Seminole Community College
Paramedic 1
Medication Handout #5
Atropine Sulfate

Atropine Sulfate is a parasympatholytic drug that enhances both the sinus node automaticity and atrioventricular conduction via its direct vagolytic action. Blocks the parasympathetic nervous system, specifically the vagal efects on the heart rate. It does not increase contractility like Epinephrine but may increase myocardial oxygen demand worsening a myocardial infarction.

Indications-
Atropine is indicated in hemodynamically symptomatic bradycardias, Second degree Heart block (Type 1) where patient is symptomatic and bradycardic, bradyasystolic arrest, organophosphate poisoning. May be absolute or relative bradycardia. Can be used in the vagal induced asystolic event.

Contraindications / Precautions-
No **absolute** contraindications in the pre-hospital setting. Should **be used with extreme caution** in Second degree Type II or Third degree block because it may cause paradoxical slowing, increased exacerbation of AMI, and decreased perfusion. May cause tachycardia, Ventricular tachycardia, Ventricular fibrillation. Anticholinergic Syndrome. Glaucoma.

Routes-
May be given Intravenously (IV) and Endotracheally (ET). Dosage via ET tube are 2.0 to 2.5 times the IV dose.

Dosage-

Cardiac Arrest-

Adult-0.5 to 1.0 mg IVP every 5 min. Most commonly 1.0 mg IVP q 5 minutes. Maximum dose if 0.04 mg/kg

Bradycardic Events-

Adult- 0.5 to 1.0 mg IVP every 5 min. Most commonly administered at 0.5 mg IVP (Half Dead gets Half Milligram)
Should not be administered in doses less than 0.5 mg due to paradoxical bradycardia.

Pediatrics- 0.02 mg/kg IV or 0.04 mg/kg ET repeated every 5 minutes up to 1 mg.

Organophosphate Poisoning-

Adult- 2.0 to 5.0 mg IV/IM/IO every 10 to 15 minutes

Pediatrics- 0.05 mg/kg IV/IM/IO every 10 to 15 minutes