

## ROUTINE ELECTROENCEPHALOGRAPHY (EEG) ANALYSIS AND REPORT

**Patient Name:** XXX  
**Date of Birth (YR.MO.DA):** 2005.09.28  
**Handedness:** RIGHT  
**Date of Study:** 2020.11.11  
**Date Received:** 2020.11.23  
**Date of Interpretation:** 2020.11.28

**Reason for Study:** EVALUATE FOR SEIZURES DUE TO SYMPTOMS OF MEMORY DEFICITS AND DECISION MAKING  
**Medication(s):** TRILEPTAL, PROZAC  
**Referring Clinician:** SADAR PSYCHOLOGICAL AND SPORTS CENTER

**RECORDING CONDITIONS:** A routine, non-sleep deprived, digitally acquired EEG was performed >40 minutes, in both EO and EC conditions, with the international 10-20 system of electrode placement and standardized international nomenclature at locations Fp1, Fp2; F7, F3, Fz, F4, F8; T7 (T3), C3, Cz, C4, T8 (T4); P7 (T5), P3, Pz, P4, P8 (T6); O1, O2; frequency range 1-70 Hz, based on patient age and cooperation. EEG data was acquired with FDA-approved amplifier, and EEG data processed, securely stored, transmitted and interpreted with licensed software, in accordance with:

**ACNS and IFCN Guidelines** (Published online 03 Feb 2015: <http://www.tandfonline.com/doi/abs/10.1080/1086508X.2006.11079583>;

*J of Clin Neurophysiology* 2015; 33(4):1; *J of Clin Neurophysiology* 2006; 23(2):85-183; American EEG Society. Guidelines for recording clinical EEG on digital media. *J Clin Neurophysiology* 1994;11:114-115; *Recommendations for the Practice of Clinical Neurophysiology. Guidelines of the International Federation of Clinical Physiology*, IFCN standards for digital recording of clinical EEG; EEG Suppl. 52;1999).

Digital EEG (DEEG) is the paperless acquisition and recording of the EEG via computer-based instrumentation, with waveform storage in a digital format on electronic media, and waveform display on an electronic monitor or other computer output device. Recording parameters and conduct of exam are governed by applicable standards of ACNS guidelines and identical/analogous to those for paper EEG recordings, utilizing linked ears and referential montages, with reformatting to longitudinal bipolar, transverse bipolar, referential bipolar, Laplacian, and/or other montages as necessary for analysis and interpretation.

### DESCRIPTION OF RECORDING:

**WAKING BACKGROUND:** During the waking state, a posterior dominant rhythm (PDR), or basic occipital resting frequency (BORF), was an intermittent rhythmic and symmetric, bioccipital rhythm with frequency and amplitude ranges of 7.5-9.0 Hz, and 30-60 uV, respectively, with a strong central peak 8.0-8.5 Hz.

In more anterior derivations, the remaining background activities consisted of mixed-frequency, relatively lower amplitude rhythms, including bilateral central-midline 6-7 Hz theta frequencies of 40-130 uV, though activities are essentially symmetrically distributed, with physiologic anterior-to-posterior amplitude gradient noted.

**DROWSINESS/SLEEP:** Drowsiness and sleep were not demonstrated.

**PAROXYSMAL ABNORMALITIES:** No overt observed focal, lateralizing, or paroxysmal abnormalities were noted during this EEG recording.

**STUDY QUALITY:** Minor muscle, motion, and eye movement artifacts were noted, but did not hinder adequate visualization and interpretation of study.

**EEG INTERPRETATION:** This EEG is mildly abnormal for age due to mild slowing of waking background rhythm for stated age in the awake state.

**EEG CLINICAL CORRELATION:** This EEG in the awake state:

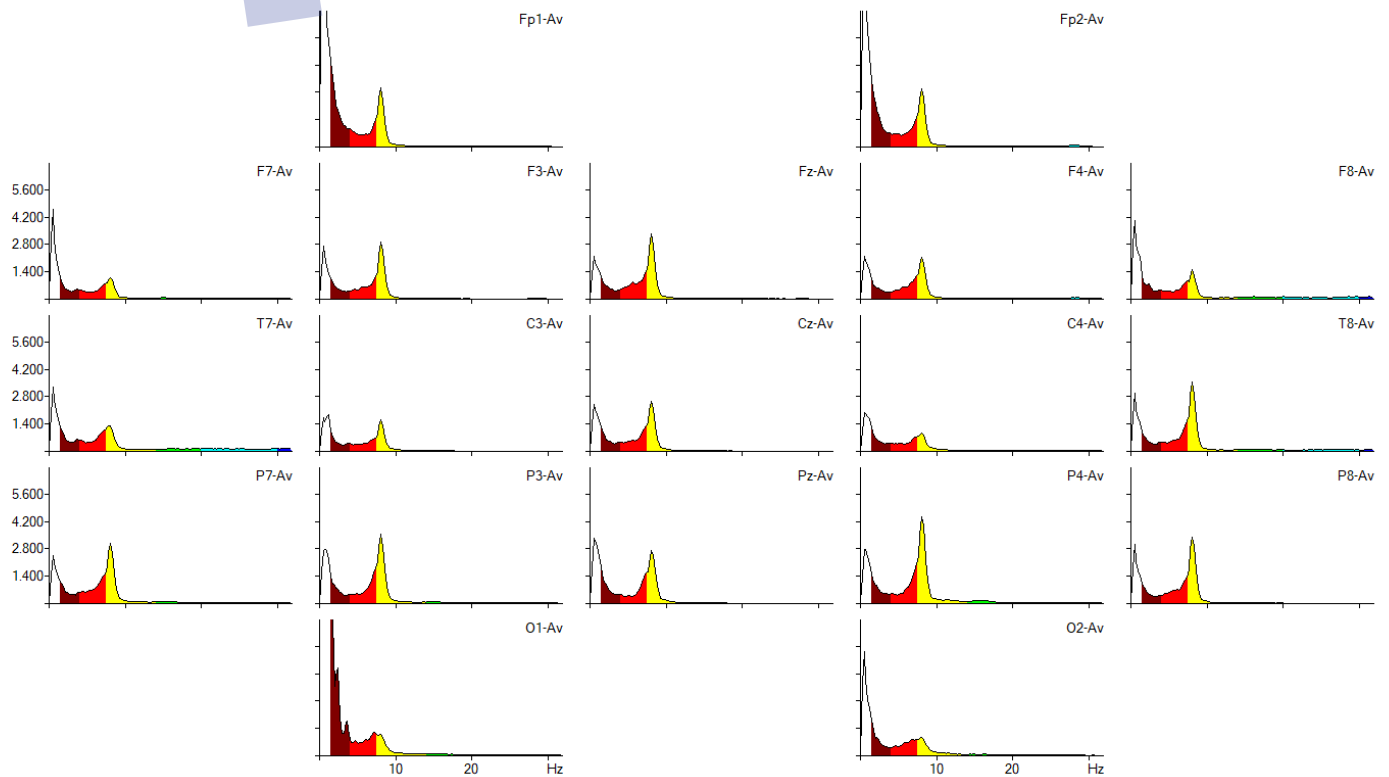
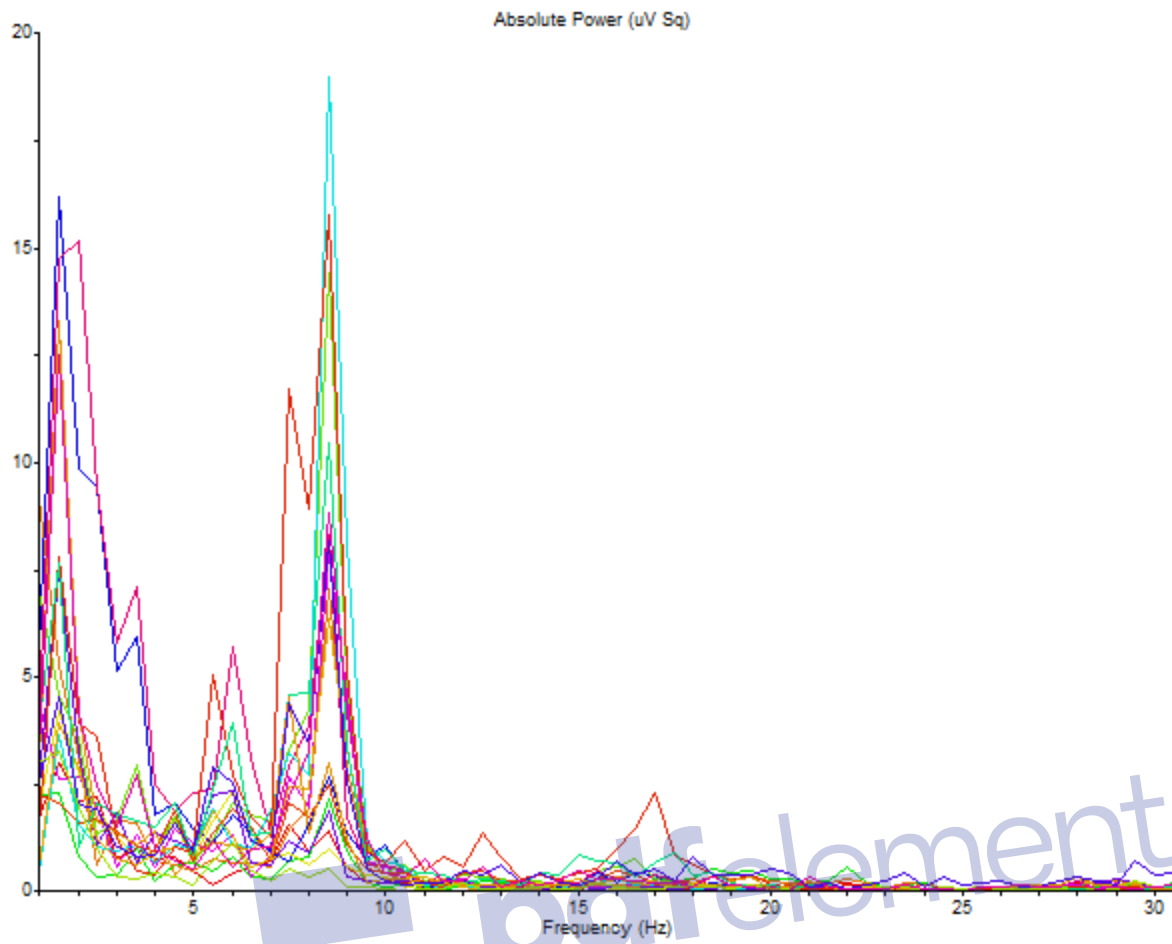
- is suggestive of possible mild cortical-subcortical dysregulation, though non-specific as to etiology, and requires clinical correlation with clinical and medication history.
- does not suggest epileptiform abnormalities or overt risk of seizures.
- suggests clinical symptoms may be amenable to non-invasive neuromodulation/neurofeedback training.

Clinical correlation is warranted.

*Robert P. Turner MD*

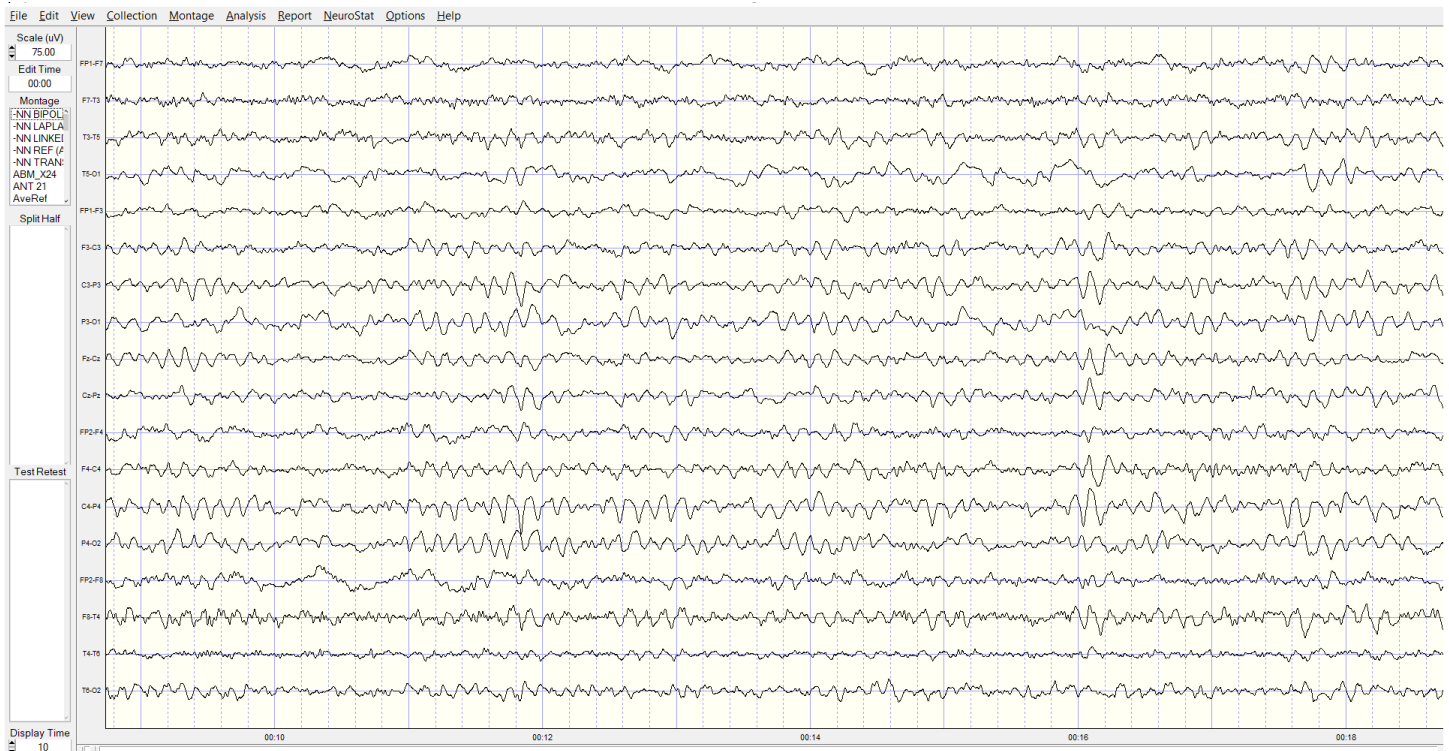
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## AWAKE – EYES CLOSED

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## AWAKE – MID-LINE THETA

