Deep Medullary Vein Thrombosis in a Neonate
A Peculiar MRI Pattern

Ana Paula Alves Fonseca, MD,* Ruann Melo de Carvalho, MD,* Mário Padula, MD,* and Rita de Cassia Maciel Pincerato, MD, PhD*


Correspondence
Dr. de Cassia Maciel Pincerato
rcmpincerato@gmail.com

Figure Image Pattern of Deep Medullary Vein Thrombosis

MRI shows hemorrhage in the cerebral white matter (WM), demonstrated on susceptibility-weighted imaging sequence (A) and T1-weighted imaging (B), with fan-shaped pattern on T2-weighted imaging (arrow in C) and cortex-sparing (arrowhead in C). Subcortical WM and corpus callosum ischemia, with restricted diffusion on diffusion-weighted imaging (arrows, D and E) and apparent diffusion coefficient (F), is present.

A full-term 15-day-old neonate, without perinatal complications and with a normal Apgar score (10) at 1 and 5 minutes, had difficulty breastfeeding and weight loss (25%) in the first week. She presented encephalopathy, hypernatremic dehydration (sodium 154 mEq/L), acute renal failure (creatinine 1.9 mg/dL), and hypoglycemia (glucose 42 mg/dL). Newborn metabolic screening was negative. MRI brain showed hemorrhage in the cerebral white matter (WM), with right predominance, in addition to subcortical WM and corpus callosum restricted diffusion, related to ischemia (figure). The radiating fan-shaped hemorrhages are compatible with deep medullary vein thrombosis.1,2

Study Funding
No targeted funding reported.

*These authors contributed equally to this work.

From the Division of Neuroradiology, Americas Serviços Médicos—United Health Group Brazil, São Paulo.

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

Appendix Authors

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ana Paula Alves Fonseca, MD</td>
<td>United Health Group Brazil, São Paulo</td>
<td>Designed and conceptualized study, analyzed the data, drafted the manuscript for intellectual content</td>
</tr>
<tr>
<td>Ruann Melo de Carvalho, MD</td>
<td>United Health Group Brazil, São Paulo</td>
<td>Interpreted the data, revised the manuscript for intellectual content</td>
</tr>
</tbody>
</table>

References

Online Learning for Everyone
No matter your career stage, interest, or learning style, the AAN has a wide variety of convenient online CME, self-assessment, and other learning activities to suit your needs. From bite-sized learning opportunities to self-assessment programs, help preparing you for the boards or continuing certification, or on-demand access to popular AAN conferences, the AAN has you covered. Visit AAN.com/Learn today.

Visit the Neurology® Resident & Fellow Website
Click on Residents & Fellows tab at Neurology.org.

Now offering:
- Neurology® Resident & Fellow Editorial team information
- “Search by subcategory” option
- E-pearl of the Week
- RSS Feeds
- Direct links to Continuum®, Career Planning, and AAN Resident & Fellow pages
- Recently published Resident & Fellow articles
- Podcast descriptions
- Blogs by Editors and Resident & Fellow team members

Find Neurology® Residents & Fellows Section on Facebook: facebook.com/AANResidentsAndFellows
Follow Neurology® on Twitter: @GreenJournal #NeurologyRF
Find Neurology® Residents & Fellows Section on Instagram: @aanbrain #NeurologyRF
Deep Medullary Vein Thrombosis in a Neonate: A Peculiar MRI Pattern
Ana Paula Alves Fonseca, Ruann Melo de Carvalho, Mário Padula, et al.
Neurology 2021;96:492-493 Published Online before print January 13, 2021
DOI 10.1212/WNL.0000000000011502

This information is current as of January 13, 2021

Updated Information & Services
including high resolution figures, can be found at:
http://n.neurology.org/content/96/10/492.full

References
This article cites 2 articles, 1 of which you can access for free at:
http://n.neurology.org/content/96/10/492.full#ref-list-1

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
Cerebral venous thrombosis
http://n.neurology.org/cgi/collection/cerebral_venous_thrombosis
Critical care
http://n.neurology.org/cgi/collection/critical_care
Electrolyte
http://n.neurology.org/cgi/collection/electrolyte
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 © 2021 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.