Teaching NeuroImage: Intracerebral Seroma Secondary to Arterial-Venous Malformation

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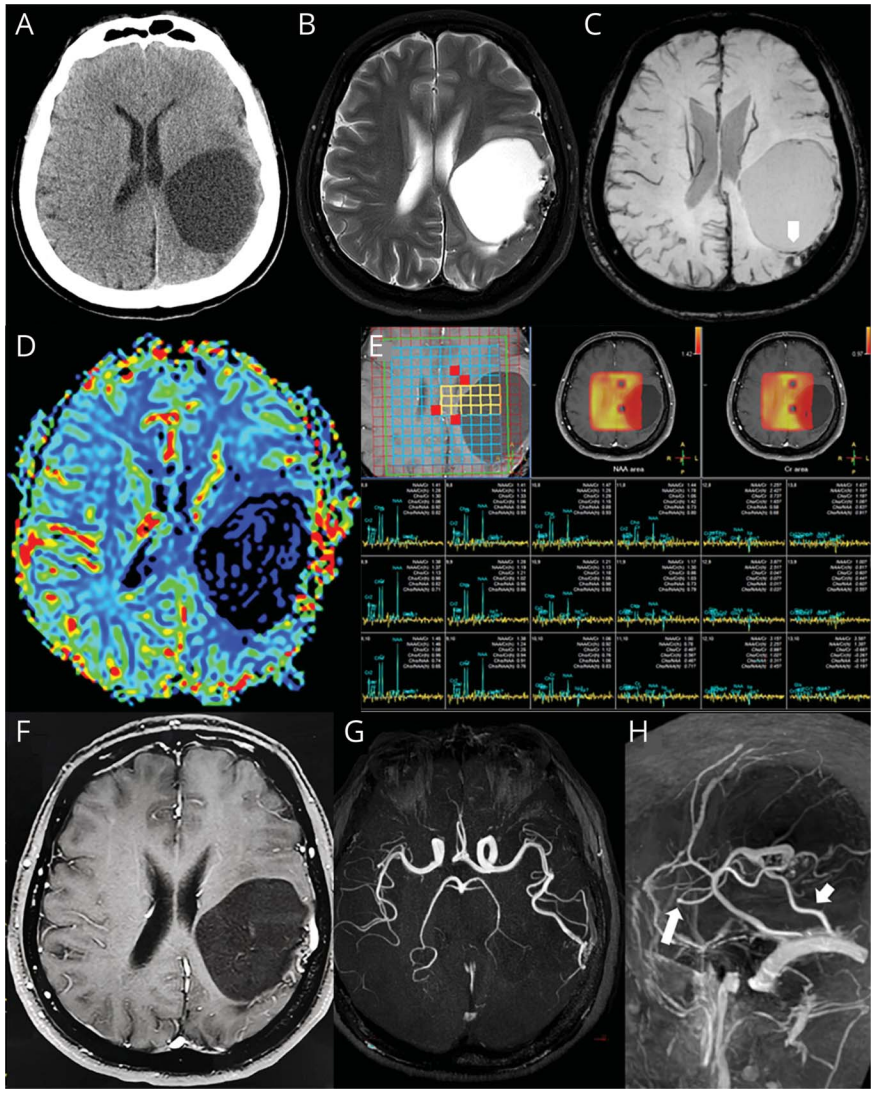
Figure Intracerebral Seroma Due to Arterial-Venous Malformation (AVM)



(A–F) Multiparameter images show a cyst-like mass with hemosiderin deposition (arrowhead) on *susceptibility-weighted imaging*, no enhancement on enhanced T1-weighted imaging, and no abnormalities on the cerebral blood volume map and proton magnetic resonance spectroscopy. (G, H) Time-of-flight magnetic resonance angiography and sagittal thin-slab maximum intensity projection enhanced T1-weighted imaging show an AVM fed by the middle cerebral artery long arrow) and drained by Labbe vein (short arrow).

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A 44-year-old man presented with worsening weakness of the right upper and lower limbs and a 26-year history of epilepsy. Images showed a cyst-like mass with hemosiderin deposition in the left hemisphere neighboring an arterial-venous malformation (AVM) (Figure). Imaging findings were consistent with seroma secondary to an AVM.[1] After receiving oral antiepileptic treatment, muscle strength of affected limbs recovered from grade 4 to 5. Seroma usually occurs as a complication of radiosurgery[2]; few cases are attributed to untreated intracerebral AVMs. This case suggests that intracerebral seroma associated with AVMs could be a long-term consequence of prior intracranial bleeding episodes.

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Disclosure

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Appendix Authors

Name	Location	Contribution
Chun Ma, MD	People's Hospital of Deyang City, China	Drafting and revision of manuscript
Jie Li, MD	People's Hospital of Deyang City, China	Drafting and revision of manuscript
Su Lui, MD, PhD	West China Hospital of Sichuan University, China	Revision of manuscript

References

1. Liu YT, Yang TC, Jung SM, Lee CC. Probable pathogenesis, diagnosis, and management of untreated arteriovenous malformation with cyst formation: case report and literature review. *Acta Neurol Belg.* 2018;118(4):603-605.
2. Sabharwal P, Maiti T, Konar S, Pandey P. Arteriovenous malformation associated with cyst in a child: case report and review of literature. *J Pediatr Neurosci.* 2013;8(2):126-128.

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