

# Ipratropium Bromide (Atrovent)

McHenry Western Lake County  
EMS



# Objectives

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



# Class:

- Anticholinergic
- Bronchodilator



# Anticholinergic

- An anticholinergic agent is a member of a class of pharmaceutical compounds (such as Dicyclomine) which serve to reduce the effects mediated by acetylcholine in the central nervous system and .



# Actions:

- Inhibits interaction of acetylcholine at receptor sites on the bronchial smooth muscle, resulting in bronchodilation.



# Indications:

- Bronchospasm associated with:
- Mod/severe allergic reaction
- COPD/Asthma
- Considered safe to use in pregnant women



# Dosing/Routes:

- 0.5 mg (500 mcg) in 2.5 ml NS added to 1<sup>st</sup> Albuterol dose by HHN.
- Peds (off label) 0.25-0.5 mg added to Albuterol dose/HHN/in line neb.

# How supplied:





# Contraindications:

- Peds patients <12 years old
- Hypersensitivity to atropine or Ipratropium (Spiriva) products.



# Precautions:

- Neb mouthpiece is preferred over face mask to avoid contact with the eyes
- Bladder neck obstruction
- Glaucoma
- Narrow angle prostate hypertrophy



# Side effects/adverse reactions:

- GI: Nausea, vomiting and dry mouth
  - EENT: Dry mouth, blurred vision, dilated pupils
  - CNS: Anxiety, dizziness, headache and nervousness
  - Resp: Cough, worsening of symptoms, bronchospasms
  - CV: Palpitation
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- Ref: MWLCEMS Protocol and 2000 Mosby's Nursing Drug Reference Book



# Case Study

- You have been dispatched to a patient having an Asthma attack. You arrive to find them in moderate distress. Your first Hand Held Neb should have what meds in it?



# Answer

- Albuterol 2.5mg and Ipratropium (Atropine) 0.5mg via HHN or mask.
- Supplement w/O<sub>2</sub> 6L/NC if patient is hypoxic and using a HHN.



# Case Study

- You have started your transport to the Hospital and the patient is now worse with a SP02 of 92%. What medications should you consider?



# Answer

- Epinephrine (1:1000) 0.3mg IM
- Continue Albuterol
- May consider Magnesium (50%) 2gm (4ml) mixed with 16 ml NS slow IVP over 5 minutes.