

■ **Multimedia teaching material**

*Epileptic Disord* 2021; 23 (2): 435-436

Epileptic  
Disorders

# Generalized periodic discharges with triphasic morphology: to treat or not to treat?

Fábio A. Nascimento, Patrick M. Chen, Joseph Cohen, Brandon M. Westover

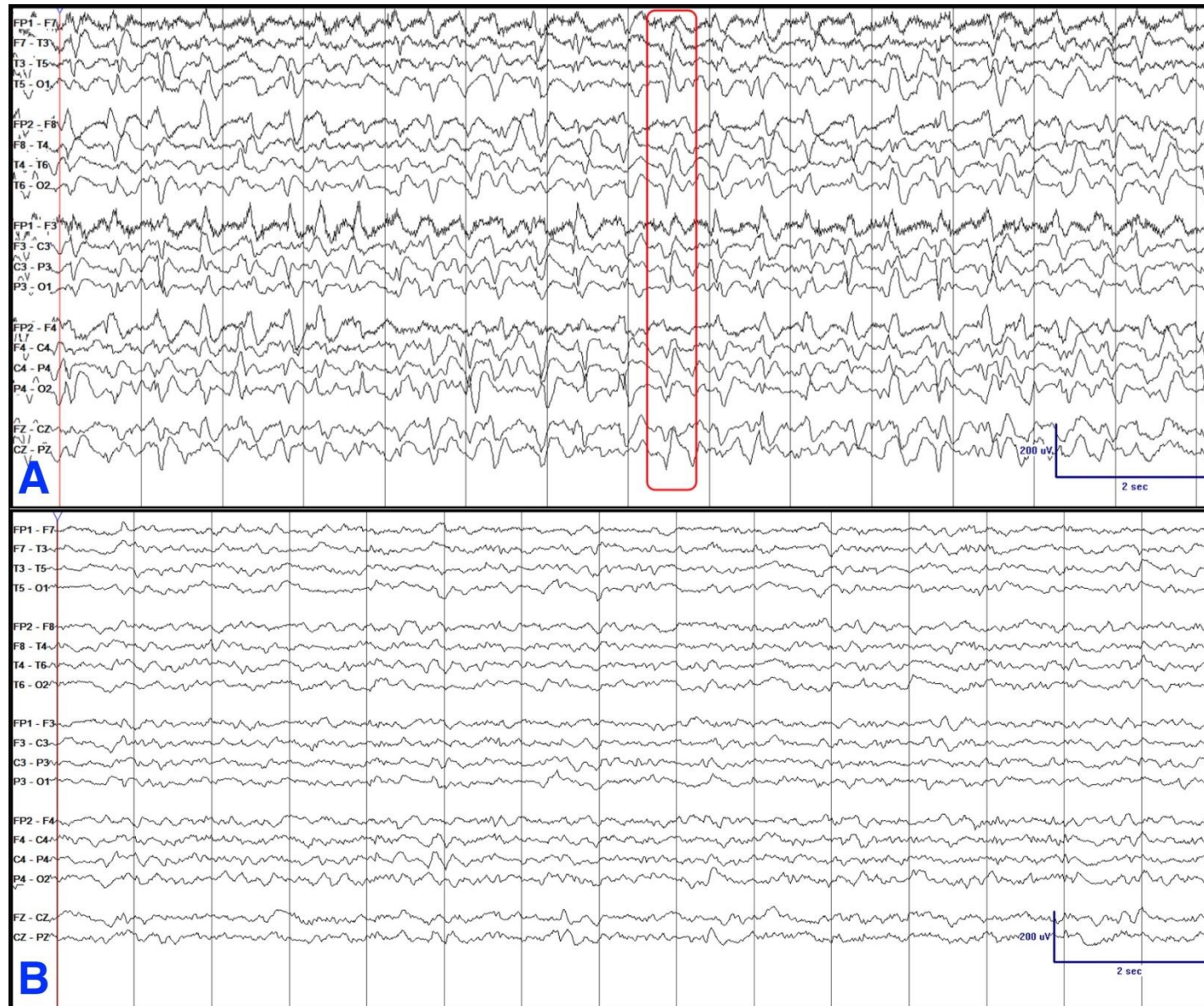
Department of Neurology, Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA

Epileptic  
Disorders

# Vignette

- We report an 82-year-old woman with recurring episodes of confusion, a left posterior fossa meningioma, and chronic hyponatremia due to SIADH. She presented with a habitual episode of confusion.
- Basic laboratory workup was unremarkable except for hyponatremia (sodium: 132 mEq/L) and head imaging was unrevealing.
- Continuous-EEG showed 2-Hz generalized periodic discharges (GPDs) with triphasic morphology, or “triphasic waves” (**figure 1A**).
- She showed improvement in EEG (**figure 1B**) and mental status following lorazepam at 1 mg, suggesting non-convulsive status epilepticus (NCSE).

# Figure 1



- Although traditionally associated with toxic-metabolic-infectious encephalopathies, GPDs with triphasic morphology may represent NCSE.
- Select patients should undergo a trial with antiseizure medication to assess for electroclinical improvement. [1, 2]
- Importantly, electrographic improvement alone does not imply a diagnosis of NCSE. [3]