

AIRWAY MANAGEMENT- CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP)

Indications:

1. Patients with severe respiratory distress due to:
 - a. Pulmonary Edema (including from near drowning).
 - b. Asthma exacerbation not responding to usual treatment.
 - c. COPD exacerbation failing conventional treatment.
 - d. Pneumonia.

Contraindications:

1. Unconsciousness
2. Inability of patient to cooperate and/or maintain airway due to lethargy, combativeness, etc.
3. Hypotension (<90mmHg systolic)
4. Vomiting
5. Suspected pneumothorax
6. Trauma
7. Facial abnormalities
8. Inability to obtain mask seal
9. Use with extreme caution in pulmonary fibrosis

Procedure:

1. Goal is to increase pressure in airways and increase gas exchange.
2. Verbally coach patient in procedure.
3. Apply waveform capnography if available.
4. Apply CPAP mask with a setting of 5 to 10 cm H₂O.
5. Coach the patient with reassurance.
6. Reassess lung sounds and vital signs at least every 5 minutes.
7. In line nebulizer treatments may be administered at same time.
8. Provider can administer Nitroglycerin while using CPAP by lifting mask off momentarily.
9. Remove CPAP if patient continues to worsen and consider advanced airway measures.

Precautions:

1. CPAP may cause drop in BP due to increased intrathoracic pressures.
2. Watch for GI distention, which may lead to vomiting.
3. Patients can become claustrophobic or unwilling to tolerate mask during initial administration.

Special Notes:

1. Proceed to advanced airway for patients with worsening respiratory distress or decreasing level of consciousness.
2. Should not be used in children <12 years.
3. Advise receiving hospital of CPAP so they can prepare.