## **Electroencephalogram Results**

#### Methodology:

The EEG was performed using standard 10-20 electrode placement.

The patient was awake and calm, with a full set of electrodes applied.

Continuous recording was conducted for approximately 30 minutes, with 5 minutes of hyperventilation and photic stimulation included.

# **Electrode Montage:**

Referenced to Cz using standard bipolar and average referential montages.

### **Background Activity:**

The background rhythm showed a mix of theta and delta activity, with predominant slowing noted.

Sleep cycles were not achieved during the recording due to the patient's irritability.

#### **Interictal Activity:**

Slow Spike-and-Wave Discharges: Notable for slow spike-and-wave discharges at a frequency of 1.5 to 2.5 Hz, seen predominantly in the frontal and central regions. Generalized Abnormalities: Widespread background slowing with occasional bursts of rhythmic delta activity.

## **Ictal Activity:**

During the recording, there were several episodes of brief, generalized seizures characterized by multifocal spikes followed by slow waves. These episodes correlate with the patient's reported history of infantile spasms.

Atonic Seizures: Occasional generalized slow wave discharges suggestive of atonic seizures.

**Photoparoxysmal Response:** Mild photoparoxysmal response was observed during photic stimulation, with increased slow wave activity but no clear seizure activity. Artifacts: Some muscle artifacts noted during periods of increased movement and agitation.

# **Impression**

The EEG demonstrates typical features of Lennox-Gastaut syndrome, including slow spike-and-wave discharges and generalized background slowing.

**Seizure Types:** Evidence of both infantile spasms and potential atonic seizures was noted during the recording.