Figure. (A) Axial T2-weighted MRI of the head showing an intraparenchymal hyperintense signal abnormality in the superior colliculi (arrow). (B) Fluid-attenuated inversion recovery axial MRI of the head showing multiple hyperintense signal abnormalities throughout the cerebrum (arrows).

Parinaud syndrome heralding MS

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A 32-year-old woman presented with diplopia and dizziness. Visual acuity was 20/25 in the right eye and 20/20 in the left. Pupils showed light/near dissociation. She had marked limitation of elevation and convergence retraction nystagmus. Results of anterior segment and fundus examination were normal. MRI revealed an 8-mm intraparenchymal lesion involving the superior colliculi without mass effect (figure, A). The working diagnosis was a tectal plate glioma. One month later, MRI of the head was performed with

spin echo and fluid-attenuated inversion recovery (FLAIR) axial images. The previously noted lesion measured 1.4 by 1 cm with new lesions in the right hippocampus, right frontal lobe, left centrum semiovale, right parietal lobe, and the genu of the corpus callosum (see figure, B).

MS occurs in association with dorsal midbrain syndrome, but seldom is a dorsal midbrain syndrome the presenting sign of MS.^{1,2} In our patient an isolated abnormality in the dorsal midbrain region was found at presentation, and the diagnosis of MS was delayed because of suspicion of a neoplasm. The initial MRI incorrectly suggested a neoplasm. Only after repeating the MRI with spin echo images and FLAIR axial images and CSF analysis was the diagnosis of MS evident.

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1. Slyman JF, Kline LB. Dorsal midbrain syndrome in multiple sclerosis. *Neurology* 1981;31:196-198.
2. Quint DJ, Cornblath WT, Trobe JD. Multiple sclerosis presenting as Parinaud syndrome. *AJNR Am J Neuroradiol* 1993;14:1200-1202.

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