CONTINUOUS POSITIVE AIRWAY PRESSURE – CPAP

1. **PURPOSE:** To improve ventilation and oxygenation, and avoid intubation. _CPAP is required for all ALS providers._

2. **INDICATIONS:** Patients age 8 or older in severe respiratory distress and:
   - CHF with pulmonary edema
   - Near-drowning
   - Other causes of severe respiratory distress

3. **CONTRAINDICATIONS** - Bag-valve-mask ventilation or endotracheal intubation should be considered for any patient who exhibits one or more of the following contraindications

   3.1 **Absolute Contraindications** (DO NOT USE):
      - Age < 8
      - Respiratory or cardiac arrest
      - Agonal respirations
      - Severely depressed level of consciousness
      - Systolic blood pressure < 90
      - Signs and symptoms of pneumothorax
      - Inability to maintain airway patency
      - Major trauma, especially head injury with increased ICP or significant chest trauma
      - Facial anomalies or trauma (e.g., burns, fractures)
      - Vomiting

   3.2 **Relative Contraindications** (USE CAUTIOUSLY):
      - History of Pulmonary Fibrosis
      - Decreased LOC
      - Claustrophobia or unable to tolerate mask (after first 1-2 minutes trial). Consider Sedation, page 139

4. **COMPLICATIONS:**
   - Hypotension
   - Pneumothorax
   - Corneal Drying

5. **GOALS OF CPAP:**
   - Elimination of dyspnea
   - Decreased respiratory rate
   - Decreased heart rate
   - Increased SpO₂
   - Stabilized blood pressure

_Bag-valve-mask ventilation or endotracheal intubation should be considered if the patient fails to show improvement based on the above goals._
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For all CPAP patients:

6. **FAILURE TO IMPROVE:** Should the patient fail to show improvement with CPAP (as evidenced by the following) remove the CPAP device and assist ventilations with BVM, as needed
   
   6.1 Sustained or increased heart rate,
   
   6.2 Sustained or increased respiratory rate,
   
   6.3 Sustained or increased blood pressure,
   
   6.4 Sustained or decreasing pulse oximetry readings, and/or
   
   6.5 Decrease in level of consciousness

7. **DOCUMENTATION:**
   
   7.1 The use of CPAP must be documented on the PCR
   
   7.2 Vital signs (BP, HR, RR, SpO₂) must be documented every 5 minutes.
   
   7.3 Narrative documentation should include a description of the patient's response to CPAP. Refer to "Goals of CPAP" for descriptive terms that may be useful
   
   7.4 Additional narrative documentation should include if the patient does not respond to CPAP and endotracheal intubation is required