Hypoglycemia - Adult

EMT STANDING ORDERS



- Routine Patient Care.
- Obtain glucose reading.
- Oral glucose: administer commercially prepared glucose gel or equivalent.
 - Hypoglycemic patients must be alert enough to swallow and protect airway.
- For patients with an insulin pump who are hypoglycemic with associated altered mental status (GCS<15):
 - Stop the pump or remove catheter at insertion site if patient cannot ingest oral glucose or ALS is not available.
 - Leave the pump connected and running if able to ingest oral glucose or receive ALS interventions.

ADVANCED EMT/PARAMEDIC STANDING ORDERS



- Administer dextrose 10% IV via premixed infusion bag (preferred) or prefilled syringe until mental status returns to baseline and glucose level is greater than 70mg/dL or to a maximum of 25 grams (250mL). IV pump not required.
 If unable to establish IV access, administer glucagon 1mg IM or Glucapen 1mg IM.
 - o Recheck glucose 15 minutes after administration of glucagon.
 - May repeat glucagon 1mg IM if glucose level is <70mg/dl with continued altered mental status.



Intraosseous (IO) administration of dextrose should be reserved for hypoglycemic patients with severe altered mental status or active seizures and IV access cannot be obtained.

PEARLS:

- Hypoglycemic emergency is defined as glucose <70mg/dl with associated altered mental status, GCS <15.
- There are no statistically significant differences in the median recovery time to a GCS score of 15 following administration of D10% versus D50%. D10% may benefit patients by decreasing the likelihood of post-treatment hyperglycemia and reducing the likelihood of extravasation injury.
- .Causes of hypoglycemia include medication misuse or overdose, missed meal, infection, cardiovascular insults (e.g., myocardial infarction, arrhythmia), or changes in activity (e.g., exercise).
- Sulfonylureas (e.g., glyburide, glipizide) have long half-lives ranging from 12-60
 hours. Patients with corrected hypoglycemia who are taking these agents are at particular risk
 for recurrent symptoms and frequently require hospital admission.
- Oral glucose equivalents include 3-4 glucose tablets, 4 oz. fruit juice (e.g. orange juice), non-diet soda, 1 tablespoon of pure NH maple syrup, sugar, or honey.
- Encourage patients who refuse transport after improvement of GCS and are back to baseline to consume complex carbohydrates (15 grams) and protein (12 – 15 grams) such as peanut butter toast, mixed nuts, milk or cheese to stabilize blood sugar.
- Hypoglycemia may be detrimental to patients at risk for cerebral ischemia, such as victims of stroke, cardiac arrest, and head trauma.