

**OLIVE VIEW-UCLA MEDICAL CENTER
RESPIRATORY CARE SERVICES – SLEEP MEDICINE
POLICY & PROCEDURE**

**NUMBER: 8850
VERSION: 2**

SUBJECT/TITLE: PAP/02 TITRATION FOR CENTRAL SLEEP APNEA SYNDROME

POLICY: All the Sleep Lab Technicians performing Sleep Studies will follow the base procedure to reverse and/or eliminate the desaturation/fluctuation caused by Central Sleep Apnea Syndrome with the necessary sequence of O₂ followed by CPAP on R/A, then CPAP w/O₂, then if those are inadequate, Auto SV. And possibly AutoSV w/O₂.

PURPOSE: OVMC Sleep Lab adheres to the AASM Standards of Accreditation to provide the highest quality of care to our patients. This policy follows the guidelines of the Medical Director of the OVMC Sleep Lab for PAP/O₂ titration for reversal of the Central Sleep Apnea Syndrome.

DEPARTMENTS: RESPIRATORY CARE SERVICES

DEFINITIONS: Auto SV- Automatic Servo Ventilation

PROCEDURE:

- 1.0 Review patients chart for patient history and previous sleep studies to assess the severity of the Central Sleep Apnea.
- 2.0 Application of electrodes, montages, filters, sensitivities, and scoring will be performed according to the AASM Manual for the Scoring of Sleep and Associated Events” Rules, Terminology and Technical Specifications Version 2.0.
- 3.0 Begin the patient on 1-2 liters of O₂, titrating to keep the SaO₂ >90% without big fluctuations and the breathing pattern is mostly even.
- 4.0 If after reaching 6L/M of O₂ the central apneas or the SaO₂ desaturations are not eliminated then start the patient on CPAP of 4cm or the pressure from the previous study that eliminated the apnea/hypopnea’s but the central apnea syndrome started.
- 5.0 Titrate the CPAP up 2-4 cm from the base line and check for improvement.
- 6.0 If no improvement with just CPAP, and no OSA/Hypopneas, then add oxygen into the line, starting at 2 L/M up to 6 L/M, check again for improvement as O₂ is titrated.
- 7.0 If there is still no reversal of the central apneas and the fluctuating SaO₂, then the patient may be placed on AutoSV if the left ventricular ejection is >45% Ordering physicians are responsible for checking the LVEF prior to ordering AutoSV.

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- 8.0 Start AutoSV out with settings defined on the Doctor's order which takes into account the patients physiology and previous study for the amount of Pressure support and Tidal volume that the patient may need.
- 9.0 A sample of the order may be: Maximum Pressure of : 20-25cm, Maximum EPAP of 12cm, Minimum EPAP of 6cm, Maximum Pressure Support: 16cm, Minimum Pressure Support: 6cm: Respiratory Rate: Auto, Bi-Flex 2, Rise Time-2.
- 10.0 Continue to titrate the settings until eliminating the central apneas with a steady SaO2 above 90%.
- 11.0 Increase the Pressure Support Maximum or the Maximum Pressure and Decrease the Maximum EPAP, (if Max. PS can't be reached with it at the set number), if the Tidal Volumes are too low.
- 12.0 If the central apneas are eliminated with an even flow pattern but the SaO2 is still low but steady then Increase Minimum EPAP. If that doesn't increase SaO2 then add O2 to the AutoSV and then titrate SaO2 to Doctors ordered saturations above 90% or in some cases as close to 90% as you can get.

References:	
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