

EEG RESIDENT ROTATION

Background: Epilepsy is a common neurological disease, and its proper diagnosis is crucial to guide both inpatient and outpatient treatment of epilepsy. A major diagnostic test for epilepsy is electroencephalography (EEG). EEG's are read by specially-trained neurologists, and interpretation of EEG is a key skill and competency for an adult neurology resident.

Overall Goal: Provide a focused experience in the inpatient and outpatient evaluation and treatment of epilepsy in adults including an introduction to the interpretation of routine, extended and video EEG recording.

Specific Objectives:

1. Participate in the daily review of Video/EEG studies
2. Participate in the daily review of Routine EEG studies
3. Attend Wednesday Epilepsy didactic sessions
4. Attend Thursday epilepsy conference or journal club
5. Attend monthly resident EEG conference

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Washington University EEG Rotation Resident Core Curriculum

I. Purpose

The purpose of this document is to broadly define the content of the core knowledge and principles to be mastered during the resident rotation in EEG.

II. Definition of Subspecialty

Adult epilepsy is a subspecialty of Neurology that involves the diagnosis and treatment of adults with epilepsy. This subspecialty includes expertise in the use and interpretation of EEG and video/EEG in the diagnosis and management of epilepsy and other conditions which may mimic epilepsy. This specialty also includes expertise in the evaluation of patients with refractory epilepsy for surgical treatments.

III. Core Curriculum

Residents should gain a basic knowledge which may include but not necessarily be limited to the following:

A. EEG

- Understand how EEG data is displayed including the polarity convention, the difference between bipolar and referential montages and familiarity with commonly used montages
- Identify the patterns in normal EEG including awake background activity, drowsiness and sleep
- Identify artifacts and be able to distinguish from abnormal patterns
- Identify normal variants and be able to distinguish from abnormal patterns
- Identify and lateralize/localize abnormal patterns
- Distinguish epileptiform from non-epileptiform abnormalities
- Identify EEG patterns associated with common epilepsy syndromes

B. Epilepsy

- Be familiar with the basic epidemiology of epilepsy
- Be able to obtain a clear description of all of the patient's clinical events as it pertains to proper interpretation of EEG
- Be able to use EEG findings to guide treatment of common epilepsy syndromes in adults
- Be familiar with the uses and limitations of ancillary testing including such as Head CT and Brain MRI in conjunction with EEG.

- Be familiar with how Video/EEG is used for characterization of spells and in the evaluation of potential epilepsy surgery candidates

C. Emergencies

- Be able to identify convulsive and non-convulsive status epilepticus on EEG

**Weekly Schedule (when not scheduled to be in the Adult Epilepsy Clinic)
Neurodiagnostic Reading Room – 3rd floor Peters Bldg (EEG)
Epilepsy Monitoring Unit – 11th floor BJH (bedside rounds)**

Monday*:

8:00 AM – Midafternoon** Video/EEG review (screening, EEG rounds, bedside rounds)

Midafternoon - ~6:00 PM Routine EEG review (screening, report writing, daily read)

Tuesday*:

8:00 AM – Midafternoon** Video/EEG review

Midafternoon - ~6:00 PM Routine EEG review

Wednesday:

8:00 AM - 12:00 PM Video/EEG review

12:00 PM - 1:00 PM** Clinical Neuroscience Lecture

1:00 PM - 3:00 PM Video/EEG and/or Routine EEG review

3:00 PM – 4:00 PM Weekly Epilepsy Didactic Session (O’Leary)

4:00 PM- ~6:00 PM Routine EEG review

Thursday:

7:30/8:30 AM – 9:00/10:00 AM Epilepsy Conference or Journal Club

9:00/10:00 AM – Midafternoon** Video/EEG review

Midafternoon - ~6:00 PM Routine EEG review

Friday*:**

7:30 AM - 8:30 AM Neurology Grand Rounds

8:30 AM – Midafternoon** Video/EEG review

Midafternoon - ~6:00 PM Routine EEG review

*Note that residents may be scheduled for variable afternoons in the Resident Clinic (COH 4th floor).

**Residents are excused for their noon/afternoon didactics.

*** On the 2nd Friday of the month, residents EEG conference at noon (Schwartz)