

EL DORADO COUNTY EMS AGENCY PREHOSPITAL PROTOCOLS

Effective: July 1, 2015

Reviewed: July, 2019

Revised: January 11, 2017

Scope: ALS – Adult/Pediatric



EMS Agency Medical Director

WIDE-COMPLEX TACHYCARDIA

ADULT ALGORITHM

ABCs / ROUTINE MEDICAL CARE - Be prepared to support ventilation with appropriate airway adjuncts and circulation with external chest compressions.

Administer oxygen at the appropriate flow rate, preferably high flow via non re-breather mask.

Place patient in position of comfort and obtain a 12 lead EKG as soon as reasonably possible.

PROTOCOL PROCEDURE: Flow of protocol presumes that wide-complex tachycardia is continuing. If response or condition changes, see appropriate protocol. If the patient remains stable and rhythm does not convert, transport to appropriate hospital. If at any time the patient becomes unstable, go to the unstable section of this protocol. **If delays in synchronized cardioversion occur and clinical condition is critical, go to immediate unsynchronized shocks.**

STABLE (GCS14 or greater; SBP Greater than 100; NO SEVERE CHEST PAIN/DYSPNEA)	UNSTABLE (GCS less than 14; SBP Less than 100; SEVERE CHEST PAIN/DYSPNEA)
<p>Establish IV administer 250 mL bolus(es)</p> <p>For Presumed Ventricular Tachycardia consider: Amiodarone 150 Mg IV drip over 10 minutes. (May Repeat x1)</p> <p>Contact Base and consider transmitting 12 lead, if equipped</p>	<p>Consider Sedation If patient is awake give Versed 2.5 mg IV/IO push q 5 min/ 5 mg IN/IM. DO NOT DELAY CARIOVERSION IF PATIENT IS UNRESPONSIVE</p> <p>Establish IV/IO (If time allows)</p> <p>Synchronized Cardioversion: 70/75 J If no conversion: Repeat Synchronized Cardioversion: 120→150→200J</p> <p>For Presumed Ventricular Tachycardia Amiodarone* 150 Mg IV/IO drip over 10 minutes. (May Repeat x 1)</p> <p>Contact Base and consider transmitting 12 lead, if equipped</p> <p>*For Torsades De Pointe administer 2 gm MAGNESIUM SULFATE diluted in 10 mL SW slow IV/IO push over 1-2 minutes prior to administration of Amiodarone</p>

AMIODARONE DRIP GUIDELINES:

Method #1: Using 100 cc bag of NS and macro drip tubing (10 gtts/mL): add 150 mg Amiodarone and mix well. Piggy back into IV/IO line and run at 1.5 gtts per second.

- **For Amiodarone sensitivity/allergy** give Lidocaine 1-1.5 mg/kg IV/IO. May repeat ½ initial dose in 5-10 minutes to a max of 3mg/kg cumulative dose

PEDIATRIC ALGORITHM

ABCs / ROUTINE MEDICAL CARE - Be prepared to support ventilation with appropriate airway adjuncts and circulation with external chest compressions.

Administer oxygen at the appropriate flow rate, preferably high flow via non re-breather mask.

Place patient in position of comfort and obtain a 12 lead EKG as soon as reasonably possible.

PROTOCOL PROCEDURE: Flow of protocol presumes that wide complex tachycardia is continuing. If response or condition changes, see appropriate protocol. If the patient remains stable and rhythm does not convert, transport to appropriate hospital. If at any time the patient becomes unstable, go to the unstable section of this protocol. **If delays in synchronized cardioversion occur and clinical condition is critical, go to immediate unsynchronized shocks.**

<p align="center">STABLE (GCS14 or greater; <u>ADEQUATE PERFUSION</u>; <u>NO SEVERE CHEST PAIN/DYSPNEA</u>)</p>	<p align="center">UNSTABLE (GCS Less than 14; <u>INADEQUATE PERFUSION</u>; <u>SEVERE CHEST PAIN/DYSPNEA</u>)</p>
<p>Establish IV administer 20 mL/kg fluid bolus(es)</p> <p>For Presumed Ventricular Tachycardia Consider: Amiodarone 5 mg/kg. Using a 100cc bag NS infuse total contents over 30 minutes</p> <p>Contact Base and consider transmitting 12 lead, if equipped</p>	<p>Consider Sedation If patient is awake give Versed 0.1 mg/kg diluted in 2-3 mL NS slow IV/IO push or 0.1 mg/kg IM or IN. DO NOT DELAY CARDIOVERSION IF PATIENT IS UNRESPONSIVE</p> <p align="center">Establish IV/IO (If time allows)</p> <p align="center">Synchronized cardioversion: 0.5-1 J/kg If no conversion: Repeat Synchronized Cardioversion as needed at 2 J/kg</p> <p>For Presumed Ventricular Tachycardia: Amiodarone 5 mg/kg. Using 100cc bag NS infuse total contents over 30 minutes</p> <p>Contact Base and consider transmitting 12 lead, if equipped</p>

- **For Amiodarone sensitivity/allergy** give Lidocaine 1 mg/kg IV/IO push. May repeat q 10 minutes to max of 3 mg/kg.

- AMIODARONE DRIP GUIDELINES:**
- Using a 100cc bag of NS and micro drip tubing (60gtts/mL): add Amiodarone and mix well. Run at 3gtts per second
 - Using a 100cc bag of NS and macro drip tubing (10gtts/mL): add Amiodarone and mix well. Run at 1gtt every 2 seconds.