

CASE STUDY

Neocortical: Occipital

23 year old woman with 4 to 5 clusters of seizures a month characterized by unformed visual phenomenon in right visual field and 3 nocturnal complex partial and/or generalized tonic clonic seizures a month.

HISTORY

Seizure onset: 10 years of age

Seizure risk factors: no risk factors except for premature birth (29 weeks)

Prior treatments: failed trials of 4 antiepileptic medications

Neurological exam: partial right inferior quadrant visual field defect

Scalp EEG: interictal left occipital spikes; video-EEG captured 3 typical seizures with left anterior temporal ictal onset

MRI: left occipital encephalomalacia

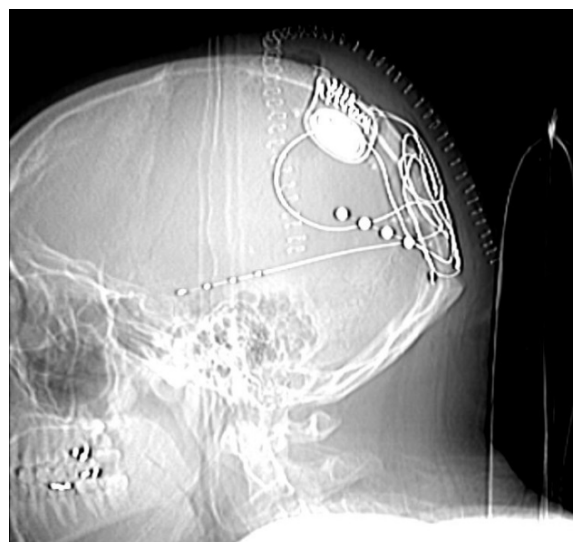
Intracranial monitoring: ictal onset in region of encephalomalacia with rapid spread to left hippocampus, mapping indicated that that removal of the entire ictal onset zone could complete the right quadrantopisa

EVALUATION & PLAN

- Partial onset of seizures of left occipital origin and early involvement of left hippocampus
- At risk for significant visual field deficit with resection
- Candidate for RNS System with responsive stimulation to left occipital region and left hippocampus

LEAD IMPLANT STRATEGY

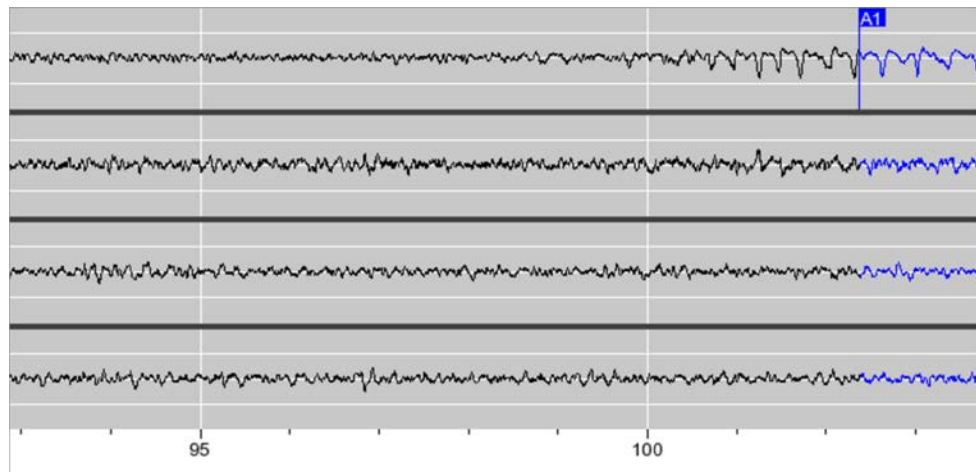
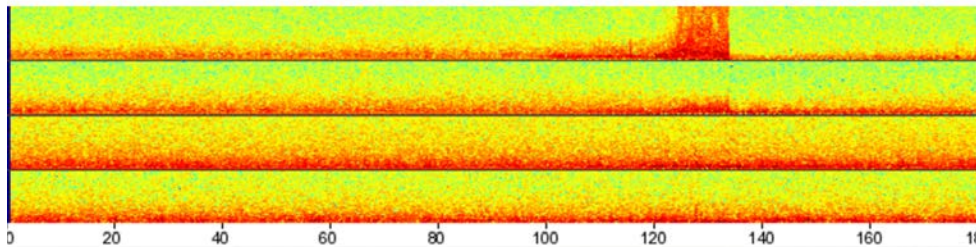
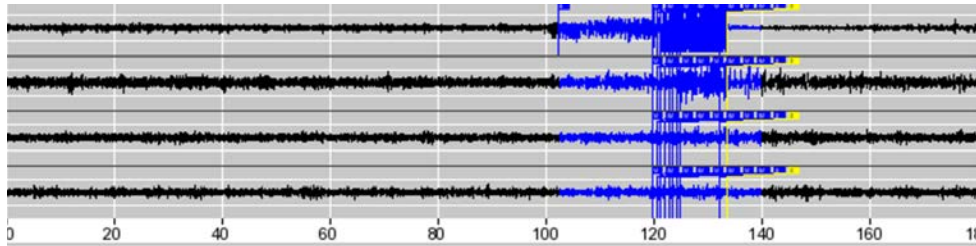
- 1 depth lead in the hippocampus
- 1 subdural strip lead targeting the left occipital lobe





ECOG

Electrographic seizure detected before stimulation was enabled. The top two channels are recording from the occipital strip lead and the bottom 2 channels from the hippocampal depth lead. A1 indicates detection. The ECoG and corresponding Fast Fourier Transform (FFT) are shown above an expanded view of the time series.



This case study is a composite adapted from actual case files; results are not necessarily representative of the patient population.



See important prescribing and safety information in the RNS® System labeling. This is intended as supplementary information and should be used in conjunction with the labeling. Refer to the labeling for a description of the RNS® System and its components, indications for use, contraindications, warnings, cautions, adverse events and instructions for use. The manuals are available at www.NeuroPace.com.

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