

Ventricular Fibrillation (and Pulseless Ventricular Tachycardia)

PHASE I:

Perfusion and Electrical Reversion Phase

1. Excellent CPR for 2 minutes (5 cycles) (if unwitnessed arrest > 4-5 minutes)
2. Rhythm check (less than 10 seconds)
3. CPR while charging then shock 200 biphasic (or 360 monophasic) followed immediately by CPR

PHASE II:

Correct Correctable Causes Phase

1. Intubate, oxygenate with 100% FiO₂, and ventilate (to minimize interruption of chest compressions, consider video laryngoscopy or ILMA)
2. Rhythm check 2 minutes (5 cycles) after previous shock
3. CPR while defibrillator charging; shock at 200 J (consider hands on defibrillation) biphasic (or 360 J monophasic) immediately followed by excellent CPR
4. 10 cc of epinephrine* 1:10,000 via large bore IV, IO (or 2-3 mg down ET tube); repeat Q 3 min

PHASE III:

Initial Antiarrhythmic Phase

1. Rhythm check after 2 minutes (5 cycles) from previous shock
2. CPR while defibrillator charging; Shock at 200 J biphasic (360 monophasic) immediately followed by excellent CPR
3. 300 mg Amiodarone IV; push and flush line or dilute to 20 cc and give IV push

PHASE IV:

Consider Magnesium Phase (Torsades +/- or ↑QT etiology)

1. Rhythm check after 2 minutes (5 cycles) after previous shock
2. CPR while defibrillator charging; shock 200 J biphasic (or 360 monophasic) immediately followed by excellent CPR
3. 2 grams MgSO₄ (4 cc of 50%) IV push and flush line

PHASE V:

Refractory Phase

1. Rhythm check after 2 minutes (5 cycles) after previous shock
2. CPR while defibrillator charging; shock 200 J biphasic (or 360 monophasic) immediately followed by excellent CPR
3. 150 mg Amiodarone IV, push and flush line; or dilute to 10 cc and give IV push
4. Reshock at 200 J biphasic every 30-60 seconds

* Vasopressin 40 mg IV may replace either the first or second dose of epinephrine