



ADULT COPD/ ASTHMA RESPIRATORY DISTRESS

History

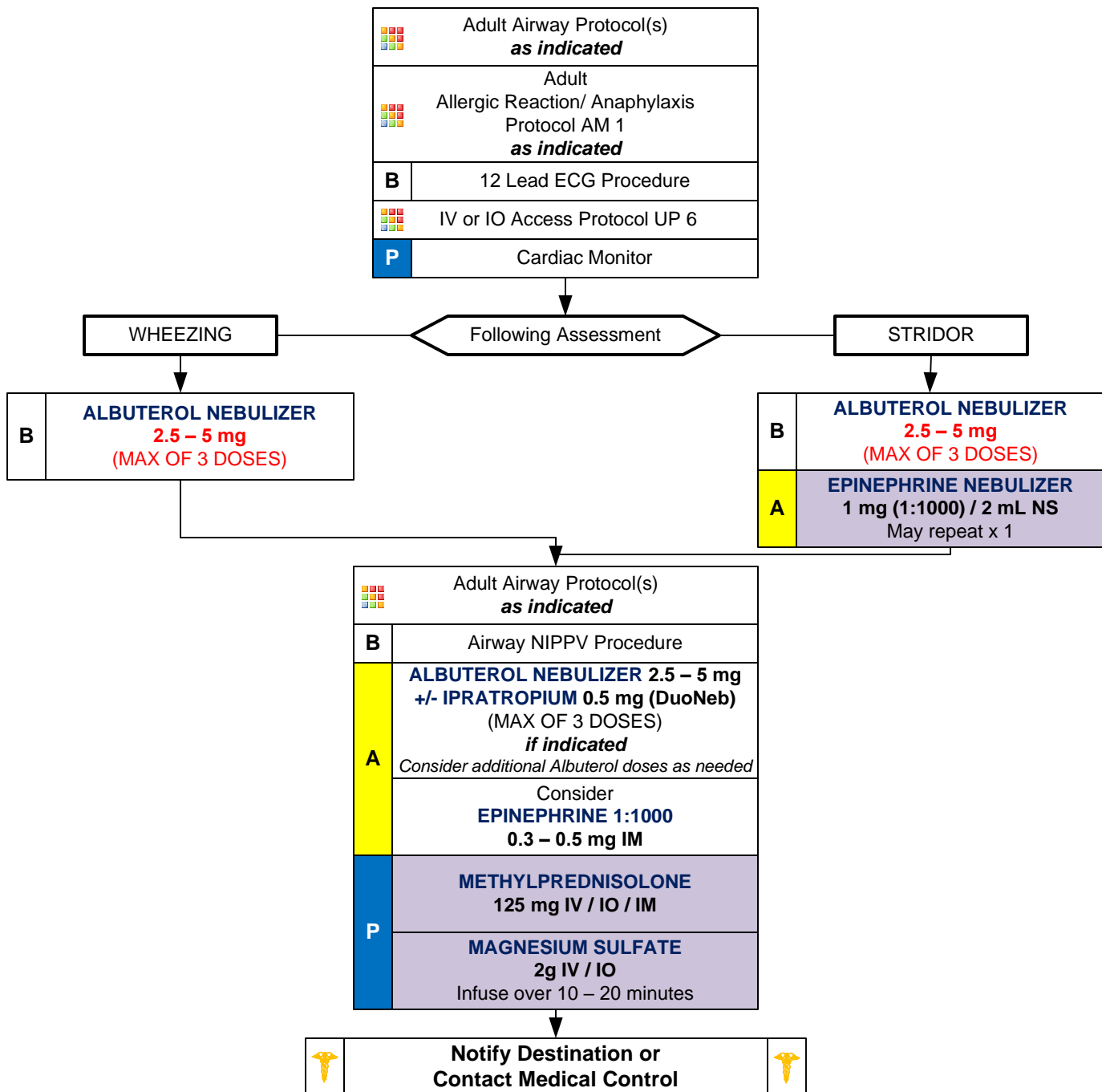
- Asthma; COPD -- chronic bronchitis, emphysema, congestive heart failure
- Home treatment (oxygen, nebulizer)
- Medications (theophylline, steroids, inhalers)
- Toxic exposure, smoke inhalation

Signs and Symptoms

- Shortness of breath
- Pursed lip breathing
- Decreased ability to speak
- Increased respiratory rate and effort
- Wheezing, rhonchi
- Use of accessory muscles
- Fever, cough
- Tachycardia

Differential

- Asthma
- Anaphylaxis
- Aspiration
- COPD (Emphysema, Bronchitis)
- Pleural effusion
- Pneumonia
- Pulmonary embolus
- Pneumothorax
- Cardiac (MI or CHF)
- Pericardial tamponade
- Hyperventilation
- Inhaled toxin (Carbon monoxide, etc.)





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MAGNESIUM SULFATE INFUSION INSTRUCTIONS

DOSE: 2 g infused over 10-20 minutes
Packaged 4 g/100 mL BAG or 5 g/10 mL VIAL

- Remove 50 mL (2 g) from 100 mL (4 g) bag of Magnesium Sulfate
 - Reserve withdrawn 50 mL (2 g) in case repeat dose is needed
- OR**
- Withdraw 2 g from vial and inject into 50 mL Normal Saline bag
 - Using a 10 gtt IV set, administer:
 - 50 gtt/minute (for 10 minutes)
 - 25 gtt/minute (for 20 minutes)

Pearls

- **Recommended Exam: Mental Status, HEENT, Skin, Neck, Heart, Lungs, Abdomen, Extremities, Neuro**
- **Items in Red Text are key performance measures used to evaluate protocol compliance and care.**
- **This protocol includes all patients with respiratory distress, COPD, Asthma, Reactive Airway Disease, or bronchospasm.**
- **Patients may also have wheezing and respiratory distress with viral upper respiratory tract infections and pneumonia.**
- **Pulse oximetry should be monitored continuously and consider End-tidal CO₂ monitoring if available.**
- **Combination nebulizers containing albuterol and ipratropium (DuoNeb):**
 - Patients may require more than 3 nebulizer treatments, treatments should continue until improvement.
 - Following 3 combination nebulizers (DuoNeb), it is preferable to continue albuterol solely with subsequent treatments as there is no proven benefit to continual use of ipratropium.
- **Epinephrine:**
 - If allergic reaction or anaphylaxis is suspected, give immediately and repeat until improvement.
 - If allergic reaction is not suspected, administer with failure to improve and/ or impending respiratory failure.
- **Consider Magnesium Sulfate with no improvement and/ or impending respiratory failure. Likely more effective with asthmatic exacerbation and less so with COPD exacerbation.**
- **Non-Invasive Positive Pressure Ventilation (NIPPV: CPAP or Bi-Level/ BiPap):**
 - May be used with COPD, Asthma, Allergic reactions, and/ or CHF.
 - Consider early in treatment course.
 - Consider removal if SBP remains < 100 mmHg and not responding to other treatments.
- In patients using levalbuterol (Xopenex) you may use Albuterol for the first treatment then use the patient's supply for repeat nebulizers or agency's supply.
- A silent chest in respiratory distress is a pre-respiratory arrest sign.
- **EMR/ EMT:**
 - **The use of Epinephrine IM is limited to the treatment of anaphylaxis and may be given only by autoinjector, unless manual draw-up is approved by the Agency Medical Director and the NC office of EMS.**
 - **Administration of diphenhydramine is limited to the oral route only.**
- **EMT administration of beta-agonist is limited to only patients currently prescribed the medication, unless approved by the Agency Medical Director and the NC office of EMS.**
- Agency Medical Director may require contact of medical control prior to EMT/ EMR administering any medication(s).