Hypoglycemia Management

Prevention:
- Serum glucose <70 mg/dl or following clinical signs and symptoms of hypoglycemia in patients with/without hypoglycemic medications:
  - Diaphoresis
  - Shakiness/Trembling
  - Mental status changes
  - Headache
  - Hunger

Perform the following STAT:
- Vital signs and oxygen saturation
- POC glucose level
- Pause subcutaneous insulin pump or IV insulin infusion, if present

If patient is symptomatic without hypoglycemia:
- Call provider team or on-call provider, or MERIT team as appropriate
- Document interventions in EHR

Recheck POC glucose after 15 minutes
- Glucose < 70 mg/dL?
  - Yes
  - No
  - Glucose < 70 mg/dL?

A
- Able to eat/drink by mouth?
  - Yes
  - No

B
- Patient remains symptomatic?
  - Yes
  - No

Give patient 15-20 grams of carbohydrates such as one of the following:
- ½ cup fruit juice
- ¾ cup non-diet soda
- 1 cup milk

Implement Clinical Parameter: Hypoglycemia orderset

Give patient 1 tube (15 g) of oral dextrose 40% gel as per clinical parameter order

Repeat oral treatment up to three times, whether with oral glucose nutritional source, if available, or with oral dextrose 40% gel as per clinical parameter order and
- Repeat POC glucose after 15 minutes of each treatment

One-hour glucose < 70 mg/dL?
- Yes
- No

Call provider team or on-call provider, or MERIT team as appropriate
- Document interventions in EHR

Repeat treatment starting from Box A and
- Call provider team or on-call provider, as appropriate

Oral glucose nutritional source available?
- Yes
  - See Page 2
- No

TREATMENT

Note: Call MERIT team at any time if patient in apparent physical distress

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson’s specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient’s care.

POC = point of care
EHR = electronic health record

1 If patient has an insulin pump and symptoms of hypoglycemia, ask patient to stop insulin infusion from the pump (refer to Insulin Pump Policy)
2 Oral glucose nutritional source: juice, non-diet soda, milk

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Department of Clinical Effectiveness V6
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Note: Call MERIT team at any time if patient in apparent physical distress

1. For patients > 25 kg:
   - dextrose 50%, 25 mL (12.5 grams) IV push over 1 minute followed by normal saline flush
2. For patients 5 – 25 kg:
   - dextrose 50% 1 mL/kg IV push over 1 minute followed by normal saline flush and contact provider for dextrose 10% normal saline IV fluid orders
3. For patients < 5 kg:
   - dextrose 10%, 5 mL/kg IV push and contact provider for dextrose 10% normal saline IV fluid orders

1. Recheck POC glucose after 15 minutes
   - Glucose < 70 mg/dL?
     - Yes
     - Call provider team or on-call provider, as appropriate
     - No
     - Patient remains symptomatic?
       - Yes
       - Recheck POC glucose in 1 hour
       - Glucose < 70 mg/dL?
         - Yes
         - Call provider team or on-call provider, as appropriate
         - No
         - One-hour Glucose < 70 mg/dL?
           - Yes
           - Document hypoglycemic event and interventions in EHR
           - Disposition per provider
           - No
           - Call provider team or on-call provider, as appropriate

1. Administer glucagon
   - For patients ≥ 25 kg, give 1 mg subcutaneously
   - For patients < 25 kg, give glucagon 0.5 mg subcutaneously

1. Implement Clinical Parameter: Hypoglycemia orderset
   - If glucagon is contraindicated, provider will indicate an alternate treatment plan
   - In an emergency, satellite pharmacy will dispense glucagon without order

1. Recheck POC glucose after 15 minutes
   - Glucose < 70 mg/dL or patient remains symptomatic?
     - Yes
     - Call provider team or on-call provider, as appropriate
     - No
     - Recheck POC glucose in 1 hour
     - Glucose < 70 mg/dL?
       - Yes
       - Call provider team or on-call provider, as appropriate and
       - Repeat treatment starting at Box C
       - No
       - Document hypoglycemic event and interventions in EHR
       - Disposition per provider

1. Note: Call MERIT team at any time if patient in apparent physical distress

Able to obtain IV access?

Patient unable to eat or drink by mouth or hypoglycemic despite 3 oral treatments

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SUGGESTED READINGS


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