Protocol: Tapering AEDs to increase yield for LTM

MOST RECENT REVISION: 1/15/2018

Video-EEG recording is the gold standard for distinguishing epileptic from psychogenic non-epileptic seizures (PNES), as well as seizure type classification, and to evaluate for epilepsy surgery.

For many patients, the frequency for their events is unpredictable. Complicating this, spontaneous epileptic seizure frequency appears to decrease in refractory epilepsy patients on admission to an EMU (Chang et al., 2002). For this reason, withdrawal of AEDs is usually recommended to minimize the time needed for evaluation, and increase diagnostic yield.

The concerns and safety of a rapid taper or discontinuation of AEDs include (Benbadis et al., 2004):

- seizure clusters
- more severe seizures; secondary generalized seizures; or faster secondary generalization that complicates EEG interpretation
- status epilepticus
- postictal psychosis

For these reasons, any protocol to rapidly taper or stop AEDs MUST BE INDIVIDUALIZED. Please discuss this with the Epi Attending.

All patients have to be counseled in detail about a likely necessity for and associated risks involved in AED reduction or discontinuation during LTM.

To reduce risk, all patients admitted for LTM irrespective of AED regimen (including NONE) must have an IV in place and a written benzodiazepine rescue protocol - these are required items in the "NEU SEIZURE" admission orderset.

Several points may help your thinking on this topic:

AED WITHDRAWL PROTOCOLS

General points

- If a patient has had previous LTM, use the decisions for AEDs from that admission as a starting point.
- In select patients ONLY, it MAY be reasonable to incrementally taper AEDs with very long t1/2 BEFORE the admission.
- Phenobarbital and Clobazam have very long t1/2, and present concern for withdrawal seizures if tapered rapidly or stopped that may not be typical events for the patient. These MAY require incremental dose reductions IN ADVANCE of monitoring for this to be effective.
- Zonisamide and Perampanel have very long t1/2, and MAY require dose reductions IN ADVANCE of monitoring for this to be effective.
- Stopping Carbamazepine can cause nonspecific withdrawal symptoms – this usually nicely addressed by continuing CBZ at 100-200/d.

PROTOCOL A (FAST)

If no prior status epilepticus, on ONE AED and not on Phenobarbital, reduce AED to half-dose on admission and then discontinue on day 2.

PROTOCOL B (SLOW)

If multiple AEDs, discontinue the AED thought least helpful on admission, and then taper the remaining AEDs by 25% of the initial dose per day, ultimately discontinuing at day 4.

RESTARTING AEDS

Patients are restarted on their outpatient doses of AEDs on discharge, unless specifically agreed by the patient and LTM attending.

The patient must receive at least their daily dose of all AEDs before discharge, unless specifically agreed by the patient and LTM attending.