



Figure. (A) Gradient echo (GRE) and (B) fluid attenuated inversion recovery (FLAIR) MR images. Multifocal low signal regions on the GRE represent prior microhemorrhages. The FLAIR image demonstrates white matter disease consistent with small-vessel ischemic injury.

Microhemorrhages on gradient echo MRI

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A 52-year-old man with no medical care for 20 years presented for evaluation of resting tremor. His exam demonstrated severe hypertension and asymmetric parkinsonism. His evaluation included MRI (figure), which demonstrated multifocal low signal

regions on T2*-weighted gradient echo (GRE). Follow-up head CT showed a single small cortical hemorrhage and no calcification. Follow-up MR angiogram demonstrated no vascular abnormalities. GRE can identify hemosiderin deposits indicative of previous microhemorrhages not seen on CT or other MRI sequences. Such microbleeds occur in approximately 6.4% of healthy elderly patients¹ and 15.2% of neurologic and psychiatric patients with no history of symptomatic cerebrovascular disease.²

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