

I. General Considerations

- A. Move potentially harmful objects away from the patient.
 - B. Do not force anything into the patient's mouth; it could obstruct the airway and do harm.
 - C. Trauma to the tongue seldom causes serious problems.
 - D. Broken teeth and/or foreign bodies may obstruct the airway.
 - E. High concentration oxygen is appropriate.
 - F. Patients who continue to seize require respiratory support and prompt transport.
 - G. Heart arrhythmias are a common cause of seizures in patients over the age of 50.
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II. History

Perform a focused history and physical exam with particular attention to:

- A. Is there a history of seizures? If so, when was the last seizure?
 - B. Is there a history of head trauma? (including any in the last month)
 - C. Is the patient taking any medications for seizures? Has the patient taken that medication as prescribed?
 - D. Obtain a past medical history including:
 - 1. Does the patient have any medical illnesses and what treatments or medications are prescribed?
 - 2. Is the patient diabetic and have they taken their insulin or pills and when did they last eat?
 - 3. What medications has the patient been, or is the patient supposed to be, taking (including over the counter medications) and does the patient drink alcohol?
 - E. What events and/or complaints preceded the seizure? (i.e., what was the patient doing prior to the seizure and did they complain of headache, fever, chest pain, or palpitations; has there been nausea, vomiting, diarrhea, or choking?)
 - F. Describe the seizure:
 - 1. Where did it start (what part of the body)? Did it involve the whole body?
 - 2. How long did it last?
 - 3. How many seizures have there been today or in a row?
 - 4. If this seizure was different from past seizures, how was it different?
 - 5. Did the patient regain consciousness between seizures?
 - 6. Did the patient say anything or cry out before or during the seizure?
 - 7. Did the patient lose control of bowel or bladder function (i.e., incontinence)?
 - G. Is the patient known to use marijuana, cocaine, heroin or any other illicit substances?
 - H. Was any "treatment" done prior to your arrival?
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III. Physical Examination

- A. Perform an initial assessment.
- B. Perform a focused history and physical exam with particular attention to:
 - 1. Is there an injury or a foreign body in the mouth?
 - 2. Examine the skin for bruises.
 - 3. Is there evidence of head or neck trauma?
 - 4. Is there evidence of a hip or shoulder dislocation?
 - 5. Is there evidence of incontinence?
- C. Assess the patient's neurological condition.
 - 1. Check pupils for size, symmetry, reactivity.
 - 2. Assess motor function. Is the patient moving all four extremities? Is there equal grip strength? Is there posturing?
 - 3. Is sensation to touch intact in all four extremities?
 - 4. What is the last thing the patient can recall?

- D. Inspect the surroundings.
 - 1. Check for pill bottles, syringes, etc. (bring with patient).
 - 2. Note odor in house, unvented heaters, etc.

Paramedic

- E. Assess the cardiac rhythm.
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IV. Treatment**Basic**

- A. Establish an airway, maintain as indicated, suction as needed.
- B. Administer high concentration oxygen.
- C. Transport the patient, preferably on the left side.

Intermediate

- D. For unconscious or seizing patients:
 - 1. Secure IV access.
 - 2. Obtain blood specimen for glucose determination at the hospital if the receiving hospital desires it. (Note: If approved by local medical advisor, perform capillary blood glucose determination. Do not use blood from IV start.)
 - 3. *Contact medical direction if patient is a known diabetic, especially if they have not eaten recently (or if glucose determination is < 80 mg/dl): administer dextrose 25 gm IV for an adult (standing order for paramedics), 0.5 - 1 gm/kg for a child.*
 - 4. *If medical direction orders it, administer naloxone 2 mg intravenously, subcutaneously or intranasally for an adult (standing order for paramedics), 0.01 mg/kg for a child. The patient may become combative and require restraint.*
 - 5. *▲ If IV access cannot be secured and the patient's blood glucose level is <80 mg/dl, administer 1 mg glucagon IM.*
 - 6. *▲ If ordered by medical direction, administer thiamine 100 mg IV.*

Paramedic

- E. Assess and monitor the cardiac rhythm; treat arrhythmias/dysrhythmias per applicable protocols.
- F. *If ordered by medical direction, administer a benzodiazepine, using appropriate dose and route.*
- G. *If IV access cannot be secured and the patient's blood glucose level is <80 mg/dl, administer 1 mg glucagon IM.*
- H. *In the presence of third trimester pregnancy, if ordered by medical direction, consider 4 gm magnesium sulfate slow IV push over 5 minutes.*