

## RESPIRATORY DISTRESS

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### **Information Needed:**

- History: fever, sputum production, medications (bronchodilators, diuretics) asthma, COPD, exposures (allergens, toxins, fire/smoke), trauma (blunt/penetrating)
- Recent use of sildenafil (Viagra®) or other erectile dysfunction medications
- Symptoms: chest pain, shortness of breath, cough, itching

### **Objective Findings:**

- Respiratory rate, rhythm, and pattern
- Breath sounds
- Heart rate and rhythm
- Pulse oximetry, initially and after interventions
- End tidal CO<sub>2</sub> if available
- Cough
- Rash, urticaria
- Work or effort of breathing
- Blood pressure
- Skins signs, perfusion
- Fever
- Mental status
- Evidence of trauma

### **Treatment:**

- Assess ABC's, secure a patent airway, measure pulse oximetry, and administer high flow oxygen via non-rebreather mask or BVM, suction as needed

### **Bronchospasm/ Wheezing/Asthma/COPD**

- History of asthma or COPD.
- For mild - moderate distress, inhaled albuterol 2.5 - 5 mg via nebulizer, repeat as necessary until there is improvement.
- For severe distress with any of the following: cyanosis, accessory muscle use, inability to speak >2 words, decreasing level of consciousness and no response to inhaled albuterol, consider epinephrine (1: 1,000) 0.3 mg IM in the thigh. Epinephrine should only be given if the patient has no known history of coronary artery disease or stroke. Use with extreme caution in patients over 35 years of age.

- Attempt endotracheal intubation only if the patient exhibits progressive signs and symptoms of respiratory failure.

### **Congestive Heart Failure (hypertension, tachycardia, JVD, wheezing, edema, rales)**

- Nitroglycerin 0.4 mg SL, repeat every 3-5 minutes if SBP remains >90. IV is not required prior to NTG administration. Continue nitroglycerin administration throughout the duration of the call, if SBP >90.
- IV access
- If hypotensive with SBP <90 (cardiogenic shock), administer Dopamine 5 mcg/kg/min IV infusion. If inadequate response, may titrate every 5 minutes in 5 mcg/kg/min increments to maintain SBP > 90mmHg. Maximum dose is 20 mcg/kg/min. Consider base physician contact
- Consider albuterol 2.5 - 5 mg via nebulizer for significant wheezing
- Continuous Positive Airway Pressure (CPAP) may be considered if tolerated and available for patients in moderate or severe respiratory distress (may use albuterol with CPAP)
- Attempt endotracheal intubation if patient exhibits progressive signs and symptoms of respiratory failure

### **Upper Airway Obstruction**

- Relieve obstruction (position, suction, Heimlich maneuver, abdominal thrusts), visualization and removal with Magill Forceps, Endotracheal Tube (ET) as needed

### **Severe Allergic Reaction/Anaphylaxis (itching, rash, wheezing)**

(See Allergic Reaction Protocol)

### **Precautions and Comments:**

- Supplemental oxygen should not be withheld in COPD patients, but it may decrease respiratory rate.
- Do not administer nitroglycerin to patients who have taken sildenafil (Viagra®) or other erectile dysfunction medications within the last 48 hours.
- Unless contraindicated, always administer at least 3 doses of nitroglycerine prior to administration of morphine.
- Epinephrine 1:1000 is administered by the intramuscular route for respiratory distress. To provide a potent dose, it should be administered in the thigh and used in patients 35 and under without history of CAD or stroke.
- The ETs placement and patency must be maintained at all times. Confirm ET position (reassess and document) with any patient transfer
- Rapid deterioration or decreased breath sounds have several causes. These include: tube dislodgement into the esophagus, tube migration into right main stem bronchus, secretions in the tube, pneumothorax. Confirm by direct visualization and CO<sub>2</sub> detector. Consider reintubation.