

Southern Illinois Regional EMS System

JJ-2 ALBUTEROL

1. Class:
 - 1.1. Sympathomimetic, bronchodilator, beta₂-agonist.
2. Description:
 - 2.1. Albuterol is a Sympathomimetic that is selective for beta₂-adrenergic receptors. It relaxes smooth muscles of the bronchial tree and peripheral vasculatures by stimulating adrenergic receptors of the sympathetic nervous system.
3. Onset and Duration:
 - 3.1. Onset: 5-15 minutes after inhalation.
 - 3.2. Duration: 3-4 hours after inhalation.
4. Indications:
 - 4.1. Relief of bronchospasm in patients with reversible obstructive airway disease.
 - 4.2. Prevention of exercise-induced bronchospasm.
5. Contraindications:
 - 5.1. Prior hypersensitivity reaction to albuterol.
 - 5.2. Cardiac dysrhythmias associated with tachycardia.
6. Adverse Reactions:
 - 6.1. Usually dose related.
 - 6.2. Restlessness, apprehension.
 - 6.3. Dizziness.
 - 6.4. Palpitations, tachycardia.
 - 6.5. Dysrhythmias.
7. Drug Interactions:
 - 7.1. Other sympathomimetics may exacerbate adverse cardiovascular effects.
 - 7.2. Antidepressants may potentiate effects on the vasculature (vasodilation).
 - 7.3. Beta-blockers may antagonize albuterol.
 - 7.4. Albuterol may potentiate diuretic-induced Hypokalemia.
8. How Supplied:
 - 8.1. Metered-dose inhaler:
 - 8.1.1. 90mcg/metered spray (17g canister with 200 inhalations).
 - 8.2. Solution for aerosolization:
 - 8.2.1. 0.5% (5mg/ml) in 3ml unit dose/nebulizer.
 - 8.2.2. 0.083% (2.5mg) in 3ml unit dose/nebulizer.

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JJ-23 PROVENTIL (ALBUTEROL)

(continued)

9. Dosage and Administration:

9.1. Bronchial asthma:

9.1.1. Adult:

9.1.1.1. Metered-dose inhaler:

9.1.1.1.1. 1-2 inhalations (90-180mcg) every 4-6 hours.

9.1.1.1.2. Wait 5 minutes between inhalations.

9.1.1.1.3. Maximum of 12 inhalations a day.

9.1.1.2. Solution:

9.1.1.2.1. 2.5mg (0.5ml of 0.5% solution) diluted to 3ml of NS.

9.1.1.2.2. Administer over 5-15 minutes 3-4 times a day by nebulizer.

9.1.1.3. Note:

9.1.1.3.1. In settings of severe asthma exacerbation, 4 inhalations or 5mg in 2.5-3ml is indicated.

9.1.2. Pediatrics:

9.1.2.1. Metered dose inhaler:

9.1.2.1.1. Same as for adult.

9.1.2.2. Solution:

9.1.2.2.1. 0.01-0.03ml (0.05-0.15mg)/kg/dose to a maximum of 0.5ml/dose diluted in 2ml of NS.

9.1.2.2.2. May repeat every 20 minutes 3 times.

9.1.3. Moderate to severe – Symptomatic hyperkalemia:

9.1.3.1. 10-20mg nebulized over 15 minutes.

10. Special Considerations:

10.1. Pregnancy Category C.

10.2. Albuterol may precipitate angina pectoris and dysrhythmias.

10.3. Albuterol should be used with caution in patients with diabetes mellitus, hyperthyroidism, prostatic hypertrophy, seizure disorder, or cardiovascular disorder.

10.4. In prehospital emergency care, albuterol should be administered only via inhalation.