Teaching NeuroImages: Texting rhythm

A common EEG finding in the era of smartphone use

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Figure “Texting rhythm” in a 39-year-old woman

(A) EEG demonstrating bilateral 5-Hz monomorphic bursts of theta with frontocentral predominance that correlated with active texting (black star). (B) This pattern ceased when the patient stopped texting (red line). EEGs are presented in an anterior-posterior bipolar montage, sensitivity 7 µV/mm, filters 1–70 Hz.

A 39-year-old woman underwent epilepsy monitoring for differential diagnosis. During video EEG, a reproducible, time-synched, bilateral 5-Hz frontocentral theta rhythm was present while text messaging on her smartphone (figure A). This pattern appeared only with active texting (figure B).

The texting rhythm is a recently recognized EEG pattern reported in up to 22.6%–24.5% of adults.¹ It is related to cortical processing associated with personal electronic devices.²

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Brief durations occur with abbreviated texting as brief as several seconds. Electroencephalographers need to be aware of this novel waveform to distinguish it from an abnormal epileptiform pattern or evidence of cerebral dysfunction.

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Disclosure

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Appendix Authors

Name	Location	Contribution
Brian Hanrahan, MD	University of Rochester Medical Center, NY	Identified case study patient for manuscript and drafting of the manuscript
William O. Tatum, DO	Mayo Clinic, Jacksonville, FL	Drafting and revision of the manuscript

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