modern applications have been essential in explaining many of the MRI abnormalities seen in CSF volume depletions whether caused by CSF leak or CSF shunt overdrainage.

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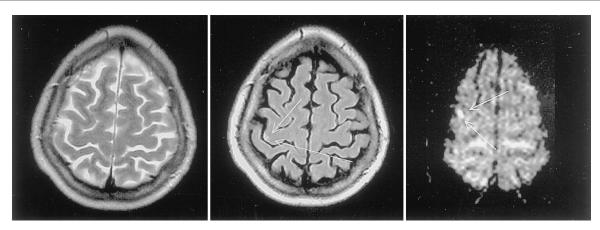


Figure. A small hyperintense area on conventional T2, flair, and diffusion-weighted MRI sequences, indicating recent vascular ischemia, is evident at the level of the prefrontal gyrus.

Hand weakness from a precentral gyrus infarct with intermittent hypotension

Marta Altieri, MD, Vittorio Di Piero, PhD. Stefano Bastianello, PhD, and Gian Luigi Lenzi, MD, Rome, Italy

A 60-year-old man awakened with weakness of the left hand. Examination showed selective weakness of the left wrist extension, thumb opposition, and finger abduction. He had no recognized vascular risk factors. He took β-blocker eye drops for glaucoma. An MRI scan showed a small, pial territory infarct in the right premotor cortex in the putative hand center (figure, white arrows). He recovered fully.

Neither transesophageal echocardiography nor MRA

showed a significant source of embolism. Blood pressure monitoring showed arterial hypotension, with further reduction during sleep. Hypotension usually is associated with bilateral border zone territory infarcts. Isolated precentral artery territory infarcts have not been attributed to specific mechanisms,1 though most have been attributed to small emboli. Although we cannot exclude a microembolus, arterial hypotension may have either caused or contributed to this small infarct.2

^{1.} Bogousslavsky J, Van Melle G, Regli F. Middle cerebral artery pial territory infarcts: a study of the Lausanne Stroke Registry. Ann Neurol 1989;25:555-560.

^{2.} Caplan LR, Hennerici M. Hypothesis: impaired clearance is an important link (washout) between hypoperfusion, embolism, and ischemic stroke. Arch Neurol 1998;55:1475-1482.



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