Fetal MR diagnosis of vein of Galen aneurysmal malformation

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Fetal MR was done on a 26-week-old fetus for further evaluation of an abnormal prenatal ultrasound. MR shows a vein of Galen aneurysmal malformation (VGAM) with large flow voids in a dilated vein of Galen (Fig. 1) and straight sinus (Fig. 2). VGAM is a choroid plexus arteriovenous malformation with persistence of the embryonic median prosencephalic vein, which develops between the 6th and 11th weeks of gestation [1]. MR better shows associated

Fig. 1 Fetal MR sagittal T2-W image

Fig. 2 Axial T2-W image

findings, such as hydrocephalus and brain atrophy, and can differentiate VGAM from a cerebral arteriovenous malformation draining into the vein of Galen. This is important since VGAM has a better prognosis after treatment with postnatal embolization. Although three-fourths of infants with VGAM survive without neurological deficits after embolization [2], neonates with large malformations fare worse and can succumb to high-output cardiac failure, as in this case, despite attempted embolization and coiling.

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