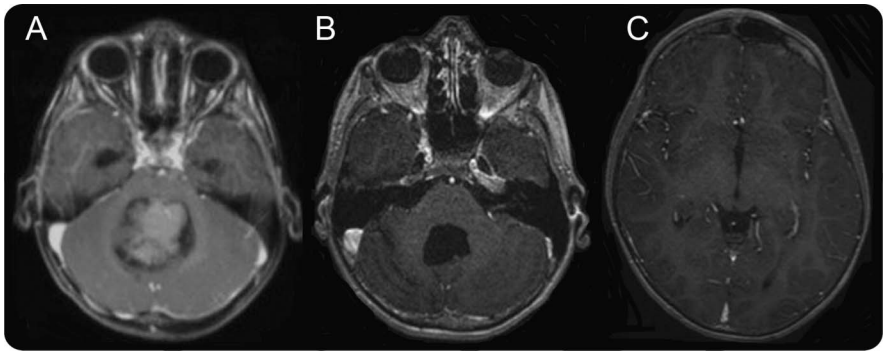
De novo arteriovenous malformation after brain radiotherapy for medulloblastoma in a child

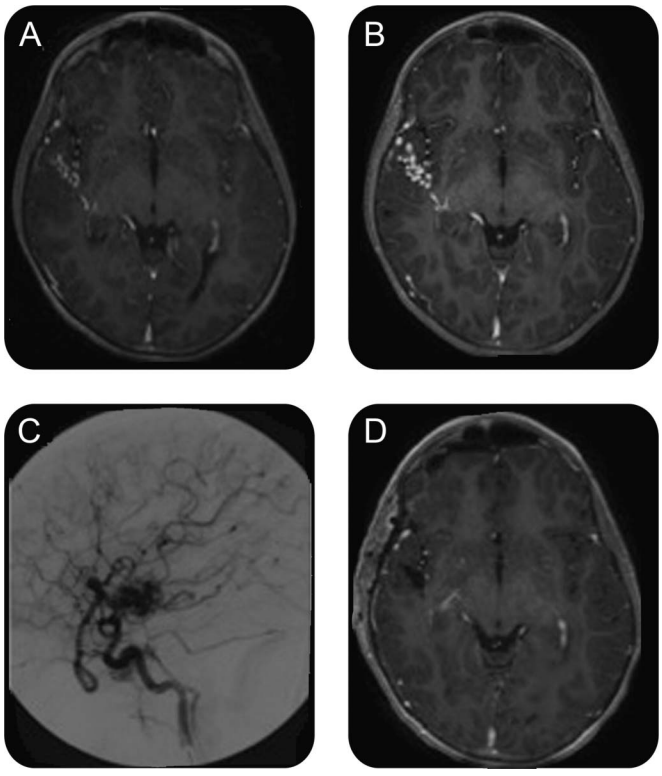
Figure 1 Initial MRI at the time of medulloblastoma treatment



Preoperative (A) and postoperative posterior fossa (B) and supratentorial (C) T1-weighted MRI with gadolinium.

A 5-year-old boy was operated on for a nonmetastatic medulloblastoma of the fourth ventricle (figure 1). Chemotherapy and bifractionated craniospinal radiotherapy were administered. Four years later, T1-weighted MRI with contrast revealed abnormal vessels in the right sylvian fissure that gradually increased during follow-up; angiography confirmed an arteriovenous malformation (AVM) (figure 2). Even though it was asymptomatic, its location and

Figure 2 Occurrence and progression of a temporal arteriovenous malformation and result after treatment



Supratentorial MRI. Suspicion of arteriovenous malformation in the temporal lobe at 4 years (A) enlarged at 6 years (B). Corresponding angiography (C) and postoperative MRI (D).

growth prompted us to treat (embolization then excision of the residual nidus). This very rare case of supposed radiation-induced AVM suggests that when abnormal vasculature imaging occurs in follow-up[1,2] further investigation with angiography is warranted, with consideration of further treatment.

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