

OXYGEN ADMINISTRATION

PURPOSE

To establish technical guidelines for proper oxygen administration and titration for patients undergoing a polysomnogram.

POLICY

Supplemental oxygen may be administered during the night under specified circumstances.

PROCEDURE

Criteria for initiating oxygen:

- Physician order
- Sustained SaO₂ < 70% for 2 minutes, regardless of associated respiratory events
- Sustained SaO₂ < 88% for 5 minutes in the absence of Apnea and Hypopnea
- Cardiac indication for initiating CPAP
 - Worsening arrhythmias associated with desaturations

Oxygen Titration:

- Initiate O₂ at 1 L/min if indicated using nasal cannula, oxygen mask, or bleed into positive airway pressure circuit.
- Titrate O₂ flow rate up, down, or off to maintain baseline SaO₂ ≥ 88%, not to exceed 4 L/min above baseline.
- If patient on is on positive airway pressure, pay special attention to need for decreasing O₂ flow rate as changes in pressures improve ventilation.
- All patients who are placed on O₂ in sleep will be titrated up or down regardless of their history of O₂ use.
- Allow a minimum of 20 minutes between O₂ flow rate changes if SaO₂ is ≥ 75%. If SaO₂ is sustained < 75% a minimum of 2 minutes between changes is recommended.
- If unable to achieve SaO₂ goal after titrating oxygen 4 L/min above baseline titration contact sleep physician on call.
- Emergency procedures should be followed as necessary.

The titration model above is a guide and does not include all scenarios that will be encountered in the sleep laboratory during a titration. If you have questions during a titration, contact the Medical Director at: (832) 701-5378.