

# Atropine

McHenry Western Lake County  
EMS



# Objectives

- During this session we will discuss:
- Class
- Actions
- Indications
- Contraindications
- Dosing/Routes
- How supplied
- Precautions
- Side effects



# Class:

- Antidysrhythmic, Anticholinergic  
parasympatholytic blocker

# Anticholinergic

- The action of certain medications that inhibit the transmission of parasympathetic nerve impulses and thereby reduce spasms of smooth muscle

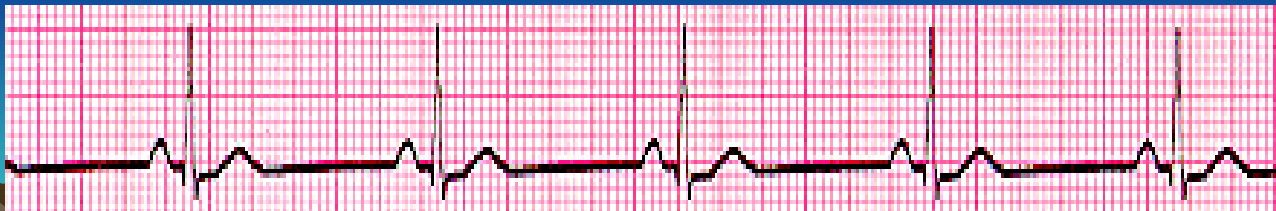


# Actions:

- Anticholinergic (parasympathetic blocker)
- Indirectly increases heart rate
- Increases AV Node conduction
- Decreases GI motility
- Dries secretions
- Dilates bronchioles

# Indications:

- Symptomatic bradycardia if pacing ineffective
- Asystole
- Cholinergic poisonings  
(organophosphates/WMD)
- Neurogenic Shock
- Pediatrics: Pre medication for DAI

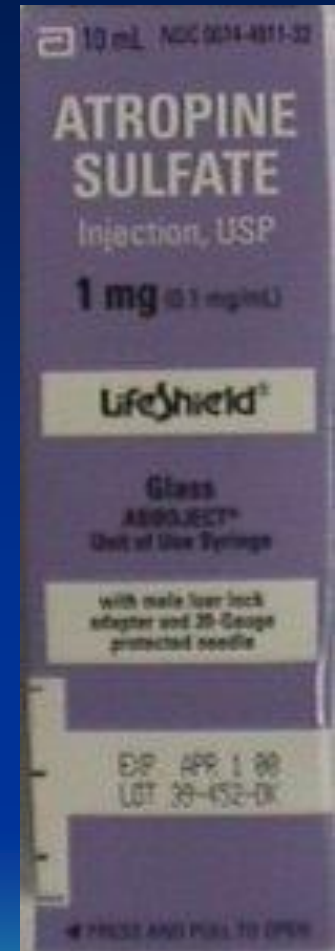


# Dosing/Routes:

- Symptomatic Bradycardia: 0.5 mg rapid IVP. Repeat every 3-5 min to max of 3mg
- Pediatrics: 0.02mg/kg rapid IV/IO. Repeat every 3-5 minutes to a max of 3mg.
- Usual dose limits are not applicable in Cholinergic Poisonings.

# How supplied:

- 1mg in 10ml preloads





# Contraindications:

- 2\* AVB Mobitz type II
- 3\* AVB with wide QRS complexes
- Known hypersensitivity
- *Use with caution in Cardiac ischemia or MI and hypoxia due to the increase in O<sub>2</sub> demand.*



# Precautions:

- A dose of  $<0.5$  mg may paradoxically slow the Heart Rate.



# Side effects/adverse reactions:

- CNS: Sensorium changes, drowsiness, confusion, headache
- CV: Increased HR, increased myocardial O<sub>2</sub> demand.
- EENT: Dilated (not fixed) pupils, blurred vision, dry eyes.
- GI: Dry mouth
- Skin: Warm, dry and flushed.

- Ref: MWLCEMS Protocol and 2000 Mosby's Nursing Drug Reference Book

# Case Study

- You have been called to the local fitness center and find a 52 y/o male who is very pale, diaphoretic and weak.
- He states that he has no history, meds or allergies
- You have placed him on the monitor and note a Sinus Bradycardia at a rate of 38. His B/P is 68/42.
- What would be the first dose of Atropine



# Answer

- He would receive 0.5mg rapid IVP
- Repeat every 3-5 minutes to max of 3mg
- Pacemaker pads would be placed on this patient as well.

# Question

- What would you set the pacemaker at?



# Answer

- Turn pacer on
- Select rate of 60-70 bpm
- Watch the ECG and increase the mA until mechanical capture is confirmed by femoral pulse.
- Evaluate B/P once capture is achieved
- Consider sedation with Versed for comfort.

