Teaching NeuroImages:
Anoxic brain injury with unilateral hemispheric cortical involvement

A 55-year-old woman collapsed with chest pain and cardiac arrest. Her pulse was restored after 6 minutes of cardiopulmonary resuscitation, but she remained comatose. Brain MRI (figure) revealed bilateral basal ganglia and right hemispheric cortical lesion, which was typical for anoxic brain injury except for the unilateral cortical involvement. Neck CT angiography showed severe stenosis in the right proximal internal carotid artery. The unilateral cortical injury could be explained by compromised cerebral blood flow due to preexisting carotid stenosis. This case demonstrates an atypical pattern of anoxic brain injury secondary to focal vascular stenosis.

AUTHOR CONTRIBUTIONS
Study concept and design: Y.-W. Kim, Y.-H. Hwang. Analysis and interpretation of data: Y.-W. Kim, J.-H. Seo. Drafting of the manuscript: Y.-W. Kim. Critical revision of the manuscript for important intellectual content: Y.-H. Hwang, S.-P. Park.

STUDY FUNDING
No targeted funding reported.

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

REFERENCES

Figure
MRI showing anoxic brain injury with unilateral cortical involvement

A diffusion-weighted MRI (A–C) shows hyperintensity in the bilateral basal ganglia and the right hemispheric cortex. Curved planar reformation from neck CT angiography (D) reveals severe stenosis (arrow) of the ipsilesional internal carotid artery with heavy calcification.
Teaching NeuroImages: Anoxic brain injury with unilateral hemispheric cortical involvement
Yong-Won Kim, Ji-Hye Seo, Sung-Pa Park, et al.

Neurology 2013;80:e160
DOI 10.1212/WNL.0b013e31828ab2dc

This information is current as of April 1, 2013

Updated Information & Services
This article, along with others on similar topics, appears in the following collection(s):
Cardiac; see Cerebrovascular Disease/Cardiac
Coma
MRI

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

References
This article cites 2 articles, 2 of which you can access for free at:
http://n.neurology.org/content/80/14/e160.full#ref-list-1

Subspecialty Collections
including high resolution figures, can be found at:
http://n.neurology.org/content/80/14/e160.full