

Teaching NeuroImages: Distinct visual anosognosia after serial lesions of Meyer loop and the lateral geniculate body

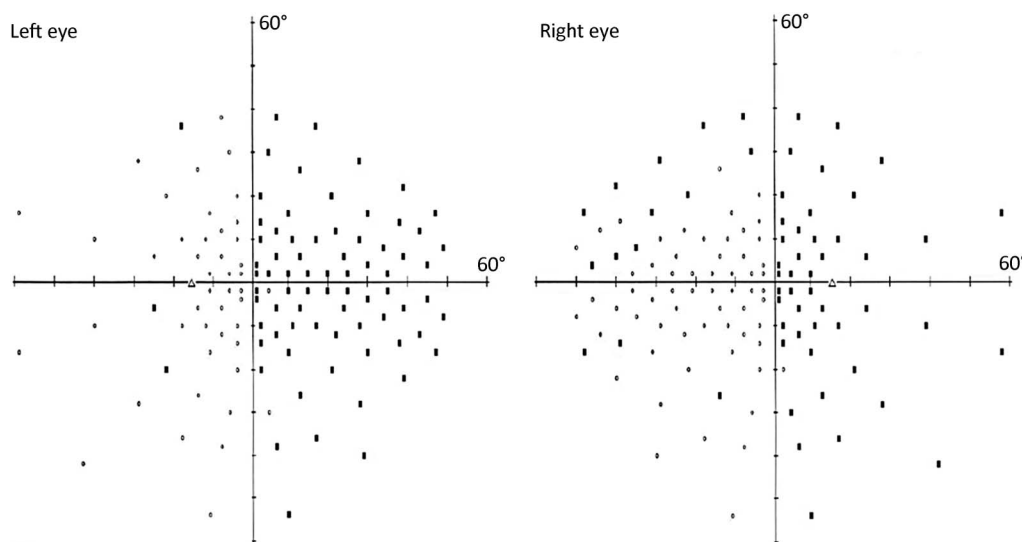
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Figure 1 Inconsistency of subjective and objective visual field deficit



While the patient is aware of homonymous upper right quadrantanopia, visual field testing reveals right-sided homonymous hemianopia.

A 65-year-old man with previous left temporal glioma resection presented complaining of an unprecedented homonymous upper right field defect. Anopia in this quadrant had been documented using confrontation testing 6 months before, indicating prior anosognosia. Repeated perimetry showed right-sided homonymous hemianopia, revealing novel anosognosia for the lower quadrant (figure 1). On MRI, there was no tumor relapse or other cortical damage, but ischemia including the lateral geniculate body (figure 2). Anosognosia is not limited to damage of visual cortical areas and is frequent after lesions of Meyer loop.¹ Inversely, awareness after subcortical lesions may require damage to a wider network.²

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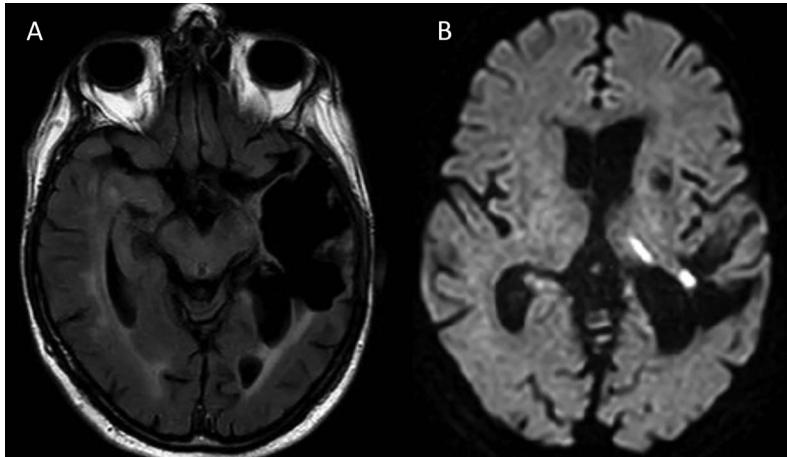
Author contributions

Andreas Traschütz: acquisition and interpretation of data, drafting the manuscript. Elke Hattingen and Thomas Klockgether: interpretation of data.

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Figure 2 Serial subcortical lesions explain partial awareness for anosopia



Damage to Meyer loop after glioma resection (A; fluid-attenuated inversion recovery) or the lateral geniculate body after ischemia (B; diffusion-weighted imaging) causes anosognosia for quadrantanopia. Awareness is limited to the quadrant affected by both lesions together.

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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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