Figure. Diffusion-weighted MR images (b value, $1,000 \text{ s/mm}^2$) and the corresponding apparent diffusion coefficient maps (A through F). Areas of restricted diffusion are evident in the middle cerebellar peduncle (A, white arrows), cerebral peduncle (B, white arrows), and internal capsule (C, white arrows). The periventricular and subcortical white matter are also affected extensively (C through F). Note that cortical and subcortical gray matter are relatively spared.

Extensive white matter injury in hypoglycemic coma

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A 77-year-old woman with a history of diabetes presented with progressive mental deterioration to coma over 2 days. On admission, vital signs were normal and blood tests were only significant for glucose level of 14 mg/dL . MRI examination revealed extensive

white matter abnormalities shown as high signals on diffusion-weighted imaging and low signals on apparent diffusion coefficient maps, sparing cortical and deep gray matter (figure, A through F). She died 14 days later owing to septicemia. Available MRI reports on hypoglycemic coma are limited but typically describe lesions involving cerebral cortex, basal ganglia, and hippocampus.¹ In our patient, profound hypoglycemia appears to be the most likely cause of acute leukoencephalopathy² because no identifiable causes of these MRI changes such as anoxic encephalopathy, carbon monoxide poisoning, or exposure to therapeutic/illicit drugs could be found.

Disclosure: The authors report no conflicts of interest.

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