HYPOGLYCEMIA: ADULT MANAGEMENT PROTOCOL FOR LONG-TERM CARE OR ASSISTED LIVING

This protocol may be implemented without a physician's order.

RECOGNITION AND ASSESSMENT

Hypoglycemia - symptomatic or asymptomatic blood glucose <70 mg/dL

Signs/Symptoms of Hypoglycemia Could Include The Following:

Autonomic Symptoms	Neuroglycopenic Symptoms
Tremor	Dizziness
Palpitations	Weakness
Anxiety/agitation	Drowsiness
Sweating	Confusion
Hunger	Altered mental status
Numbness/tingling	Severe: coma/seizure
Facial pallor	

If Hypoglycemia is Suspected:

1. Do a STAT finger stick blood glucose level.
2. Assess mental status (alert, drowsy, uncooperative, unconscious).

TREATMENT AND INTERVENTIONS

1. If resident is on an insulin pump, suspend the insulin pump until the blood glucose (BG) is >100 mg/dL. After suspending insulin pump, treat hypoglycemia (see table). Check BG every 15 minutes. (BG lowering will be dependent on individual responsivity).
2. If resident is not using an insulin pump, treat hypoglycemia (see table).
3. Once acute hypoglycemia has resolved, notify the provider responsible for glucose management immediately and document in resident's medical record.

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Blood glucose (BG) <70 mg/dL and patient is conscious and able to take nutrition orally

Immediate Action/Treatment	Repeat	Follow-up Treatment
Give 15 grams of carbohydrates: • ½ cup fruit juice or regular soda • 1 TBSP honey, sugar, syrup, or jelly • 3 glucose tablets • 1 tube dextrose gel • 1 packet glucose powder • 4-5 saltine crackers Staff to remain with resident at all times.	Repeat BG and re-treat every 15 minutes until BG >70 mg/dL without symptoms.	If more than 1 hour until next meal/snack, give 15 grams of carbohydrates with ~5 grams protein: e.g., ½ sandwich with 1 TBSP peanut/nut butter*, 3 graham crackers with 1 TBSP peanut/nut butter *

Blood glucose (BG) <70 mg/dL and resident is UNABLE OR UNWILLING to consume nutrition orally

Immediate Action/Treatment	Repeat	Follow-up treatment
Give glucagon. • 1 mg subcutaneously^ • 3 mg intranasally^ • 1 mg intramuscularly Turn resident on their side to prevent aspiration. Staff to remain with resident at all times.	In 15 minutes, if the resident is able and willing to consume nutrition, repeat finger stick BG, and re-treat every 15 minutes until BG >70 mg/dL without symptoms. If the resident is not able or willing to consume nutrition within 15 minutes, give another dose of glucagon, and call for emergency help, ie. 911.	If more than 1 hour until next meal/snack, give 15 grams of carbohydrates with ~5 grams protein: e.g., ½ sandwich with 1 TBSP peanut/nut butter*, 3 graham crackers with 1 TBSP peanut/nut butter *
Nutrition: Carbohydrate and protein sources are examples and not meant to be all inclusive. *If nut allergy is present, an alternative source of nutrition could be cheese and deli meat. ^Use ready to use glucagon. If not available, use glucagon that requires reconstitution.		

CLINICAL FOLLOW-UP AND MONITORING

Discuss with provider the following:

a. Resident's A1C goal. In long-term care, goals are often not necessary but instead limiting hypoglycemia and hyperglycemia (BG >250 mg/dL) should be considered.
b. Frequency of hypoglycemia episodes.
c. Potential causes of hypoglycemia (e.g., decreased oral nutrition intake, medication error, activity level)
d. Medication list for medications that could be contributing to hypoglycemia. The most common antidiabetic agents are insulin (all types) and sulfonylureas (glipizide, glyburide, glimepiride).
e. Medication adjustments, implementation, and monitoring.
- With the provider, discuss the need for an order for glucagon for the management of severe hypoglycemic events.
f. In states where emergency kits are permitted, check the availability of glucagon for emergency use.

REFERENCES

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