

Medial medullary infarction with central sparing

Figure 1 Shaded areas indicate regions of decreased sensation

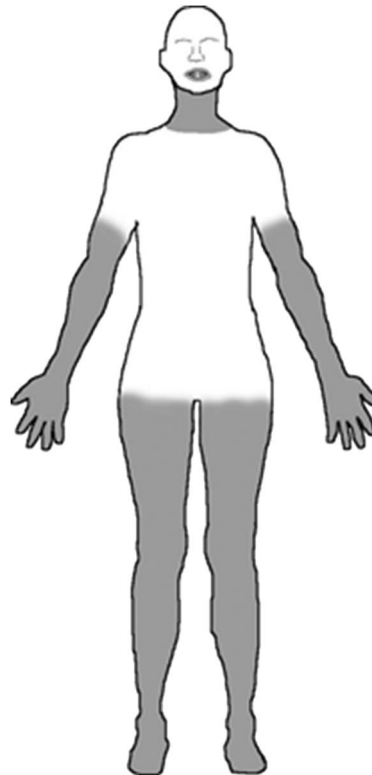
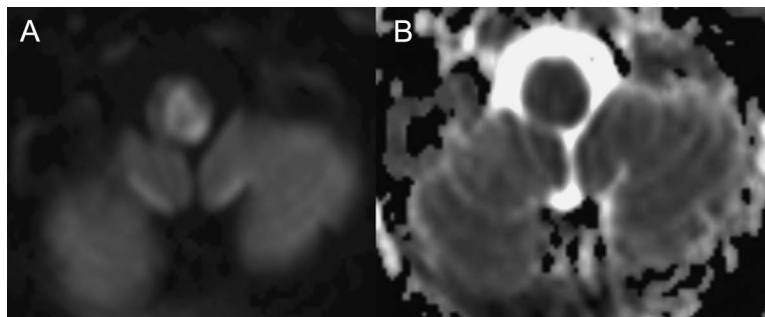


Figure 2 Brain MRI



(A) Axial diffusion-weighted imaging and (B) apparent diffusion coefficient mapping show a ring-like area of ischemia involving the medial medulla with central sparing.

A 35-year-old woman had cardiac arrest requiring treatment with a left ventricular assist device. After regaining consciousness, examination revealed upbeat nystagmus, otherwise normal bulbar function, left arm dysmetria, and numbness periorally and in areas she described as “a turtleneck of numbness with a T-shirt of sensation” (figure 1).

MRI showed diffusion restriction in a ring-like pattern in the medial medulla (figure 2), a probable embolic infarction given the clinical history. This correlated with the patient's preserved truncal sensation, since in the medullary portion of the medial lemniscus, truncal fibers are positioned centrally, between fibers from the lower extremities anteriorly and upper extremities posteriorly.¹ In contrast to Dejerine syndrome, the hypoglossal nucleus was spared. Upbeating nystagmus and left arm dysmetria were consistent with involvement of the nucleus intercalatus² and the cuneocerebellar tract, respectively.

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