



Figure 1. ESI-SOZ for different scalp EEG ictal electrographic patterns.

Clinical classification of ictal events according to specific electrographic patterns: (a) Rhythmic Activity: alpha, theta, or delta frequencies; (b) Paroxysmal Fast: rhythmic activity ≥ 13 Hz; (c) Repetitive Epileptiform Activity: three or more epileptiform discharges in sequence; or (d) Arrhythmic Activity: irregular, mixed frequency waveforms. Lower Left: Boxplot distribution for the different ictal patterns and comparison between seizure-free and non-seizure-free patients. Circles denote values that are farther than 1.5 interquartile ranges. Lower Right: Odds Ratios (OR) and 95% confidence intervals for seizure freedom as defined by the resection of SOZ dipoles. Our results indicate that the resection of rhythmic activity and paroxysmal fast activity SOZ dipoles presented the best association with surgical outcome (OR=5.3 and 6.7). NSF = Non Seizure Free; SF = Seizure free. REDs = Repetitive Epileptiform Discharges.

* = $p < 0.05$; ** = $p < 0.005$; *** = $p < 0.001$