Amiodarone

Classification

Antiarrhythmic

Indications

- ACP: Ventricular fibrillation
- ACP: Pulseless ventricular tachycardia
- ACP: Unstable ventricular tachycardia
- ACP: Recurrent ventricular tachycardia following cardioversion

Contraindications

- Hypersensitivity
- Cardiogenic shock
- Marked symptomatic sinus bradycardia
- Second- or third-degree atrioventricular node block

Adult dosages

- ACP: ventricular fibrillation and pulseless ventricular tachycardia
  - 300 mg IV push. May repeat 150 mg IV after 10 minutes if VF/VT persist.
- ACP: unstable ventricular tachycardia and recurrent ventricular tachycardia following cardioversion
  - 150 mg IV over 10 minutes

Pediatric Considerations And Dosing

Safety and efficacy in children has not been established. Contact CliniCall if required.

Mechanism Of Action

Amiodarone is a Class III antiarrhythmic, but also possesses characteristics of all four Vaughn-Williams classes of medications. It blocks sodium channels in the heart, antagonizes beta adrenoreceptors to inhibit some sympathetic activity, produces negative chronotropic effects in nodal tissues, lengthens the cardiac action potential, and also slows conduction and prolongs refractoriness by blocking potassium channels.

Pharmocokinetics

Following intravenous administration:

- Onset: minutes
- Peak: 10-15 minutes
- Duration: prolonged (days)

Adverse Effects

Hypotension is the most commonly reported side effect following intravenous administration. In patients with a perfusing rhythm who are receiving amiodarone, if hypotension develops or worsens, slow the rate of the infusion. Nausea and bradycardia have also been reported.

QT interval prolongation has also been reported. QTc values greater than 500 ms may provoke Torsade de Pointes.

Overdose

Accidental overdose of intravenous amiodarone is likely to produce hypotension, bradycardia, or cardiogenic shock. These should be managed by stopping or slowing the intravenous administration and providing volume replacement. Transcutaneous pacing may be required.

Warning And Precautions

Amiodarone is toxic to tissues if extravasation occurs.

Drug Interactions

Amiodarone may enhance or potentiate the effects of beta blockers, calcium channel blockers, or digoxin and should be used with caution in these patients.