

EL DORADO COUNTY EMS AGENCY

PREHOSPITAL PROTOCOLS

305

Effective: July 1, 2015

Reviewed: July, 2021

Revised: May 2025

Scope: BLS/ALS Adult/Pediatric

(on file)

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 than 15; SBP Less than 100; CHEST PAIN/DYSPNEA)
Vascular Access: IV/IO Administer 250 mL bolus if indicated. Repeat if indicated. For Presumed Ventricular Tachycardia: Amiodarone 150 mg IV drip over 10 minutes (Repeat x1 if indicated) If Amiodarone unavailable or pt is allergic/sensitive: Lidocaine 1 mg/kg slow IV/IO push over 60 seconds. (May repeat PRN x1 in 10 minutes if indicated). Contact Base and transmit EKG if able	Consider Sedation If patient is awake, give Midazolam per formulary. IF PATIENT IS UNRESPONSIVE, DO NOT DELAY CARDIOVERSION 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) If Amiodarone unavailable or pt is allergic/sensitive:

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Lidocaine

1mg/kg slow IV/IO push over 60 seconds.
(May repeat PRN x1 in 10 minutes if indicated)

Contact Base and transmit EKG if able

***For Torsades de Pointes**

Magnesium Sulfate

2g diluted in 10 mL SW slow IV/IO over 1-2 minutes
prior to Amiodarone or Lidocaine

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

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 (GCS 15; ADEQUATE PERFUSION; <u>NO</u> CHEST PAIN/DYSPNEA)	UNSTABLE (GCS Less than 15; INADEQUATE PERFUSION; CHEST PAIN/DYSPNEA)
<p>Vascular Access: IV/IO</p> <p>Administer 20 mL/kg fluid bolus. Repeat as indicated.</p> <p>For Presumed Ventricular Tachycardia:</p> <p>Transmit ECG</p> <p>Amiodarone Drip 5mg/kg Infused over 30 minutes Not to exceed 300mg</p> <p>Contact Base</p>	<p>Consider Sedation If patient is awake give Midazolam per formulary.</p> <p>CARDIOVERT WITHOUT DELAY IF PATIENT IS UNRESPONSIVE</p> <p>Vascular Access: IV/IO (If time allows) Transmit ECG</p> <p>Synchronized cardioversion: 0.5-1 J/kg Repeat Synchronized Cardioversion as needed at 2 J/kg</p> <p>For Presumed Ventricular Tachycardia:</p> <p>Amiodarone 5mg/kg IV/IO push over 1-2 min, not to exceed 300mg</p> <p>May repeat x1 at: 2.5 mg/kg, IV/IO push over 1-2 min, not to exceed 150mg</p> <p>Contact Base</p>
<p>AMIODARONE DRIP GUIDELINES:</p> <p><u>Micro drip:</u> Add weight-based Amiodarone dose to 100 mL bag NS and mix well. Run at 3 gtts/second</p> <p><u>Macro drip:</u> Add weight-based Amiodarone dose to 100 mL bag NS and mix well. Run at 1 gtt every 2 seconds</p>	

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If Amiodarone unavailable or pt is allergic/sensitive:
(stable or unstable)

Lidocaine

1mg/kg slow IV/IO (over 60 seconds)

If rhythm persists, may repeat x1 in 10 minutes.

Contact base for additional doses.