

Primary (Genetic) Generalized Epilepsy in a Pediatric Patient: Characterizing Infrequent Generalized Seizures and Sleep-Activated Discharges via Extended Video-EEG Monitoring

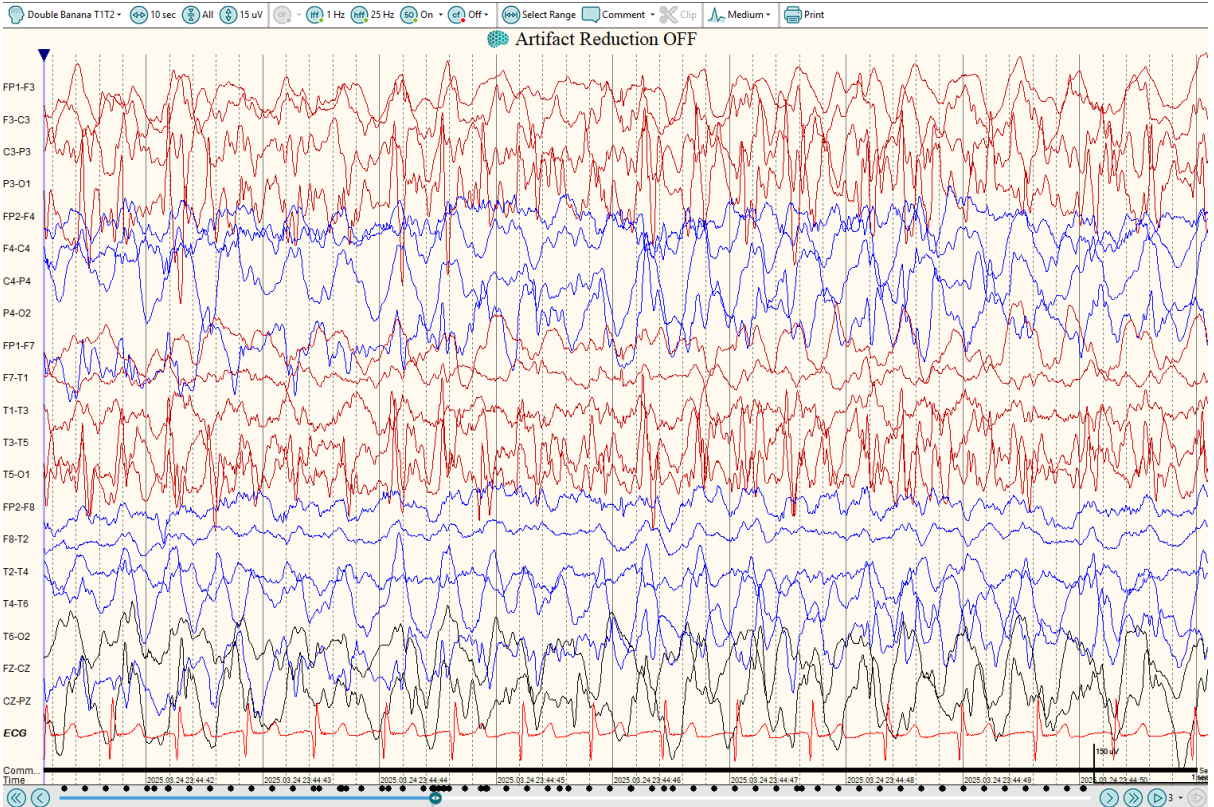
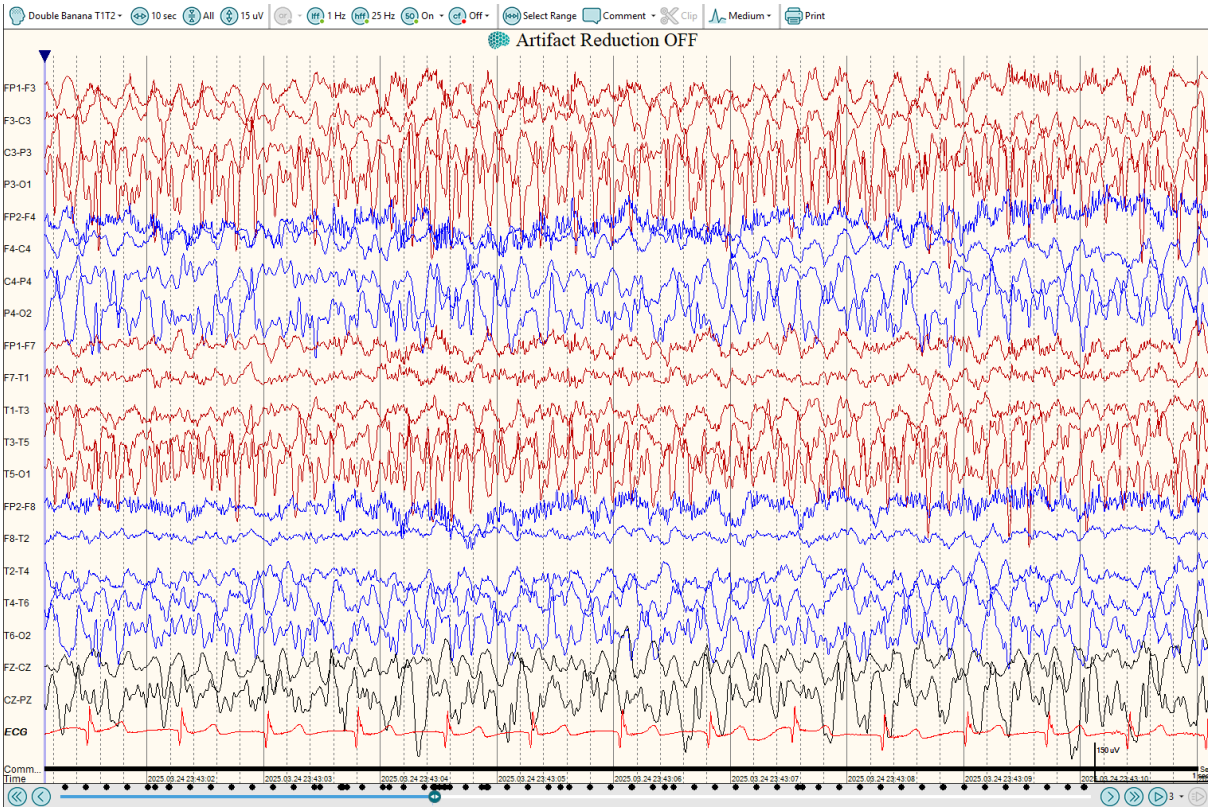
Patient History

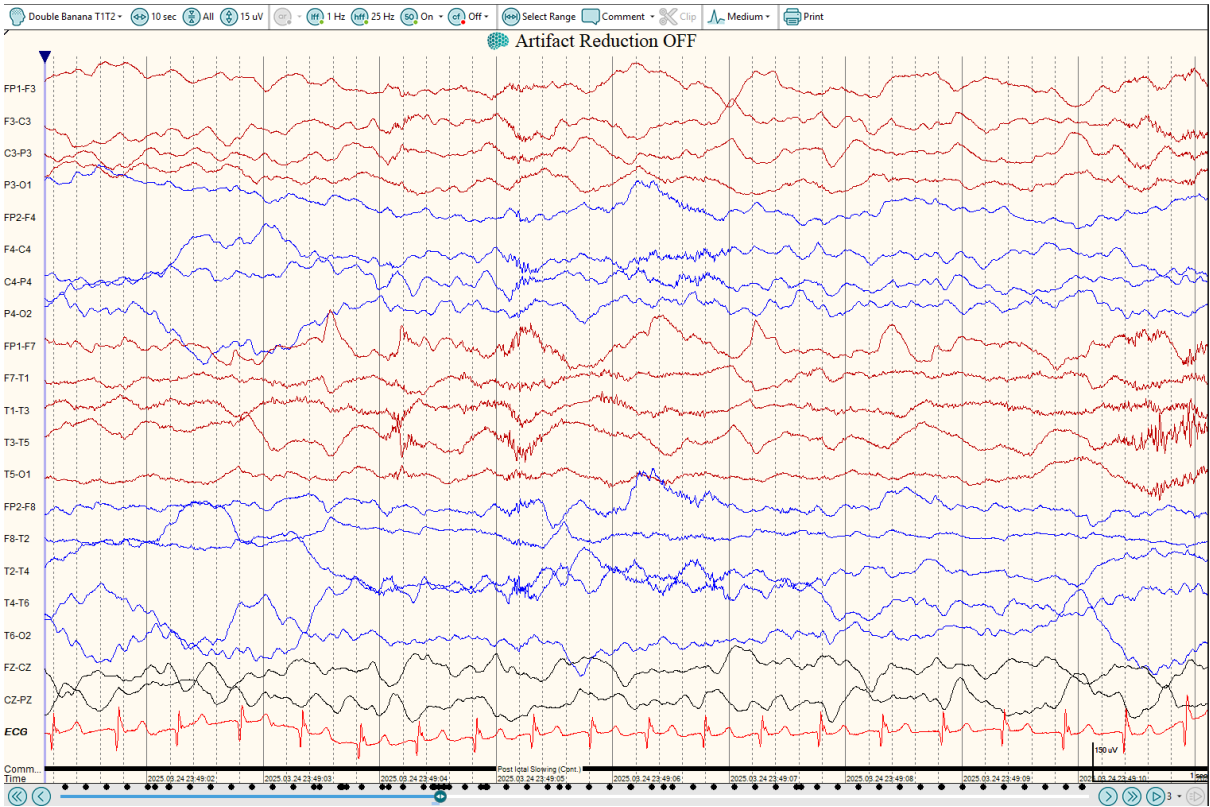
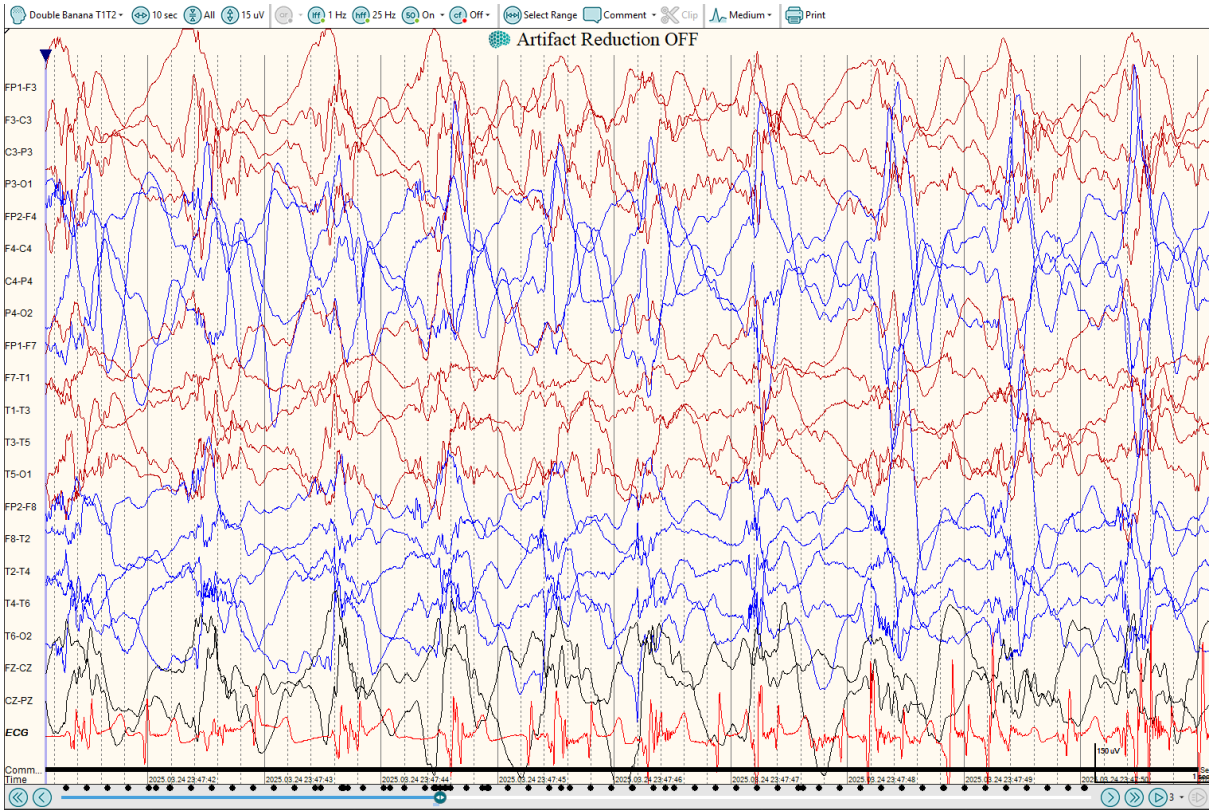
The 11 year old male patient, seizures since 2.8 years of age. Birth - NVD, at term 2.5 Kg, cried immediately, Development - Normal, Seizure semiology - No Aura, Deviation to right side at night for 1-2 min and mostly about to sleep or at drowsy state. Post ictal drowsiness - 10 min, Frequency - 1-2 episodes per year, Last attack - 1 month ago. No family history, no head trauma and no surgery. Right ear malformation. Current AED - Zenoza, Lacosamide. MRI - Normal, Previous EEG - Normal. Mocxa- Long term VEEG was done in the hospital. Mocxa's capability for extended monitoring periods was crucial for capturing infrequent events in this patient.

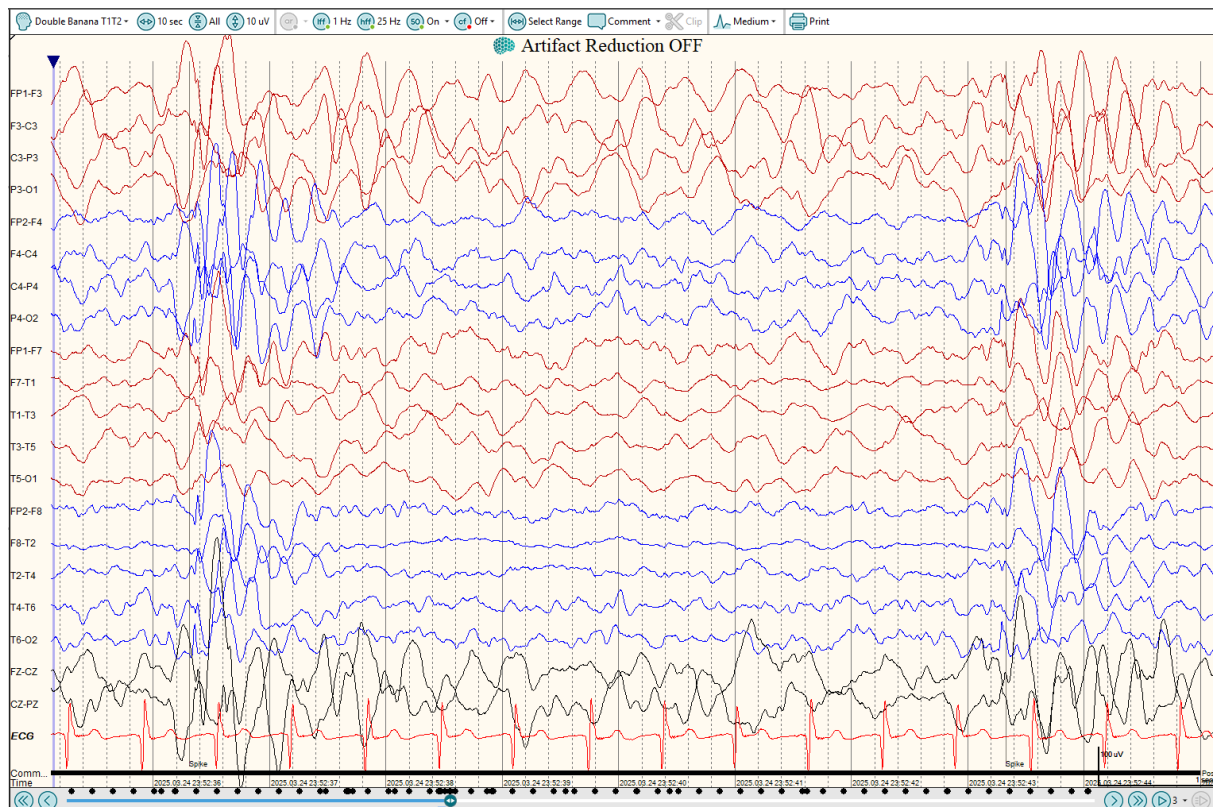
Procedure Details

Location	Home
Duration	24 Hours
EEG Type	Ambulatory, 24 channels, With ECG, With Video









Report

Description: Awake record showed posterior dominant rhythm of 8-9hz over the bilateral posterior head regions, well reactive to eye-opening and mentally alert. Sleep record consisted of a mix of theta and delta waves, with occasional bursts of higher frequency 12-14hz activity sleep spindles. Symmetric sleep spindles, vertex waves and K-complexes were noted. IEDs: Epileptiform abnormalities in the form frontally dominant generalized spike, polyspikes and wave discharges were noted during wakefulness with increased activation in sleep. Seizures: Recorded 1 seizure with clinical semiology: patient was lying in bed in right lateral position, noted to have sustained posturing of left upper limb with altered sensorium EEG: Diffuse burst of frontally dominant generalized polyspikes, followed by attenuation, followed by bilateral PHR evolution of fast spike and wave discharges, and synchronization.

Impression: This EEG record showed bifrontal and generalized epileptiform abnormalities. Recorded 1 generalized seizure of diffuse ictal onset. The presence of normal background activity, activation in sleep and morphology of discharges, suggests a probable diagnosis of Primary (Genetic) generalized epilepsy.