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## EPILEPSY AND SEIZURE DISORDERS

### Patients with pre-existing seizure disorders

- Patients may be at increased risk for seizures in the perioperative period due to infection, electrolyte and other metabolic disturbances.
- Patients may also be at risk because many anti-seizure medications can only be given PO (carbamazepine, gabapentin, lamotrigine, topiramate, among others).
- Phenytoin (Dilantin) is commonly used antiepileptic medication for IV administration. PO dose = IV dose. Side effects include hypotension and arrhythmia when given IV. (Must be given slowly IV).
- Phenobarbital, levetiracetam, and valproic acid are alternatives that may be given IV.
- Recommend discussion with pharmacy to convert from PO to IV phenobarbital or valproic acid.
- Recommend discussion with both pharmacy and neurology if a patient's baseline medication needs to be switched to an alternative agent in IV form.

### Patients with new onset seizures in the perioperative period

- Consider a broad differential diagnosis.
  - Electrolyte abnormalities, especially Na
  - Medications e.g. meperidine, imipenem
  - Infection
  - Withdrawal, e.g. benzodiazepine or alcohol
  - CNS injury
  - Stroke
- Workup should include thorough history and physical, electrolytes, search for infection. Other workup should be directed by clinical suspicion.
- Neurology consultation may be warranted.