Teaching NeuroImages: MRI time lag with acute disseminated encephalomyelitis

Shaheen E. Lakhan, MD, PhD, MS, MEd

A 68-year-old man presented with 6 weeks of progressive dementia, visual distortions, and gait disturbance. Brain MRI demonstrated diffuse cerebral atrophy (figure 1). CSF showed lymphocytic pleocytosis and elevated protein; other studies were negative. He became aphasic. Repeat brain MRI 8 weeks from symptom onset demonstrated multifocal central parenchymal non-enhancing T2/fluid-attenuated inversion recovery hyperintensities involving the body of the corpus callosum and adjacent anterior cingulate cortex (A); bilateral insular and right subinsular regions with mild lateral ventriculomegaly (B); and left middle cerebellar peduncle (C). There is no associated enhancement in the signal abnormalities or leptomeninges (not shown).

From the Department of Neurology, Cleveland Clinic, Cleveland, OH.
Go to Neurology.org for full disclosures. Disclosures deemed relevant by the authors, if any, are provided at the end of this article.
hyperintensities (figure 2). Whole-body FDG-PET/CT showed no malignancy. Left frontal stereotactic biopsy revealed multifocal perivascular demyelination consistent with acute disseminated encephalomyelitis (ADEM). The patient received IV methylprednisolone followed by plasma exchange with good recovery.

This case represents an atypical presentation of ADEM as rapidly progressive dementia in an older patient without known infectious or vaccination trigger. Delay in the appearance of MRI lesions has been previously reported,1,2 but the 6- to 8-week lag is unusual.

DISCLOSURE
Dr. Lakhan serves on the American Academy of Neurology’s Distance Education Subcommittee. Go to Neurology.org for full disclosures.

REFERENCES
Teaching NeuroImages: MRI time lag with acute disseminated encephalomyelitis
Shaheen E. Lakhan
Neurology 2012;78:e138-e139
DOI 10.1212/WNL.0b013e318258305c

This information is current as of May 28, 2012

Updated Information & Services
including high resolution figures, can be found at:
http://n.neurology.org/content/78/22/e138.full

References
This article cites 2 articles, 0 of which you can access for free at:
http://n.neurology.org/content/78/22/e138.full#ref-list-1

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
Acute disseminated encephalomyelitis
http://n.neurology.org/cgi/collection/acute_disseminated_encephalomyelitis
MRI
http://n.neurology.org/cgi/collection/mri

Permissions & Licensing
Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
http://www.neurology.org/about/about_the_journal#permissions

Reprints
Information about ordering reprints can be found online:
http://n.neurology.org/subscribers/advertise