

Deep Medullary Vein Thrombosis in a Neonate

A Peculiar MRI Pattern

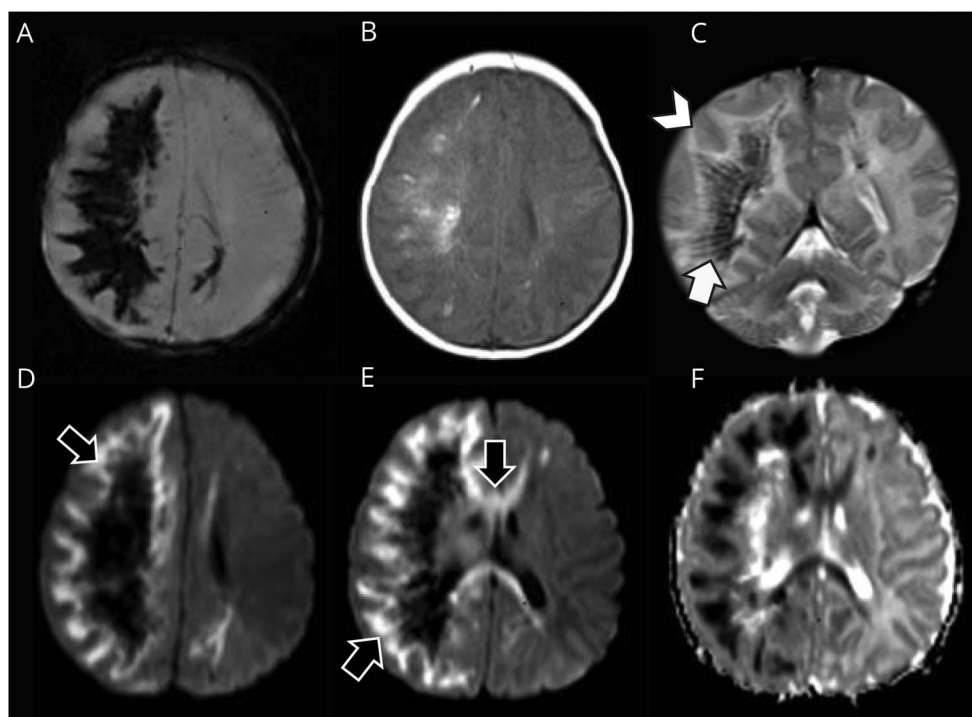
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Figure Image Pattern of Deep Medullary Vein Thrombosis



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}

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Appendix Authors

| Name | Location | Contribution |
|------------------------------------|---------------------------------------|---|
| Ana Paula Alves Fonseca, MD | United Health Group Brazil, São Paulo | Designed and conceptualized study, analyzed the data, drafted the manuscript for intellectual content |
| Ruann Melo de Carvalho, MD | United Health Group Brazil, São Paulo | Interpreted the data, revised the manuscript for intellectual content |

Appendix (continued)

| Name | Location | Contribution |
|---|---------------------------------------|---|
| Mário Padula, MD | United Health Group Brazil, São Paulo | Interpreted the data, revised the manuscript for intellectual content |
| Rita de Cassia Maciel Pincerato, MD, PhD | United Health Group Brazil, São Paulo | Interpreted the data, revised the manuscript for intellectual content |

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