Teaching Video *NeuroImages*: Frontal opercular seizures with jacksonian march

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Figure 1 Representation of the motor homunculus across the primary motor cortex according to Penfield

Depiction of jacksonian seizure spread from the inferior/ventral toward the dorsal aspect of the precentral gyrus (B) based on clinical semiology (blue arrow). (A) Postcentral gyrus. Modified from figure 18-6 from *Principles of Neural Science* by E. Kandel et al. © 2000 McGraw-Hill Education. Reprinted with permission of the publisher.

A 31-year-old man presented with a 3-month history of progressive dysarthria and 1 month of gradually worsening motor seizures predominantly affecting the right face. Examination was unremarkable except for a mild spastic dysarthria and slow, alternating tongue movements, probably due to a partial opercular syndrome. Seizures captured during EEG recording showed a jacksonian march starting over the opercular aspect of the motor homunculus,^{1,2} and anarthria and sialorrhea without EEG correlate (videos 1 and 2 on the *Neurology*® Web site at Neurology.org and figure 1). MRI brain showed a left opercular tumor (figure 2, A and B), found to be an anaplastic astrocytoma after resection. The patient has been seizure free for 12 months after treatment with carbamazepine and resective surgery but has residual dysarthria.

AUTHOR CONTRIBUTIONS

Dr. Extercatte wrote the first draft of the manuscript. Dr. de Haan provided information about final diagnosis and treatment and revised the final manuscript. Dr. Gaitatzis made the initial diagnosis and drafted and revised subsequent manuscripts.

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Figure 2 Noncontrast MRI showing a left opercular lesion

(A) Axial fluid-attenuated inversion recovery image showing a left opercular lesion. (B) Coronal T2-weighted MRI showing the left opercular lesion with surrounding edema.

DISCLOSURE

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

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