



Hyperglycemia

Aliases

Diabetes

Diabetic ketoacidosis (DKA)

Hyperosmolar hyperglycemic state (HHS)

Patient Care Goals

1. Limit morbidity from hyperglycemia by:
 - a. Appropriate use of glucose monitoring
 - b. Appropriate hydration for hyperglycemia

Patient Presentation

Inclusion Criteria

1. Adult or pediatric patient with altered level of consciousness [See [Altered Mental Status Guideline](#)]
2. Adult or pediatric patient with stroke symptoms (e.g., hemiparesis, dysarthria) [See [Suspected Stroke/Transient Ischemic Attack Guideline](#)]
3. Adult or pediatric patient with seizure [See [Seizures Guideline](#)]
4. Adult or pediatric patient with symptoms of hyperglycemia (e.g., polyuria, polydipsia, weakness, dizziness, abdominal pain, tachypnea)
5. Adult or pediatric patient with history of diabetes and other medical symptoms

Exclusion Criteria

Patient in cardiac arrest

Patient Management

Assessment

1. Monitoring:
 - a. Check blood glucose level
2. Secondary survey pertinent to altered blood glucose level:
 - a. Constitutional: assess for tachycardia, hypotension, and tachypnea
 - b. Eyes: assess for sunken eyes from dehydration
 - c. Nose/mouth/ears: assess for dry mucous membranes or tongue bite from seizure
 - d. Abdominal pain including nausea and vomiting especially in children
 - e. Neurologic:
 - i. Assess Glasgow Coma Score (GCS) and mental status
 - ii. Assess for focal neurologic deficit: motor and sensory
3. Evaluate for possible concomitant sepsis and septic shock [See [Shock Guideline](#)]
4. Obtain 12-lead EKG to assess for findings consistent with hyperkalemia or acute coronary syndrome

Treatment and Interventions

1. If altered level of consciousness, stroke, or sepsis/septic shock, treat per [Altered Mental Status Guideline](#), [Suspected Stroke/Transient Ischemic Attack Guideline](#), or [Shock Guideline](#) accordingly
2. If glucose greater than 250 mg/dL with symptoms of dehydration, vomiting, abdominal pain, or altered level of consciousness: