

Teaching Video NeuroImages: Hepatic myelopathy

An unusual neurologic complication of hepatic encephalopathy

Vinicius Boaratti Ciarlariello, MD, Marcos Vinicius Tadao Fujino, MD, Marcio Dias de Almeida, MD, PhD, Orlando G.P. Barsottini, MD, PhD, and José Luiz Pedroso, MD, PhD

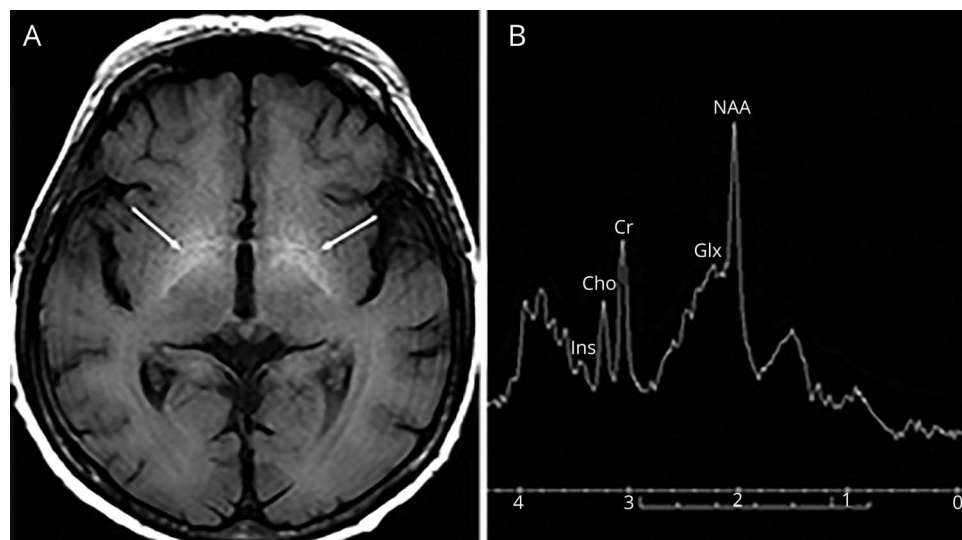
Correspondence

Dr. Pedroso

jlpedroso.neuro@gmail.com

Neurology® 2019;93:e320-e321. doi:10.1212/WNL.0000000000007782

Figure Imaging and spectroscopy



(A) T1-weighted axial brain MRI shows hyperintense signal in internal globus pallidus (manganese deposition due to hepatic encephalopathy [HE]). (B) MRI spectroscopy with water-suppressed proton spectra of a voxel located in normal-appearing parietal white matter shows an increase in glutamine/glutamate signal intensity (Glx, 2.15–2.45 ppm) associated with a decrease in myo-inositol (Ins, 3.45 ppm) and choline (Cho, 3.2 ppm). N-acetylaspartate (NAA) index has normal signal intensity (2.0 ppm). These findings are typically observed in HE.

A 57-year-old man with alcoholic cirrhosis presented with a 4-year history of hepatic encephalopathy (HE) and progressive gait impairment that worsened during HE (video 1). Examination disclosed spasticity and weakness in lower limbs. Brain MRI showed hyperintense signal in basal ganglia and spectroscopy disclosed increased glutamine/glutamate and decreased myo-inositol (figure). Spine MRI was normal, and other causes were ruled out. Hepatic myelopathy was diagnosed.

MORE ONLINE

Video

Teaching slides

links.lww.com/WNL/A926

Hepatic myelopathy is an unusual complication of liver disease and is characterized by progressive spasticity and lower limbs weakness over the years.¹ Symptoms usually worsen during HE episodes. Treatment of HE and liver transplantation may partially improve gait.²

Author contributions

V.B. Ciarlariello: case report project: conception, organization, execution; manuscript: writing of the first draft, review and critique. M.V.T. Fujino: case report project: conception, organization, execution; manuscript: writing of the first draft, review and critique. M.D.d. Almeida: case report project: conception, organization, execution; manuscript: review and critique. O.G.P. Barsottini: case report project: conception, organization, execution; manuscript: review and critique. J.L. Pedroso: case report project: conception, organization, execution; manuscript: review and critique.

From the Department of Neurology (V.B.C., M.V.T.F., M.D.d.A.), Hospital Israelita Albert Einstein; and Department of Neurology (O.G.P.B., J.L.P.), Ataxia Unit, Universidade Federal de São Paulo, Brazil.

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.

Study funding

No targeted funding reported.

Disclosure

The authors report no disclosures relevant to the manuscript.

Go to [Neurology.org/N](https://www.neurology.org/N) for full disclosures.

References

1. Utku U, Asil T, Balci K, Ilkay U, Çelik Y. Hepatic myelopathy with spastic paraparesis. *Clin Neurol Neurosurg* 2005;107:514–516.
2. Yin YH, Ma ZJ, Guan YH, Ren YD, Zhang ZL. Clinical features of hepatic myelopathy in patients with chronic liver disease. *Postgrad Med J* 2009;85:64–68.

Neurology®

Teaching Video NeuroImages: Hepatic myelopathy: An unusual neurologic complication of hepatic encephalopathy

Vinícius Boaratti Ciarlariello, Marcos Vinícius Tadao Fujino, Marcio Dias de Almeida, et al.

Neurology 2019;93:e320-e321
DOI 10.1212/WNL.0000000000007782

This information is current as of July 15, 2019

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/93/3/e320.full
References	This article cites 2 articles, 1 of which you can access for free at: http://n.neurology.org/content/93/3/e320.full#ref-list-1
Citations	This article has been cited by 1 HighWire-hosted articles: http://n.neurology.org/content/93/3/e320.full##otherarticles
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): All Medical/Systemic disease http://n.neurology.org/cgi/collection/all_medical_systemic_disease All Spinal Cord http://n.neurology.org/cgi/collection/all_spinal_cord Gait disorders/ataxia http://n.neurology.org/cgi/collection/gait_disorders_ataxia MRI http://n.neurology.org/cgi/collection/mri Spastic paraplegia http://n.neurology.org/cgi/collection/spastic_paraplegia
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 © 2019 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

