

Epilepsia partialis continua induces transient brain edema

Epilepsia parcial contínua induz edema cerebral transitório

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A 52-year-old woman with a past history of a tumefactive demyelinating lesion five years ago with left hemiparesis presented with a 30-day history of uninterrupted clonic movements involving her left face and upper limb, compatible with *epilepsia partialis continua*. An MRI showed right hemispheric cortical swelling (Figure 1). She received phenytoin, valproate and phenobarbital with control of

the *epilepsia partialis continua* and resolution of the MRI abnormalities (Figure 2).

The reason for cerebral edema in *status epilepticus* is unknown¹, but restricted cortical diffusion is consistent with cytotoxic edema by cellular energy failure^{2,3}. It can be triggered by an imbalance between the energy supply and demand in neurons and it remains unclear why only certain patients have these abnormalities^{1,3,4}.

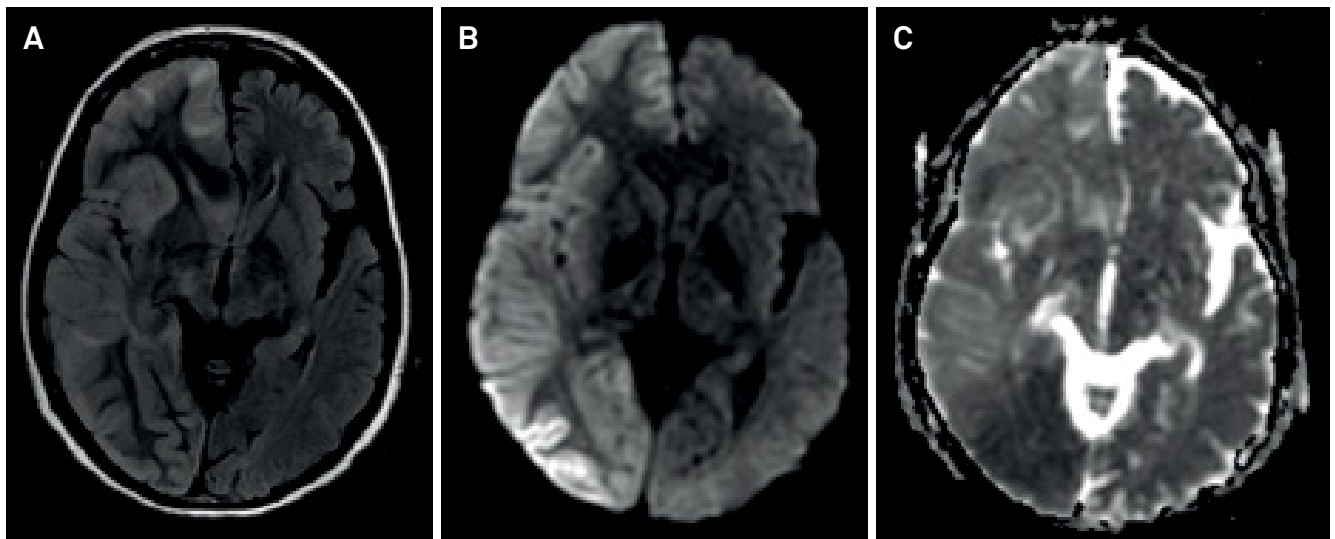


Figure 1. Brain MRI during *epilepsia partialis continua*. FLAIR (A) image: right hemispheric increased signal intensity and swelling at the cortical gray matter and subcortical white matter and mild midline shift. DWI (B) and ADC map (C): cortical hyperintensity and restricted diffusion. DWI: Diffusion weighted imaging; ADC: Apparent diffusion coefficient

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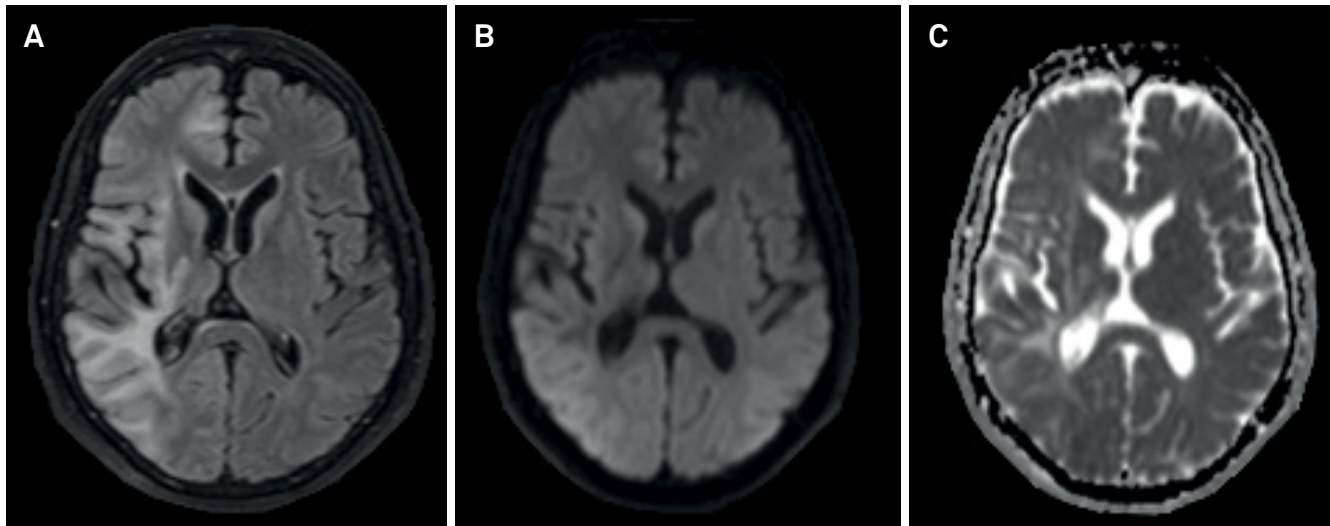


Figure 2. Brain MRI two weeks after resolution of the *epilepsia partialis continua* with antiepileptic drugs. FLAIR (A) image: previous residual aspect of tumefactive demyelinating lesion with hyperintensities in periventricular and subcortical white matter. DWI (B) and ADC map (C) without restricted diffusion. DWI: Diffusion weighted imaging; ADC: Apparent diffusion coefficient

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