EL DORADO COUNTY EMS AGENCY PREHOSPITAL PROTOCOLS

Effective: July 1, 2015

Reviewed: <u>July 2021</u> Revised: <u>July 2024</u>

Scope: <u>BLS/ALS – Adult/Pediatric</u>

EMS Agency Medical Director

WIDE-COMPLEX TACHYCARDIA - ADULT

PROTOCOL PROCEDURE: Flow of protocol presumes that wide-complex tachycardia is continuing. If condition changes, refer to appropriate protocol. If at any time the patient becomes unstable, go to the unstable section of this protocol. If at any time the patient becomes pulseless, refer to the Pulseless Arrest protocol. **If delays in synchronized cardioversion occur and clinical condition is critical, go to immediate unsynchronized shocks.**

Advanced Life Support

Paramedic

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
- HP-CPR as indicated
- Place patient in position of comfort and obtain a 12 lead EKG as soon as reasonably possible

<u>STABLE</u> (GCS15; SBP Greater than 100; <u>NO</u> CHEST PAIN/DYSPNEA)	<u>UNSTABLE</u> (GCS less than15; SBP Less than 100; CHEST PAIN/DYSPNEA)
Vascular Access: IV/IO	Consider Sedation If patient is awake, give Midazolam per formulary.
Administer 250 mL bolus if indicated. Repeat if indicated.	IF PATIENT IS UNRESPONSIVE, DO NOT DELAY CARDIOVERSION
For Presumed Ventricular Tachycardia: Amiodarone 150 Mg IV drip over 10 minutes (Repeat x1 if indicated) Contact Base and transmit EKG if able	Vascular Access: IV/IO (If time allows) Synchronized Cardioversion: 70/75 J If no conversion: Repeat Synchronized Cardioversion: 120→150→200J
	For Presumed Ventricular Tachycardia: Amiodarone* 150 Mg IV/IO drip over 10 minutes (Repeat x 1 if indicated) Contact Base and transmit EKG if able
	*For Torsades de Pointes administer 2 g magnesium sulfate diluted in 10 mL SW slow IV/IO over 1-2 minutes prior to amiodarone.

AMIODARONE DRIP GUIDELINES: Add 150 mg Amiodarone to 100 ML bag NS and mix well. Infuse IV/IO over 10 minutes

FOR AMIODARONE SENSITIVITY/ALLERGY: Lidocaine 1mg/kg slow IV/IO. May repeat PRN 1mg/kg x1 in 10 minutes. Contact base for additional doses.

WIDE COMPLEX TACHYCARDIA - PEDIATRIC

PROTOCOL PROCEDURE: Flow of protocol presumes that wide-complex tachycardia is continuing. If condition changes, refer to appropriate protocol. If at any time the patient becomes unstable, go to the unstable section of this protocol. If at any time the patient becomes pulseless, refer to the Pulseless Arrest protocol. **If delays in synchronized cardioversion occur and clinical condition is critical, go to immediate unsynchronized shocks.**

Advanced Life Support

Paramedic

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
- HP-CPR as indicated
- Place patient in position of comfort and obtain a 12 lead EKG as soon as reasonably possible

STABLE (GCS15; ADEQUATE PERFUSION; NO CHEST PAIN/DYSPNEA)	<u>UNSTABLE</u> (GCS Less than15; INADEQUATE PERFUSION; CHEST PAIN/DYSPNEA)
Vascular Access: IV/IO	Consider Sedation If patient is awake give Midazolam per formulary.
Administer 20 mL/kg fluid bolus. Repeat as indicated.	CARDIOVERT WITHOUT DELAY IF PATIENT IS UNRESPONSIVE
For Presumed Ventricular Tachycardia: Amiodarone per formulary	Vascular Access: IV/IO (If time allows)
Contact Base and transmit EKG if able	Synchronized cardioversion : 0.5-1 J/kg Repeat Synchronized Cardioversion as needed at 2 J/kg
	For Presumed Ventricular Tachycardia: Amiodarone per formulary
	Contact Base and transmit EKG if able

AMIODARONE DRIP GUIDELINES:

<u>Micro drip:</u> Add Amiodarone 150 mg to 100 mL bag NS and mix well to make 150mg/mL concentration. Calculate dose and drip rate at 60 gtt/mL.

<u>Macro drip:</u> Add Amiodarone 150 mg to 100 mL bag NS and mix well to make 1.5 mg/mL concentration. Calculate dose and drip rate at 10 gtt/mL.

FOR AMIODARONE SENSITIVITY/ALLERGY: Lidocaine 1mg/kg slow IV/IO. If rhythm persists, may repeat 1mg/kg x1 in 10 minutes. Contact base for additional doses.