

Protocol 3-7

SECTION: Adult General Medical Emergencies

PROTOCOL TITLE: Medical – Diabetic – Hyperglycemia

REVISED: 06/2017

OVERVIEW:

Symptomatic hyperglycemia can be described as an elevated blood glucose level with signs of severe dehydration, altered mental status, and / or shock. For the purpose of these protocols, the glucose level for symptomatic hyperglycemia is 300 mg / dL. Hyperglycemia is usually the result of an inadequate supply of insulin to meet the body's needs. Most pre-hospital care should be focused around the treatment of severe dehydration and support of vital functions.

HPI	Signs and Symptoms	Considerations
<ul style="list-style-type: none"> History of diabetes Onset of symptoms Medications 	<ul style="list-style-type: none"> Anxiety, agitation, and / or confusion Dry, red, and / or warm skin Acetone (fruity) smell on breath Kussmaul respirations Dry mouth, intensive thirst Abnormal / hostile behavior Tachycardia Dizziness / headache 	<ul style="list-style-type: none"> Hypoxia Stroke Brain trauma Alcohol intoxication Toxin / substance abuse Medication effect / overdose

HYPERTGLYCEMIA

	EMR	EMT	A	I	P
1. Perform general patient management.	•	•	•	•	•
2. Support life-threatening problems associated with airway, breathing, and circulation.	•	•	•	•	•
3. Assess for signs of trauma. Provide spinal immobilization as necessary.	•	•	•	•	•
4. Administer oxygen to maintain <i>SPO₂</i> 94 - 99%	•	•	•	•	•
5. For altered mental status, perform rapid glucose determination.		•	•	•	•
6. If glucose greater than 300 mg / dL, start an IV of normal saline.			•	•	•
7. For signs and symptoms of hypovolemic shock or dehydration, follow the <i>Medical – Hypotension/Shock (non-trauma)</i> protocol.	•	•	•	•	•
8. Place on cardiac monitor and obtain / interpret <u>12 lead ECG</u> as indicated.		•	•	•	•
9. Transport and perform ongoing assessment as indicated.		•	•	•	•

POSSIBLE CAUSES OF PULSELESS ARREST

A	Alcohol, Abuse, Acidosis	T	Toxidromes, Trauma, Temperature, Tumor
E	Endocrine, Electrolytes, Encephalopathy	I	Infection, Intussusception
I	Insulin	P	Psychogenic, Porphyria, Pharmacological
O	Oxygenation, Overdose, Opiates	S	Space occupying lesion, Sepsis, Seizure, Shock
U	Uremia		

PEARLS:

1. Use aseptic techniques to draw blood from finger.
2. Allow alcohol to dry completely prior to puncturing finger for blood glucose level. Alcohol may cause inaccurate readings. Do not blow on, or fan site, to dry faster.
3. After puncturing finger, use only moderate pressure to obtain blood. Excessive pressure may cause rupture of cells causing inaccurate results.
4. Know your specific agency's glucometer's parameters for a "HI" and "LO" reading.