denies use of illicit drugs or alcohol.

A characteristic recording which was representative of his nocturnal sleep study is shown in the Figure:



Based on the clinical history and PSG finding, which of the following would be the best next action?

- A. Referral to the behavioral health service for a psychiatric consultation.
- B. Order a sleep-deprived EEG.
- C. Schedule an appointment with an orthodontist.
- D. A trial of clonazepam.

Disclosure Statement

Dr. Roehrs has indicated no financial conflict of interest.

Address correspondence to: John D. Roehrs, M.D., 11684 North 83rd Place, Scottsdale, AZ 85260; Tel: (480) 778-1848; Fax: (480) 778-1972; E-mail: jdroehrs@yahoo.com

Answer: C

The illustration presented suggests that bruxism is related to this patient's clinical symptoms. Sleep bruxism generally presents with orofacial pain, jaw dysfunction, headache, and tooth destruction. Psychosocial factors, especially anxiety and stress, may be associated with the disorder.¹⁻³ One recent epidemiologic study found that bruxism occurred in 4.4% of the study population.²

Answer A would not be the next recommended action, as this therapy may not give immediate relief of the symptoms. However, a behavioral health referral may be needed to complete the evaluation and treatment for his bruxism.

The patient had no past history of seizures, and the clinical presentation was not suggestive of a seizure disorder; thus the EEG would likely not be helpful (Answer B).

Because there is no specific cure for bruxism, it is important to manage the consequences of the disorder. Referral for device fitting to mitigate the damage to the teeth would be the most important next step in his care (Answer C). Furthermore, one recent study documented significant improvement in the clinical symptoms with the application of dental splints. In this study, the devices reduced the number of sleep bruxism/rhythmic masticatory muscle activity episodes.⁴

Clearly pharmacotherapy may play a role in the treatment of bruxism, as suggested in Answer D. Many medications have been tried and some have achieved some positive effect on the symptoms of bruxism.³ A recent study showed significant improvement in the number of bruxing episodes with clonazepam.⁵ Buspirone and methocarbamol have also shown efficacy. Most of these studies, however, involved small numbers of patients, and use of them is recommended only for short term use and not chronic treatment.⁶ This patient's history included sleep talking which has been associated with bruxism and could respond to pharmacologic intervention as well.

Bruxism is classified into awake-time bruxism and sleep-time bruxism (Table). The disorder is further divided into primary, or idiopathic, and secondary bruxism due to a medical or psychiatric condition. Medication administration or withdrawal from medication (e.g., amphetamines) has been associated with sleep bruxism. This patient had been on dextroamphetamine for his presumed ADHD. However he had not taken it for a year, thus decreasing the likelihood of a medication withdrawal. Bruxism has not been found to have any correlation with psychiatric illness. In addition, rigorous evidence is lacking to support the notion that sleep bruxism is an anxiety related disorder.¹

Table 1—Classification of Bruxism*

Awake time bruxism: tooth clenching/tapping, jaw bracing without tooth contact (grinding is rarely noted during the daytime)
Sleep time bruxism: tooth grinding with phasic (rhythmic) and/or tonic (sustained) or mixed (both types) jaw muscle contractions
Primary and/or idiopathic: without known medical or dental causes but could be associated with exacerbating psychosocial factors in some patients
Secondary: associated with a medical/psychiatric condition (could also be iatrogenic)
Iatrogenic: following drug intake or withdrawal

*adapted from Kryger et al⁶

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