Teaching Video NeuroImage: Shedding Light on Sunflower Syndrome

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We report a 12-year-old girl with a history of absence and generalized tonic-clonic seizures as well as stereotyped, light-induced, hand-waving episodes (HWEs) (video 1). The latter were occasionally accompanied by eye fluttering. Notably, her maternal uncle had childhood-onset tonic-clonic seizures. Video-EEG confirmed that her HWEs were epileptic in nature (video 2). She was started on fenfluramine in addition to valproate with a partial improvement in HWEs.

Sunflower syndrome (SFS) is a rare childhood-onset generalized epilepsy characterized by photosensitivity, heliotropism, and drug-resistant stereotyped seizures. Hand-waving episodes are typically associated with generalized 3–4 Hz spike- and-wave discharges; however, ictal EEG findings may vary. SFS may have an underlying genetic component, although this has not been fully elucidated. Differential diagnoses include tics and behavioral issues. Besides broad-spectrum antiseizure medications, these patients should be advised to avoid the sun and wear a hat or tinted glasses.[1,2] Fenfluramine may be an effective treatment option.[3]

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Name	Location	Contribution
Fábio A. Nascimento, MD	Massachusetts General Hospital, Boston	Conceptualized and designed study, analyzed and interpreted data, drafted manuscript
Elizabeth A. Thiele, MD, PhD	Massachusetts General Hospital, Boston	Conceptualized and designed study, analyzed and interpreted data, reviewed manuscript, supervised study

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