Figure. Brain imaging at 4 hours after onset (A–C) and at day 3 (D–F). (A) Fluid-attenuated inversion recovery (FLAIR) image with hyperintensity in right middle cerebral artery (MCA) representing thrombus; (B) normal diffusion-weighted MRI; (C) CT angiogram of intracranial vessels confirms filling defect in right MCA; (D) follow-up FLAIR with infarction in MCA territory and hyperintensity of distal cortical MCA branches; (E) diffusion-weighted imaging showing acute infarct; (F) MR angiogram showing absence of distal branches of right MCA and recanalization of proximal MCA.

Journey of an embolus

Aileen McGonigal, MRCP, and Keith W. Muir, FRCP, Glasgow, UK

A 19-year-old man presented with sudden onset left hemiparesis. He improved spontaneously 1 hour after onset. Neurologic examination results were normal at 3 hours. MRI at 4 hours showed normal brain parenchyma on fluid-attenuated inversion recovery (figure, A) and diffusion-weighted (figure, B) scans, but high signal within the right middle cerebral artery (MCA) trifurcation, compatible with acute thrombus (see figure, A), which was confirmed on CT angiography (figure, C). Further MRI 3 days later showed more distal MCA thrombus (figure, D), with posterior MCA division infarction (figure, E) and branch occlusion on MR angiography (figure, F). The patient remained asymptomatic, and returned home to resume all usual functions, including work in a technical manual occupation. Routine neurologic examination results remained normal at follow-up 3 months later, and no defi-

cits had been noted by the patient or his family. No cause for stroke was identified except for a patent foramen ovale on transesophageal echocardiography.

A rapidly resolving major hemispheric syndrome, due to cerebral artery occlusion followed by rapid reperfusion with fragmentation and distal passage of the embolus, has been termed the “spectacular shrinking deficit.”^{1,2} Distal movement of the embolus has been shown angiographically,² but has not been demonstrated previously using MRI.

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