Hypoglycemia Management

**PRESENTATION**

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

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

**TREATMENT**

A

- Able to eat/drink by mouth?
  - Yes
  - See Page 2
  - No
  - Glucose < 70 mg/dL?
    - Yes
    - See Page 2
    - No
    - See Box B

B

- One-hour glucose < 70 mg/dL?
  - Yes
  - Patient remains symptomatic?
    - Yes
    - Repeat treatment starting from Box A and Call provider team or on-call provider, as appropriate
    - No
    - Document interventions in EHR
    - No
    - Repeat oral treatment up to total of three treatments, whether with oral glucose nutritional source², if available, or with oral dextrose 40% gel as per clinical parameter order and Recheck POC glucose after 15 minutes of each treatment
- No
  - Call provider team or on-call provider, or MERIT team as appropriate
  - Document interventions in EHR
  - One-hour glucose < 70 mg/dL?
    - Yes
    - Document hypoglycemic event and interventions in EHR
    - Disposition per provider
    - No

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1 If patient has an insulin pump and symptoms of hypoglycemia, ask patient to stop insulin infusion from the pump and notify Endocrinology-Diabetes provider per on call calendar (refer to the Insulin Pump Policy (MD Anderson Institutional Policy # CLN1284)

2 Oral glucose nutritional source: juice, non-diet soda, milk

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.

Department of Clinical Effectiveness V7
Approved by the Executive Committee of the Medical Staff on 05/17/2022

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

Implement Clinical Parameter: Hypoglycemia orderset

Able to obtain IV access?

Yes

Recheck POC glucose after 15 minutes

Glucose < 70 mg/dL?

Yes

No

Call provider team or on-call provider, as appropriate

Patient remains symptomatic?

Yes

No

One-hour glucose < 70 mg/dL?

Yes

No

Document hypoglycemic event and interventions in EHR

Disposition per provider

Administer glucagon¹

● For patients ≥ 25 kg, give 1 mg subcutaneously
● For patients < 25 kg, give glucagon¹ 0.5 mg subcutaneously

Recheck POC glucose after 15 minutes

Glucose < 70 mg/dL or patient remains symptomatic?

Yes

No

Call provider team or on-call provider, as appropriate

For patients > 25 kg:
dextrose 50%, 25 mL (12.5 grams) IV push over 1 minute followed by normal saline flush

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

For patients < 5 kg:
dextrose 10%, 5 mL/kg IV push and contact provider for dextrose 10% normal saline IV fluid orders

For patients > 25 kg: dextrose 50%, 50 mL (25 grams) IV push over 1 minute followed by normal saline flush

For patients 5 – 25 kg: dextrose 50% 1 mL/kg IV push over 1 minute followed by normal saline flush

For patients < 5 kg: dextrose 10%, 5 mL/kg IV push

Additionally, for patients < 25 kg, contact provider for dextrose 10% normal saline IV fluid orders

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

Yes

No

Able to obtain IV access?

Yes

No

Glucose < 70 mg/dL?

Yes

No

Recheck POC glucose in 1 hour

Glucose < 70 mg/dL?

Yes

No

Administer glucagon¹

● For patients ≥ 25 kg, give 1 mg subcutaneously
● For patients < 25 kg, give glucagon¹ 0.5 mg subcutaneously

Recheck POC glucose in 1 hour

Glucose < 70 mg/dL or patient remains symptomatic?

Yes

No

Call provider team or on-call provider, as appropriate

One-hour glucose < 70 mg/dL?

Yes

No

Document hypoglycemic event and interventions in EHR

Disposition per provider

¹Note: If glucagon is contraindicated, provider will indicate an alternate treatment plan
● In an emergency, satellite pharmacy will dispense glucagon without order
SUGGESTED READINGS


DEVELOPMENT CREDITS

This practice consensus algorithm is based on majority expert opinion of Hypoglycemia workgroup at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following:

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