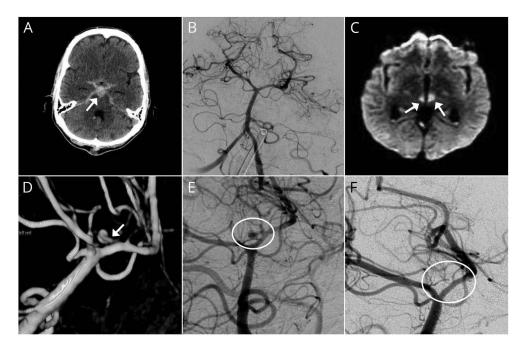
Teaching NeuroImages: Rupture and spontaneous resolution of a P1 perforator pseudoaneurysm

Enrico Giordan, Alejandro A. Rabinstein, MD, Harry J. Cloft, MD, PhD, and Giuseppe Lanzino, MD Neurology® 2018;90:e1730-e1731. doi:10.1212/WNL.0000000000005485

Correspondence

Dr. Lanzino Lanzino.giuspeppe@ mayo.edu

Figure Rupture and spontaneous resolution of a thalamoperforator pseudoaneurysm



(A) Admission CT shows subarachnoid hemorrhage (arrow). (B) Initial catheter angiography shows no visible abnormalities. (C) Brain MRI DWI shows bilateral thalamic infarcts (arrows). (D) Follow-up angiography, 3D reconstruction, demonstrates a 2 mm pseudoaneurysm arising from a large left thalamoperforator (arrow). (E) 2D of the same study. (F) Angiography 6 weeks after presentation documents spontaneous resolution of the pseudoaneurysm (circle).

A 47-year-old man with a history of smoking and hypertension had a severe, sudden headache. Head CT showed subarachnoid hemorrhage (SAH) (figure, A). Progressive ophthalmoplegia developed without alteration of consciousness. Catheter angiography was normal (figure, B). Brain MRI documented bilateral thalamic infarcts (figure, C). Repeat catheter angiography after 4 days showed a 2-mm dissecting pseudoaneurysm of a thalamoperforator (figure, D and E). Serial noninvasive vascular studies documented no growth. Six weeks later, a catheter angiogram demonstrated complete resolution of the pseudoaneurysm (figure, F). Bilateral third nerve palsy persisted at 1 year follow-up. Dissecting pseudoaneurysms of perforating posterior circulation vessels can present with a pattern suggestive of perimesencephalic SAH. Presence of associated neurologic deficits should increase the level of suspicion. Spontaneous resolution can occur without invasive treatment.¹

MORE ONLINE

→Teaching slides
links.lww.com/WNL/A427

From the Department of Neurosurgery and Neurology, Mayo Clinic, Rochester, MN.

Go to Neurology.org/N for full disclosures. Funding information and disclosures deemed relevant by the authors, if any, are provided at the end of the article.

Author contributions

Enrico Giordan: manuscript preparation, drafting manuscript, collection of data and figure, approval of final version. Alejandro A. Rabinstein: collection of data, preparation of manuscript, critical review and approval of the final version. Harry Cloft: collection of data, critical review and final approval of the manuscript. Giuseppe Lanzino: manuscript preparation, drafting manuscript, collection of data and figure, approval of final version.

Study funding

No targeted funding reported.

Disclosure

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

Reference

 Park SQ, Kwon OK, Kim SH, Oh CW, Han MH. Pre-mesencephalic subarachnoid hemorrhage: rupture of tiny aneurysms of the basilar artery perforator. Acta Neurochir 2009;151:1639–1646.



Teaching NeuroImages: Rupture and spontaneous resolution of a P1 perforator pseudoaneurysm

Enrico Giordan, Alejandro A. Rabinstein, Harry J. Cloft, et al. *Neurology* 2018;90;e1730-e1731 DOI 10.1212/WNL.00000000005485

This information is current as of May 7, 2018

Updated Information & including high resolution figures, can be found at: **Services** http://n.neurology.org/content/90/19/e1730.full

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

http://n.neurology.org/content/90/19/e1730.full#ref-list-1

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

following collection(s):

All Cerebrovascular disease/Stroke

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

e

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 © 2018 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

