

ALBUTEROL (generic), PROVENTIL, VENTOLIN (brand)

ACTION: Sympathomimetic bronchodilator (beta₂-adrenergic agonist)

INDICATIONS:

1. For relief of acute bronchospasm (reversible airway obstruction)

CONTRAINDICATIONS:

1. Allergy or known hypersensitivity to albuterol

PRECAUTIONS:

1. Beta-receptor blocking agents and albuterol inhibit the effect of each other.
2. Use with caution in patients with heart disease, hypertension, diabetes, the elderly and those being treated with antidepressants.

ADVERSE REACTIONS/SIDE EFFECTS:

1. Hypertension and headache
2. Arrhythmias and chest pain
3. Nervousness and shakiness
4. Rare: May produce immediate allergic reactions or paradoxical bronchospasm, which can be life threatening. Discontinue treatment immediately if this occurs.

ADMINISTRATION:

1. BLS with medication training:
 - A. Pour one unit dose bottle (2.5 mg = 3 ml of 0.083% solution) into nebulizer reservoir.
 - B. Connect nebulizer to oxygen source at 6 or 8 liters per minute (depending on manufacturer).
 - C. Have patient breathe as calmly and deeply as possible until no more mist is found in the nebulizer chamber (5 - 15 minutes). Routine nebulizer therapy should be accomplished by instructing the patient to close his/her lips tightly around the mouthpiece. An acceptable alternative to using the mouthpiece would be to attach the nebulizer reservoir to an oxygen mask, i.e. remove the bag from a non-rebreather nebulizer reservoir and do not use the T-piece or the mouthpiece.
 - D. Continuous nebulizer treatments (with reassessment in between) may be given to all ages as indicated.
 - E. Restart patient on oxygen at appropriate concentration.
2. ALS: Same as above except that Atrovent 500 mcg is added to the first (only) neb, unless contraindicated.
3. ALS: In the intubated patient, albuterol should be administered with an adapter that permits in-line nebulization.
4. Further orders must come from Medical Control Physician.

PEDIATRIC CONSIDERATIONS:

1. BLS with medication training: Continuous nebs, at adult strength, may be given on standing order.
2. ALS: Continuous nebs (with Atrovent added to first neb) at adult strength, may be given on standing order.

SPECIAL NOTES:

1. May begin treatment prior to IV therapy. This may decrease anxiety in the patient.
2. Nebulizer treatments for patient with active tuberculosis should be performed in well-ventilated areas (outside patient compartment if possible). Providers should use appropriate respiratory protection.
3. ALS providers can provide in-line nebs during CPAP therapy as appropriate.