

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

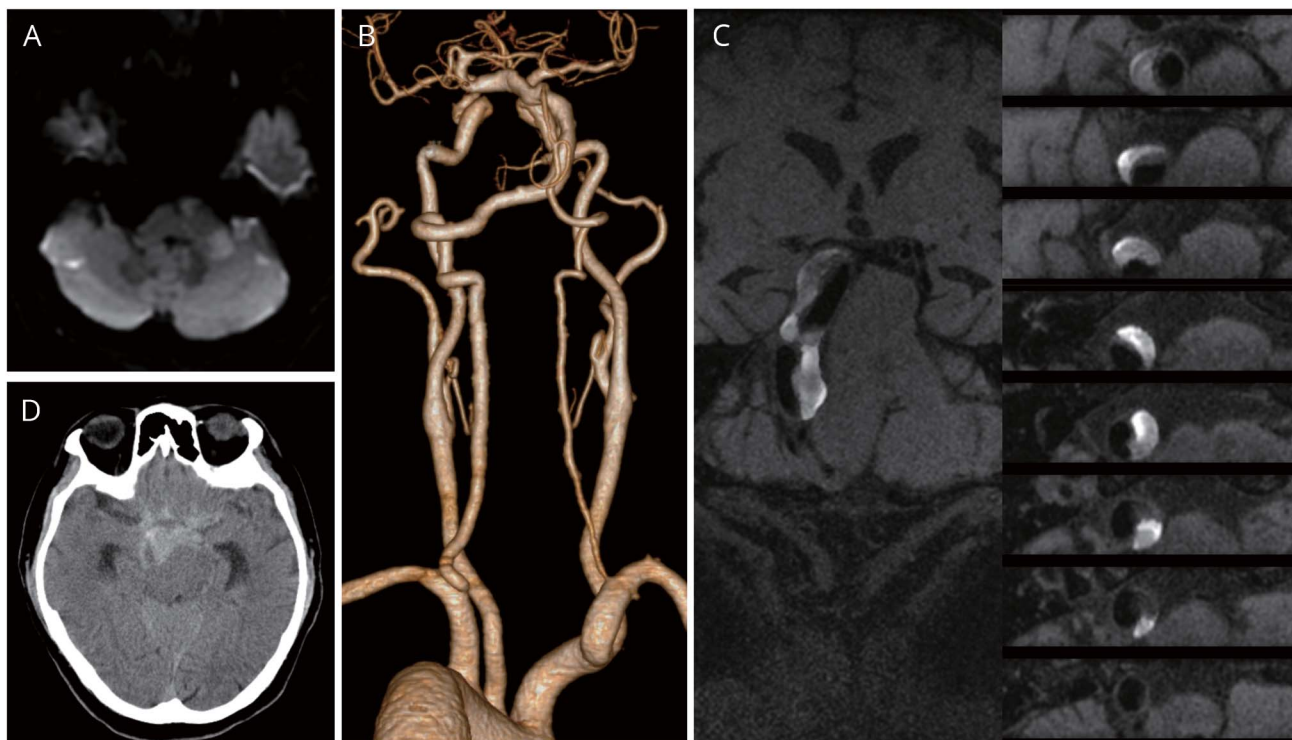
Xinmiao Zhang, MD,* Jing Jing, MD, PhD,* Kehui Dong, MD, Yilong Wang, MD, PhD, and Yongjun Wang, MD

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Correspondence

Dr. Yongjun Wang
yongjunwang1962@gmail.com
or Dr. Yilong Wang
yilong528@gmail.com

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.¹ 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.²

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*These authors contributed equally to this work.

From the Department of Neurology, Beijing Tiantan Hospital, Capital Medical University; China National Clinical Research Center for Neurological Diseases; Center of Stroke, Beijing Institute for Brain Disorders; and Beijing Key Laboratory of Translational Medicine for Cerebrovascular Disease, China.

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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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