ON-LINE FIGURE. Diffusion-weighted sequence (A) shows restricted cortical diffusivity in the posterior regions of the right hemisphere (arrow), with cortical swelling (arrow) on conventional T2-weighted images (B). MR angiography (C) shows prominent branches of the right middle and posterior cerebral arteries (arrows), and the arterial spin-labeling sequence (D) shows increased cortical cerebral blood flow in the right hemisphere cortex, more pronounced in the posterior regions (arrow). These findings were interpreted as related to the acute phase of the epileptic seizure. We detected no area of restricted diffusivity compatible with ischemic stroke or hypoperfused areas on arterial spin-labeling.