

Teaching NeuroImages: Vessel wall imaging of carotid web

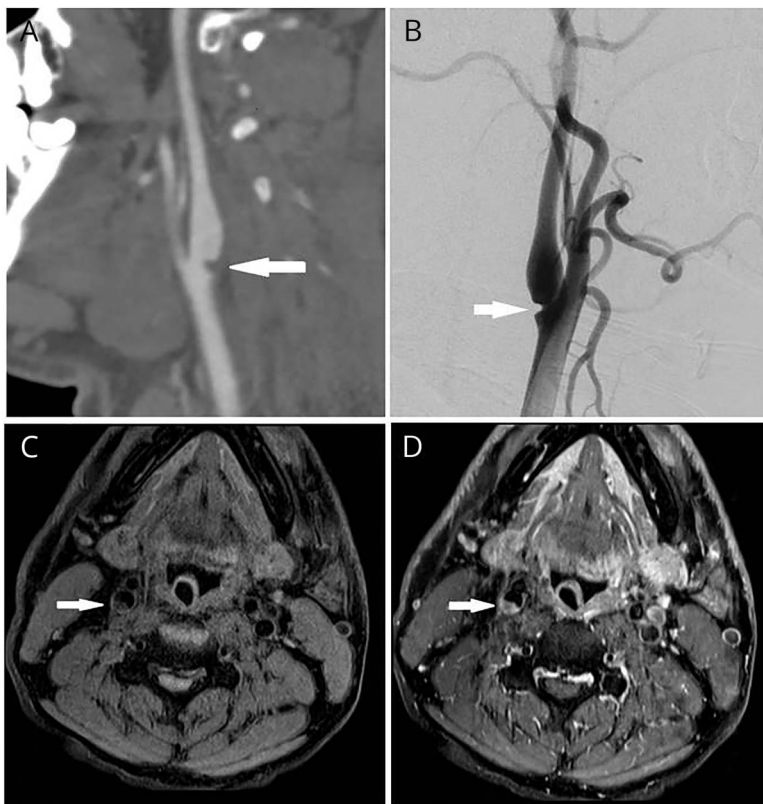
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Figure CT angiogram, digital subtraction angiogram, and MRI vessel wall imaging



CT angiogram (A) and catheter digital subtraction angiogram (B) showing characteristic appearance of a carotid web (arrow) arising from the posterior wall of internal carotid artery origin. Precontrast (C) and postcontrast (D) MRI vessel wall imaging shows a shelf-like protrusion (arrow) slightly T1 hypointense to normal vessel wall with peripheral enhancement and central hypoenhancement.

A 46-year-old man with a right distal middle cerebral artery occlusion was referred to a comprehensive stroke center. Outside CT angiogram (figure, A) had been originally interpreted as normal, but upon review revealed a carotid web at the origin of the right internal carotid artery. Catheter angiogram (figure, B) and MRI vessel wall imaging were subsequently performed (figure, C and D). Carotid web, a variant of fibromuscular dysplasia, is known to be thrombogenic due to stasis of blood flow distal to the web causing ipsilesional and recurrent infarctions.^{1,2} The appearance on MRI vessel wall imaging is currently not well-documented.

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Name	Location	Contribution
Neethu Gopal, MBBS	Department of Neurology, Mayo Clinic, Jacksonville, FL	Execution, writing of first draft and review
Vivek Gupta, MD	Department of Radiology, Mayo Clinic, Jacksonville, FL	Execution, review and critique

Appendix *(continued)*

Name	Location	Contribution
Alok A. Bhatt, MD	Department of Radiology, Mayo Clinic, Jacksonville, FL	Execution, review and critique
Erik H. Middlebrooks, MD	Department of Radiology, Mayo Clinic, Jacksonville, FL	MRI description, execution, review and critique

References

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