Teaching *NeuroImages*: Spontaneous involution of symptomatic delayed tumefactive cyst following radiosurgery for AVM

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Figure 1 MRI of cyst formation and resolution on T2-weighted images

(A) Arteriovenous malformation flow voids in the left temporal lobe (arrow). (B) Postradiation changes in the left temporal lobe. (C) Large cystic and septated mass with mass effect. (D) Spontaneous decrease in the size of the mass.

A 65-year-old woman underwent radiosurgery for a left temporal arteriovenous malformation (AVM) (figure 1A). Follow-up MRI/magnetic resonance angiography 3 years later demonstrated postradiation changes (figure 1B) and AVM resolution (figure 2). Six years posttreatment, she had progressive headaches and aphasia and a large cyst (figure 1C). Her symptoms resolved acutely without treatment. MRI 3 months later showed reduction of the cyst with mass effect resolution related to spontaneous fenestration in the ventricle (figure 1D).

Cyst formation is rare following radiosurgery.¹ Treatment of symptomatic cysts consists of cyst fenestration either in the subarachnoid space or in the ventricle, which occurred spontaneously in this case.

AUTHOR CONTRIBUTIONS

Giovanni Aiello: manuscript preparation, drafting manuscript, collection of data and figures, approval of final version. Kendall Snyder: manuscript preparation, drafting manuscript, collection of data and figures, approval of final version. Waleed Brinjikji: manuscript preparation, drafting manuscript, collection of data and figures, approval of final version. Giuseppe Lanzino: manuscript preparation, drafting manuscript, collection of data and figures, approval of final version.

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