V-Fib or Pulseless Ventricular Tachycardia

Signs and Symptoms

- Pulseless
- Apneic

History

- Preexisting cardiac disease
- AICD
- Trauma

Differential

- VTach w/ pulses
- Asystole/PEA

Care: Adults and Pediatrics

I P

Follow general directive #3, Orders for all Patients.
Follow Cardiac Emergencies #4 Cardiac Arrest.

Shock at 2J/kg up to 200 joules and immediately resume 2 min. of CPR. Establish IV/IO of **Normal Saline** and initiate 20ml/kg up to 1000 ml bolus.

Check rhythm

Rhythm change?

If still **VFib/VTach:**

Shock at 4J/kg up to 300J. Continue CPR and check rhythm every 2 min.

Epinephrine (1:10,000) 0.01mg/kg up to 1 mg FAST IV followed by a 10-20 ml fluid bolus, repeated every 3 min. as long as the patient remains pulseless.

Initiate advanced airway management when provider availability allows.

If rhythm unchanged, shock at 4J/kg up to 360J. Continue CPR and check rhythm every 2 min.

Amiodarone (**Cordarone®**) 5mg/kg up to 300 mg FAST IV push. Repeat once 5mg/kg up to 150 mg fast IV push if no rhythm change after 5 min.

Continue shocks at 4J/kg up to 360J every 2 minutes if rhythm unchanged.

If the heart rhythm converts at any time treat according to the specific protocol.

Nonperfusing or Bradycardic rhythm

Refer to appropriate protocol based on rhythm.

Perfusing rhythm

Refer to appropriate protocol based on rhythm as needed. Supportive care with goal of SBP >90.

If runs of V-Tach, refer to **Cardiac Emergencies # 11 Ventricular Tachycardia (with pulses).**

Refer to **Cardiac Emergencies Protocol # 7 Hypotensive Emergencies as needed**.

Acquire and transmit 12 lead EKG.

Pearls

- Effective CPR and prompt defibrillation are the keys to successful resuscitation. Do not delay shocks for VF/VT every 2 minutes for other procedures (IV, airway, medication administration).
- Minimize interruption of CPR and avoid prolonged/repeated attempts to secure an airway.
- If BVM successful, intubation may be deferred until rhythm change or several defibrillation sequences have been completed.
- Drugs should be prepared in advance of their potential use and should be administered to the patient in cardiac arrest during the active performance of CPR.
- Endotracheal drug administration is unpredictable and undesirable. If unable to establish IV/IO access promptly contact Medical Control for direction.
- If refractory V-Tach and there is a high index of suspicion that the rhythm is Torsades de Pointes, administer **Magnesium Sulfate** 25mg/kg up to 1 gram IV push on standing order.
- No evidence exists to support the prophylactic use of antiarrhythmic drugs (**Amiodarone**) after cardiac arrest.

Performance Indicators

- Performance and documentation of proper resuscitative measures.