

Teaching NeuroImages: Intracranial extramedullary hematopoiesis

Blood disorders on the mind

Lily W. Zhou, MD, and Tychicus Chen, MD, FRCPC

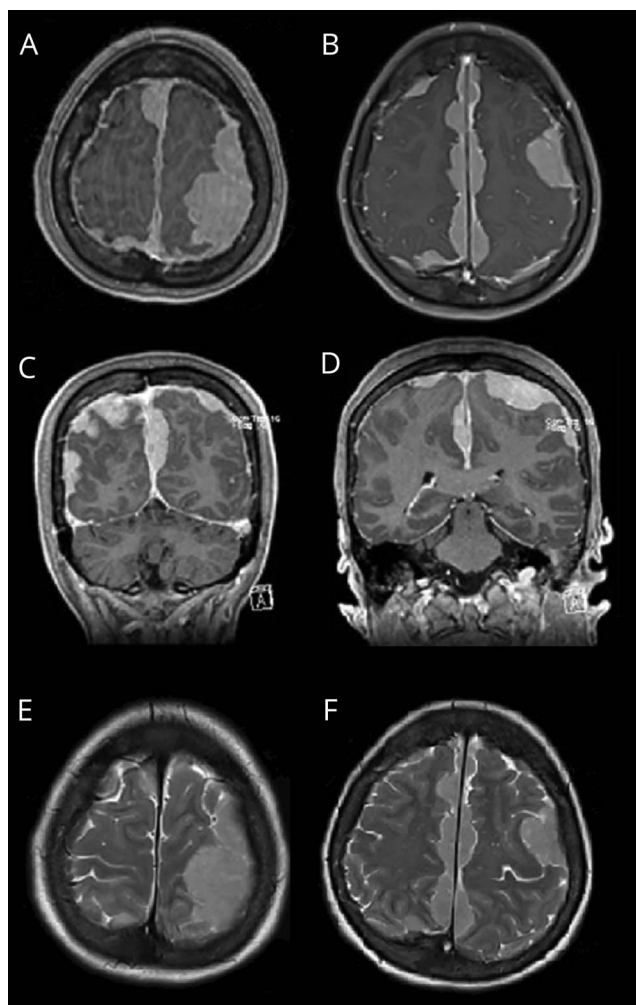
Neurology® 2020;95:e606-e607. doi:10.1212/WNL.0000000000009926

Correspondence

Dr. Zhou

lilyzhou@hsph.harvard.edu

Figure Extramedullary hematopoiesis on MRI



Axial (A, B) and coronal (C, D) T1-weighted MRI with contrast demonstrates multiple lobulated dural-based homogeneous enhancing lesions. There is mild mass effect with no significant associated edema on T2-weighted images (E, F).

A 73-year-old woman with JAK-2–positive polycythemia vera, myelodysplastic/myeloproliferative overlap disorder, and biopsy-proven extramedullary hematopoiesis (EMH) involving pleura and paravertebral regions presented with 6 weeks of headaches and blurry vision. Examination showed

MORE ONLINE

→Teaching slides

links.lww.com/WNL/B127

From the Department of Neurology, University of British Columbia, Vancouver, Canada.

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.

bilateral papilledema, preserved acuity, and mild right pyramidal weakness. MRI brain showed homogenously enhancing dural lesions with no associated edema (figure). She underwent external beam radiation (10 fractions, 200 cGy/fraction) for symptomatic management.

EMH is seen in myeloproliferative neoplasms and hemoglobinopathies and more commonly involves liver, spleen, and lymph nodes.¹ Intracranial EMH is rare and typically presents as dural¹ or choroid plexus–based lesions² with features of increased intracranial pressure.

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.

Appendix Authors

Name	Location	Contributions
Lily W. Zhou, MD	University of British Columbia, Vancouver, Canada	Involved in first draft, preparation of images, and revisions
Tychicus Chen, MD, FRCPC	University of British Columbia, Vancouver, Canada	Involved in first draft, preparation of images, and revision

References

1. Eskazan AE, Ar MC, Baslar Z. Intracranial extramedullary hematopoiesis in patients with thalassemia: a case report and review of the literature. *Transfusion* 2012;52:1715–1720.
2. Tabesh H, Shekarchizadeh A, Mahzouni P, Mokhtari M, Abrishamkar S, Abbasi Fard S. An intracranial extramedullary hematopoiesis in a 34-year-old man with beta thalassemia: a case report. *J Med Case Rep* 2011;5:S80.

Neurology[®]

Teaching NeuroImages: Intracranial extramedullary hematopoiesis: Blood disorders on the mind

Lily W. Zhou and Tychicus Chen

Neurology 2020;95:e606-e607 Published Online before print July 13, 2020

DOI 10.1212/WNL.00000000000009926

This information is current as of July 13, 2020

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/95/5/e606.full
References	This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/95/5/e606.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): MRI http://n.neurology.org/cgi/collection/mri Secondary headache disorders http://n.neurology.org/cgi/collection/secondary_headache_disorders Visual loss http://n.neurology.org/cgi/collection/visual_loss
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 © 2020 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

