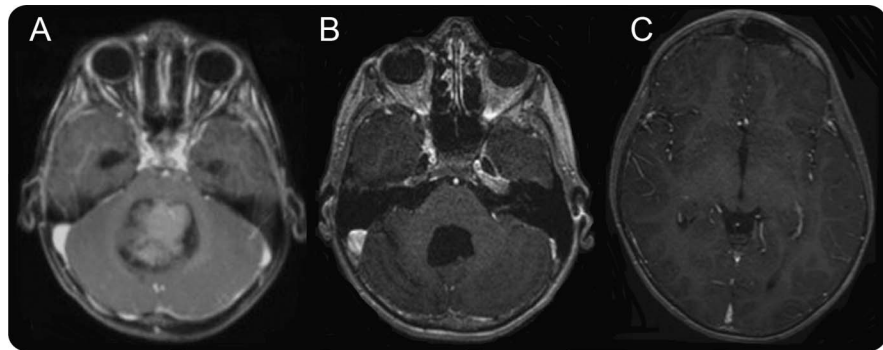


De novo arteriovenous malformation after brain radiotherapy for medulloblastoma in a child

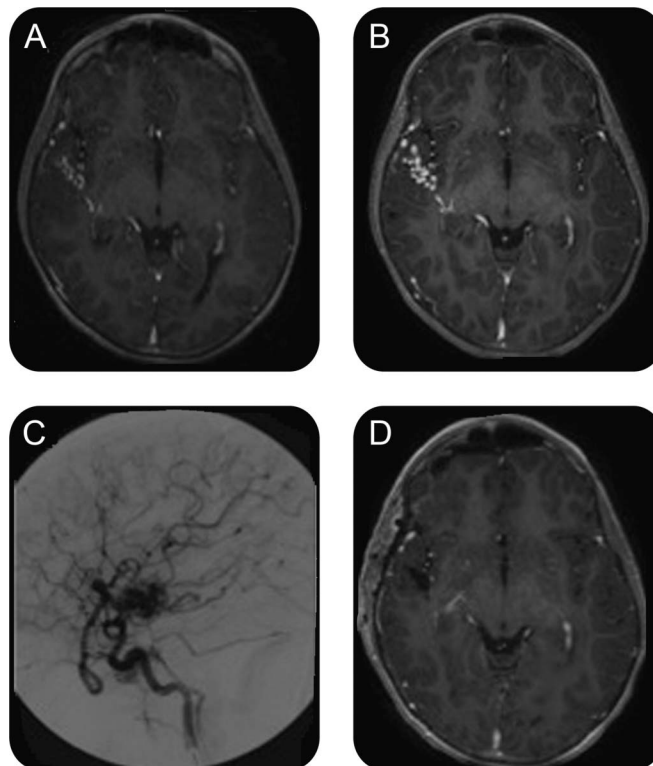
Figure 1 Initial MRI at the time of medulloblastoma treatment



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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Author contributions: B.M. and S.P. wrote the manuscript. B.M., T.B., S.B., C.D., and O.N. collected the data and reviewed the manuscript. F.B. reviewed the manuscript.

Study funding: No targeted funding reported.

Disclosure: The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

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1. Heckl S, Aschoff A, Kunze S. Radiation-induced cavernous hemangiomas of the brain: a late effect predominantly in children. *Cancer* 2002;94:3285–3291.
2. Pozzati E, Giangaspero F, Marliani F, Acciarri N. Occult cerebrovascular malformations after irradiation. *Neurosurgery* 1996;39:677–682; discussion 682–684.

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Neurology 2013;81:398-399
DOI 10.1212/WNL.0b013e31829c5cd5

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