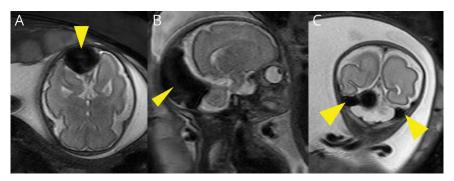
Fetal dural sinus malformation

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Neurology® 2020;95:452-453. doi:10.1212/WNL.000000000010446

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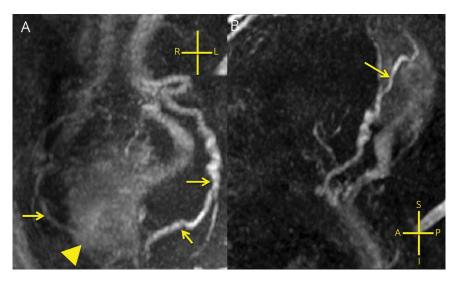
Figure 1 Fetal MRI



(A–C) Single-shot turbo spin echo sequence images in axial, sagittal, and coronal planes reveal the ectatic torcula, posterior sagittal sinus, and bilateral transverse sinuses, respectively. Flow voids are maintained. No mass effect or hydrocephalus.

A 24-year-old multigravida with no comorbidities underwent anomaly ultrasound at 21 weeks 5 days, followed by fetal MRI, which showed dilation of the torcula, adjacent superior sagittal sinus, bilateral transverse sinuses, and proximal sigmoid sinuses with maintained flow voids (figure 1)

Figure 2 Fetal intracranial 3D gradient recalled echo Dixon-based magnetic resonance angiography



(A, B) Coronal and sagittal maximum intensity projection images depict prominent bilateral occipital arteries (arrows) supplying the dural sinus malformation, which is visualized in the arterial phase (arrowhead).

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and blood supply to the torcula from bilateral occipital arteries and bilateral posterior cerebral arteries (figure 2), suggesting a diagnosis of nonthrombosed midline type of dural sinus malformation (DSM) in the fetus.^{1,2}

DSM should be suspected on prenatal ultrasonography. Prompt fetal MRI must be done to establish the diagnosis, identify intracranial complications, and plan timing, mode of delivery, and postnatal treatment strategy, resulting in better postnatal outcome.

Study funding

No targeted funding reported.

Disclosure

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

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| Name | Location | Contribution |
|--------------------------|--|---|
| Kavya S. Kaushik, DNB | Manipal Hospitals, Bengaluru, India | Design and conceptualization of study, major role in acquisition of data, drafting and revising the manuscript for intellectual content |

Appendix (continued)

| Name | Location | Contribution |
|---|--|---|
| Ullas V. Acharya, DM, MD | Manipal Hospitals, Bengaluru, India | Design and conceptualization of study, major role in acquisition of data, analysis and interpretation of the data, critical revision of the manuscript for intellectual content |
| Rupa Ananthasivan, DMRD, DNB, FRCR, CST (UK) | Manipal Hospitals, Bengaluru, India | Major role in acquisition of data, analysis and interpretation of the data, critical revision of the manuscript for intellectual content |
| Bhavana Girishekar, DNB | Manipal Hospitals, Bengaluru, India | Major role in acquisition of data, analysis and interpretation of the data |
| Pramesh Reddy, DNB | Manipal Hospitals, Bengaluru, India | Major role in acquisition of data, analysis and interpretation of the data |

References

- Ebert M, Esenkaya A, Huisman TA, et al. Multimodality, anatomical, and diffusionweighted fetal imaging of a spontaneously thrombosing congenital dural sinus malformation. Neuropediatrics 2012;43:279–282.
- Rossi A, De Biasio P, Scarso E, et al. Prenatal MR imaging of dural sinus malformation: a case report. Prenat Diagn 2006;26:11–16.

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Kavya S. Kaushik, Ullas V. Acharya, Rupa Ananthasivan, et al. Neurology 2020;95;452-453 Published Online before print August 4, 2020 DOI 10.1212/WNL.000000000010446

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