

Protocol 3-12

SECTION: Adult General Medical Emergencies

PROTOCOL TITLE: Medical - Seizure

REVISED: 06/2017

OVERVIEW:

A seizure is a period of altered neurologic function caused by abnormal neuronal electrical discharges. Generalized seizures begin with an abrupt loss of consciousness. If motor activity is present, it symmetrically involves all four extremities. Episodes that develop over minutes to hours are less likely to be seizures; generally seizures only last one to two minutes. Patients with seizure disorders tend to have stereotype, or similar, seizures with each episode and are less likely to have inconsistent or highly variable attacks. True seizures are usually not provoked by emotional stress. Most seizures are followed by a postictal state of lethargy and confusion.

HPI	Signs and Symptoms	Considerations
<ul style="list-style-type: none"> • Reported, witnessed • Seizure activity description • Previous seizure history • Medic alert tag information • Seizure medications • History of trauma • History of diabetes mellitus • History of pregnancy 	<ul style="list-style-type: none"> • Decreased mental status • Sleepiness • Incontinence • Observed seizure activity • Evidence of trauma 	<ul style="list-style-type: none"> • CNS (head) trauma • Brain tumor • Metabolic, hepatic, renal failure • Diabetic • Hypoxia • Electrolyte abnormality • Drugs, medications, non-compliance • Infection, fever, meningitis • Alcohol withdrawal • Eclampsia • Stroke • Hyperthermia

	EMR	EMT	A	I	P
1. Perform general patient management.	•	•	•	•	•
2. Support life-threatening problems associated with airway, breathing, and circulation.	•	•	•	•	•
a. Suction the oro / nasopharynx as necessary.	•	•	•	•	•
b. Place a nasopharyngeal airway as necessary (avoid in head trauma).	•	•	•	•	•
3. Administer oxygen to maintain SPO_2 94 - 99%. Support respirations as necessary with a BVM.	•	•	•	•	•
4. Do not restrain the patient. Let the seizure take its course but protect patient from injury.	•	•	•	•	•
5. Perform rapid glucose determination. If glucose less than 60 mg / dL or clinical signs and symptoms indicate hypoglycemia, refer to the <i>Medical – Diabetic – Hypoglycemia</i> protocol.		•	•	•	•
6. Establish an IV of normal saline at KVO.			•	•	•

SEIZURES

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Continued

SEIZURES

	EMR	EMT	A	I	P
7. If the seizure persists and the rapid glucose determination is greater than 60 mg / dL, give <u>MIDAZOLAM</u> 0.2 mg / kg INTRANASAL (max single dose 10 mg) –OR- give <u>MIDAZOLAM</u> 0.1 mg / kg IV / IM (max single dose 5 mg)				•	•
a. Repeat dose in 5 minutes if seizure persists.				•	•
b. If midazolam is unavailable, administer, <u>DIAZEPAM</u> 0.25 mg / kg up to 5 mg slow IV push. Repeat once as necessary.				•	•
8. Place patient on cardiac monitor (life-threatening dysrhythmias may cause seizure-like activity).				•	•
9. Consider placing the patient in the recovery position during the postictal period.	•	•	•	•	•
10. Transport and perform ongoing assessment as indicated.		•	•	•	•

TYPES OF SEIZURES		
<u>Generalized</u>	<u>Simple Partial</u>	<u>Complex Partial</u>
<ul style="list-style-type: none"> • Absence (Petit-Mal) • Atonic (Drop Attack) • Myoclonic (Brief bilateral jerking) • Tonic-Clonic (Grand-Mal) 	<ul style="list-style-type: none"> • Focal/ Local: Localized twitching of hand, arm, leg, face, or eyes. Patient may be conscious or unconscious 	<ul style="list-style-type: none"> • Temporal Lobe • Psychomotor

PEARLS:

1. Status epilepticus is defined as two or more consecutive seizures without a period of consciousness or recovery. This is a true emergency requiring rapid airway control, treatment, and transport.
2. Grand Mal seizures are generalized in nature and associated with loss of consciousness, incontinence, and tongue trauma.
3. Focal seizures affect only a specific part of the body and are not usually associated with loss of consciousness.
4. Jacksonian seizures are seizures that start as focal in nature and become generalized.
5. Petit Mal seizures may be localized to a single muscle group or may not involve visible seizure activity at all. Always examine pupils for nystagmus, which would alert provider to continued seizure activity.
6. Respirations during an active seizure should be considered ineffective and airway maintenance should occur per assessment.
7. Be prepared for airway problems and continued seizures.
8. Investigate possibility of trauma and substance abuse.
9. Be prepared to assist ventilations as dosage Midazolam or Valium is repeated and/or increased.