Teaching Video NeuroImages: Posterior territory stroke with parahippocampal involvement

A neglected cause of neglect

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Figure Brain MRI

(A) Diffusion-weighted imaging sequence and (B) apparent diffusion coefficient sequence show a stroke in the right posterior cerebral artery territory involving the parahippocampal gyrus (see arrow).

An 87-year-old patient presented with a stroke in the right posterior territory (figure), with visual neglect, which was initially thought to be left homonymous hemianopia. The tip of the occipital lobe was spared, however, and therefore complete hemianopia was not to be expected. With a posterior stroke, neglect can easily be overlooked, although it is common in posterior strokes, when the parahippocampal gyrus is involved.¹ The 2 deficits can be tested for separately by turning the body of the patient to the left and the head to the right, because the neglect is body-centered.² (video).

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Author contributions

Dr. Dreier: acquisition of data, interpretation of symptoms, critical revision of manuscript. Dr. Maaijwee: acquisition of data, interpretation of symptoms, preparation of manuscript. Prof. Nyffeler: interpretation of symptoms, critical revision of manuscript, patient supervision. Prof. Bohlhalter: interpretation of symptoms, critical revision of manuscript, preparation of video, patient supervision.

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Disclosure

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