Teaching NeuroImages: Extracranial internal carotid artery aneurysm causing embolic stroke

A 42-year-old man with no history of trauma experienced acute numbness in his right arm and leg. A pulsating left cervical tumor was noted on clinical examination. Carotid ultrasound demonstrated significant widening of the left proximal internal carotid artery (ICA) and a large nonocclusive hypoechoic structure compatible with an aneurysm and intraluminal thrombus (figure, B, D, and E). MRI confirmed a fusiform extracranial ICA aneurysm and showed a left-sided small embolic stroke (figure, A and C). The patient underwent anticoagulation with low-molecular-weight heparin and eventually surgical treatment (i.e., resection and saphenous vein graft interposition). Histopathology revealed severe atherosclerosis. Extracranial ICA aneurysms are rare and can cause embolic stroke. The underlying etiology is diverse, with atherosclerosis being the most common entity.

AUTHOR CONTRIBUTIONS
Dr. Barlinn obtained the images, prepared the figure, and wrote the case summary. Dr. Kepplinger assisted in preparation of the figure and contributed to drafting and revising the manuscript. Dr. Puetz and Dr. Bodechtel contributed to revising the manuscript.
STUDY FUNDING
No targeted funding reported.

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

REFERENCES
Teaching NeuroImages: Extracranial internal carotid artery aneurysm causing embolic stroke
Kristian Barlinn, Jessica Kepplinger, Volker Puetz, et al.
Neurology 2014;83:e48-e49
DOI 10.1212/WNL.0000000000000604

This information is current as of July 14, 2014

Updated Information & Services
including high resolution figures, can be found at:
http://n.neurology.org/content/83/3/e48.full

Supplementary Material
Supplementary material can be found at:
http://n.neurology.org/content/suppl/2014/07/13/83.3.e48.DC1

References
This article cites 2 articles, 0 of which you can access for free at:
http://n.neurology.org/content/83/3/e48.full#ref-list-1

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
Embolism
http://n.neurology.org/cgi/collection/embolism
MRI
http://n.neurology.org/cgi/collection/mri
Stroke in young adults
http://n.neurology.org/cgi/collection/stroke_in_young_adults
Ultrasound
http://n.neurology.org/cgi/collection/ultrasound

Permissions & Licensing
Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
http://www.neurology.org/about/about_the_journal#permissions

Reprints
Information about ordering reprints can be found online:
http://n.neurology.org/subscribers/advertise

Neurology ® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2014 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.