

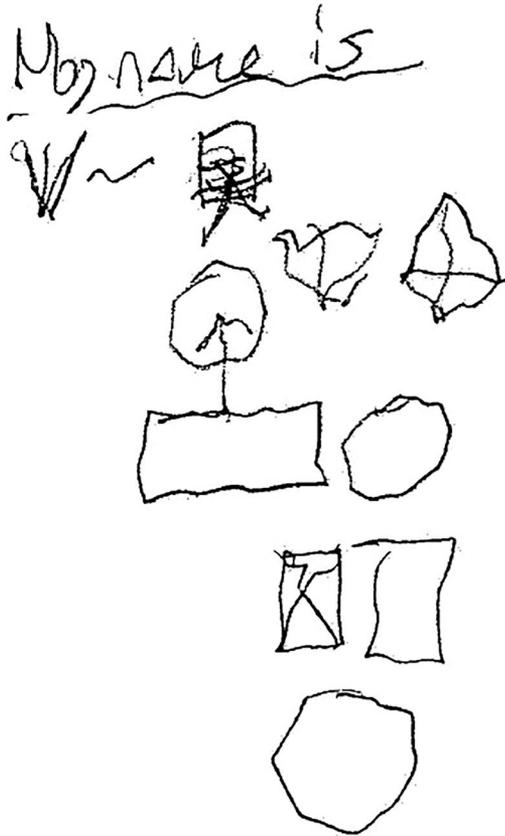
Ictal multicomponent agraphia in left temporal lobe epilepsy

Carol Ulloa, MD, Gloria Ortiz-Guerrero, MD, Caleb Pearson, PhD, John Leever, MD, Patrick Landazuri, MD, and Utku Uysal, MD

Correspondence
Dr. Ulloa
culloa@kumc.edu

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Figure 1 Illustration



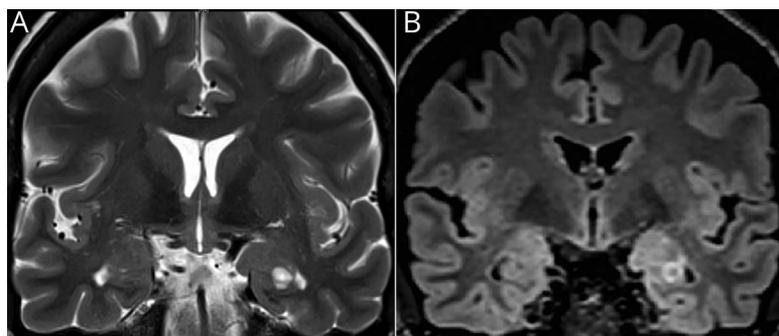
According to the patient, "Couldn't think of letters to write—just shapes to start."

A 58-year-old woman with a clinical diagnosis of temporal lobe epilepsy characterized by episodes of disorientation and derealization followed by aphasia tried to write sentences during a seizure. Instead, she drew random figures (figure 1). External standard MRI was reported normal; however, a nonenhancing left amygdala lesion was identified on our 3T epilepsy protocol MRI (figure 2). This drawing emphasizes ictal multicomponent agraphia characterized by impaired allographic storage with expected accompanying aphasia.¹ Although symbolic graphic language is impaired, non-language-based symbolic graphic production remains intact. This suggests posterior temporal/temporo-parietal junction involvement during seizure spread.²

From the Departments of Neurology (C.U., G.O.-G., C.P., P.L., U.U.) and Radiology (J.L.), University of Kansas Medical Center, Kansas City.

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Figure 2 MRI



Coronal T2 (A) and fluid-attenuated inversion recovery (FLAIR) (B) MRI. Ovoid lesion with FLAIR hyperintense rim in left amygdala. Characteristics are typical of dysembryoplastic neuroepithelial tumor, a cystic “bubbly” intracortical tumor that often involves the temporal lobe. Ganglioglioma also commonly arises in the temporal lobes but may exhibit enhancement and calcification.

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Disclosure

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

Appendix Authors

Name	Location	Role	Contribution
Carol Ulloa, MD	University of Kansas Medical Center	Author	Conceptualized the manuscript, treating physician, prepared the manuscript
Gloria Ortiz-Guerrero, MD	University of Kansas Medical Center	Author	Assisted in writing the manuscript, technical editing of the images
Caleb Pearson, PhD	University of Kansas Medical Center	Author	Analyzed the functional anatomy related to the patient's drawing, edited the illustration legend

Appendix (continued)

Name	Location	Role	Contribution
John Leevers, MD	University of Kansas Medical Center	Author	Interpreted the MRI, edited the figure legend
Patrick Landazuri, MD	University of Kansas Medical Center	Author	Revised the manuscript for intellectual content
Utku Uysal, MD	University of Kansas Medical Center	Author	Revised the manuscript for intellectual content

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2. Baldo JV, Kacirik N, Ludy C, et al. Voxel-based lesion analysis of brain regions underlying reading and writing. *Neuropsychologia* 2018;115:51–59.

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