

Teaching Video NeuroImage: Bilateral Eyelid Opening Apraxia in a Patient With Top of the Basilar Syndrome

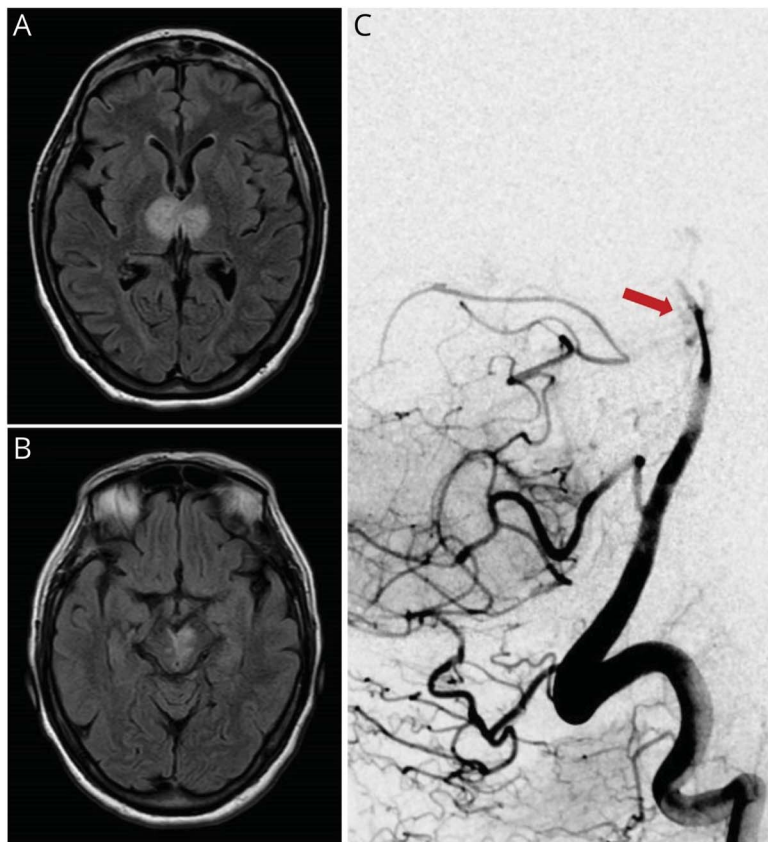
Angelo Tiziano Cimmino, MD, Francesca Vitali, MD, and Raffaele Iorio, MD, PhD

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Correspondence

Dr. Cimmino
angelotizianocimmino@
gmail.com

Figure Patient's Neuroimaging



Brain MRI showing a bilateral paramedian thalamic (A) and mesencephalic (B) infarction in fluid-attenuated inversion recovery sequences. Digital subtraction angiography showing an occlusion of the top of the basilar artery (arrow, C).

A 76-year-old woman was admitted to our emergency department for acute development of vertigo, followed by loss of consciousness. Brain MRI revealed a bilateral paramedian thalamo-mesencephalic infarction due to basilar artery occlusion (Figure). The patient underwent systemic thrombolysis and mechanical thrombectomy, with complete reperfusion of the basilar artery. After the procedure, the patient was alert and oriented, and her examination demonstrated apraxia of eyelid opening (ALO) and vertical-gaze palsy (Video 1). ALO is considered a form of eyelid dystonia. Previous electromyographic studies on affected patients demonstrated either involuntary *levator-palpebrae* inhibition or pretarsal *orbicularis-oculi*

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From the Department of Neuroscience (A.T.C., F.V., R.I.), Università Cattolica del Sacro Cuore; and UOC Neurologia (R.I.), Fondazione Policlinico Universitario Agostino Gemelli IRCSS, Rome, Italy.

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muscle motor persistence.¹ Its neuroanatomic bases are still unknown, but there is evidence that this condition is linked to disorders of the basal ganglia, rostral midbrain, and frontal lobes.¹ Myint et al.² reported a case of ALO in isolated bilateral thalamic infarction, suggesting that the paramedian thalamic nuclei may have a role in the voluntary eyelid movements network.

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Appendix Authors

Name	Location	Contribution
Angelo Tiziano Cimmino, MD	Department of Neuroscience, Università Cattolica del Sacro Cuore, Rome, Italy	Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; analysis or interpretation of data
Francesca Vitali, MD	Department of Neuroscience, Università Cattolica del Sacro Cuore, Rome, Italy	Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; analysis or interpretation of data
Raffaele Iorio, MD, PhD	Department of Neuroscience, Università Cattolica del Sacro Cuore; UOC Neurologia, Fondazione Policlinico Universitario Agostino Gemelli IRCSS, Rome, Italy	Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; analysis or interpretation of data

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