



# Seizure

## Assessment

### Pediatric Pearls:

- Use pediatric dosing of medications or electrical therapy for a pediatric patient < 37 kg and as defined by the PEDIA Tape.
- Pediatric hypotension is defined as SBP < 70 + (age in years x 2) mmHg

### Signs & Symptoms:

- Altered mental status
- Sleepiness
- Incontinence
- Observed seizure activity
- Evidence of trauma
- Unconscious
- Fever
- Seizure activity
- Tongue trauma
- Rash
- Nuchal rigidity

### Differential:

- CNS/Head trauma
- Tumor
- Metabolic, Hepatic, or Renal failure
- Electrolyte abnormality (Na, Ca, Mg, K)
- Medication non-compliance
- Infection / Fever
- Alcohol withdrawal
- Eclampsia
- Stroke
- Hyperthermia
- Hypoglycemia

## Clinical Management Options

P	P	P	P	P	P	<ul style="list-style-type: none"> <li>• <a href="#">Oxygen</a></li> <li>• <a href="#">BGL</a> &amp; <a href="#">CPSS</a> assessments</li> <li>• <a href="#">SMR</a> assessment</li> <li>• BLS airway management</li> <li>• For any seizure in a pregnant or recently post-partum patient, consider eclampsia and consult the <a href="#">OB Emergencies</a> COGs.</li> <li>• Examine mental status, HEENT, heart, lungs, extremities, and neuro</li> </ul>
L	L	L	L	L	L	<ul style="list-style-type: none"> <li>• Patient assist: <a href="#">Vagus Nerve Stimulator</a> (VNS) q 60 seconds, may repeat x3</li> </ul>
1	2	3	4	5	6	<ul style="list-style-type: none"> <li>• <a href="#">Vascular access</a></li> <li>• <a href="#">Isotonic Crystalloid</a> fluid challenge at 30 ml/kg</li> <li>• Pediatric: Temp &gt; 100.4 F then <a href="#">Acetaminophen</a></li> </ul>
						<ul style="list-style-type: none"> <li>• Monitoring and interpretation of ECG &amp; <a href="#">EtCO<sub>2</sub></a></li> </ul>
						<ul style="list-style-type: none"> <li>• <a href="#">Midazolam</a></li> </ul>

## Consult Online Medical Control As Needed

### Pearls:

- Refer to drug formulary charts for all medication dosing for both adults and pediatric patients.
- Impending status epilepticus is defined as two or more successive seizures or a continuous seizure lasting 5 minutes without a period of consciousness or recovery. This is a true emergency requiring rapid airway control, treatment, and transport.
- Grand mal seizure (generalized) are associated with loss of consciousness, incontinence, and tongue trauma.
- Focal seizures (petit mal) effect only a part of the body and are not usually associated with a loss of consciousness.
- Jacksonian seizures are seizures which start as focal seizure then become generalized.
- Assess possibility of occult trauma and substance abuse.
- Be prepared to assist ventilations, especially if Midazolam is used.
- Addressing the ABCs and verifying blood glucose is more important than stopping the seizure. Hypoglycemia is the 2<sup>nd</sup> most common cause of seizure.
- Avoiding hypoxemia is extremely important.
- In an infant, a seizure may be the only evidence of a closed head injury.