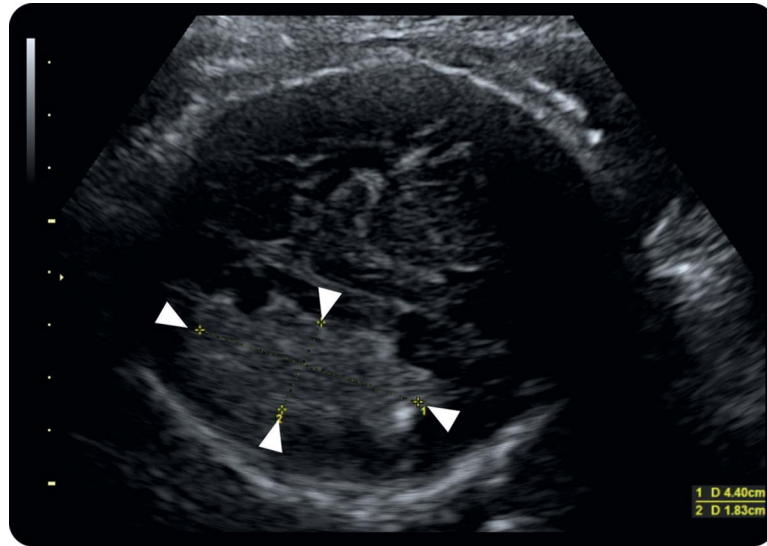


Teaching NeuroImages: Fetal deep medullary vein thrombosis presenting as progressive intracerebral hemorrhage

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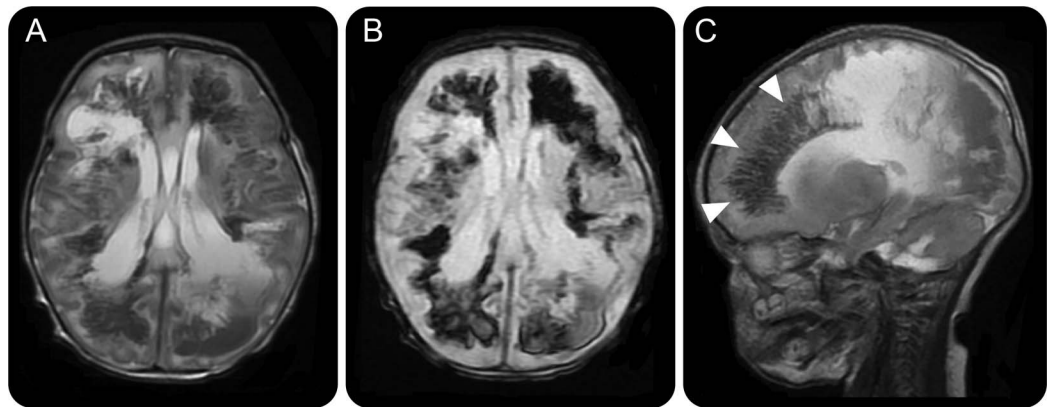
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Figure 1 Antenatal ultrasonography



Axial section of the brain from the prenatal sonogram shows a large echogenic lesion in the left cerebral hemispheric white matter (arrowheads).

Figure 2 MRI of brain on day 2 of life



(A) Axial T2 and (B) gradient-recalled echo images of the brain show large parenchymal hemorrhages in the deep white matter of the frontal and parietal lobes. (C) Sagittal T2-weighted image of the brain shows linear hypointense lesions in the frontal periventricular white matter, oriented radially from the ventricular margin. The characteristic fan-shaped orientation of these lesions and involvement of the frontal white matter distinguishes this entity from other more common causes of neonatal intracerebral hemorrhage such as germinal matrix hemorrhage.

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A 27-year-old pregnant woman underwent ultrasonography at 36 weeks gestation, which revealed unilateral echogenic lesion (figure 1). Her previous week's scan was normal. Possibilities of intracerebral hemorrhage and neoplasm were considered. The neonate, delivered 7 days later, had seizures on day 1. The MRI revealed bilateral extensive supratentorial intracerebral hemorrhages (figure 2). The baby died 3 days later due to continuing seizures and raised intracranial pressure. The MRI was characteristic of deep medullary vein (DMV) thrombosis with secondary hemorrhagic infarction. Prothrombotic workup revealed anti-thrombin III deficiency. The radiating fan-shaped hemorrhages are unique imaging findings of DMV thrombosis, causing substantial morbidity.^{1,2}

AUTHOR CONTRIBUTIONS

R.K., C.R., L.L., and N.S. provided clinical care to the mother and baby and drafted the manuscript. D.R.V. provided radiologic input. All authors read and approved the final version of the manuscript.

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