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# Teaching Neuro*Images*: Aphasia after infarction of the left pulvinar nucleus

Figure Axial sections of brain MRI



Confluent area of restricted diffusion (A) in the left occipital lobe with extension to the left pulvinar nucleus with apparent diffusion coefficient correlation (B).

A 79-year-old man, admitted for left knee replacement, complained of right-sided vision loss on postoperative day 3. Examination revealed a right homonymous hemianopsia, fluent speech with semantic paraphasias, and impaired naming and comprehension, with intact repetition. MRI of the brain (figure) showed restricted diffusion affecting the left pulvinar nucleus, without signal abnormality in the cortical language areas.

Isolated posterior thalamic territory infarctions are rare, which may be explained by the dual blood supply of this nucleus, with contributions from the anterior circulation (anterior choroidal artery) and posterior circulation through several branches.<sup>1–3</sup> The typical symptoms of thalamic aphasia consist of fluent output, semantic paraphasias, impairment of comprehension, and normal repetition. The relationship among the thalamus, language function, and aphasia is complex and has recently been reviewed by Llano<sup>3</sup> and Crosson.<sup>4</sup>

### **AUTHOR CONTRIBUTIONS**

Dr. Bruzzone: acquisition of data, analysis and interpretation, manuscript redaction. Dr. Gill: acquisition of data, analysis and

interpretation. Dr. Ruland: study supervision, revision of the manuscript.

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#### DISCLOSURE

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

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