

# Teaching NeuroImages: Vertebrobasilar dolichoectasia with dissection manifested as infarct and subarachnoid hemorrhage

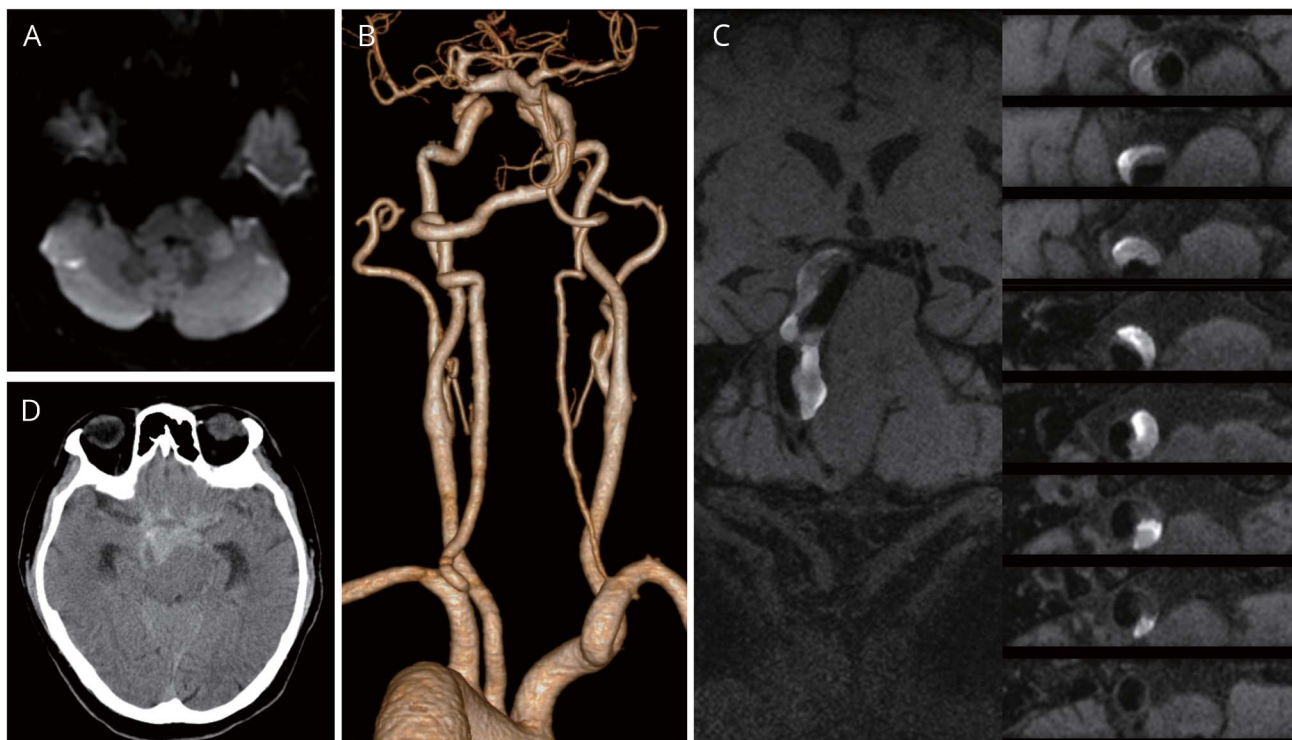
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**Figure** Radiologic imaging features of the patient



(A) Diffusion-weighted imaging shows acute infarctions of cerebellar hemispheres and pons. (B) CT angiography shows vertebrobasilar dolichoectasia. (C) High-resolution MRI (T1-CUBE) shows a crescentic high signal of the basilar artery and left vertebral artery, indicating intramural hematoma of artery dissection. (D) CT shows subarachnoid hemorrhage in the suprasellar cistern.

A 60-year-old man presented with vertigo, dysarthria, and left weakness. MRI and CT angiography showed multifocal infarctions and vertebrobasilar dolichoectasia (VBD) (figure, A and B). High-resolution MRI showed dissection of basilar artery and left vertebral artery (figure, C). He had subarachnoid hemorrhage (SAH) on the 10th day (figure, D) and died on the 30th day. VBD with dissection can manifest as sequential infarct and SAH, which predicts poor prognosis.<sup>1</sup> High-resolution MRI is a useful tool to detect dissection in VBD. No consensus has been reached on treatment of VBD; antiplatelet agents, anticoagulants, surgical, and endovascular treatment are all treatment options.<sup>2</sup>

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## Author contributions

Xinmiao Zhang: acquisition of images and data, drafting of the manuscript. Jing Jing: analysis and interpretation of data, drafting of the manuscript. Kehui Dong: analysis and interpretation of data. Yilong Wang: study concept and design, revising the manuscript. Yongjun Wang: study supervision, revising the manuscript for content.

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## Disclosure

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