

Teaching NeuroImages: Prosopagnosia heralding anti-NMDA receptor encephalitis

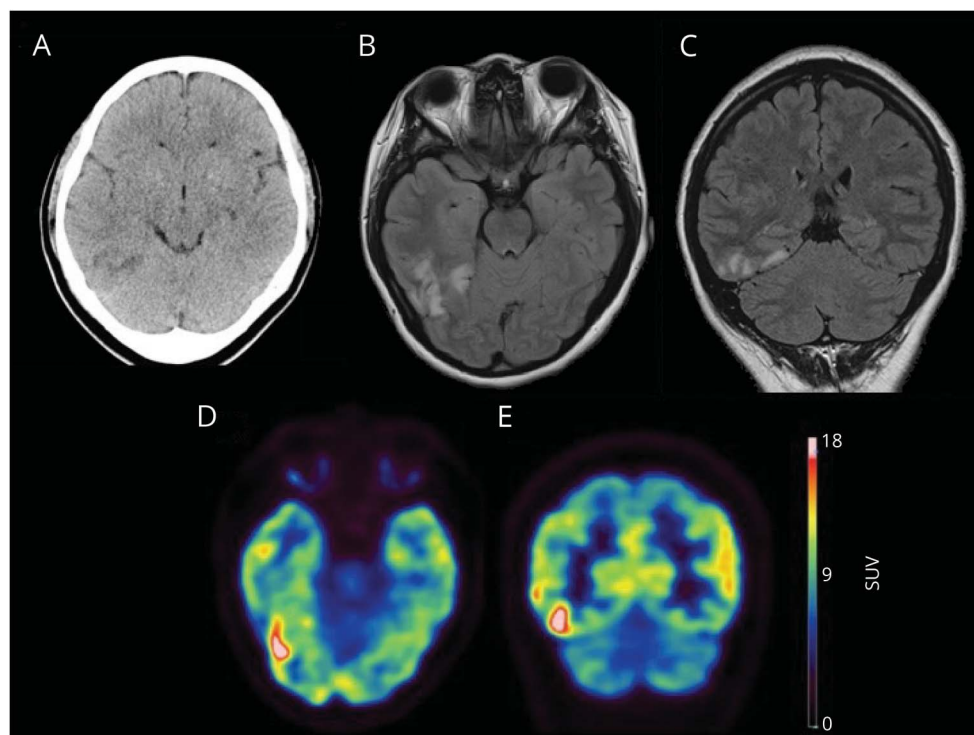
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Figure Neuroimaging findings in anti-NMDA receptor encephalitis presenting with prosopagnosia



(A) CT head reveals right posterior temporal hypodensity. (B) Axial and (C) coronal T2 fluid-attenuated inversion recovery MRI demonstrate high signal in right posterior temporal lobe and fusiform gyrus. (D) Axial and (E) coronal FDG-PET/CT images demonstrate right posterior-inferior temporal hypermetabolism (standardized uptake value 0–18, CIMSNeuro scale, Oasis, Segami Corporation, Columbia, MD).

A 23-year-old right-hand-dominant woman presented with 3 weeks of progressive difficulty recognizing faces, including her own, subsequently developing psychosis. Non-contrast CT head and MRI brain with contrast revealed a nonenhancing lesion of the right posterior temporal lobe and fusiform gyrus, with corresponding hypermetabolism on FDG-PET/CT brain (figure). EEG demonstrated right posterior temporal slowing. CSF and serum anti-NMDA receptor (NMDAR) antibodies were positive, with CT abdomen/pelvis revealing ovarian teratoma. Teratoma removal, plasmapheresis, and 1 cycle of rituximab yielded symptom resolution over 1 month. Anti-NMDAR encephalitis rarely presents with prosopagnosia,¹ and in this case, is likely secondary to right fusiform gyrus dysfunction.²

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Author contributions

Grayson Beecher performed the patient's clinical assessment, wrote the manuscript, and created the figure. Amanda Nicole Wagner assisted in writing the manuscript and figure legend.

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Dr. Jonathan Abele reported the FDG-PET/CT imaging findings, provided the figure images, and edited the manuscript. Penelope Smyth assisted in the patient's clinical assessment and performed a critical revision of the manuscript for intellectual content.

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Disclosure

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

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