

# Teaching NeuroImages: Isolated mammillary body infarction presenting with memory impairment

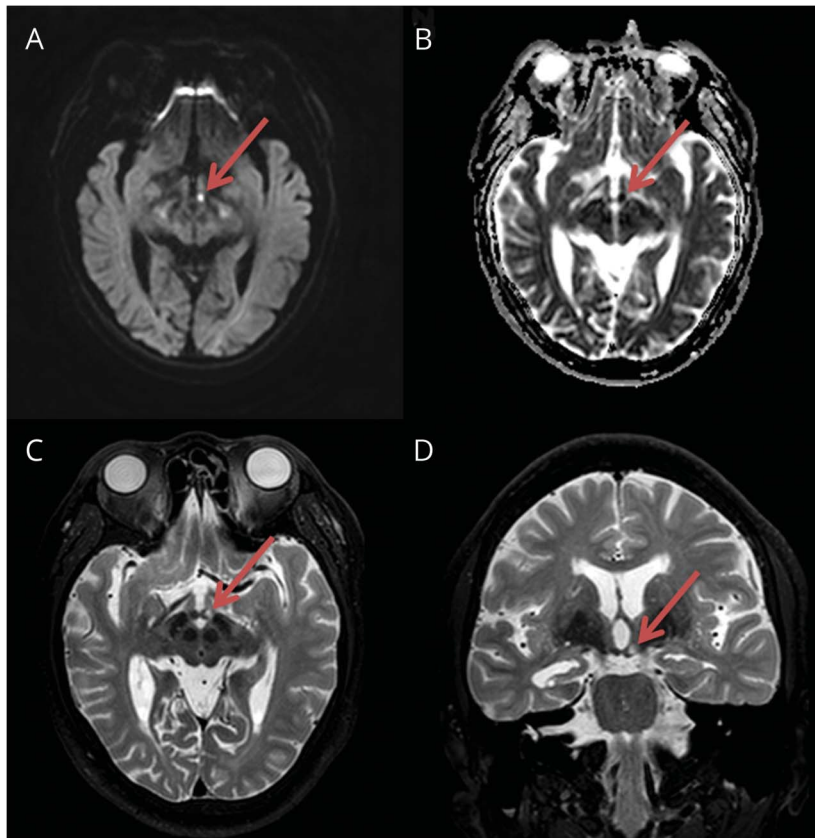
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**Figure 1** Brain MRI



(A) Diffusion-weighted, (B) apparent diffusion coefficient, and (C, D) T2-weighted images show an ischemic infarct in the left mammillary body (arrows).

A right-handed 68-year-old man presented with acute-onset memory impairment. Before the event, he was doing well in his daily life. He had a history of hypertension. On the Seoul Neuropsychological Screening Battery, his verbal memory functions exhibited significant impairments (31.82 percentile for immediate recall, 1.09 percentile for delayed recall, and 2.22 percentile for delayed copy). A brain MRI revealed an acute infarction in the left mammillary body (figure 1), and CT angiography revealed focal stenosis of the bilateral posterior cerebral arteries (figure 2).

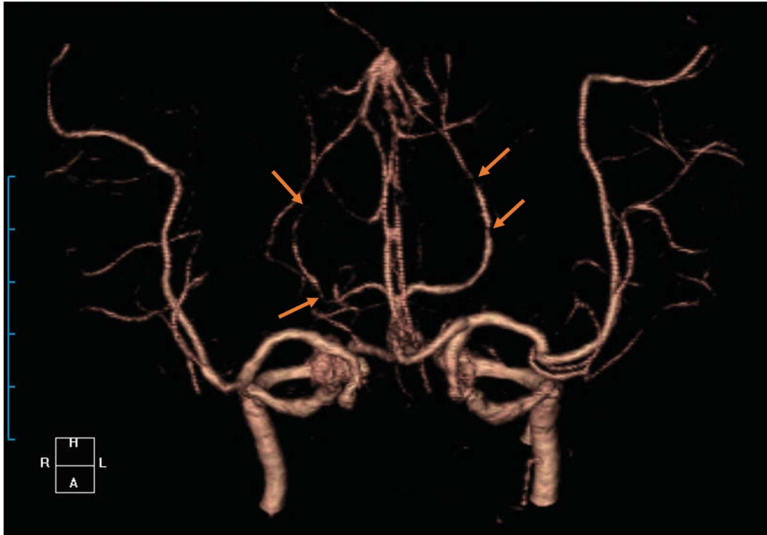
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Focal stenosis of the bilateral posterior cerebral arteries (arrows).

The mammillary bodies are part of the Papez circuit, which is involved in memory consolidation and emotional control.<sup>1</sup>

### Author contributions

Sung Eun Kim: design or conceptualization of the study. Bong Ju Lee: interpretation of the neuropsychological data. Tae Hyung Kim and Chi Woong Mun: interpretation of the radiologic data. Kang Min Park: drafting the manuscript.

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### Disclosure

The authors report no disclosures relevant to the manuscript. Go to [Neurology.org/N](http://Neurology.org/N) for full disclosures.

### Reference

1. Vann SD, Nelson AJ. The mammillary bodies and memory: more than a hippocampal relay. *Prog Brain Res* 2015;219:163–185.

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