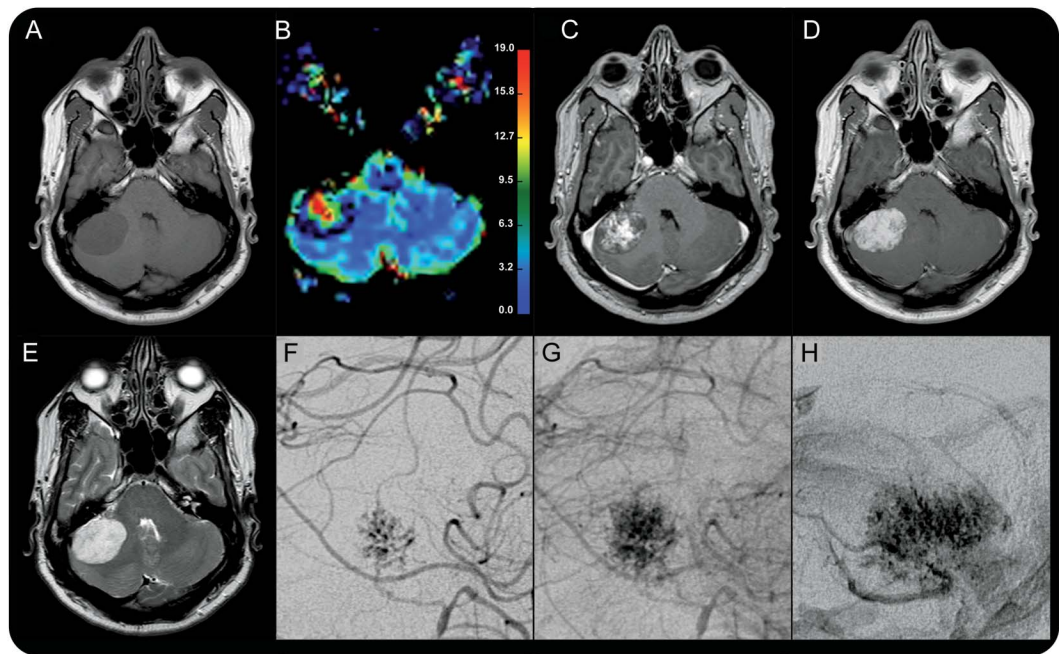


Low-flow vascular malformation

Contribution of sequential postcontrast MRI acquisitions

Figure 1 MRI and digital subtraction angiography



T1-weighted imaging (A) and T2-weighted imaging (E). Central high perfusion on the cerebral blood volume map (dynamic susceptibility contrast perfusion) (B), progressive enhancement on T1-weighted imaging immediately after injection (C), and 5 minutes later (D). Progressive vascular filling on digital subtraction angiography: arterial phase (F), intermediate phase (G), and late phase (H).

A 50-year-old man was referred for subacute intracranial hypertension. MRI revealed a well-circumscribed lesion in the posterior fossa that was hypointense on T1-weighted imaging and hyperintense on T2-weighted imaging (figure 1, A and E). Cerebral blood volume map and sequential postcontrast T1-weighted images showed progressive increase in the homogeneity of the contrast enhancement, indicating that the lesion had low but substantial flow (figure 1, B–D). Digital subtraction angiography showed a vascular lesion with a central to peripheral pattern of vascularity and absence of early venous return (figure 1, F–H). The lesion was resected. Pathologic examination revealed a capillary-venous malformation (figure 2).^{1,2} This case highlights that MRI can identify low flow in vascular malformations.

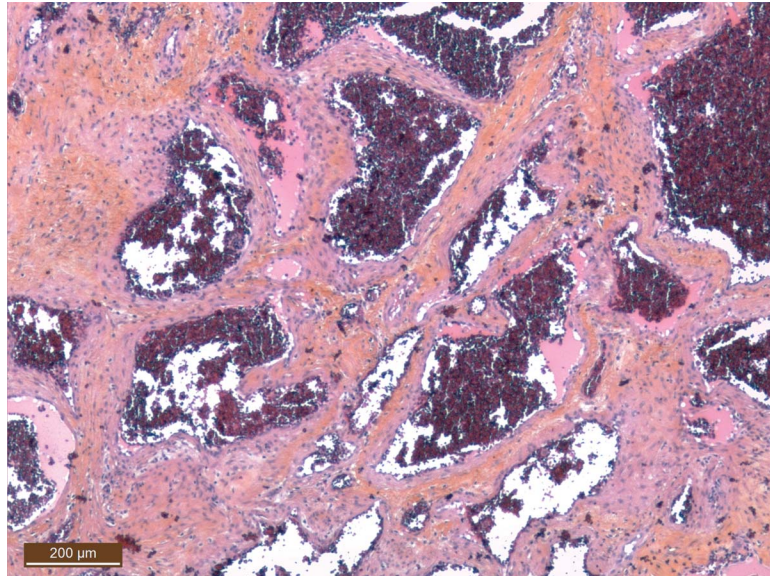
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Figure 2 Pathologic examination (magnification $\times 40$)



Paraffin-embedded section stained with hematoxylin & eosin-Safran shows large blood vessels with thin walls. Absence of proliferating cells; no expression of GLUT1. This can be defined as capillary-venous malformation according to the International Society for the Study of Vascular Anomalies classification system.

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