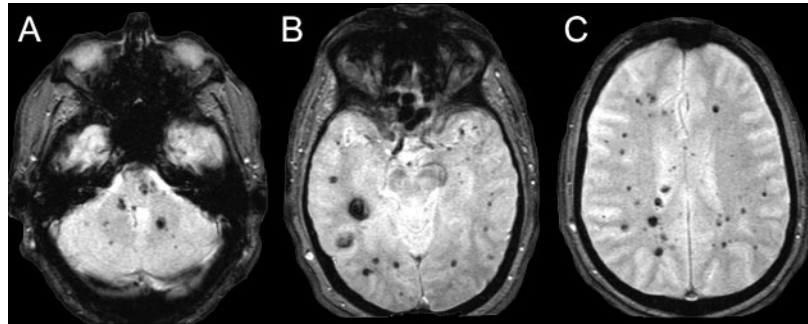


# Susceptibility-weighted imaging in familial cerebral cavernous malformations

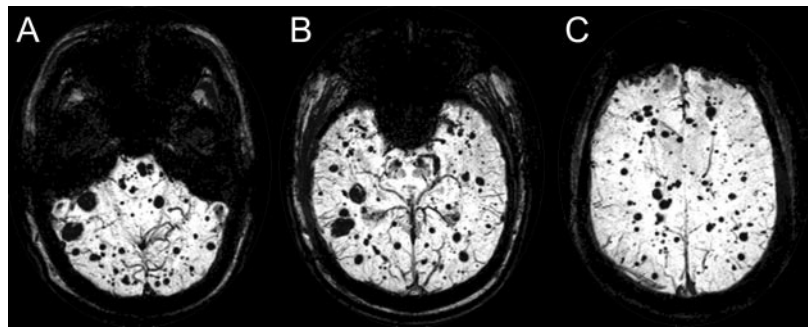
**Figure 1** Axial T2\*-weighted gradient echo MRI sequence showing multiple cerebral cavernous malformations



A 59-year-old man with a family history of cerebral cavernous malformations (CCM) presented with focal seizures. T2\*-weighted gradient echo (GRE) images showed multiple lesions consistent with cavernous malformations (figure 1). Susceptibility-weighted images (SWI) detected nearly triple the number of lesions than were seen with the GRE sequence (figure 2).

SWI is a relatively new MRI technique that is optimized for detection of magnetic susceptibility effects.<sup>1</sup> SWI is more sensitive than T2\*-weighted GRE images in detecting CCMs.<sup>2,3</sup> As with GRE techniques, SWI demonstrates “blooming” of hemosiderin containing lesions.<sup>3</sup> SWI may prove to be useful in identifying the true extent of CCMs or in confirming the presence of suspected small CCMs.

**Figure 2** Axial susceptibility-weighted MRI sequence showing nearly triple the number of cerebral cavernous malformations when compared to conventional T2\*-weighted gradient echo MRI sequence



Alex D. Cooper, MD, Norbert G. Campeau, MD, and Irene Meissner, MD, Rochester, MN

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*Address correspondence and reprint requests to Dr. Alex D. Cooper, Department of Neurology, Mayo Clinic, 200 1st Street SW, Rochester, MN 55905; cooper.alex@mayo.edu*

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