Amiodarone is a complex drug with multiple effects, making it hard to predict exactly how a person will respond to receiving it IV. It has blocking effects of the sodium, potassium and calcium channels as well as the alpha and beta adrenergic receptors. It is a class IIb for the treatment of stable VT, whether it be polymorphic, wide complex or narrow complex. It is used to treat cardiac arrhythmias and to prevent recurrence after successful conversion.

Indications and Administration

1. Treatment for stable, narrow complex tachycardias, including atrial fibrillation and pre-excitation atrial tachycardia. Treatment for stable, monomorphic ventricular tachycardia and polymorphic ventricular tachycardia with a normal QT.
    a. **Adult –** Bolus 150 mg in 100ml D5W, IV or IO over 10 mins. Repeat bolus every 10 mins if needed. If unstable VT occurs, cardiovert and repeat bolus. Defibrillate if VF occurs, then repeat the bolus.
    b. **Pediatric –** Bolus 5 mg/kg of 150 mg in 100 ml D5W, IV or IO over 10 - 20 mins. If needed repeat bolus after 20 mins.
2. Treatment of pulseless VF and VT.
    a. **Adult** – Initial dose:300 mg IV or IO. Second dose 150 mg IV or IO.
    b. **Pediatric** –Initial dose 5 mg/kg IV or IO. May repeat 2 times up to a total of 15 mg/kg. Do not exceed 300 mg/kg in any single dose.
3. Prevention of recurrent VF and VT once defibrillation, electrical cardioversion or chemical cardioversion is successful.
    a. **Adult –** Bolus 150 mg in 100 ml D5W, IV or IO over 10 mins. Repeat bolus every 10 mins if needed. If unstable VT recurs, cardiovert and repeat bolus. Defibrillate if VF recurs and then repeat the bolus.
    b. **Pediatric –** Bolus 5 mg/kg of 150 mg in 100 ml D5W, IV or IO over 20 mins. If needed repeat bolus after 20 mins.

Notes

1. The most common adverse side affect is hypotension and bradycardia and these can be mitigated by slowing the rate of administration. Amiodarone should be administered as slowly as the patient's condition will allow. Sometimes fluids and pressors are needed.
2. Amiodarone is more effective at faster heart rates so that wide complex VT may not convert readily.
3. Amiodarone has been used to convert PSVT, SVT, and WPW. However, as with other antiarrhythmics, paradoxical rate acceleration can occur. Cardioversion then should be considered.
4. Amiodarone prolongs the QRS duration and the QT interval and therefore can be pro- arrhythmic. If Torsades de Pointes develops treat with magnesium or defibrillation.