

EL DORADO COUNTY EMS AGENCY PREHOSPITAL PROTOCOLS

Effective: October 1, 2022

Reviewed: N/A

Scope: ALS Adult/Pediatric

EMS Agency Medical Director

RETURN OF SPONTANEOUS CIRCULATION (ROSC) - ADULT

Advanced Life Support

Paramedic

AIRWAY – Intubate or insert SGA if not already done.

PULSE OXIMETRY and ETCO2 MONITORING

OXYGEN – Use the lowest LPM able to achieve pulse oximetry 92-98%

VENTILATION – 10 breaths/minute to maintain ETCO2 35-45

ECG – Obtain and transmit if able

TRANSPORT – Consider 5-minute transport delay post-ROSC, to better ensure patient stability and prepare for possible interventions enroute. ¹

IF DEFIBRILLATED/CARDIOVERTED AND NOT ALREADY GIVEN:

AMIODARONE: 150 mg in 100 mL NS infused over 10 minutes

FOR ECTOPY REFRACTORY TO AMIODARONE:

LIDOCAINE: 1mg/kg IV/IO push (max = 100mg). Repeat at 0.5 mg/kg every 5-10 minutes as needed up to a maximum of 3 mg/kg total.

FOR HYPOTENSION (SBP < 90):

EPINEPHRINE PUSH-DOSE:

- Mix 1mL of Epi 1:10,000 (0.1mg/mL) with 9 mL of NaCl 0.9% to make a concentration of 1:100,000 (0.01mg/mL).
- Label syringe "epi 10 mcg/mL".
- **0.5-1 mL (5-10 mcg) IVP** every 1-5 minutes

¹ Best available data shows that patients with ROSC benefit from optimized ventilation and hemodynamics. Use a 5-minute post-ROSC window to obtain vitals, secure additional IV access, support BP, obtain ECG and ensure advanced airway with EtCO2 and SpO2 monitoring.

- Titrate to >90 SBP

GLUCOSE LEVEL ASSESSMENT – Via finger stick or venipuncture. Treat if indicated per GLYCEMIC EMERGENCY protocol.

Consider **EPINEPHRINE** or **DOPAMINE** gtt for hypotension

THERAPEUTIC HYPOTHERMIA (TARGETED TEMPERATURE MANAGEMENT) – Refer to THERAPEUTIC HYPOTHERMIA protocol

RETURN OF SPONTANEOUS CIRCULATION (ROSC) - PEDIATRIC

Advanced Life Support

Paramedic

AIRWAY – Insert **SGA** if not already done

PULSE OXIMETRY and ETCO2 MONITORING

OXYGEN – Use the lowest LPM able to achieve pulse oximetry 94-99%

VENTILATION – 20-30 breaths/minute to maintain ETCO2 35-45

ECG – Obtain and transmit if able

IF DEFIBRILLATED/CARDIOVERTED AND NOT ALREADY GIVEN:

AMIODARONE: 5 mg/kg over 10 minutes

FOR ECTOPY REFRACTORY TO AMIODARONE:

LIDOCAINE: 1 mg/kg IV/IO push (max = 100mg per push). Repeat 0.5 mg/kg every 5-10 minutes as needed up to a maximum of 3 mg/kg total.

FOR HYPOTENSION (SBP < Age appropriate)

EPINEPHRINE (PUSH-DOSE):

- Mix patient's 0.01 mg/kg code dose of 1:10,000 (0.1mg/mL) epi with NaCl 0.9% to total 10 mL
- The number of mL of epi multiplied by 10 is the concentration in mcg/mL
- Label the syringe with "epi" and calculated concentration in mcg/mL
- Give **1 mL every 1-2 minutes** (which is 1mcg/kg) and titrate to age-appropriate SBP

GLUCOSE LEVEL ASSESSMENT – Via finger stick or venipuncture. Treat as indicated per GLYCEMIC EMERGENCY protocol