EL DORADO COUNTY EMS AGENCY
PREHOSPITAL PROTOCOLS

Effective: July 1, 2015 EMS Agency Medical Director
Reviewed: July, 2021
Revised: October 2022
Scope: BLS/ALS- Adult/Pediatric

GLYCEMIC EMERGENCIES - ADULT

PROTOCOL PROCEDURE: *Consider other causes for clinical presentation, such as shock, toxic exposure, seizure, or head trauma. If patient is in distress, immediate, rapid transport is preferred with treatment performed en route.*

Basic Life Support

EMT

ABCs / ROUTINE MEDICAL CARE –

- Assess airway and support ventilation with appropriate airway adjuncts as indicated.
- Apply oxygen if pulse oximetry <94% or signs of hypoperfusion or respiratory distress

ORAL GLUCOSE – 15 g PO if indicated. Repeat prn if indicated and ALS intervention unavailable.

LOSOP

EMT working under Local Optional Scope

GLUCOSE LEVEL ASSESSMENT – Via finger stick and treat as indicated.

GLUCOSE LEVEL ASSESSMENT - Via venipuncture or finger stick. Consider confirming test results with second glucose check with blood from a different site (and different meter, if available) if the patient's presentation doesn't match the test results.

VASCULAR ACCESS - Establish IV/IO, rate as indicated.

HYPOGLYCEMIA *BGL ≤ 60mg/dL*	**HYPERGLYCEMIA** *BGL > 250 mg/dL*
DEXTROSE - Administer 100 mL of a 250 bag of Dextrose 10% (10g) IV/IO Repeat to a max of 50g as indicated. After each 10g (100mL) bolus, check blood glucose, LOC and patency of line. **GLUCAGON**- If no IV/IO access, give 1mg IM/IN	**NORMAL SALINE** –1000 mL bolus. Continue bolus in **250 mL** increments as indicated. Contact Base Hospital for order for > 2 L Hydrate with caution in patients with chronic renal failure, CHF, and hypertension.

ETCO² MONITORING – A low reading < 25 may indicate DKA.

GLYCEMIC EMERGENCIES -PEDIATRIC

PROTOCOL PROCEDURE: *Consider other causes for clinical presentation, such as shock, toxic exposure, seizure, or head trauma. If patient is in distress, immediate, rapid transport is preferred with treatment performed en route.*

Basic Life Support

EMT

ABCs / ROUTINE MEDICAL CARE –

- Assess airway and support ventilation with appropriate airway adjuncts as indicated.
- Apply oxygen if pulse oximetry <94% or signs of hypoperfusion or respiratory distress

ORAL GLUCOSE – 15 g PO if indicated. Repeat prn if indicated and ALS intervention is unavailable.

LOSOP

EMT working under Local Optional Scope

GLUCOSE LEVEL ASSESSMENT – Via finger stick and treat as indicated.

Advanced Life Support

Paramedic

GLUCOSE LEVEL ASSESSMENT - Via venipuncture or finger stick. Consider confirming test results with second glucose check with blood from a different site (and different meter, if available) if the patient's presentation doesn't match the test results.
VASCULAR ACCESS - Establish IV/IO

HYPOGLYCEMIA
Neonate (<1month) BGL ≤ **50mg/dL**
Infant/child (>1month) BGL ≤ **60mg/dL**

DEXTROSE 10% (usually supplied as a 250cc bag)

NEONATE:	INFANT/CHILD:
2mL/kg IV/IO.	**5mL/kg IV/IO.**

GLUCAGON – (if no IV) **0.1mg/kg IM/IN** (Max 1mg).

HYPERGLYCEMIA
BGL > 250 mg/dL

NORMAL SALINE – Give 20 mL/kg bolus. Repeat as needed for signs/symptoms of dehydration.

Contact Base if more IV fluid indicated after 40 mL/kg given.

$ETCO^2$ MONITORING – A low reading < 25 may indicate DKA.

Recheck blood glucose 5 minutes after administration of dextrose or glucagon.