



Figure. FLAIR (left column) and T2\*-weighted gradient echo (right column) brain MRI showing a hemosiderin-laden cavernous malformation in the right tegmental region of the upper pons (A) and medulla (B). This lesion interrupts the central tegmental tract, the intra-brainstem component of the Guillain-Mollaret triangle, causing ipsilateral signal changes in, and enlargement of, the inferior olive (arrows). Note the normal appearing left inferior olivary nucleus (arrowhead).

### VIDEO Cerebellar limb tremor and inferior olivary hypertrophy

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A 49-year-old wheelchair-bound man was rendered left hemiparetic, dysarthric, and diplopic after a brainstem hemorrhage.

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Several months later he developed a progressively disabling left arm tremor. Examination showed skew deviation, left hemiparesis, left hemianesthesia, truncal ataxia, and a postural and action proximal left arm tremor (video). Brain MRI demonstrated a cavernous malformation in the right upper brainstem and enlarged ipsilateral inferior olivary nucleus secondary to a lesion in the central tegmental tract (figure). Cerebellar limb tremor is associated with contralateral hypertrophic inferior olive, analogous to secondary palatal tremor,<sup>1</sup> whose delayed onset by weeks or months after injury may be due to compensatory changes in the motor system.<sup>2</sup>

1. Deuschl G, Toro C, Valls-Sole J, Zeffiro T, Zee DS, Hallett M. Symptomatic and essential palatal tremor. 1. Clinical, physiological and MRI analysis. *Brain* 1994;117:775-788.
2. Louis ED, Lynch T, Ford B, Greene P, Bressman SB, Fahn S. Delayed-onset cerebellar syndrome. *Arch Neurol* 1996;53:450-454.

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