

Teaching NeuroImages: Isolated and persistent hiccup by tiny ischemia at dorsolateral medulla

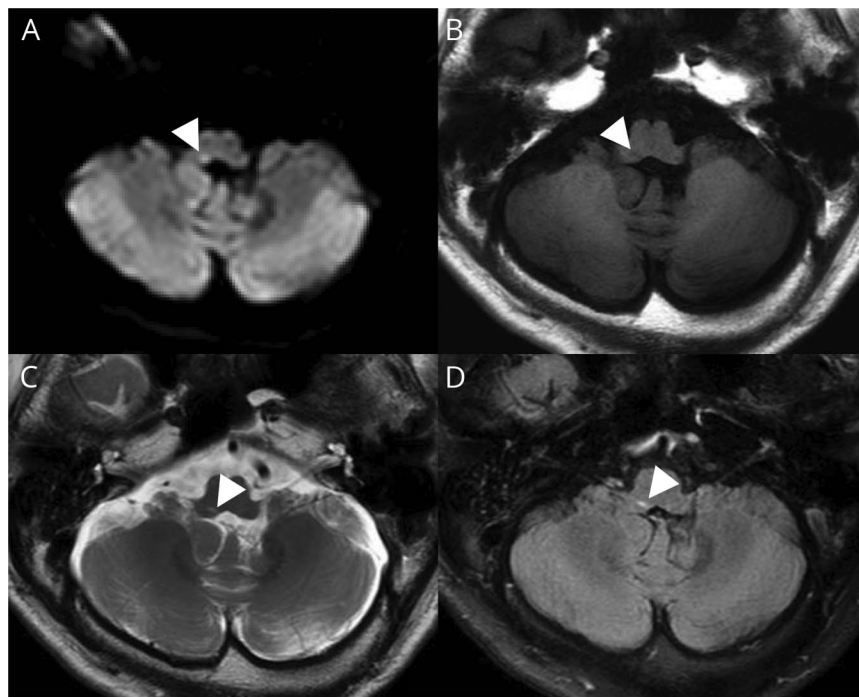
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Figure Imaging



MRI axial diffusion-weighted imaging (A) shows small foci of diffusion restriction at the right dorsolateral of the medulla oblongata. This lesion shows as low signal intensity in axial T1-weighted image (B), high signal intensity in axial fluid-attenuated inversion recovery MRI and axial T2-weighted image (C, D). It involves nucleus ambiguus and vagal nucleus.

A 76-year-old man presented with 4 days of hiccups. The patient denied dizziness, sensory changes, or weakness. Antiemetics, muscle relaxants, and antiepileptic treatments were ineffective. Seven days later, brain MRI with diffusion-weighted imaging revealed tiny ischemic lesions located in the nucleus ambiguus and vagal nucleus at right dorsolateral medulla (figure). The patient's hiccups lasted 2 weeks. Most hiccups with stroke are reported as one of the symptoms of lateral medullary syndrome.¹ The mechanism of hiccup is imbalance and involuntary inspiration by destruction of the expiratory area in the medulla and is related in the nucleus ambiguus and dorsal motor nucleus of the vagus nucleus.²

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Disclosure

The author reports no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

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