



***The Management of ED Seizure and Status Epilepticus Patients:
The Role of 1st and 2nd Generation Anti-epileptic Drugs in 2007***

**ED Seizure and SE Patient Management:
Seizure & SE Guidelines and AED Use**

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Learning Objectives

- Describe the optimal treatment of ED patients who present with seizures and SE, including the review of published guidelines regarding anti-epileptic drug use.
- Determine what published guidelines suggest should be the ED use of 1st and 2nd generation AEDs based on the clinical presentation, patient demographics, and likely seizure etiology.

Background

Emergency physicians must be able to quickly and effectively deliver anti-epileptic drug (AED) therapy to ED patients who present with recurrent seizures or in status epilepticus (SE). There are two aspects of the AED choice that merit consideration: the need to quickly terminate the seizure prior to the onset of complications while in the ED, and the likely long-term AED use based on the patient demographics, likely seizure etiology, and other issues such as safety and cost.

There are two guideline areas that may be relevant to this decision. The first are the Emergency Medicine guidelines that suggest how to treat the acute seizure and/or SE, and the second set address which AEDs should be used long-term in order to manage epilepsy patients. The questions to be considered are whether the EM guidelines support specific therapies, and whether the neurology guidelines provide information that is relevant to the need of emergency physicians to quickly treat the acute seizure or SE episode, including the use of 2nd generation AEDs in treating epilepsy. In other words, does every ED seizure or SE patient get a benzodiazepine and a phenytoin, or is there a need to be more discriminating based on clinical factors noted in the ED?

Key Clinical Questions

- What are the options and priorities in the treatment of ED seizure and SE patients based on the current clinical policies and guidelines?
- What do the current guidelines recommend regarding specific 1st or 2nd generation AEDs based on the ED seizure and SE patient clinical presentation?