

Priority Topic: SEIZURES

Key Features:

For a single source on this topic: [Epilepsy AIM 2016](#)

1. In a patient having a seizure:

a) Ensure proper [airway control](#) (e.g., oropharyngeal airway or nasal trumpet, lateral decubitus to prevent aspiration).

What you should study:

- ✓ [Geeky Medics Acute Management of Seizures](#)
- ✓ [EM Cases Episode 73: ER Management of Pediatric Seizures](#)

b) [Use drugs](#) (e.g., benzodiazepines, phenytoin) promptly to stop the seizure, even before the etiology is confirmed.

What you should study:

- ✓ [Convulsive Status Epilepticus Algorithm AES 2016](#)
- ✓ [Emergency Management of the Pediatric patient with Convulsive status epilepticus CPS 2018](#)

c) Rule out [reversible metabolic causes](#) in a timely fashion (e.g., hypoglycemia, hypoxia, heat stroke, electrolytes abnormalities).

What you should study:

- ✓ [Epilepsy AIM 2016](#) **Box: Seizure Evaluation**
- ✓ [Diagnosis and Management of Epilepsy CMAJ 2003](#) **Box 1**

2. In a patient presenting with an ill-defined episode (e.g., fits, spells, turns), take a [history to distinguish a seizure from other events](#).

What you should study:

- ✓ [New-Onset Seizure in Adults and Adolescents JAMA 2016](#)
- ✓ [Psychogenic Non-Epileptic Seizure AAFP 2005](#)
- ✓ [Febrile Seizures AAFP 2012](#)

3. In a patient presenting with a seizure, take an [appropriate history to direct the investigation](#) (e.g., do not overinvestigate; a stable known disorder may require only a drug-level measurement, while new or changing seizures may require an extensive work-up).

What you should study:

- ✓ [Evaluation of First Nonfebrile Seizure AAFP 2012](#)
- ✓ [Causes of Seizure in the Elderly 2016](#)

4. In all patients presenting with a seizure, [examine carefully](#) for focal neurologic findings.

What you should study:

- ✓ [NeuroExam.com](#)- **check out the videos for each component of the neuro exam.**

This website is designed to be the companion to the textbook Neuroanatomy Through Clinical Cases, also known as the bible of the neurological exam (or Blumenfeld's, after the author).

5. In a patient with a previously known seizure disorder, who presents with a seizure or a [change in the pattern of seizures](#):
- Assess by history the [factors](#) that may [affect the primary seizure disorder](#) (e.g., medication compliance, alcohol use, lifestyle, recent changes in medications [not just antiepileptic medications], other illnesses).
 - Include [other causes of seizure](#) in the differential diagnosis. (Not all seizures are caused by epilepsy.)

What you should study:

- ✓ [Epilepsy Foundation: Lifestyle Modification](#)
- ✓ [Epilepsy AIM 2016](#)
- ✓ [Causes of Seizure in the Elderly 2016](#)

6. In the [ongoing care](#) of a patient with a stable seizure disorder:
- Regularly [inquire about compliance](#) (with medication and lifestyle measures), [side effects](#) of anticonvulsant medication, and the [impact of the disorder](#) and its treatment on the patient's life (e.g., on driving, when seizures occur at work or with friends).
 - Monitor for [complications of the anticonvulsant medication](#) (e.g., hematologic complications, osteoporosis).
 - Modify management of other health issues [taking into account the anticonvulsant medication](#) (e.g., in prescribing antibiotics, pregnancy).

What you should study:

- ✓ [Adverse Effects of AEDs Lancet 2012](#)
- ✓ [Management of Adult-Onset Seizures MAYO 2017](#) **See Table 3: Complications**
- ✓ [AED drug interactions 2010](#) **See Table 2**
- ✓ [Comparative Safety of Antiepileptic Drugs in Pregnancy 2012](#)

Although not stated, you should know how to treat seizures:

- ✓ [Adult first unprovoked seizure guideline AES 2015](#)
- ✓ [Epilepsy Treatment Options AAFP 2017](#)
- ✓ [Immediate Anticonvulsants? AAFP Cochrane 2017](#)
- ✓ [Antiepileptic Monotherapy AAFP Cochrane 2018](#)