Teaching *NeuroImages*: Anoxic brain injury with unilateral hemispheric cortical involvement

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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.

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 injury¹ 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.² 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.

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Neurology 2013;80:e160

DOI 10.1212/WNL.0b013e31828ab2dc

This information is current as of April 1, 2013

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