



POLICY: 554.05
 TITLE: Ventricular Tachycardia with Pulses

EFFECTIVE: 9/16/2020
 REVIEW: 9/2025
 SUPERCEDES:

APPROVAL SIGNATURES ON FILE IN EMS OFFICE

VENTRICULAR TACHYCARDIA WITH PULSES

- I. AUTHORITY
 Health and Safety Code, Division 2.5, California Code of Regulations, Title 22, Division 9
- II. PURPOSE
 To serve as a patient treatment standard for EMRs, EMTs, and Paramedics within their scope of practice.
- III. PROTOCOL
 Regular or slightly irregular rhythm. Heart rate 100 to 200 (120 is common rate). A-V disassociation is present: P-waves may be seen unrelated to QRS complex. QRS complex distorted, wide (greater than 0.12 seconds) and bizarre. T-waves usually have opposite axis as QRS complex.

EMR STANDING ORDERS

Patient Assessment	Circulation, Airway and Breathing, assess vitals q 5 minutes
Oxygen Administration	Provide oxygen if appropriate and be prepared to support ventilations with a BVM

EMT STANDING ORDERS

Note	Must perform items in EMR standing orders if applicable
Pulse Oximetry	Report initial reading to paramedic if applicable
Mentation	If Altered Level of Consciousness check blood glucose and refer to 554.31 Altered Level of Consciousness if BGL<60mg/dl

PARAMEDIC STANDING ORDERS

Note	Must perform items in EMT standing orders if applicable
Cardiac Monitor	Identify heart rhythm and obtain 12-lead if time permits
IV/IO access	TKO. 250ml fluid challenge if systolic BP is <90mm/Hg. Repeat until BP improves
Amiodarone	If patient is stable, 150mg IV/IO infusion over 10 minutes. May repeat once if no change and patient remains stable
Lidocaine	If patient is stable 1.5mg/kg IV/IO. May repeat once at 0.75mg/kg IV/IO. Max total dose of 3mg/kg

Synchronized Cardioversion	If patient is unstable (chest pain or ALOC or shortness of breath or systolic BP < 90), perform at escalating doses per manufacturer recommendation. Repeat attempt x2 at next energy dose. If conversion is successful, administer Amiodarone 150mg IV/IO infusion over 10 minutes or Lidocaine 0.5mg/kg IV/IO repeat Lidocaine every 10 minutes until Max total dose of 3 mg/kg is achieved. Record and document vital signs q 5 minutes.
Fentanyl	Consider for pain management. 50mcg IV/IO push if systolic BP>100

Clinical PEARLS

- Intravenous access is preferred over Intraosseous unless patient is unstable.
- Secure airway with simplest technique, i.e. BLS airway unless unable to manage.
- Obtain 12 lead post cardioversion and record findings in Patient Care Report.
- The use of capnography is recommended and should be considered during the use of analgesia.
- Never administer both Amiodarone and Lidocaine to the same patient.
- Reduce cardioversion dose by half for patient on Digitalis.
- If delays in synchronized cardioversion and patient is critical use unsynchronized shock.
- Avoid Lidocaine or Amiodarone post cardioversion if any AV Block or idioventricular dysrhythmias.
- Amiodarone is preferred in patients with known depressed ejection fraction (prior MI or CHF).