A 13-year-old girl with generalized tonic and grand mal seizures had brain MRI that revealed subcortical band heterotopia (SBH) (figure 1). Twenty-four-hour EEG showed pervasive generalized slow spike and wave pattern (figure 2). Blood DNA confirmed a mutation in the doublecortin (DCX) gene. Interictal 18-fluoro-deoxy (FDG) PET showed reduced FDG uptake (~10%) in the cerebral cortex and intensely increased uptake (~20%) in the subcortical band (figure 1), suggesting epileptogenic subcortical band correlating with pervasive slow spike wave pattern on simultaneous EEG. Two PET reports1,2 showed similar or minor increased FDG uptake in the heterotopic band compared to the cerebral cortex.

Joanna Fong, MD, Guiyun Wu, MD, Elaine Wyllie, MD, Ajay Gupta, MD, Cleveland, OH

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Address correspondence and reprint requests to Dr. Ajay Gupta, S-51, Epilepsy Center/Neurological Institute, Cleveland Clinic Foundation, Cleveland, OH 44195; guptaa1@ccf.org

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Joanna Fong, Guiyun Wu, Elaine Wyllie, et al.
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