Teaching NeuroImage: Abducens Nerve Palsy With Ipsilateral Excessive Eye Tearing Attributed to an Internal Carotid Artery Sympathetic Plexus Schwannoma

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**Figure 1** Neuroimaging Findings of a Patient With an Internal Carotid Sympathetic Plexus Schwannoma

Axial brain MRI with T2-weighted sequence shows a hyperintense lesion along the anterior wall of the left internal carotid artery at the transition of the petrous to cavernous segment (A, arrow). Coronal (B) and sagittal (C) brain MRI with T2-weighted 3D turbo spin-echo (SPACE) sequence with multiplanar reconstruction demonstrate the elongated course of the lesion (arrows) within the left carotid canal, juxtapositionally to the internal carotid artery from the lower part of the cavernous segment until the midpoint of the petrous segment. Axial (D), coronal (E), and sagittal (F) brain MRI with T1-weighted 3D SPACE black blood sequence show the homogeneously enhancing lesion (arrows) in the left carotid canal, surrounding the petrous and cavernous segments of the internal carotid artery.

A 65-year-old man developed subacute horizontal diplopia due to left abducens nerve (AN) palsy and excessive left eye tearing. Brain MRI revealed a hyperintense T2 lesion with an elongated course within the left carotid canal, presenting homogenous contrast enhancement (figure 1). The imaging findings were characteristic for an internal carotid artery sympathetic...
plexus (ICSP) schwannoma compressing the left AN. Subsequent irritation of the deep petrosal nerve originating directly from ICSP and continuing as the Vidian nerve may have led to the lacrimal gland edema and excessive left eye tearing (figure 2). Thorough case presentation and a figure demonstrating the relevant anatomy are available from Dryad at doi.org/10.5061/dryad.pzgmsbck6.

ICSP schwannoma represents an uncommon cause of AN palsy\(^1,2\) that may also manifest with excessive ipsilateral eye tearing due to Vidian nerve involvement.

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None to report.

**Disclosure**
The authors report no disclosures. Go to Neurology.org/N for full disclosures.

**Appendix**

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References
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