A 4-yr-old boy was brought to the emergency department (ED) by his parents, with a decreased level of consciousness and “strange” behaviour. His teacher had found him crying on a snowbank at school after being “kicked in the face” by another student. He had 5 episodes of emesis prior to arrival.

The past medical history was significant for recurrent headaches for which he took ibuprofen and for which he was scheduled to see a neurologist. There was a family history of migraines, but no history of epilepsy or other neurologic disorders. His birth, growth and developmental histories were unremarkable. He had been well prior to attending school that day, and his parents reported having no medication in the home except for over-the-counter analgesics.

On arrival to the ED, he was awake but sleepy with intermittent eye flickering that could be interrupted by vocal stimulus. His vital signs were as follows: temperature 36.8°C, heart rate 100 beats/min, respiratory rate 20 breaths/min and blood pressure 100/53 mm Hg. There were no obvious signs of trauma. He was able to follow simple commands but was unable to sit or stand. Although he would respond to questions, he appeared distracted and his speech was slurred and unintelligible at times. His pupils were equal and reactive to light; he had normal extraocular movements, and his optic discs were sharp. The rest of the cranial nerves, as well as sensory, motor and reflex examinations were otherwise normal. His neck was supple, and his ears and oropharynx were unremarkable. Chest, abdomen and skin examinations were likewise normal.

Results of blood work, including complete blood count, electrolytes, calcium, magnesium, phosphate, glucose, blood urea nitrogen, creatinine and liver enzymes returned within normal limits. An electrocardiogram (ECG) followed by a noncontrast CT scan of his head were performed and were also normal. A lumber puncture was considered but deferred.

After sleeping for several hours, the child’s eye flickering and dysarthria resolved and he was able to walk. He complained of a headache, but this resolved with acetaminophen. He was observed overnight and remained symptom free. The diagnosis is:

A. Postictal confusional state
B. Atypical seizure
C. Toxic exposure
D. Acute confusional migraine
E. Diffuse axonal injury

For the Answer to this Challenge, see page 451.

Go to bed, sleepy head

Peter G. Katis, MD