Sleep disorders in clinical practice

A wake-up call for neurologists

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I am honored to serve as curator for a special series focusing on sleep disorders in this issue of *Neurology® Clinical Practice*. Neurologists in every subspecialty are increasingly asked to participate in the evaluation and management of sleep disturbances and also to provide a prognostic opinion on the implications of having a specific sleep disorder. It is incumbent upon neurologists to become familiar with the tools available in the evaluation and management of these disorders, despite the fact that some of us traditionally have not received formal and consistent sleep medicine training during postgraduate medical education.

Distinguished neurologists in the field of sleep medicine have contributed their expertise and practical real-world advice to this series. Molano and Vaughn focus on the challenge of managing insomnia in patients with dementia. Left untreated, patients with insomnia have a reduced quality of life, increase the burden on caregivers, and may even be at increased risk for falls. Some patients may medicate themselves with substances like alcohol or over-the-counter medications such as diphenhydramine-containing compounds, which can have considerable side effects in the elderly. Many patients with dementia have other comorbidities, including nocturia, sleep apnea, REM sleep behavior disorder (RBD), periodic leg movements of sleep, and Willis-Ekbom disease. A referral for a diagnostic polysomnogram is often useful when insomnia is refractory or when the clinical history reveals pauses in breathing or abnormal movements.

As the population ages, neurologists will undoubtedly encounter an increasing number of patients with neurodegenerative disorders who complain of poor sleep leading to insomnia and hypersomnia. In his article on key sleep neurologic disorders, St. Louis addresses sleep disorders that have specific and mutual relationships with neurologic diagnoses. Exemplifying this overlap is the reciprocal relationship between sleep and epilepsy. Patients with epilepsy frequently complain of disrupted sleep, as well as sleepiness, and frequent breakthrough seizures are attributable to disturbed sleep. Parasomnias, such as RBD, are sometimes indistinguishable from nocturnal seizures, which may, in turn, be confused as psychiatric disorders. Narcolepsy is a neurologic disorder that could be acquired in the setting of neurologic disease. I was asked recently to consult on a patient with neurosarcoidosis who presented with hypothalamic dysfunction. The hospital team had

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already made plans when I arrived. I collected the patient's CSF to conduct the hypocretin assay, which confirmed that the presence of narcolepsy was due to a medical condition.

Salas, Chakravarthy, Sher, and Gamaldo provide a helpful synopsis of 5 new management considerations in patients with sleep apnea, one of the most frequently encountered sleep disorders with the highest degree of morbidity. Salas et al. offer an informative overview of new diagnostic tools such as home sleep testing, discuss at-risk populations, and review innovative conservative and surgical treatment options.

Horowitz and Hungs expertly outline the diagnostic approaches in sleep medicine practice in their elegant review on the utility of sleep studies. While the diagnostic polysomnogram remains the "workhorse" tool for evaluating patients with sleep complaints, the test has become exceedingly important for neurologists who utilize it to establish prognosis, e.g., in patients with dream enactment behavior in whom RBD can be a harbinger of alpha-synucleinopathies. Neuromuscular specialists rely on polysomnograms to establish the degree of hypoventilation in their populations, especially since positive pressure therapy can improve quality of life and even prolong survival. Horowitz and Hungs also outline additional objective indicators of sleep and wake propensities and circadian rhythm abnormalities and delineate the indications for the key diagnostic tools. Flowcharts are provided to help us navigate the decision trees of why and when studies should be utilized.

Raphaelson and Brown remind us that as we identify optimal or ideal diagnostic instruments for our patients, we live in a time where our practice is being monitored and regulated. As they put it, "practitioners find themselves exposed to a seeming avalanche of fast-changing laws, rules, and payment conditions for the detection and treatment of sleep disorders." The authors conclude their poised review by prompting us to keep up with the new stipulations by perpetually reviewing new guidelines and appropriately adjusting, modifying, and recalibrating our habits.

As a sleep neurologist who treats mainly adults, I'm often perplexed by the relative lack of data on sleep medications in children. Felt and Chervin advise that the most successful strategy in managing sleep disorders in children is to discern the causes and to customize a unique intervention to manage the underlying predisposing factors. They conclude by drawing attention to the fact that until more data are available, we should exercise care and vigilance to use a multidisciplinary approach that incorporates both behavioral and pharmacologic interventions while searching for primary sleep disorders.

I hope very much that this special series emphasizing sleep disorders will help neurologists in every subspecialty magnify and enrich their care of patients with sleep complaints. Furthermore, I hope that neurology trainees will remember to ask their patients about their satisfaction with sleep. This is an often forgotten question and one that some may be afraid to ask as it could open a Pandora's box. I hope you will find this series helpful in confidently turning that box into a treasure chest of practical tools to assist our patients.

Many of the contributors to this series are American Academy of Neurology Sleep Section members who expressed an interest in promoting sleep education through a special series focusing on sleep. My appreciation goes out to all of them for their dedication and enthusiasm in making this concept a reality and thereby advancing knowledge in our discipline.

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