

**SYMPTOMS:**

Patient who exhibits seizure activity upon arrival of prehospital personnel or new or recurrent seizure activity lasting more than 5 minutes.

**ASSESSMENT and TREATMENT**

**ALL LEVELS**

1. Conduct primary assessment.
2. Treat any life-threatening conditions.
3. Obtain detailed patient history related to seizure (time of onset, duration, medications given prior to arrival of EMS, etc.).

**EMR-O; EMT-R**

4. If signs of airway obstruction are present, and chin-lift or jaw thrust, positioning and/or suctioning do not alleviate it, place nasal-pharyngeal or oral-pharyngeal airway (if gag reflex is absent).
5. Monitor SpO<sub>2</sub> and/or waveform capnography to monitor oxygenation/ventilation.
6. Administer oxygen as appropriate for dyspnea or distress with the target of achieving greater than 93% saturation for most acutely ill patients.
7. Conduct secondary assessment including perfusion and neurological status.
  - a. Air movement and airway patency
  - b. Breath sounds, respiratory rate, and effectiveness of ventilation.
  - c. Signs of perfusion (pulses, capillary refill, color)
  - d. Neurologic status (GCS, uncontrolled repetitive movement of the eyes [nystagmus], pupil size, focal neurological deficit, or signs of stroke)
8. Check blood glucose level. If less than 60 mg/dL treat per [Hypoglycemia guideline \[M-9\]](#). [Hypoglycemic patients who are treated in the field for seizure should be transported to the hospital even if a return to baseline mental status after treatment.]
9. If febrile (fever related) seizure:
  - a. Remove excessive layers of clothing
  - b. Apply cool compresses to the body

**EMT-O**

10. Consider 12-lead ECG after cessation of seizure.

**AEMT-R**

11. IV placement is not necessary for treatment of seizures but could be obtained if needed for other reasons.
12. Routes of administration: IN/IM routes are preferred over PR (rectal), IV or IO.
13. For febrile seizures, consider administering Acetaminophen [15mg/kg PR/IV/IO/PO maximum dose 1000mg] for both adult and pediatric patients.

**INT-R**

14. Monitor 12 lead ECG for potential cardiac cause of seizure.

**INT-O**

15. Consider administration of anti-convulsive medication Midazolam [Adult: 4mg IV/IO/IN or 10mg IM; Pediatric: 0.1mg/kg IV/IO/IN or 0.25mg/kg IM].
16. Consider administration of Diazepam [0.2mg/kg PR; maximum dose 10 mg] both adult and pediatric patients.
17. For febrile seizure:

- a. Ketorolac [Adult: 15mg/kg IV/IO (maximum initial dose of 25mg; maximum cumulative dose of 100mg); Pediatric: 0.5mg/kg IV/IO (maximum dose of 15mg or 1mg/kg IM (maximum dose of 30mg] OR
- b. Ibuprofen [10mg/kg PO (maximum dose of 600mg) if able to swallow] for adult and pediatric patients.

PARA-R

18. In the case of a seizure in the third trimester of pregnancy or post-partum, consider Magnesium Sulfate [4g IV 20% solution over 20 minutes followed by 1g/hour IV].

NOTE:

The presence of fever with seizure in children less than 6 months old and over 6 years old is NOT consistent with a simple febrile seizure, and should be transported for evaluation for meningitis, encephalitis, or other causes.