Corpus callosum dysgenesis limits MRI changes to one hemisphere in status epilepticus

A 46-year-old man with cerebral palsy presented with complex partial seizures and left sided clonic movements. EEG showed right hemispheric seizures (figure 1). MRI demonstrated dysgenesis of the corpus callosum (figure 2, A and B) with hyperintense signal throughout the right cortex in diffusion-weighted imaging (DWI) (figure 2C) corresponding with decreased apparent diffusion coefficient signal (figure 2D). Gyriform cortical hyperintensities on DWI may occur during status epilepticus that do not respect vascular distributions.1,2 We suggest that DWI changes are restricted to one hemisphere because dysgenesis of the corpus callosum prohibits the spread of ictal activity to the contralateral hemisphere.

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