Teaching *NeuroImages*: Hyperintense acute reperfusion marker in ischemic stroke with transient symptoms

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Figure Hyperintense acute reperfusion marker in correspondence with acute ischemic lesion without evidence of hemorrhage

(A) Acute ischemic lesions on diffusion-weighted imaging. (B) CSF space enhancement on fluid-attenuated inversion recovery (white arrow). (C, D) No signs of hemorrhage on T2* susceptibility-weighted angiography (C) or CT (D).

A 67-year-old man with 45-minute onset left hemiparesis underwent 3.0T gadolinium-enhanced MRI (reported iodine contrast allergy) with right frontoparietal small infarcts on diffusion-weighted images without vascular obstruction. No reperfusion therapy was given due to complete spontaneous symptoms regression. Twenty-four

hours later, a second MRI showed right parietal CSF space enhancement on fluid-attenuated inversion recovery. Neither MRI nor CT had sign of hemorrhage (figure).

The hyperintense acute reperfusion marker is an early and transient blood–brain barrier disruption sign caused by leakage of gadolinium-based

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contrast into the CSF.¹ Caution must be taken to avoid misinterpreting it as subarachnoid hemorrhage.²

AUTHOR CONTRIBUTIONS

Dr. Cristiane Borges Patroclo and Dr. Miguel Rossi Picanço wrote the manuscript. Dr. Alexandre Camilo Nascimento Bandeira, Dr. Valério Silva de Carvalho Jr., and Dr. Daniel da Cruz Bezerra reviewed the manuscript.

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