Teaching NeuroImages: Convexal subarachnoid hemorrhage accompanied by transient global amnesia

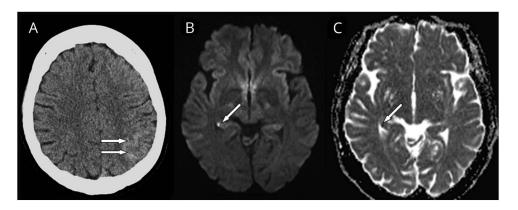
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Figure Brain CT and MRI



Brain CT showed a hyperdense signal in several sulci of the left frontal lobe consistent with convexal subarachnoid hemorrhage (arrows) (A). MRI revealed a small bright diffusion-weighted imaging-positive lesion (arrow) in the right hippocampus (B). Corresponding apparent diffusion coefficient map shows decreased diffusivity (arrow) (C).

A 55-year-old otherwise healthy woman presented with sudden-onset anterograde amnesia, temporal disorientation, and repetitive questioning, which was associated with moderate intensity headache. Consistent with transient global amnesia (TGA), this clinical symptomatology lasted for 8 hours. Brain imaging showed a convexal subarachnoid hemorrhage (cSAH) (figure, A) and—characteristic of TGA²—a punctuate diffusion-weighted imaging positive lesion in the right hippocampus on MRI (figure, B and C). Cerebral microbleeds or cortical superficial siderosis were not evident on acute MRI.

The clinical manifestations of cSAH are diverse, including transient focal neurologic episodes, while headache is frequently absent. After TGA, punctuate hippocampal diffusion-weighted imaging–positive lesions appear in up to 80% of patients. The present observation suggests that cSAH may trigger a TGA, while a random coincidence appears unlikely.

Author contributions

M.B. took care of the patient. All authors interpreted imaging findings and wrote the report.

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