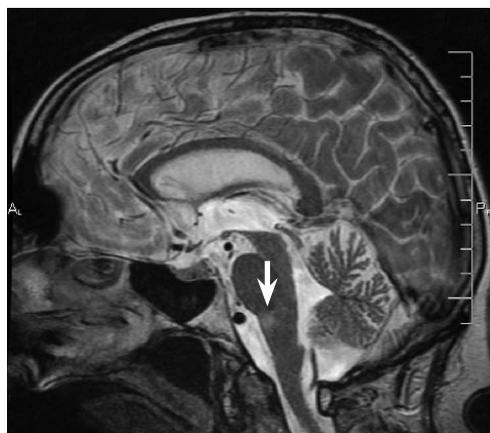


# Pure Motor Hemiplegia from Right Medullary Pyramidal Infarction

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A



B



C

**A**n 80-year-old man with a previous history of hypertension presented to the emergency department with a sudden onset of left-sided weakness. Examination revealed normal speech with facial sparing and left arm and left leg weakness but normal sensation. Brain magnetic resonance imaging (**Image A** and **Image B**) and diffusion-weighted imaging (**Image C**) showed an acute infarction of the right medullary pyramid. After intensive rehabilitation, the patient made a good recovery and was discharged home.

Medial medullary syndrome (MMS; also known as Dejerine's syndrome) results from occlusion of either the anterior spinal artery or its parent vertebral artery.<sup>1</sup> It is characterized by contralateral hemiplegia (pyramidal tract involvement), contralateral loss of position and vibration sense (medial lemniscus involvement), ipsilateral paresis, and atrophy and fibrillation of the tongue (involvement of the hypoglossal nerve fibers or its root). "Pure motor hemiplegia" with facial sparing from pyramidal damage due to anterior spinal artery occlusion is rare.<sup>2</sup> Patients with arm and leg weakness can present with either facial sparing or facial involvement depending on whether the corticobulbar (facial fibers) are spared or affected by the lesion. MMS occurs mainly in elderly men.<sup>3</sup> This case highlights the possibility of recovery after MMS. A favorable outcome is associated with a focal lesion (detected by brain magnetic resonance imaging), lack of tongue involvement, and an absence of respiratory symptoms.<sup>4</sup> Previous reports of poor outcome in cases of MMS were autopsy based.<sup>5,6</sup>

HP

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