

CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) PROCEDURE

Indications

- Patients >8 years of age in severe respiratory distress and signs of CHF, COPD, and asthma
- Near drowning

Pre-procedure

- ALS RMC
- Place patient in a seated position with legs dependent
- Follow manufacturer directions for CPAP device set up
- Explain device to patient

Equipment

- CPAP equipment
- In-line nebulizer

Procedure

- Apply device to patient; set flow rate in excess of the patients inspiratory flow rate
- If albuterol and/or ipratropium appropriate, may administer with CPAP in-line nebulizer
- Reassess VS q5 min after CPAP applied, continuous SpO₂ monitoring
- Increase oxygen percentage if patient does not demonstrate improvement after 5 minutes of application; repeat PRN to obtain improvement
- Remove the CPAP device and assist ventilations with BVM and/or intubation if patient condition worsens

Critical Information

- Contraindications:
 - Absolute:
 - Age <8 years
 - Respiratory or cardiac arrest
 - Agonal respirations
 - Severely depressed LOC
 - S/Sx of pneumothorax
 - Inability to maintain airway latency
 - Major trauma (especially head trauma with signs of ICP or significant chest trauma)
 - Facial anomalies or trauma
 - Vomiting
- Relative contraindications
 - Systolic BP <100
 - History of pulmonary fibrosis or history of barotrauma
 - Decreased LOC
 - Claustrophobia or inability to tolerate mask (after 1-2 min trial)

SPECIAL CONSIDERATIONS

- Consider using sedation to alleviate possible anxiety associated with the CPAP device