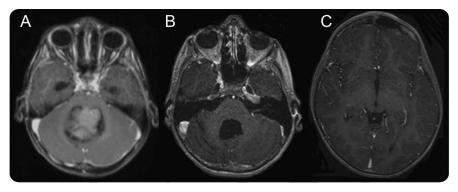
De novo arteriovenous malformation after brain radiotherapy for medulloblastoma in a child

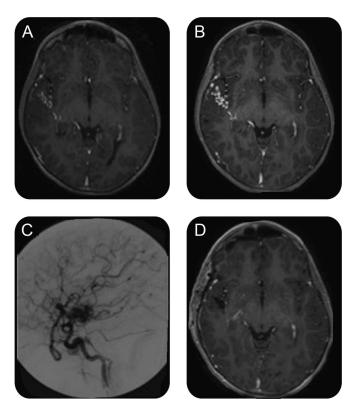
Figure 1 Initial MRI at the time of medulloblastoma treatment



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.

Bertrand Mathon, MD, Thomas Blauwblomme, MD, Stephanie Bolle, MD, Christelle Dufour, MD, Olivier Nagarra, MD, Francis Brunelle, MD, PhD, Stephanie Puget, MD, PhD

From Necker Hospital (B.M., T.B., F.B., S.P.), Université René Descartes, Paris Cité Sorbonne; Gustave Roussy Cancer Institute (S.B., C.D.), University Paris XI, Villejuif; and Sainte-Anne Hospital (O.N.), Paris, France.

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.

Correspondence to Dr. Puget: stephanie.puget@gmail.com

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

Neurology 81 July 23, 2013 399



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

Bertrand Mathon, Thomas Blauwblomme, Stephanie Bolle, et al. *Neurology* 2013;81;398-399 DOI 10.1212/WNL.0b013e31829c5cd5

This information is current as of July 22, 2013

Updated Information & including high resolution figures, can be found at:

Services http://n.neurology.org/content/81/4/398.full

References This article cites 2 articles, 0 of which you can access for free at:

http://n.neurology.org/content/81/4/398.full#ref-list-1

Subspecialty Collections This article, along with others on similar topics, appears in the

following collection(s):

All Pediatric http://n.neurology.org/cgi/collection/all_pediatric

Arteriovenous malformation

http://n.neurology.org/cgi/collection/arteriovenous_malformation

MRI

http://n.neurology.org/cgi/collection/mri

Primary brain tumor

http://n.neurology.org/cgi/collection/primary_brain_tumor

Radiation therapy-tumor

http://n.neurology.org/cgi/collection/radiation_therapytumor

Permissions & Licensing Information about reproducing this article in parts (figures,tables) or in

its entirety can be found online at:

http://www.neurology.org/about/about_the_journal#permissions

Reprints Information about ordering reprints can be found online:

http://n.neurology.org/subscribers/advertise

Neurology ® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2013 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

