



General Medicine
HYPOGLYCEMIA / HYPERGLYCEMIA
Practice Guideline

Patient Care Goals
 Limit morbidity from hypoglycemia and hyperglycemia by:
 1. Describing appropriate use of glucose monitoring
 2. Treating symptomatic hypoglycemia
 3. Appropriate hydration for hyperglycemia

Patient Presentation:
Inclusion Criteria
 1. Adult or pediatric patient with blood glucose < 60 mg/dL with symptoms of hypoglycemia; infants < 40 mg/dL with symptoms of hypoglycemia
 2. Adult or pediatric patient with altered level of consciousness
 3. Adult or pediatric patient with stroke symptoms
 4. Adult or pediatric patient with seizure
 5. Adult or pediatric patient with symptoms of **DKA*** (dehydration, polyuria, polydipsia, nausea/vomiting, abdominal pain, weakness, dyspnea, dizziness, confusion, fruity-scented breath)
 6. Adult or pediatric patient with history of diabetes and other medical symptoms
 7. Patients with suspected alcohol ingestion

Medications:
Oral Glucose:
 Adult Dosing: 15 gm q 5 mins x 3 PRN if symptomatic
 Pediatric Dosing: 1 gm/kg (max of 15 gm/dose) q 5 mins x 3 PRN if symptomatic

Dextrose IV
 Adult Dosing: 100 mL 10% dextrose IV
 Pediatric Dosing: 4 mL/kg of 10% dextrose IV (max 100 mL)
 Dextrose may be repeated if patient remains symptomatically hypoglycemic PRN

Glucagon IM/IN
 Adult and Pediatric Dosing: 1 mg IM/IN
 Pediatric Dosing <20 kg: 0.5 mg IM/IN

Normal Saline Bolus
 Glucose > 400 mg/dL with symptoms of DKA.
 Repeat PRN until symptom improvement, 3 boluses, or signs of heart failure/shortness of breath.

Quality Improvement:
 Key Documentation Elements
 1. Glucose measurements
 2. Response to interventions
 3. Hypoglycemia refusal for transport elements documented

Patient Safety Considerations
 Patient refusals are high risk situations; use checklist. Routine use of lights and sirens is not recommended during transport unless severe or refractory to EMS interventions.

