

Teaching NeuroImages: Cortical damage with leptomeningeal enhancement in neuromyelitis optica spectrum disorder

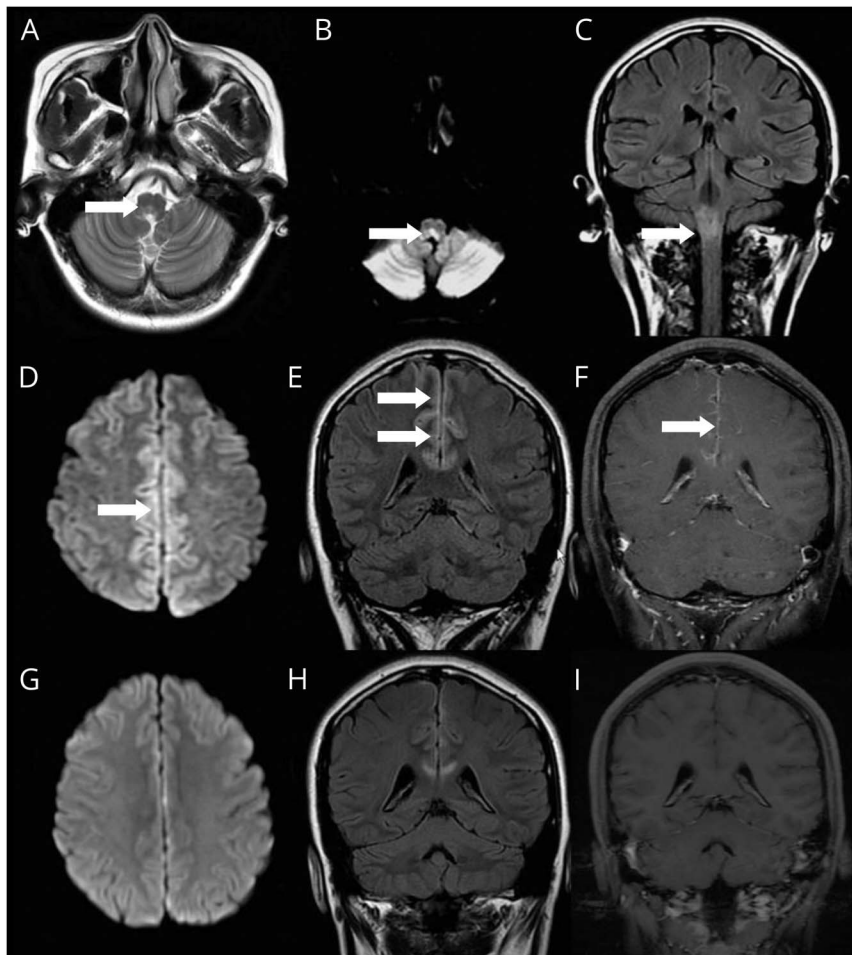
Hui Sun, MMe, and Lei Wu, MD

Neurology® 2018;91:e1087-e1088. doi:10.1212/WNL.0000000000006161

Correspondence

Dr. Wu
wlyingsh@163.com

Figure Neuroimaging (MRI) during the course of the disease



Axial T2-weighted images, diffusion-weighted imaging (DWI), and coronal fluid-attenuated inversion recovery (FLAIR) images (arrows; A–C) show medulla hyperintensity. DWI and coronal FLAIR images show focal cortical hyperintensity (singular and double arrows; D–E) and leptomeningeal enhancement (F). The local foci improved after treatment (G–I).

A 27-year-old woman presented with headache, weakness, and numbness in both lower extremities for 2 weeks. Two years ago, she had refractory hiccups and vomiting with associated area postrema lesions on MRI (figure, A–C). Workup for infectious disease was negative. Serum aquaporin-4-immunoglobulin G was positive. Recent MRI showed cortical damage adjacent to the cerebral falx with leptomeningeal enhancement (figure, D–F).

MORE ONLINE

→ **Teaching slides**

links.lww.com/WNL/A665

From the Department of Neurology, Chinese PLA General Hospital, Beijing, China.

Go to Neurology.org/N for full disclosures. Funding information and disclosures deemed relevant by the authors, if any, are provided at the end of the article.

Copyright © 2018 American Academy of Neurology

Copyright © 2018 American Academy of Neurology. Unauthorized reproduction of this article is prohibited.

e1087

Treatment with immunoglobulin and high-dose methylprednisolone produced a significant improvement of the symptoms and the follow-up MRI (figure, G–I). This patient's case is unusual, as neuromyelitis optica spectrum disorders rarely involve the cortex and pia mater.^{1,2}

Author contributions

Dr. Sun: conception, design, and writing the first manuscript.

Dr. Wu: critical revision of manuscript for intellectual content and study supervision.

Study funding

No targeted funding reported.

Disclosure

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

References

1. Kim W, Lee JE, Kim SH, et al. Cerebral cortex involvement in neuromyelitis optica spectrum disorder. *J Clin Neurol* 2016;12:188–193.
2. Kim JE, Kim SM, Ahn SW, et al. Brain abnormalities in neuromyelitis optica. *J Neurol Sci* 2011;302:43–48.

Neurology®

Teaching NeuroImages: Cortical damage with leptomeningeal enhancement in neuromyelitis optica spectrum disorder

Hui Sun and Lei Wu

Neurology 2018;91:e1087-e1088

DOI 10.1212/WNL.0000000000006161

This information is current as of September 10, 2018

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/91/11/e1087.full
References	This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/91/11/e1087.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): All Headache http://n.neurology.org/cgi/collection/all_headache Devic's syndrome http://n.neurology.org/cgi/collection/devics_syndrome MRI http://n.neurology.org/cgi/collection/mri Optic neuritis; see Neuro-ophthalmology/Optic Nerve http://n.neurology.org/cgi/collection/optic_neuritis Transverse myelitis http://n.neurology.org/cgi/collection/transverse_myelitis
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

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2018 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

