

Developmental venous anomaly found by cranial US in a neonate

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A healthy female neonate received a cranial US as part of a routine screening program. The coronal view demonstrated a long hyperechoic area (*arrow*) in the right frontal lobe (Fig. 1). A central blood flow toward the lateral ventricle was found on sagittal color flow Doppler sonogram. CT and MRI confirmed the diagnosis of developmental venous anomaly (DVA), also known as venous angioma. The contrast-enhanced CT demonstrated the caput medusae



Fig. 1 Coronal cranial US

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appearance and MRI venogram showed a transcerebral vein (*arrowhead*) (Fig. 2).

The incidence of DVA is 2.5% at autopsies [1]. It is the most common incidental brain vascular malformation detected in adults [2], but rarely found by US in neonates. This is the only one in our series of more than 5,000 healthy neonatal cranial ultrasonograms. The rarity of the DVA in neonates may be due to its slow “development,” which makes most of them undetectable early or, perhaps due to lack of proper recognition or imaging sensitivity, when present at this young age.



Fig. 2 MRI venogram

References

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