An 86-year-old male presented with confusion, fever and tonic-clonic seizures. CSF analysis showed lymphocytic pleocytosis and high protein count, leading to initiation of acyclovir. EEG revealed PLEDs in the left hemisphere (figure 1C) and MRI demonstrated left hippocampal and insular hyperintensities (figure 1A, 1B). Herpes simplex virus (HSV) encephalitis was confirmed by PCR.

PLEDs represent periodic sharp discharges lateralized to one hemisphere usually due to acute neuronal injury. Since not all patients present seizures, the acronym LPDs (Lateralized Periodic Discharges) may be more accurate. Besides encephalitis, several etiologies produce PLEDs, including stroke, metabolic disarrangements, brain tumors, intracranial hemorrhage, anoxic encephalopathy, among others. Nevertheless, HSV encephalitis should always be considered and CSF studies obtained in the appropriate clinical scenario.

**Figure.** (A, B) Brain MRI; axial FLAIR sequence showing hyperintensities in the insular cortex and parahippocampal gyrus, respectively; (C) EEG demonstrating unilateral and focal sharp wave complexes that appear periodically in the left hemisphere, as the electrographic reflection of the HSV lesion (arrow).

**References**