Albuterol
(Proventil, Ventolin)

McHenry Western Lake County EMS
Objectives

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

- Adrenergic beta-2 agonist
- Bronchodilator
Actions:

• Causes smooth muscle relaxation in the lungs through the beta-2 agonists.
Beta 2 agonist

- Bronchodilator medicine that opens the airways by relaxing the muscles around the airways that may tighten during an asthma attack or in COPD (chronic obstructive pulmonary disease).
Indications:

- Reversible bronchospasm associated with asthma, COPD, allergic reactions, croup, cystic fibrosis, hyperkalemia.
Dosing/Routes:

• For bronchospasm: 2.5 mg in 3ml (0.083%) via HHN with 02 at 6-8 L depending on unit until mist stops (5-15 minutes). May use HHN, mask or BVM. Continue/repeat en-route.

• For hyperkalemia: 5 mg doses repeated up to 20 mg/neb throughout transport.
How supplied:

- 0.083% in 3cc (HHN with 2-3cc of NS)
Albuterol set-ups
Contraindications:

- Hypersensitivity. Caution in patients w/ACS, dysrhythmias, symptomatic tachycardia, diabetes, HTN, seizures or in active labor.
Precautions:

- Pregnancy, cardiac disorders, hyperthyroidism, diabetes, hypertension, seizures.
Side effects/adverse reactions:

- CNS: Tremors, anxiety, headache, dizziness, restlessness.
- EENT: Dry nose, irritation of nose and throat
- CV: Palpitations, tachycardia, hypertension, angina, hypotension, dysrhythmias.
- GI: Heartburn, nausea and vomiting

Ref: MWLCEMS Protocol and 2000 Mosby’s Nursing Drug Reference Book
Case Study

- You have been called to a home for a 22 year old male who has experienced an Asthma attack due to Air Fresheners.
- You listen to his lung sounds and you here wheezes in all lung fields with decreased capacity. SP02 is showing 92% on room air.
- What would be the correct dose Albuterol
Answer

- 2.5 mg in 3 ml. (0.083%) via Hand Held Nebulizer (HHN) with O2 at 6-8 lpm depending on the unit until the mist stops.
- Usually within 5-15 minutes.
• Continue HHN, Mask or BVM method during transport to Hospital.