Ipratropium Bromide (Atrovent)

Ipratropium is an anti-cholinergic inhalation medication primarily used for the long term treatment of COPD. Given in nebulized form, it acts directly on the smooth muscle of the bronchial tree by inhibiting acetylcholine at receptor sites. This parasympathetic block allows the bronchial smooth muscles to relax and the mucous cells to quit secreting. It also abolishes any vagally mediated reflex bronchospasm caused by inhaled irritants such as smoke, dust, cold air, and a range of inflammatory mediators (e.g. that provoke histamine release).

Indications and Administration

1. Bronchospasm/wheezing associated with COPD/asthma.
    a. **Adults** – 0.5mg mixed with 2.5ml NS or use 0.02% pillow pack. Administer in nebulizer with albuterol.
    b. **Pediatric** – not commonly used.

Notes

1. Usually one mixes a prefilled dose of ipratropium and one prefilled dose of albuterol into one neb treatment.
2. Increased dosage and frequency is not effective. Therefore it does not need to be repeated with subsequent albuterol doses, unless the first neb was NOT adequately inhaled.
3. Do not give to patients hypersensitive to ipratropium, lomotil or atropine.
4. May cause thickened secretions, dry mouth, and bitter taste.
5. Usually considered a maintenance drug but is effective acutely especially when used with albuterol. Ipratropium and albuterol produce a greater and more prolonged response than either agent used alone.