

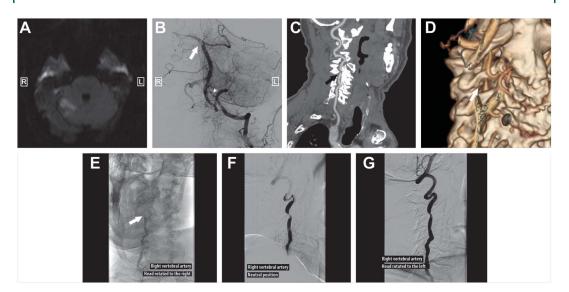
Section Editor Mitchell S.V. Elkind, MD, MS

Isabelle Mourand, MD Souhayla Azakri Guillaume Boniface, MD Alain Bonafé, MD, PhD Igor Lima Maldonado, MD, PhD

Correspondence to Dr. Mourand: i-mourand@chu-montpellier.fr

Teaching Neuro *Images*: Intermittent symptomatic occlusion of the vertebral artery caused by a cervical osteophyte

Figure Imaging



(A) Diffusion-weighted MRI: right cerebellar infarcts. (B) Angiography performed during an urgent thrombectomy procedure after a second episode of vertebrobasilar ischemia. An image suggestive of an embolus is seen at the top of the basilar artery (white arrow). An iatrogenic vasospasm due to the endovascular manipulation is also visible in the same image (arrowhead). CT angiogram (C) and 3-dimensional reconstruction (D). Dynamic angiography: complete right vertebral artery occlusion with the head rotated to the right (E); moderate compression with the head in the neutral position (F) or rotated to the left (G).

A 77-year-old man presented with 2 episodes of waking up with symptoms of vertebrobasilar ischemia (figure, A and B) within 6 months. A CT angiogram showed narrowing of the right vertebral artery due to extrinsic compression by an osteophyte of the superior articular process of the fourth cervical vertebra, compromising the foramen transversarium (figure, C and D). Dynamic angiography demonstrated intermittent vascular occlusion associated with head turning (figure, E–G). After recurrence, surgical decompression of the vertebral artery was performed. Extrinsic compressions of the vertebral artery are rare. 1

The most frequent signs are those of vertebrobasilar insufficiency. Surgical treatment has been proposed when conservative management fails.¹

AUTHOR CONTRIBUTIONS

I. Mourand, I.L. Maldonado, and A. Bonafé: patient care, manuscript preparation, editing, and review. S. Azakri and G. Boniface: patient care and manuscript preparation.

REFERENCE

 Citow JS, Macdonald RL. Posterior decompression of the vertebral artery narrowed by cervical osteophyte: case report. Surg Neurol 1999;51:495–498.

From the Departments of Neurology (I.M., S.A.), Neurosurgery (G.B.), and Neuroradiology (A.B., I.L.M.), Montpellier University Hospital, Montpellier, France.

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



Teaching Neuro Images: Intermittent symptomatic occlusion of the vertebral artery caused by a cervical osteophyte

Isabelle Mourand, Souhayla Azakri, Guillaume Boniface, et al.

Neurology 2013;80;e54

DOI 10.1212/WNL.0b013e31827f0eeb

This information is current as of January 28, 2013

Updated Information & including high resolution figures, can be found at:

Services http://n.neurology.org/content/80/5/e54.full

References This article cites 1 articles, 0 of which you can access for free at:

http://n.neurology.org/content/80/5/e54.full#ref-list-1

Subspecialty Collections This article, along with others on similar topics, appears in the

following collection(s):

 \mathbf{CT}

http://n.neurology.org/cgi/collection/ct
Other cerebrovascular disease/ Stroke

http://n.neurology.org/cgi/collection/other_cerebrovascular_disease__s

troke

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 © 2013 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

