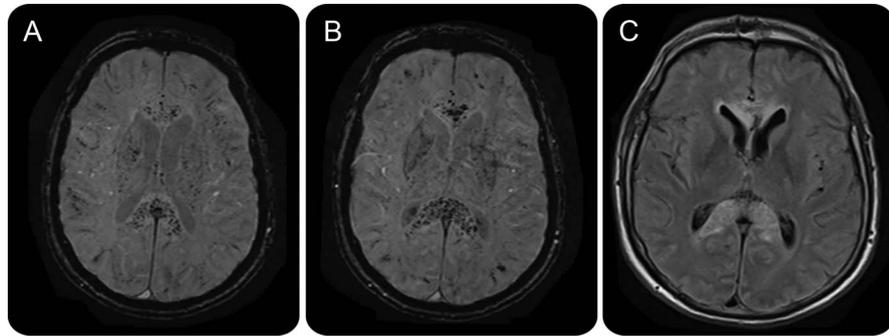


Extracorporeal membrane oxygenation

Uncommon cause of corpus callosal microhemorrhage

Figure MRI brain shows corpus callosum microhemorrhage following extracorporeal mechanical oxygenation



(A, B) Noncontrast axial susceptibility-weighted images demonstrate widespread microhemorrhages within splenium and genu of the corpus callosum. There is also involvement within subcortical and periventricular white matter. (C) Noncontrast fluid-attenuated inversion recovery images demonstrate hyperintensity within the corpus callosum.

A 47-year-old man presented with respiratory failure secondary to influenza requiring venovenous extracorporeal mechanical oxygenation (ECMO) for 10 days. MRI performed for mental status changes revealed numerous microhemorrhages predominantly involving the corpus callosum (figure). ECMO was the only identified cause; there was no history of substance abuse, hypertension, or other explanation. Neurologic injury occurs in half of ECMO-treated patients and includes anoxic injury, various hemorrhages, and infarctions.¹ Callosal microhemorrhage is a rare ECMO complication and may be a consequence of continuous heparin infusion during ECMO and hemorrhagic diathesis.² Neurologic complications are more common with venoarterial ECMO than venovenous ECMO.²

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