Teaching NeuroImages: Carotid body tumor as a novel cause of cerebral ischemic stroke

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Figure CT imaging and neck photograph

(A) Axial CT of the head shows right middle and posterior cerebral artery territory infarction. (B) Sagittal CT angiography of the neck shows an extrinsically occluded right internal carotid artery. (C) Contrast-enhanced axial CT of the neck demonstrates an enhancing mass in the right carotid space. (D) Photograph of the neck demonstrates a nonpulsatile mass visible in the neck.

An 83-year-old man presented with drowsiness, dysarthria, anosognosia, forced right gaze deviation and left hemianopia, hemiplegia, and hemianesthesia consistent with a right hemispheric stroke. A painless, nonpulsatile, right cervical mass was noted. CT angiography demonstrated a right carotid body tumor (CBT) occluding the ipsilateral internal carotid artery (figure) and a fetal-type right posterior cerebral artery. Other etiologies of stroke were excluded. CBTs are rare. They usually affect middle-aged patients with chronic hypoxia and present as a cervical mass with lower cranial nerve palsies.¹ CBTs completely surrounding the internal carotid artery should be included among the uncommon causes of stroke.²

AUTHOR CONTRIBUTIONS

D. Larrosa: conceptualization, bibliographic review, and manuscript elaboration. J. Vega: CT angiography images elaboration and figure design. L. Benavente: conceptualization, bibliographic review, and manuscript elaboration. C. Ramón: manuscript conceptualization. S. Calleja: manuscript conceptualization. J. Pascual: manuscript review.

REFERENCES

1. Rao AB, Koeller KK, Adair CF. From the archives of the AFIP: paragangliomas of the head and neck: radiologic-pathologic correlation. *Radiographics* 1999;19:1605–1632.
2. Chamorro Sanchez A, Varela de Seijas E, Matesanz Matesanz J, Trapero VL. Carotid body tumor: unusual cause of transient ischemic attacks. *Stroke* 1988;19: 102–103.

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