Teaching NeuroImages: Acute convexity subarachnoid hemorrhage

An underrecognized presentation of CAA-ri

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Nontraumatic acute convexity subarachnoid hemorrhage (cSAH) is a common manifestation of cerebral amyloid angiopathy (CAA), but has been rarely reported in patients with CAA-related inflammation (CAA-ri).^{1,2}

We describe the neuroimaging findings of an 89-year-old woman presenting with a 1-month history of visual hallucinations, disorientation, and agitation. Brain MRI (figure, A–F) showed disseminated cortical superficial siderosis, cerebral microbleeds, and asymmetric white matter hyperintensities in both hemispheres. There was also subacute cSAH in right parietal lobe with diffusion restriction and gadolinium enhancement in subarachnoid space.

The patient fulfilled CAA-ri diagnostic criteria and was treated with IV methylprednisolone with clinical and radiologic (figure, G) improvement.

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Figure Imaging

Axial susceptibility-weighted imaging (SWI) shows convexity subarachnoid hemorrhage (red arrow, A). There was evidence of gadolinium enhancement in the subarachnoid space (B) and asymmetric white matter hyperintensities on fluid-attenuated inversion recovery sequences (C). Diffusion restriction was documented on right parietal lobe (green arrow, D; E). Cortically located cerebral microbleeds were also documented on SWI (yellow arrow, F). Right parietal white matter hyperintensities resolved following corticosteroid treatment (G).

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Disclosure

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Appendix *(continued)*

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