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Figure. Axial T2 MRI at the level of the caudal midbrain demonstrates a hyperintense lesion at the posterolateral border of the red nucleus, close to the right third nerve fascicle. White-matter lesions around the right temporal horn, and in the occipital lobes, are also seen.

Neuro Images

Painful third nerve palsy in MS

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A 36-year-old woman presented with an acute, painful, pupil-involving third nerve palsy. She had been diagnosed with MS 5 months previously, when she had presented with a resolving myelopathy. MRI scans at that time had shown multiple white matter lesions in the brain and spinal cord consistent with demyelinating plaques. On this occasion, repeat MRI brain scan showed a new midbrain lesion adjacent to the right third nerve fascicle (figure). MRA of the circle of Willis was normal. The patient was treated with IV methylprednisolone and made a full recovery. Isolated third nerve palsy is rare in MS,¹ but may mimic a posterior communicating artery aneurysm.²

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