



SLEEP DISORDERS IN THE DYSAUTONOMIAS

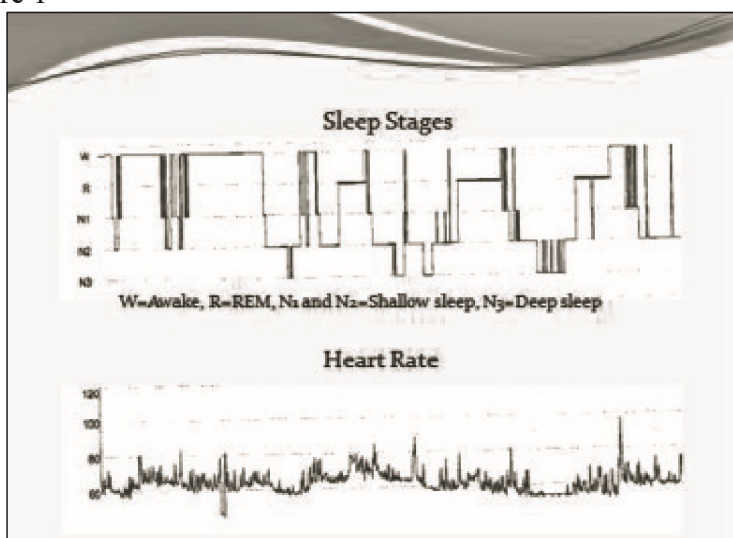
by Alan Pocinki, MD, FACP

Non-restorative sleep is a common feature of the dysautonomias and conditions associated with autonomic dysfunction, such as Ehlers-Danlos and chronic fatigue syndrome (CFS). In my experience, sleep studies in these patients often show frequent disruptions and/or reduced deep sleep; and treatments that are successful in reducing arousals and increasing deep sleep yield symptomatic improvements in the quality of sleep.

Disruptions in the continuity of sleep are termed either awakenings (defined as lasting longer than 30 seconds, though most people will not recall being awake unless they have been awake for at least 2 minutes) or arousals, if less than 30 seconds long. Arousals are usually termed either respiratory, if related to respiratory difficulty such as apnea; movement related, as in periodic limb movements of sleep; or, if neither of these causes is apparent, “spontaneous.” Patients with autonomic dysfunction and poor sleep tend to have a large number of spontaneous arousals, which appear to be directly related to autonomic dysfunction.

At the top of Figure 1 is a hypnogram showing sleep stages through the night. Although there is an underlying cycling through the various stages of sleep, superimposed on this is a large number of arousals, seen as vertical lines. The lower tracing shows the patient’s heart rate, which should be a relatively flat line, but instead shows almost constant fluctuations, fluctuations which mirror the arousals in the tracing above.

Figure 1



There are both pharmacologic and non-pharmacologic methods of reducing such “hyperarousal.” Among the latter are relaxation techniques such as deep breathing, the effects of which can help patients fall asleep more easily, but which usually do not last more than a few hours. The mainstays of pharmacologic therapy are medications that either reduce sympathetic activity, i.e. alpha and beta blockers and clonidine and guanfacine; or medications that increase deep sleep, i.e. low-dose antidepressants such as trazodone, amitriptyline, and doxepin. Choosing the right drug or combination for each patient is largely a trial and error process, though patients who tend to get a “second wind” of energy in the evening tend to do better on a longer-acting beta blocker taken in the early evening, while others might need only a short acting beta blocker taken at bedtime. The alpha blocker prazosin tends to be particularly effective in patients who have frequent and/or vivid dreams.

Lastly, it is important not to overlook other factors which can adversely affect sleep quality, such as pain, depression, and anxiety, when developing a treatment regimen for dysautonomia patients with non-restorative sleep. Regimens that successfully reduce arousals and increase deep sleep almost without exception result in reductions in fatigue and improvements in well-being.

Dr. Pocinki is a general internist in private practice in Washington, D.C. His interest in Ehlers-Danlos and related autonomic and sleep problems over the past decade grew out of his experience studying chronic fatigue syndrome (CFS) since 1987. He has found that virtually all of his CFS patients (and fibromyalgia patients as well) have hypermobile joints, and autonomic and sleep problems similar to those of EDS patients. He has received a variety of awards and recognition for service to his profession, as well as for the quality of his practice, and speaks and writes regularly about these conditions. He is an Associate Clinical Professor at George Washington University School of Medicine and Health Sciences; and a Fellow of the American College of Physicians. He received his medical degree from Cornell University Medical College.

