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Neuro Images

Figure. MR images, FLAIR (fluid-attenuated inversion recovery) sequences. Arrows align regions of change (shown only on the left side for clarity, but bilateral change is clearly evident). Note the progression of increased signal in the hippocampus during status epilepticus at onset (6/7/02), 1 week later (6/14/02), and then at 1 month (7/08/02).

MRI changes in status epilepticus

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J.F. Drazkowski, MD; and J.S. Larson, MD

A 41-year-old woman with an unremarkable medical history presented to the emergency room in generalized convulsive status

epilepticus. The only abnormal laboratory tests included a CSF protein level of 89 and an anti-thyroglobulin antibody titer of 1:2,834 with euthyroid thyroid function tests. Continuous EEG monitoring confirmed generalized status epilepticus for 8 weeks, which failed to respond to numerous anticonvulsants and anesthetics. A brain biopsy revealed nonspecific gliosis.

This case illustrates the MRI changes that can be seen over time in convulsive status epilepticus (figure).^{1,2} Pathologic studies suggest that the increased FLAIR (fluid-attenuated inversion recovery) signal represents seizure-induced cytotoxic edema progressing to neuronal damage.²

The authors have nothing to disclose, and there is no conflict of interest with regards to the content of the manuscript.

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