Teaching Video *NeuroImages*: Epilepsia partialis continua in an adolescent with preexisting focal epilepsy

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A 15-year-old girl, with an 8-year history of well-controlled focal epilepsy, moderate intellectual disability, and neuropsychiatric problems (aggression and disinhibition), presented with continuous semi-rhythmic repetitive movement of the left hand (video at Neurology.org). EEG showed new-onset non-rhythmic/nonperiodic central spike-wave not time-locked to the abnormal movements (figure, A). MRI brain demonstrated subtle cortical T2–fluid-attenuated inversion recovery hyperintensity in right precentral gyrus (figure, B); CSF protein was elevated at 810 mg/L.¹ Direct sequencing of *POLG* identified compound heterozygous pathogenic variants (p.Cys418Arg/p.Trp748Ser).

Epilepsia partialis continua may be the first clue to *POLG*-related diseases in children or adults with pre-existing epilepsy, intellectual disability, or neuropsychiatric disorders.^{1,2}

AUTHOR CONTRIBUTIONS

Dr. Lagan drafted, reviewed, and revised the manuscript. Drs. Gorman and Shahwan and Prof. King reviewed the initial manuscript and subsequent drafts. All authors reviewed and approved of the final manuscript prior to submission.

STUDY FUNDING

No targeted funding reported.

DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

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Supplemental data
at Neurology.org

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(A) EEG recording during involuntary movement. EEG with bursts of central spike-waves, maximum right hemisphere, not periodic or rhythmic. No evidence of rhythmic high-amplitude delta with superimposed (poly)spikes. (B) MRI. Axial T2 fluid-attenuated inversion recovery demonstrates new T2 hyperintensity in right precentral gyrus (arrow).

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Neurology 2017;89:e274-e275

DOI 10.1212/WNL.0000000000004713

This information is current as of December 4, 2017

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