MRI Lesion Correlates with Scalp High Frequency Oscillations After Pediatric Stroke

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Abstract:

Rationale: High-frequency oscillations (HFOs) are established electrophysiological biomarkers of epileptic activity; however, correlation with neuroimaging findings following stroke has not been investigated. We explore whether HFO patterns demonstrate spatial and quantitative correlation with MRI-defined stroke lesions in the pediatric population.

Methods: We conducted a retrospective analysis of patients from our pediatric stroke database, including all stroke subtypes. Stroke lesions were characterized using MRI performed at minimum 6