

Psychiatric Aspects of Seizures: Review Questions

W. Curt LaFrance, Jr, MD

QUESTIONS

Choose the single best answer for each question.

Questions 1 and 2 refer to the following case study.

A 32-year-old single white woman with a history of learning disability is seen for evaluation of paroxysms. She underwent cleft palate repair at birth, which required revision at age 30 years. Subsequent to a second adult repair 4 months ago, she developed what she describes as “whole-body shaking with frothing at the mouth from the anesthesia” following the surgery. The paroxysmal events lasted approximately 10 minutes and consisted of rhythmic bilateral arm and leg movements, with variable cognizance during and after the events. She required 1 minute to return to her cognitive baseline. Over the course of the next 4 months, the events occurred 1 to 4 times per week, and most were preceded by a frontal headache. The events were minimally responsive to lorazepam 1 mg, which was administered each time she was brought to the emergency department.

The patient has no history of psychiatric problems or abuse but does note having a “nervous stomach.” She takes no illicit drugs. She has been on a medical leave of absence from her job as a food service assistant since her most recent surgery. Her mental status examination reveals slight palatal dysarthria and mild anxiety but is otherwise unremarkable. Results of neurologic examination are largely normal, except for mild incoordination on tandem gait maneuvers.

- 1. The case patient has repeated episodes of generalized shaking with lapses of consciousness and is partially amnesic of the events. Which of the following is the provisional primary diagnosis for this patient?**
 - (A) Munchausen syndrome
 - (B) Panic disorder without agoraphobia
 - (C) Partial complex epilepsy with secondary generalization
 - (D) Prolonged QT syndrome
 - (E) Psychogenic nonepileptic seizures (NES)
- 2. Results of a computed tomographic scan of the patient’s head are normal. Which of the following is the most appropriate diagnostic study to obtain next?**
 - (A) Magnetic resonance imaging of the brain
 - (B) Neuropsychological battery
 - (C) Routine electroencephalography
 - (D) Video electroencephalography
- 3. Measurement of which of the following values is useful in distinguishing NES from epileptic seizures?**
 - (A) Cerebrospinal fluid protein level
 - (B) Leukocyte count
 - (C) Serum amylase level
 - (D) Serum creatine kinase level
 - (E) Serum prolactin level
- 4. NES occur in which of the following groups?**
 - (A) Preadolescent, predominantly males
 - (B) 20- to 40-year-old, predominantly males
 - (C) Middle aged, predominantly females
 - (D) Across all ages, in both genders
- 5. Which of the following is the best treatment for patients with NES?**
 - (A) Unknown
 - (B) Administration of antiepileptic drugs
 - (C) Administration of anxiolytic drugs
 - (D) Psychodynamic psychotherapy
 - (E) Combined pharmacotherapy and psychotherapy

(turn page for answers)

Dr. LaFrance is a Clinical Research Fellow, Brown Medical School; and a staff neurologist and psychiatrist at Rhode Island Hospital, Providence, RI.

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EXPLANATION OF ANSWERS

- 1. (E) Psychogenic nonepileptic seizures (NES).** NES are paroxysmal disruptive changes in a person's behavior that resemble epileptic seizures but are not associated with the characteristic electrophysiologic brain changes of epilepsy. NES are also referred to as "pseudoseizures" and, like epilepsy, they have no single cause. NES and epileptic seizures have similar observable manifestations, presenting with alterations in behavior, consciousness, or convulsions; no single clinical feature reliably distinguishes epileptic seizures from NES. NES must be distinguished from physiologic nonepileptic events (eg, febrile seizures, convulsive syncope secondary to cardiac arrhythmias, migraine variants, posttraumatic brain injury seizure, substance-induced seizures). Children may have nonepileptic paroxysmal behaviors, including mannerisms, staring spells, parasomnias, hyperventilation attacks, breath-holding spells, syncope, and movement disorders. These behaviors are seen in younger children with normal results on an electroencephalogram (EEG) and do not require psychiatric intervention for resolution.
- 2. (D) Video electroencephalography.** The video EEG is the gold standard for diagnosing NES. During the study, the electroencephalographic tracing is coregistered with video of the patient's events. Epileptiform activity, which consists of focal or generalized epileptiform discharges, including sharp waves or spikes or any ictal pattern on the EEG, is an indicator for epilepsy. Direct observation of a patient's event, coupled with a normal background electroencephalographic pattern or one that reveals no epileptiform activity, provides the diagnosis of NES.
- 3. (E) Serum prolactin level.** Epileptic seizures are associated with an elevation in the level of serum prolactin. Studies have found that an increase of 2 to 3 times the normal level of serum prolactin occurs

in 90% of patients with generalized tonic-clonic seizures and in 43% to 100% of patients with complex partial seizures. This increase in prolactin does not occur during NES. Blood for measurement of serum prolactin level should be drawn within 30 minutes of seizure onset, and the level obtained should be compared to that obtained from blood drawn 24 hours later, at the same time of day. False-positives may occur, however, as a result of certain medications (eg, dopamine antagonists) or with breast stimulation (eg, breast-feeding, physical manipulation).

- 4. (D) Across all ages, in both genders.** The most common population in which NES occur is female (70%) in early adulthood (75%). Studies reveal, however, that NES can occur in children as young as 5 years. More recently, NES have been shown to occur in the elderly population more than previously suspected. NES have been documented in patients as old as 83 years.
- 5. (A) Unknown.** Whereas NES have been documented in the medical literature for over a century, no randomized controlled trial of treatment for NES has been conducted. Anecdotal reports reveal that antiepileptic drugs may actually worsen NES, yielding the recommendation to taper administration of antiepileptic drugs in patients with NES and no evidence of epilepsy. Patients with NES have a high prevalence rate of comorbid psychiatric illness (eg, major depressive disorder, posttraumatic stress disorder, cluster B personality disorders). As many as 60% of patients with NES also have a history of childhood or current trauma or abuse. Numerous case reports of psychotropic medications and uncontrolled psychotherapy trials have yielded consensus statements that a combination of medications and psychotherapy may be the best approach to treating patients with NES.

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