Drug Name: Ipratropium Bromide
Trade Name: Atrovent
Class:
  - Anticholinergic
Mechanism of Action:
  - Ipratropium antagonizes the action of acetylcholine by blocking muscarinic cholinergic receptors resulting in bronchodilation & drying of respiratory tract secretions.
Indications:
  - Bronchial Asthma
  - Bronchospasm in acute exacerbation of COPD (chronic bronchitis, emphysema)
  - Bronchospasm in:
    - Anaphylaxis
    - Burns
    - Toxic Inhalations
  - Bronchospasm associated with cardiac asthma
Contraindications:
  - Known hypersensitivity (because of the preservative contained in the atrovent solution, *people allergic to peanuts & soybeans should not receive atrovent*).
  - Also should not be used on patients with a known hypersensitivity to atropine, atropine derivatives, or bromide.
Precautions:
  - Use with caution when administering it to:
    - Elderly patients
    - Individuals with cardiovascular disease or hypertension
  - Pregnancy (B)
CAUTION: All patients receiving inhaled beta agonists and/or anticholinergic medications should be observed for a least one-hour following treatment for return of symptoms.
Dosage:
Adults:
  - Nebulizer—0.5 mg via nebulizer, O₂ flow @ 8 L per min, normally takes 8-12 minutes to administer. *Do not repeat. Subsequent nebulizers are with albuterol only.*
Pediatrics:
  - Identical dosage.
Onset:
  - 5-15 minutes
Duration:
  - 4-6 hours
Drug: Ipratropium Bromide

Side Effects:

- Palpitations
- Cough, Dry Mouth
- Blurred Vision
- Anxiety, Nervousness
- Dizziness
- HA
- Rash
- N/V

Interactions:

- Few in the prehospital setting.

PEARLS:

- The nebulizer system can be adapted to accommodate a mask if the patient is too fatigued or working too hard to hold the nebulizer. It can also be adapted to ET administration. Both ET & mask nebulizer treatments should have an O2 flow rate of 8-10L/min.
- The medication chamber should be kept upright to ensure efficient medication administration, patients have a tendency to tilt the chamber, recheck it often. “Tap” the container toward the end of the treatment to ensure complete administration.
- All patients receiving nebulizer beta agonists and/or anticholinergics should be observed for at least one hour after treatment.
- Patients, when appropriate, should have a cardiac monitor and have venous access established along with bronchodilator treatment
- Monitor for dramatic increase in heart rate, development of frequent ventricular ectopy, or development of serious CNS symptoms.
- Atrovent has some immediate effects, but peak effects are delayed. Therefore, atrovent is more appropriate for maintenance treatment than for acute bronchospasm. Thus, administration of atrovent alone is not useful in our setting. In combination with albuterol, atrovent promotes more effective, maintainable bronchodilation than albuterol alone.