A 14-year-old girl presented to the epilepsy monitoring unit for diagnostic evaluation of recurrent episodic abdominal pain. During the admission, multiple typical episodes lacked ictal correlate, and she was diagnosed with nonepileptic events. However, her long-term EEG recording revealed several transient findings in wakefulness and sleep exemplifying normal developmental variants in the awake (Figure 1) and asleep (Figure 2) EEG. Posterior slow waves of youth, 14 and 6 Hz positive spikes, and alpha squeak are rare before 2 years, and only alpha squeak persists after adolescence. Lambda waves and positive occipital sharp transients of sleep do not occur younger than 1 year and are more common in later childhood through adulthood. Rhythmic midtemporal theta of drowsiness occurs from adolescence through adulthood. We show examples of these variants in 3 separate montages, highlighting the montage(s) in which each is best appreciated. Proper recognition of these age-appropriate normal EEG variants is key to avoid overinterpretation and misdiagnosis.

Author Contributions
L. Basovic: drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; analysis or interpretation of data. K. Walsh: analysis or interpretation of data; additional contributions: designing and crafting figures. C.J. Chu: drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; analysis or interpretation of data.

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Figure 2 Normal Variants During Drowsy and Sleep EEG

(A) 14 and 6 Hz positive spikes (red box) are 1–2 second bursts of spiky, arciform waveforms. (B) Rhythmic midtemporal theta of drowsiness (red box), or psychomotor variant, consists of nonevolving runs of prominent theta activity. (C) Positive occipital sharp transients of sleep (red arrows) are morphologically similar to lambda waves.

Disclosure
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