

## 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: