Teaching NeuroImages:

Eagle syndrome

Cerebrovascular complications

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Figure CT angiogram shows internal carotid artery (ICA) compression and MRI brain shows ischemia in left ICA territory

Elongated styloid process on left causes compression of left internal carotid artery extracranially (A–C). Restricted cortical diffusion in left anterior cerebral artery and middle cerebral artery territory spares the white matter, with corresponding hypointensity on apparent diffusion coefficient sequence (D, E).

A 70-year-old man developed acute onset of aphasia and right-sided hemiplegia in the setting of mild hypotension after hemodialysis. Brain MRI (figure, D and E) revealed diffusion restriction in the left anterior and middle cerebral artery territories. Brain CT (figure, A–C) was significant for an elongated styloid process causing mild compression of the left internal carotid artery. A comprehensive workup for stroke etiology was otherwise unremarkable.

Eagle syndrome is primarily an otorhinolaryngologic condition characterized by odynophagia and cervicofacial pain due to an elongated or ossified stylohyoid ligament.¹ Ipsilateral head turn or relative systemic hypoperfusion may precipitate focal cerebral hypoperfusion and ischemia.²

AUTHOR CONTRIBUTIONS

Dr. Tapan Kavi: acquisition of data, analysis and interpretation, manuscript concept and design. Dr. Shouri Lahiri: critical revision of the manuscript for important intellectual content.

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DISCLOSURE

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

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