Reverse crossed cerebellar diaschisis in status epilepticus: case report

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A 53-year-old female with history of ischemic stroke eleven years before was admitted to the emergency room with recurrent few seconds duration head turning seizures in the past two weeks. Electroencephalogram confirmed focal status epilepticus and Brain MRI disclosed restricted diffusion over left hemisphere regions, together with signs of reverse crossed cerebellar diaschisis (Figure 1).

Diaschisis is a transient neuronal shock modality attributable to depression of distant parts of the brain, connected to an injured area1. In focal status epilepticus, cerebellar injury is hypothesized to be due to an excessive excitatory neuronal transmission in the cortico-pontine-cerebellar tract2.

Figure 1. Axial postcontrast TI-weighted image (A) shows two chronic infarcts (arrows); axial DWI (B and C) demonstrate restricted diffusion in the cerebral cortex in the vicinity of the infarction in the territory of the left middle cerebral artery, due to status epilepticus. The involvement of left thalamic pulvinar (arrow in B) and right cerebellar hemisphere (C), (reverse crossed cerebellar diaschisis) can also be noticed, ADC map (D) discloses true cortical restricted diffusion (arrow).

References


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