Section: Pediatric Medical
Subject: CARDIAC ARREST – VENTRICULAR FIBRILLATION / PULSELESS VENTRICULAR TACHYCARDIA
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1. General Cardiac Arrest Algorithm

2. Specific ALS Treatment

3. Defibrillation
    a. Initial energy is 2 J/kg

4. Treatment Sequence
    a. A circular algorithm will be followed:
        i. Defibrillate, then
        ii. CPR for two minutes, then
        iii. Medications, then
        iv. Pulse check, then repeat
    b. Defibrillation:
        i. 4 J/kg for the second and subsequent shocks
    c. Medications:
        i. Epinephrine:
            1. 0.01 mg/kg (0.1 mL/kg of a 1:10,000 solution) IV/IO
            2. Repeat every 3 – 5 minutes.
        ii. Amiodarone:
            1. 5.0 mg/kg IV/IO bolus
            2. May repeat up to two times for refractory VF/pulseless VT.
        iii. For *Torsades de Pointes* magnesium sulfate 50 mg/kg (maximum 2.0 grams) IV/IO as a bolus.

5. Return of Spontaneous Circulation (ROSC)
    a. Continue to HCFR ROSC protocol
    b. Treat lethal arrhythmias appropriately (remember a resuscitated patient will still be affected by prior drug therapy)

6. QA Points:
    a. In resistant VF/pVT, the maximum amperage is 10 J/kg.
        i. Not to exceed the adult dose
        ii. Contact Medic-1 for authorization
    b. Pauses in compressions must be as short as possible.
    c. Given that maintaining continuous compressions is of paramount importance, the initial capture of the airway will be with a supra-glottic airway device.
    d. If there is return of spontaneous circulation (ROSC), the airway may be converted to an ETT by an approved method at the discretion of the paramedic in charge.