

Bilateral Anterior Choroidal Artery Infarction Presenting with Progressive Somnolence

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A 55-year-old woman was admitted with a 3 days history of increasing lethargy with bradyphrenia and apathy. She progressively developed severe somnolence with marked abulia, right hemiparesis, right hemianopsia, and pseudobulbar palsy. Brain magnetic resonance imaging showed the rare image of bilateral acute anterior choroidal artery infarction. Pseudobulbar mutism and in rare cases abulia have been described in acute anterior choroidal artery infarction contralateral to an older lesion in mirror position. Although neurologic deterioration is not infrequent in anterior choroidal artery territory infarcts, the absence of focal neurologic signs on admission is rare and did not raise suspicion of acute stroke. **Key Words:** Ischemic stroke—anterior choroidal artery—bilateral—somnolence—infarction.

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Case Report

A 55-year-old right-handed woman was admitted with a 3 days history of increasing lethargy. Clinical neurologic examination on admission showed an encephalopathic state with marked bradyphrenia and apathy, without focal neurologic deficits or signs of lateralization. Over a few days, she gradually developed severe somnolence with right hemiparesis and right hemianopsia. There was marked abulia and pseudobulbar mutism, diminished facial expression, and severe swallowing difficulties. Brain magnetic resonance imaging performed

3 days after admission revealed the rare image of acute infarction in the territory of the anterior choroidal artery (AChA) bilaterally (Fig 1). Additionally, there were small acute cortical infarcts in the right frontobasal, occipitoparietal, and rolandic cortex and in the left parietal cortex, suggesting cardioembolic stroke. Computed tomographic angiography showed a high-grade stenosis of the left carotid artery, which could not explain for all the infarcts. Transesophageal echocardiography was normal. Holter monitoring for a period of 24 hours could not reveal atrial fibrillation. Stroke mechanism remained unclear; however, occult cardiac source was suspected.

Discussion

The 'AChA syndrome,' as first described in 1925 by the clinical triad of hemiparesis, hemihypesthesia, and hemianopsia, in its complete form, is rare. Dysarthria, ataxia, aphasia, disturbances of consciousness, neglect, and even gaze preference have been previously described.¹⁻³ We describe a patient with the rare diagnosis of bilateral AChA infarction, who progressively developed an encephalopathic state with marked abulia, right hemiparesis, right hemianopsia, and pseudobulbar palsy. Similar clinical vignette has previously been

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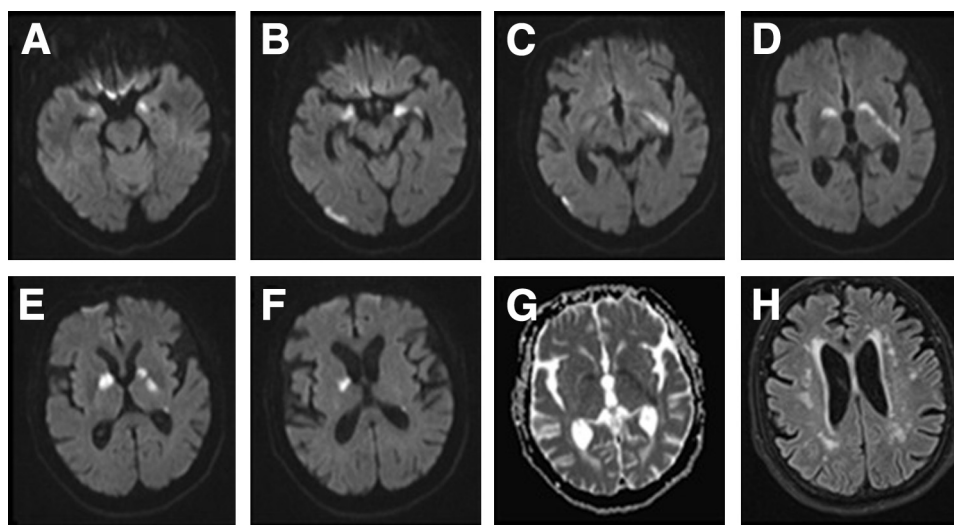


Figure 1. Brain MRI showing acute bilateral anterior choroidal artery infarction. Brain MRI showed diffusion restriction bilaterally in the posterior limb of the internal capsule, globus pallidus, and medial temporal lobe (A-F). Lesions were hypointense on apparent diffusion coefficient map suggesting acute infarction (G). Fluid attenuated inversion recovery image showed multiple periventricular white matter lesions as seen in small vessel disease (H). Abbreviation: MRI, magnetic resonance imaging.

reported in acute AChA stroke contralateral to an older lesion in mirror position.³ The combination of pseudobulbar palsy due to interruption of corticobulbar fibers and abulia due to damage to basal ganglia-thalamocortical loops could account for the mutism.⁴⁻⁶ Progressive neurologic deterioration as seen in our patient is common in AChA infarcts.⁷ A decreased level of consciousness without focal neurologic signs on admission, however, has not been reported and can be misleading, as it does not raise suspicion of acute stroke.

Conclusions

The clinical spectrum of AChA infarcts is widening. A decreased level of consciousness can be the first manifestation of a bilateral acute infarction in AChA territory.

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