Teaching NeuroImages: An aTIPICal cause of acute neck pain

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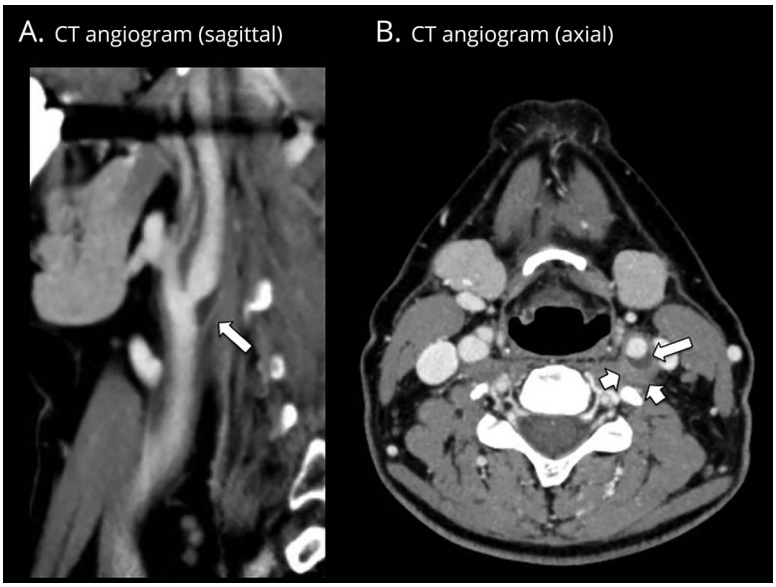
Figure 1 Initial imaging



(A) Sagittal and (B) axial CT angiography images demonstrate eccentric low-attenuation plaque along the posterior wall of the distal left common carotid artery (long arrow) without significant luminal narrowing. Surrounding soft tissue and fat stranding (short arrows) are consistent with perivascular inflammation.

A healthy 54-year-old woman developed spontaneous acute onset of sharp left-sided neck and facial pain and odynophagia following a brief flu-like illness. CT angiography revealed eccentric perivascular infiltration at the left carotid bifurcation (figure 1) with corresponding enhancement on MRI (figure 2). She was empirically treated with prednisone and had clinical and imaging improvement at follow-up.

Transient perivascular inflammation of the carotid artery (TIPIC) is a rare, self-limited entity distinguishable on vascular imaging from extracranial dissection by lack of luminal narrowing and marked perivascular inflammation.[1] Reported treatments include nonsteroidal anti-inflammatory drugs, antiplatelet agents, and steroids. There is no known associated risk of stroke. Pain typically resolves within 2 weeks, with radiologic improvement by 3 months.[2]

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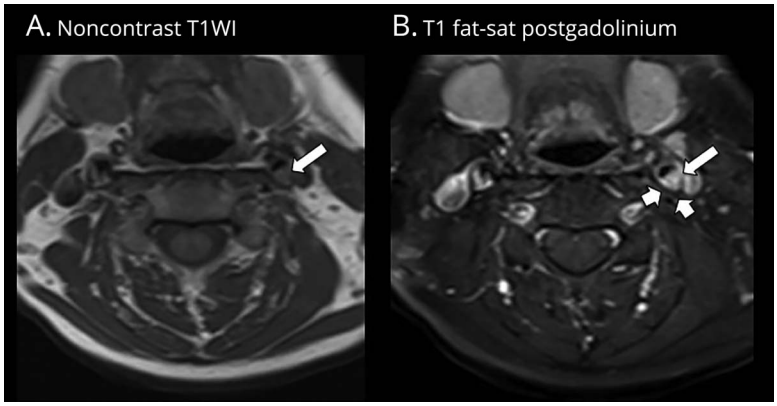
Figure 2 Follow-up imaging at 3 weeks



(A) Noncontrast T1-weighted axial MRI at 3 weeks post-CT showing minimally hyperintense plaque at the posterior aspect of the distal left common carotid artery (CCA), which enhances post IV contrast on (B) postgadolinium T1 fat-saturation imaging axial MRI (long arrows). There is a clear fat plane at the posterior margin of the left CCA (short arrows) consistent with resolution of perivascular inflammation, which was identified on CT at the time of initial presentation.

Disclosure

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

Appendix Authors

Name	Location	Contribution
Stephanie Gosselin-Lefebvre, MD, FRCPC	Université Laval, Québec, Canada	Gathered patient data, drafted manuscript, revised figure captions
Athari K. Salmeen, MD, FRCPC	Jaber Al-Ahmad Al Sabah Hospital, Kuwait City, Kuwait	Gathered patient data, revised manuscript
Danielle Byrne, MD, RCSI	Vancouver General Hospital, Canada	Prepared figures, drafted figure captions, revised manuscript

Appendix *(continued)*

Name	Location	Contribution
Jason Shewchuk, MD, FRCPC	Vancouver General Hospital, Canada	Prepared figures, revised figure captions and manuscript
Thalia S. Field, MD, FRCPC, MHSc	Vancouver General Hospital, Canada	Conception, revised manuscript and figure captions

References

1. Lecler A, Obadia M, Savatovsky J, et al. TIPIC syndrome: beyond the myth of Carotidynia, a new distinct unclassified entity. Am J Neuroradiology 2017;38:1391–1398.
2. Ulus S, Aksoy Ozcan U, Arsian A, et al. Imaging spectrum of TIPIC syndrome. Clin Neuroradiol Epub 2018 Nov 23.