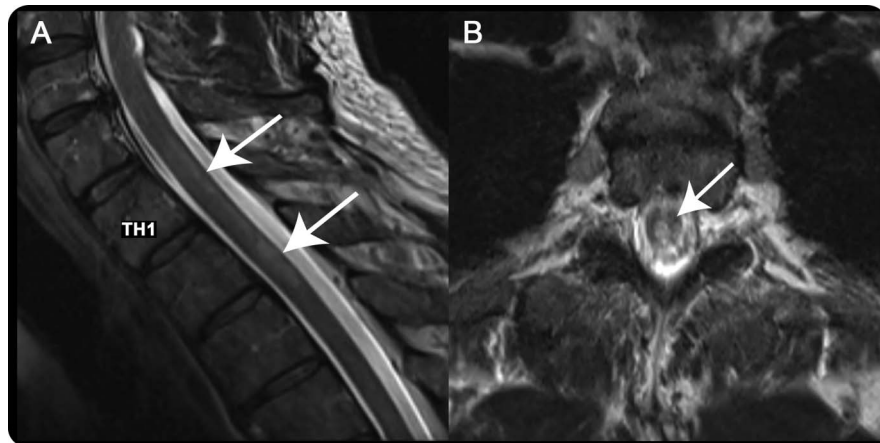


Teaching NeuroImages: Variant of Guillain-Barré syndrome with spinal cord involvement

Celine Gächter, MD
Jens A. Petersen, MD
Urs Schwarz, MD
Athina Pangalu, MD
Alexander Andrea
Tarnutzer, MD

Correspondence to
Dr. Tarnutzer:
alexander.tarnutzer@usz.ch

Figure Spinal MRI 1 week after symptom onset



MRI of the spine demonstrates longitudinal (A, sagittal plane) T2 hyperintensities (C7/T1 to T3) affecting the dorsal columns more than the lateral columns (B, axial image at the level of T2).

A 48-year-old man presented with ascending sensory deficits over 12 hours, followed by urinary retention. He had areflexia, mild lower extremity weakness, sensory ataxia, and a T2 sensory level. Smooth pursuit was impaired, but cranial nerves were otherwise normal. Diagnostic evaluation demonstrated CSF cytoalbuminologic dissociation and demyelinating polyneuropathy fulfilling the electrodiagnostic criteria for Guillain-Barré syndrome (GBS).¹ Laboratory evaluation had normal results, including vitamin B₁₂; anti-neuromyelitis optica, antineuronal, and ganglioside antibodies; and oligoclonal bands. Myelopathy was confirmed on MRI (figure). This case highlights that acquired acute demyelination may rarely affect the peripheral and CNS simultaneously (GBS–transverse myelitis overlap syndrome), likely related to common autoimmune-mediated pathomechanisms.²

AUTHOR CONTRIBUTIONS

Dr. C. Gächter: drafting of manuscript and analysis/interpretation of general neurologic findings. Dr. J. Petersen: interpretation of electroneurography findings, critical revision of the manuscript for important intellectual content. Dr. U. Schwarz: analysis and interpretation of clinical findings. Dr. A. Pangalu: analysis and interpretation of MRI. Dr. A. Tarnutzer: analysis and interpretation, study supervision, critical revision of the manuscript for important intellectual content.

STUDY FUNDING

No targeted funding reported.

DISCLOSURE

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

REFERENCES

1. Ho TW, Mishu B, Li CY, et al. Guillain-Barré syndrome in northern China: relationship to *Campylobacter jejuni* infection and anti-glycolipid antibodies. *Brain* 1995;118:597–605.
2. Tripp A. Acute transverse myelitis and Guillain-Barre overlap syndrome following influenza infection. *CNS Spectr* 2008;13:744–746.

Neurology®

Teaching *NeuroImages*: Variant of Guillain-Barré syndrome with spinal cord involvement

Celine Gächter, Jens A. Petersen, Urs Schwarz, et al.

Neurology 2015;84:e30

DOI 10.1212/WNL.0000000000001217

This information is current as of February 2, 2015

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/84/5/e30.full
Supplementary Material	Supplementary material can be found at: http://n.neurology.org/content/suppl/2015/02/01/WNL.0000000000001217.DC1
References	This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/84/5/e30.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): EMG http://n.neurology.org/cgi/collection/emg Guillain-Barre syndrome http://n.neurology.org/cgi/collection/guillainbarre_syndrome 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 © 2015 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

