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Resident & Fellow Section Teaching Video Neurolmage

A 7-Year-Old Boy with Tonic Posturing After Exercise



Vignette

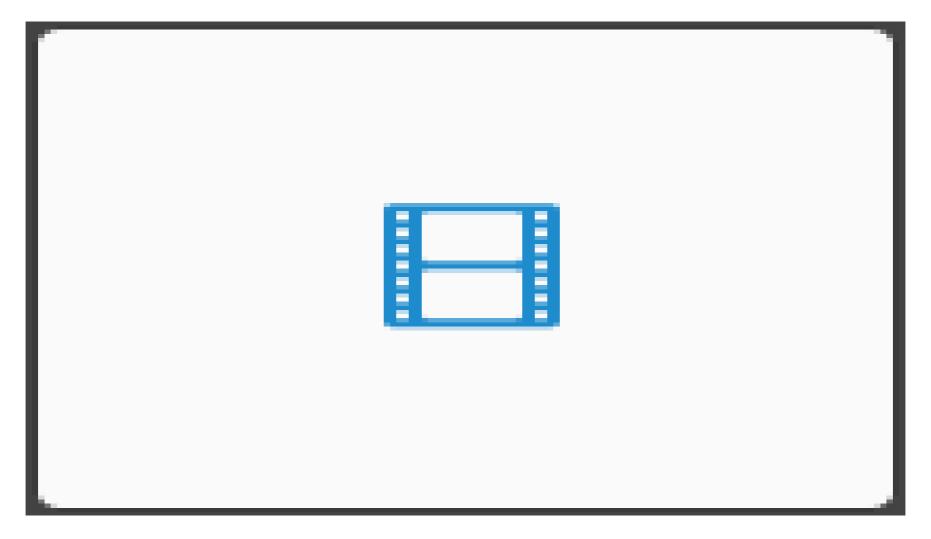
A 7-year-old right-handed boy with tuberous sclerosis complex and focal epilepsy developed new episodes exercise-induced full body tonic posturing, whimpering, and preserved awareness at home.

• The patient was admitted to the hospital for video-EEG monitoring and repeat brain MRI.

A stationary bike was set up in the room to help provoke an event.



Imaging





Reflex Epilepsy: Seizures Induced by Vigorous Exercise

•The patient had a representative episode following vigorous pedaling on the bike, associated with bitemporal (left > right) ictal correlate.

- Brain MRI did not reveal any lesions with temporal topography.
- Exercise-induced seizures are a rare form of reflex epilepsy.¹
- •Available data suggest these seizures typically localize to the temporal region (left > right) and tend to be refractory to medical and surgical treatments, depending on the etiology.²

