

Teaching NeuroImage: Cryptococcosis in the Central Nervous System Mimicking Neurocysticercosis

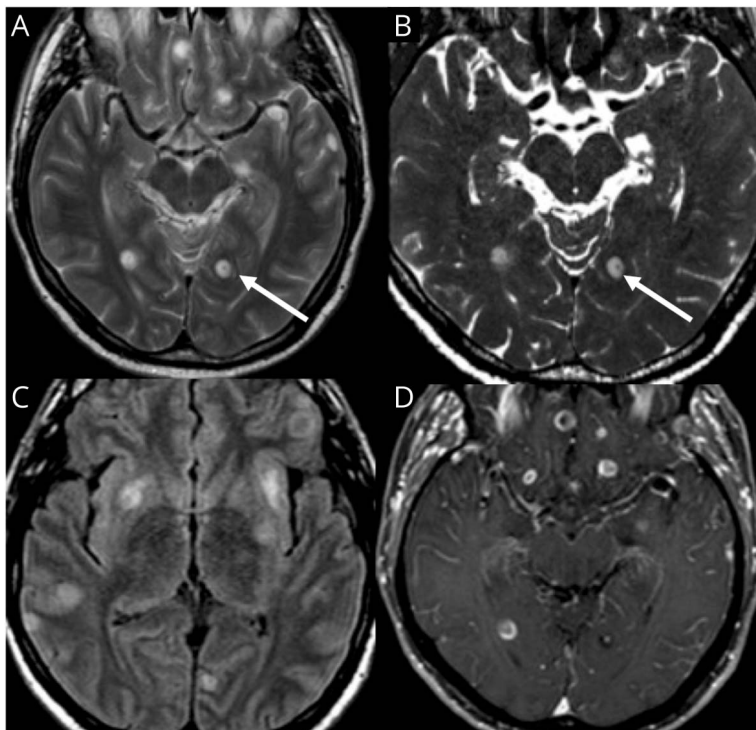
Marcos Rosa-Júnior, MD, PhD, Eduardo Cots, MD, and Claudia Biasutti, MD

Neurology® 2022;98:e1302-e1303. doi:10.1212/WNL.000000000200053

Correspondence

Dr. Rosa-Júnior
marcosrosajr@hotmail.com

Figure 1 MRI of a Patient With Cryptococcosis Mimicking Neurocysticercosis—Supratentorial Findings



(A) Axial T2WI shows multiple cystic lesions, one in the left occipital lobe with dot sign (arrows in A and B). Axial fluid-attenuated inversion recovery shows vasogenic edema around most lesions (C). Axial T1WI postgadolinium shows peripheral and dot sign enhancement (D). Dot sign is a nodule within a cystic lesion.

A 51-year-old man presented with headache, paresthesias of the legs and arms, and seizure. MRI showed multiple cystic lesions with dot sign and gadolinium enhancement (Figures 1 and 2). The findings are reported to be pathognomonic of neurocysticercosis in the colloidal stage; however, brain tumors and cryptococcosis can mimic it. In this case, *Cryptococcus gattii* was isolated from the CSF. Despite treatment with amphotericin B and fluconazole, the patient died. There are important imaging differences between neurocysticercosis and cryptococcosis. In neurocysticercosis, usually there is no postcontrast enhancement of the dot sign. Cryptococcosis encephalitis is a difficult-to-treat disease that can affect immunosuppressed or immunocompetent patients.^{1,2}

MORE ONLINE

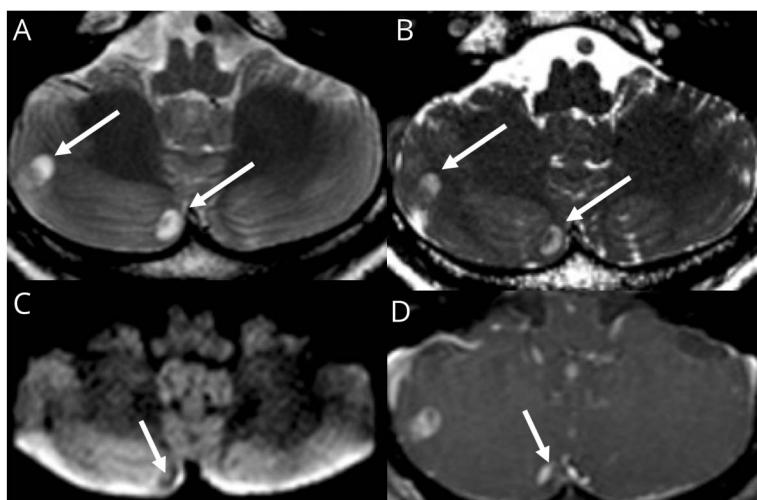
Teaching slides

links.lww.com/WNL/B787

From the Department of Neuroradiology (M.R.-J.), Department of Radiology (E.C.), and Department of Infectious Disease (C.B.), Hospital Universitário Cassiano Antônio Moraes da Universidade Federal do Espírito Santo—HUCAM/UFES/EBSERH, Vitória ES, 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.

Figure 2 MRI of a Patient With Cryptococcosis Mimicking Neurocysticercosis—Infratentorial Findings



(A) Axial T2WI shows 2 cystic lesions in the right cerebellar hemisphere with dot sign (arrows in A and B). Axial DWI shows dot sign (arrow in C). Axial T1WI postgadolinium shows nodular and dot sign enhancement (arrow in D).

Study Funding

No targeted funding reported.

Disclosure

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

Appendix Authors

Name	Location	Contribution
Marcos Rosa-Júnior, MD, PhD	Department of Neuroradiology, Hospital Universitário Cassiano Antônio Moraes da Universidade Federal do Espírito Santo – HUCAM/UFES/EBSERH, Vitória ES, Brazil	Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; and analysis or interpretation of data
Eduardo Cots, MD	Department of Radiology, Hospital Universitário Cassiano Antônio Moraes da Universidade Federal do Espírito Santo – HUCAM/UFES/EBSERH, Vitória ES, Brazil	Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; and analysis or interpretation of data

Appendix (continued)

Name	Location	Contribution
Claudia Biasutti, MD	Department of Infectious Disease, Hospital Universitário Cassiano Antônio Moraes da Universidade Federal do Espírito Santo—HUCAM/UFES/EBSERH, Vitória ES, Brazil	Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; and analysis or interpretation of data

References

1. Loyse A, Moodley A, Rich P, et al. Neurological, visual, and MRI brain scan findings in 87 South African patients with HIV-associated cryptococcal meningoencephalitis. *J Infect*. 2015; 70(6):668-675.
2. Chen S, Chen X, Zhang Z, Quan L, Kuang S, Luo X. MRI findings of cerebral cryptococcosis in immunocompetent patients. *J Med Imaging Radiat Oncol*. 2011; 55(1):52-57.

Neurology®

Teaching NeuroImage: Cryptococcosis in the Central Nervous System Mimicking Neurocysticercosis

Marcos Rosa-Júnior, Eduardo Cots and Claudia Biasutti

Neurology 2022;98:e1302-e1303 Published Online before print January 31, 2022

DOI 10.1212/WNL.0000000000200053

This information is current as of January 31, 2022

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/98/12/e1302.full
References	This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/98/12/e1302.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 All Infections http://n.neurology.org/cgi/collection/all_infections Fungal infections http://n.neurology.org/cgi/collection/fungal_infections 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

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 © 2022 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

