

EEG features of 15q duplication syndrome

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We report a seven-year-old boy with intellectual disability and new-onset seizures associated with an interstitial duplication of 15q11-q13, consistent with the diagnosis of 15q duplication syndrome (Dup15q). Routine EEG (*figures 1, 2*) showed excessive beta activity, bursts of high-amplitude, sleep-activated, multifocal epileptiform discharges and bursts of sleep-activated 16-20-Hz fast activity. Although excessive beta activity (13-30 Hz) can be seen in other scenarios, such as in patients on benzodiazepines or barbiturates [1], it is one of the characteristic EEG findings in Dup15q syndrome [2]. In addition to high-amplitude, sleep-activated, multifocal discharges, these findings

should raise the suspicion for Dup15q syndrome. ■

Disclosures.

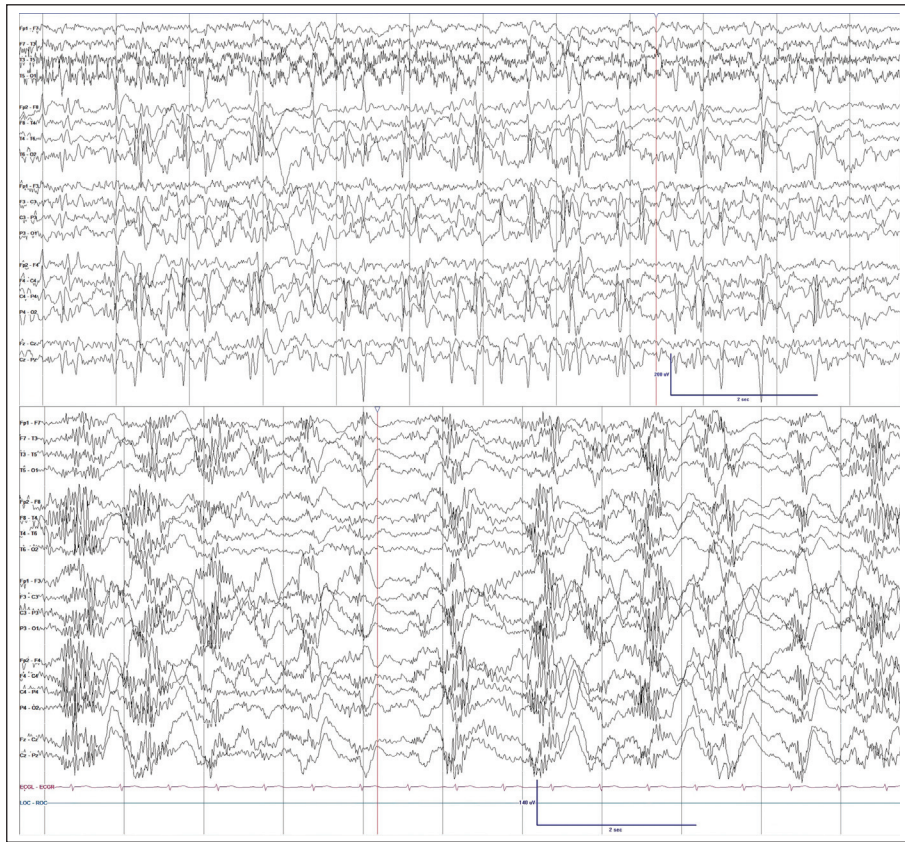
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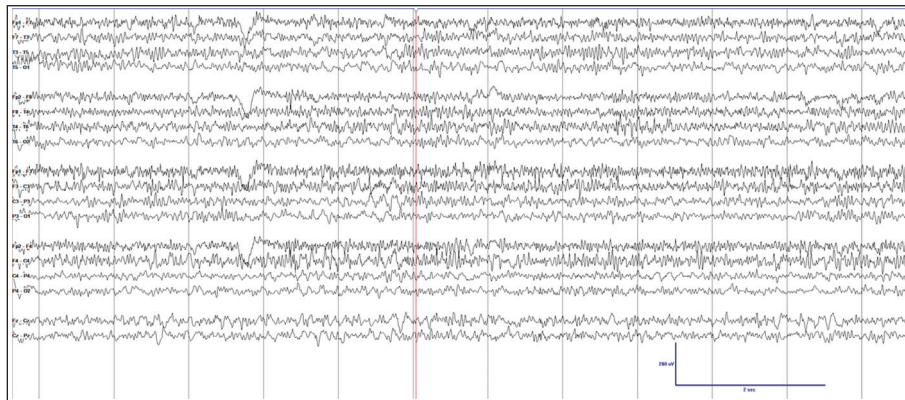
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■ **Figure 1.** EEG showing sleep activated bursts of 16-20-Hz (beta) fast activity (upper panel) and runs of sleep-activated high-amplitude multifocal discharges (lower panel). Sensitivity: 7 μ V/mm, LFF: 1 Hz, HFF: 70 Hz, notch on 60 Hz, timebase: 15 mm/sec.



■ **Figure 2.** EEG bipolar montage shows excessive 16-18-Hz (beta) activity. Sensitivity: 10 μ V/mm, LFF: 3 Hz, HFF: 70 Hz, notch on 60 Hz, time base: 15mm/sec.