



Figure. (A) Gradient echo (GRE), (B) T2-weighted imaging (diffusion weighted MRI $b = 0$) and (C) FLAIR showed right hemisphere hyperintensity with a slight rim of hypointensity on GRE and T2, consistent with an accumulation of fresh arterial blood consisting mainly of intact red blood cells containing oxy-Hb. Oxy-Hb is diamagnetic showing hypo or isointensity on T1-weighted imaging and hyperintensity on T2-weighted imaging (high water content).

Hyperacute post-thrombolysis hematoma by MRI

A.J. Gagnon, MD, FRCPC, and P.A. Barber, MB ChB, MRCP, Calgary, Alberta, Canada

An 89-year-old woman presented acutely following the onset of aphasia and right hemiparesis (NIH Stroke Scale = 10), without clinical or CT contraindications to thrombolysis. She received IV recombinant tissue plasminogen activator (0.9 mg/kg infused over 1 hour after 10% bolus) beginning 90 minutes after symptom onset.

Address correspondence and reprint requests to Dr. A.J. Gagnon, University of Calgary, Calgary Stroke Program, 1403-29 Street NW, Calgary, Alberta T2N 2T9, CANADA; e-mail: alexis.gagnon@calgaryhealthregion.ca

The patient was imaged with a 3 T MRI 2.5 hours after stroke onset. Ten minutes after the start of the MRI, she suddenly became agitated and developed contralateral left hemiplegia. Fluid attenuated inversion recovery (FLAIR), T2-weighted and gradient echo sequences revealed a hyperacute right hemisphere hematoma (figure).¹ Microbleeds, a potential risk factor for contralateral symptomatic hemorrhage following thrombolysis, were not identified on gradient echo sequences.²

1. Parizel PM, Makkat S, Van Miert E et al. Intracranial hemorrhage: principles of CT and MRI interpretation. *Eur Radiol* 2001;11:1770–1783.
2. Kidwell CS, Saver JL, Villablanca P et al. Magnetic resonance imaging detection of microbleeds before thrombolysis: an emerging application. *Stroke* 2002;33:95–98.