

## Seizure Management

### Purpose:

To provide a general and pharmacological management strategy for the acute control of recurrent seizures or status epilepticus

### Overview:

A seizure is a paroxysmal alteration of brain function due to abnormal disorganized discharge of neurons. Seizures can be classified as focal or generalized. Focal seizures may not result in an alteration of consciousness, whereas generalized seizures result in loss of consciousness. Up to 40% of patients with brain tumors have a seizure at the time of diagnosis and another 20% develop seizures during the course of the illness. Seizures may also complicate various brain injuries, brain infections, severe electrolyte disorders, alcohol withdrawal or be idiopathic.

### Assessment:

**History:** Identify risk factors for seizures or past history of seizures. Determine what the episode is like in terms of frequency, duration, whether it is focal or generalized. Review current medications.

**Exam:** During a seizure try to distinguish tonic-clonic (whole body) seizures from seizures that only involve part of the body and do not impair consciousness. Perform a neurological examination checking for weakness, tremor, or increased muscle tone. Check for any seizure related injuries such as tongue biting or extremity injury.

Alert MD for new or increased seizure activity.

### Procedure:

Protect patient from injury; remove potential hazards; surround by soft objects; prevent falls.

Use tactile and vocal stimuli to reassure the patient

Watch and wait for 3 minutes as the majority of seizures will stop spontaneously

### Single self- limited seizures:

- Obtain glucose fingerstick to rule out hypoglycemia
- Check O2 saturation and administer oxygen via nasal canuli if available
- If no reversible cause is identified, initiation of maintenance AED (antiepileptic drugs) should be considered, especially if prognosis is expected to be more than a few weeks

**Status epilepticus (continuous generalized seizure greater than five minutes or 2 or more seizures without return to baseline consciousness) :**

- Place an IV if possible
- Administer O2 if available

- Pharmacologic Management

<b>Drug</b>	<b>Status Loading Dose</b>	<b>Maintenance</b>
<b>Lorazepam</b>	2 – 4 mg IV or IM, may repeat q 15 minutes, not to exceed 8 mg/12 hr; 2 – 4 mg PR	0.5 – 2 mg q 4- 6 hr
<b>Diazepam</b>	0.2 mg/kg or 10 – 20 mg PR	5 – 10 mg BID - QID
<b>Phenobarbital</b>	10 – 15 mg/kg IV or SC ; 60 – 120 mg PR, may repeat q hour, not to exceed 360 mg	1 – 3 mg/kg/day IV or IM; 60 – 120 mg PR TID

**Advance Crisis Planning:**

Place seizure kit in home or nursing home for high-risk patients (ordered by MD)

Diazepam 10 mg suppositories PRN seizure

or

Ativan suppositories 2 mg PRN seizure