Delayed Postanoxic Encephalopathy with Serial MRI and PET Studies

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The authors present serial MRI and PET studies in the case of a 69-year-old man with delayed postanoxic encephalopathy. Ongoing regional cytotoxic edema was observed in MRI diffusion-weighted images over a 1-year follow-up. The delayed effects of an initial hypoxic injury might be more prolonged than has been previously reported [1, 2].

\textbf{Fig. 1.} Serial MRI studies with FLAIR, diffusion-weighted imaging (\(b = 1,000\) s/mm\(^2\)) and ADC (apparent diffusion coefficients) mapping from left to right at the delayed onset of postanoxic encephalopathy (\(a\)), 6 months (\(b\)) and 13 months (\(c\)). Some lesions in both frontal white matter and the anterior corpus callosum showed persistent decreased diffusivity on diffusion-weighted imaging and ADC maps (0.35 \(\times\) \(10^{-3}\) mm\(^2\)/s and 0.48 \(\times\) \(10^{-3}\) mm\(^2\)/s; mean values of regions of interest indicated by arrowheads in \(b\) and \(c\)).
**Fig. 2.** Hypometabolic regions in serial PET studies at delayed onset of postanoxic encephalopathy (a), 6 months (b) and 13 months (c). Hypometabolism in both parietotemporal cortices was improved (arrowheads); however, hypometabolism in both frontal cortices was aggravated (arrows). The hypometabolic regions (yellow; color version on-line) are displayed on surface-rendered images at the threshold of p < 0.001, uncorrected (t = 3.61, k = 100).

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**References**
