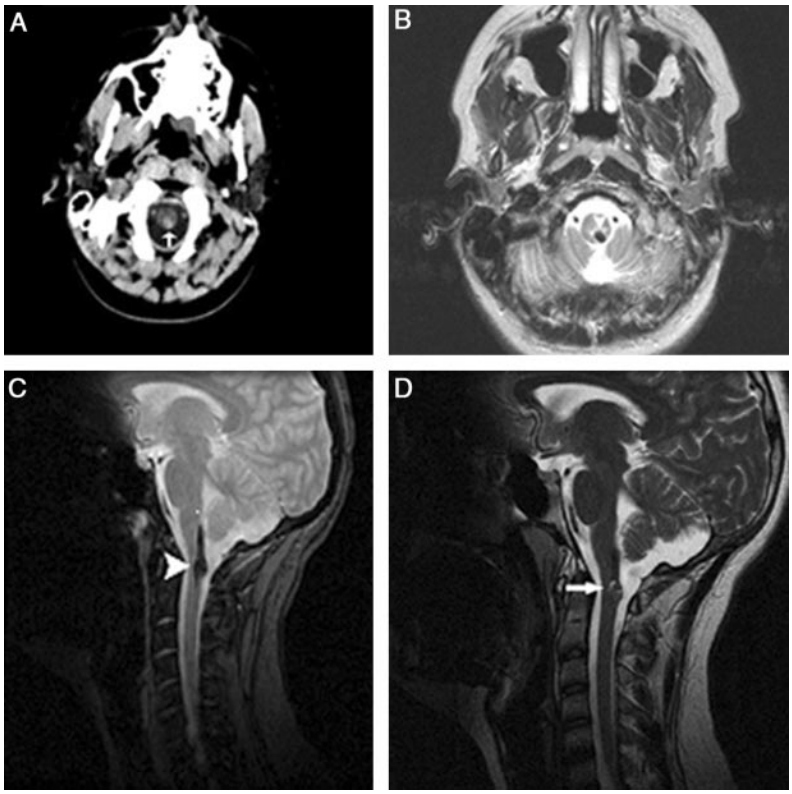
Hemipseudoathetosis due to a hemorrhage at the cervicomedullary junction

Figure CT scan and follow-up T2-weighted MRI



CT scanning revealed a hyperdense region at the cervicomedullary junction (A, vertical arrow) suggesting acute hemorrhage, confirmed by the corresponding hypointensity most pronounced on T2-weighted MRI (B). Follow-up T2-weighted MRI demonstrated hemosiderin deposition (gradient echo, C) and a "popcorn"-like structure (D).

A 17-year-old male presented with spontaneous left neck pain and ipsilateral involuntary arm movements. Examination revealed left facial hypoesthesia, right-sided pyramidal signs, and proprioceptive loss in the left arm with pseudoathetosis (video). Cervical-spinal imaging suggested acute hemorrhage at the cervicomedullary junction (figure, A and B). The patient improved over 3 months, and a follow-up MRI demonstrated hemosiderin deposition and a "popcorn" appearance confirming old intraparenchymal hemorrhage (figure, C and D).

The hemorrhage correlated anatomically with the left cuneate tract and nucleus. Coexisting signs implied involvement of the spinal tract and nucleus of the trigeminal nerve and the corticospinal tract predecussation. Pseudoathetosis indicates disruption of the proprioceptive pathway, from peripheral nerve to parietal cortex.[1] Spontaneous cervicomedullary hemorrhage results from bleeding diatheses, tumor, syrinx, or vascular malformation.[2]

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Supplemental data at www.neurology.org

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