

# Shortness of Breath

**History**

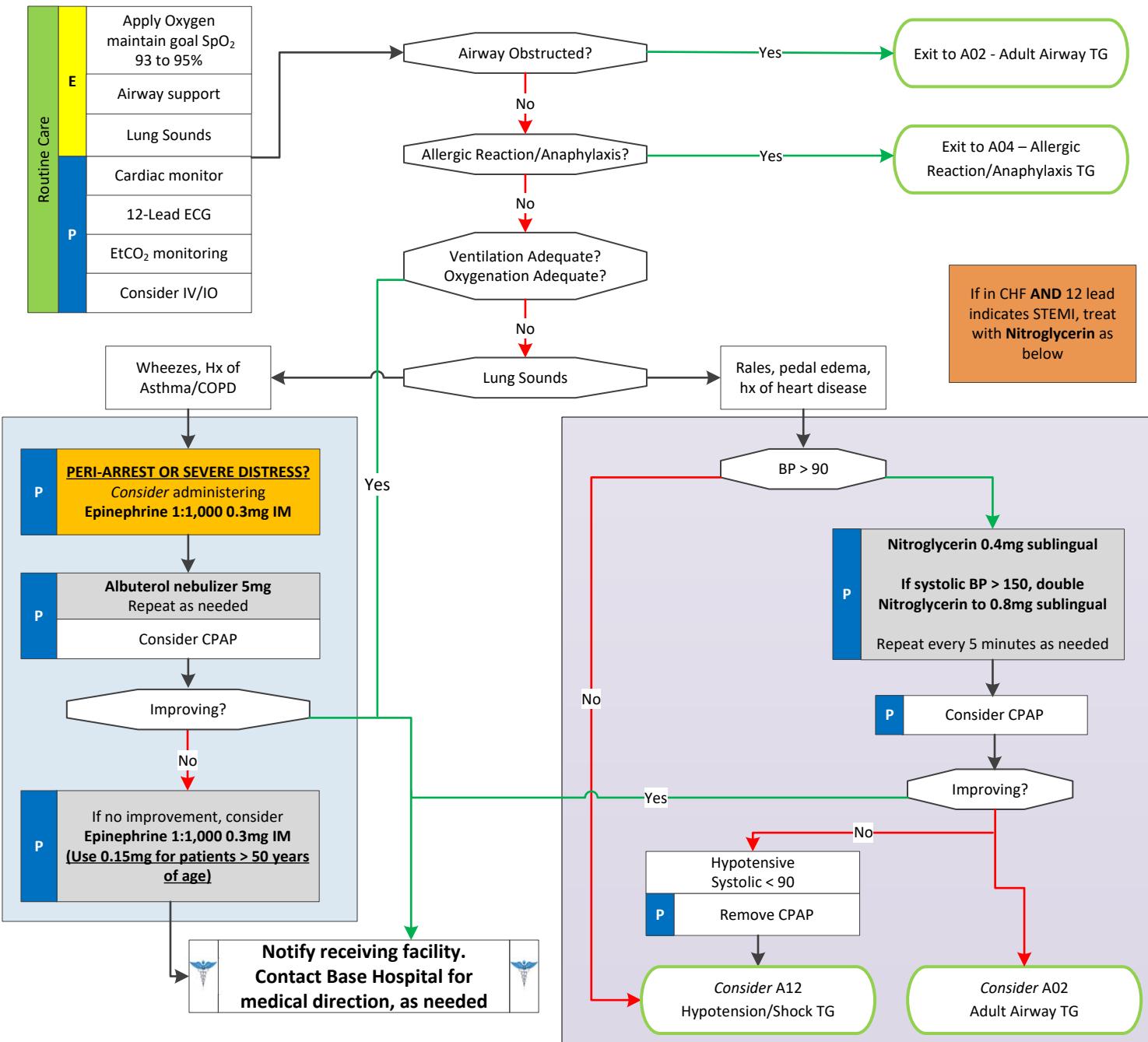
- Asthma; COPD – chronic bronchitis and emphysema
- Home treatment (e.g. oxygen or nebulizer)
- Medications (e.g. Theophylline, steroids, inhalers, digoxin, lasix, Viagra, Sildenafil, levitra, vardenafil, cialis, or tadalafil)
- Toxic exposure or smoke inhalation
- Cardiac History including MI

**Signs and Symptoms**

- Shortness of breath
- Increased respiratory rate and effort
- Diminished or abnormal lung sounds
- Tachycardia
- Pursed lip breathing
- Use of accessory muscles
- Jugular vein distension
- Peripheral edema or diaphoresis
- Pink, frothy sputum

**Differential**

- Asthma
- COPD
- Congestive Heart Failure
- Myocardial Infarction
- Aspiration
- Pneumonia
- Pulmonary embolus
- Hyperventilation
- Inhaled toxin



## Treatment Guideline A09

# Shortness of Breath

## Pearls

- If a patient is in CHF AND the 12 lead indicates STEMI, treat with nitroglycerine as on this treatment guideline. Nitro is withheld if the patient has a STEMI and CHF symptoms are not present.
- Patients receiving epinephrine should receive a 12-Lead ECG at some point in their care in the prehospital setting, but this should NOT delay the administration of Epinephrine.
- Epinephrine may precipitate cardiac ischemia. The following patients should receive half the adult dose of Epinephrine (0.15mg Epinephrine 1:1,000) for the initial dose and any repeated doses:
  - 1) Patients with a history of coronary artery disease, MI, stents, CHF, cardiac surgery; OR
  - 2) Patients over 50 years of age and has a heart rate  $\geq 150$ .
- Pulse oximetry and continuous EtCO<sub>2</sub> monitoring is required for all respiratory patients.
- A silent chest in respiratory distress is a pre-respiratory arrest sign.
- CPAP is not a ventilation device. Patients with an inadequate respiratory rate or depth of respiration will need assistance with a BVM.
- Opioids have NOT been shown to improve the outcomes of EMS patients with pulmonary edema. Even though this has historically been a mainstay of EMS treatment, it is no longer routinely recommended.
- Avoid Nitroglycerin in any patient who has used Viagra (Sildenafil) or Levitra (Vardenafil) in the past 24 hours or Cialis (Tadalafil) in the past 36 hours due to potential for severe hypotension.
- Carefully monitor the patient's level of consciousness, chest pain, and respiratory status with the above interventions.
- If a patient has taken their own nitroglycerin without relief, consider potency of medication. Provider maximum doses do not include patient administered doses.
- Consider MI in all of these patients: Diabetic, geriatric, and female patients often have atypical pain or only generalized complaints.
- Document CPAP application using the CPAP procedure in the EHR. Document the 12-Lead ECG in the EHR as a procedure along with the interpretation.



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