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Magnetic Resonance Imaging of Sympathetic Ganglion in a Patient with Internal Carotid Artery Dissection

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Keywords

Carotid artery dissection; Headache; MRI brain; Horner syndrome; Sympathetic plexus

Previously, a healthy 41-year-old man presented with headache that radiated to the right side of the neck and teeth. Symptoms began 3 days before presentation after a fall. He had right-sided miosis, ptosis, facial flushing, and conjunctival injection on examination. CT-angiography showed dissection of the distal cervical right internal carotid artery starting at the level of C2 and extending to the skull base. Thin-slice high-resolution 3T T1 and T2 weighted fat-saturated magnetic resonance imaging images showed the intramural hematoma as a crescentic hyperintensity along the medial wall of the vessel, which was compressing the true lumen and the adjacent superior sympathetic ganglion.

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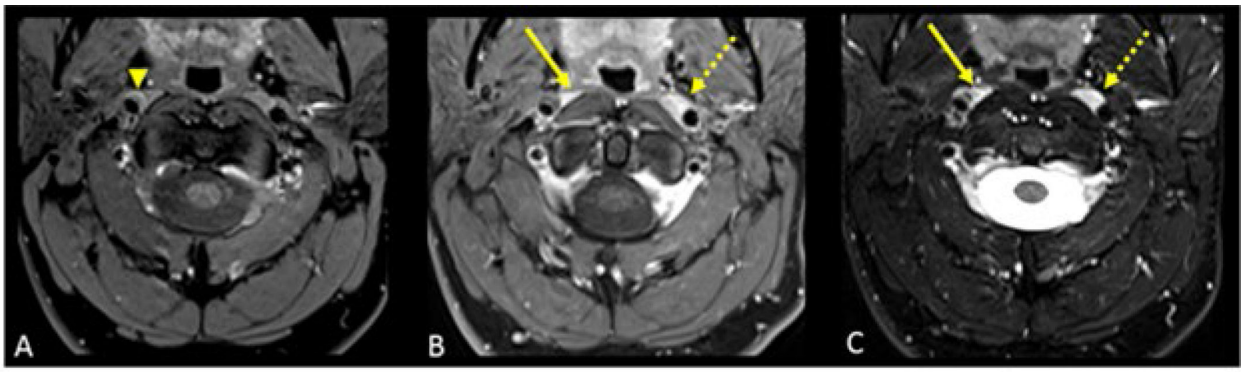

Figure 1. MRI of the neck. Axial T1-weighted fat-saturated image (A) shows crescentic T1 hyperintensity surrounding the lumen of the distal cervical segment of the right internal carotid artery (arrowhead), representing dissection. Axial postcontrast T1-weighted fat saturated (B) and T2-weighted fat saturated (C) images show a small right superior sympathetic ganglion (solid arrow) as compared to the left (dotted arrow).

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