Psychological Non-epileptic Seizures

Dr. Charles Zaroff, Ph.D.

Non-epileptic seizures (NES) refers to temporary behavioral episodes which resemble seizures, although they do not have epilepsy as a cause. NES can have a physiological basis, as, for example, syncope, migraine, and transient ischemic attacks, among others, and can produce temporary changes in behavior that resemble seizures. More often, NES events have a psychological basis. The cause of such psychological non-epileptic seizures (PNES) is unknown, although stress, and a lack of adequate stress coping mechanisms, are thought to play a role. For instance, the rates of PNES are higher in victims of physical or sexual abuse, who commonly experience comorbid posttraumatic stress disorder. However, factors associated with PNES may vary across individuals, with one study showing that children with PNES were found to have undiagnosed learning disabilities associated with poor academic performance, presumably causing emotional distress.

Reliable estimates of PNES are not yet available given that tertiary care centers, in which many of the studies are conducted, tend to see more severe cases. Prevalence has been estimated at 2 to 33 per 100,000 and studies have shown that at any one time 10-40% of patients on a Video EEG monitoring unit may have PNES. While PNES events typically manifest between the third and fourth decade of life, they have been observed in both geriatric and preschool-aged populations. Higher rates are found in females.

Psychiatric comorbidities are common in patients with PNES, and include mood disorders such as depression and anxiety, personality disorders, and posttraumatic stress disorder. Many patients with PNES also have comorbid neurological dysfunction. Of note, patients may have both epileptic and psychological non-epileptic seizures.

PNES events are a concern not just for the epilepsy specialist and neurologist, but for all members of a patient’s treatment team and patient caregivers. Despite receiving relatively little attention in even neurology-specific scientific journals, the emotional and financial costs incurred by such patients can be substantial. Studies have shown that patients with PNES incur twice the amount of annual medical costs even after controlling for psychiatric and medical disorders, and posttraumatic stress disorder. For some time treatment focused on the comorbid mood or personality disorders, and psychotropic medication and psychotherapy, either in combination or individually, were the most common modes of treatment. However, research on PNES and its treatment, including work by neurologists and neuropsychologists at the Northeast Regional Epilepsy Group, has shown that a specific treatment tailored to the diagnosis of PNES can be quite effective. Currently, the Northeast Regional Epilepsy Group offers services for PNES patients in both the diagnosis and treatment of PNES. Treatment begins with the diagnostic evaluation, including a comprehensive history and physical examination, and the use of diagnostic tests such as video EEG monitoring and other neurophysiologic studies.

For some time treatment focused on the comorbid mood or personality disorders, and psychotropic medication and psychotherapy, either in combination or individually, were the most common modes of treatment. However, research on PNES and its treatment, including work by neurologists and neuropsychologists at the Northeast Regional Epilepsy Group, has shown that a specific treatment tailored to the diagnosis of PNES can be quite effective. Currently, the Northeast Regional Epilepsy Group offers services for PNES patients in both the diagnosis and treatment of PNES. Treatment begins with the diagnostic presentation, an assessment of the workup that cannot be underestimated, given that many individuals with PNES events will stop having the events after being provided a proper diagnosis. Patients then meet with neuropsychologists to discuss treatment options, and undergo a psychiatric interview. Patients are then informed of the treatment options available to them.

Copyright © Northeast Regional Epilepsy Group 2007