
CPAP/BiPAP Administration

Purpose: This protocol may be utilized by ALS agencies that have completed the CPAP/BiPAP training, approved by the MCA, and are equipped with CPAP/BiPAP Equipment. For use of this protocol, patients must meet the Inclusion Criteria. Contraindicated patients and those that do not meet the inclusion criteria will be treated according to existing protocols without the application of CPAP/BiPAP.

Indications:

Severe respiratory distress with any of the following:

- a. CHF/Pulmonary edema/near drowning
- b. Hypoxia, i.e., SaO₂ less than 92%
- c. Acute exacerbation of asthma/COPD.

Contraindications:

- a. Pediatrics (less than 8 years).
- b. Respiratory/cardiac arrest.
- c. B/P less than 90mmHg.
- d. Unresponsive to speech.
- e. Inability to maintain patent airway.
- f. Major trauma, pneumothorax, penetrating chest trauma.
- g. Vomiting or active GI bleeding with emesis.
- h. Unstable facial fractures.
- i. Patient with aspiration risk/history.

Procedure

1. EXPLAIN THE PROCEDURE TO THE PATIENT.
2. Apply CPAP/BiPAP per manufacturer's recommendations.
3. Place the patient on continuous pulse oximetry.
4. Place the patient on cardiac monitor and record rhythm and vital signs.
5. Secure the mask with provided straps and tighten to obtain a good seal, check for air leaks.
6. Administer medications, per respiratory distress protocol, as indicated.
7. Continue to coach the patient to keep the mask in place, readjust as needed, and consider sedation to reduce anxiety (per **Patient Sedation Procedure**).
8. Advise medical control of CPAP/BiPAP use during radio report.
9. If respiratory status deteriorates, remove the device and assist ventilations with a BVM/supplemental O₂; place an appropriate airway control device.

Removal Procedure

1. CPAP/BiPAP therapy needs to be continuous and should not be removed unless the patient cannot tolerate the mask or has marked deterioration including respiratory arrest, decreasing LOC or patient may vomit.

2. Assist ventilations as necessary with BVM and control airway with intubation/Supraglottic airway.

Special Notes:

1. Do not remove CPAP/BiPAP until hospital therapy is ready to be placed on the patient.
2. Watch the patient for gastric distention.
3. CPAP/BiPAP may be used on DNR patients not in arrest.
4. Due to changes in cardiac preload and afterload during CPAP/BiPAP therapy, a complete set of VS must be obtained every 10 minutes (5 minutes in short transport situations).