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**OVERNIGHT POLYSOMNOGRAPHY REPORT WITH PAP TITRATION**

PATIENT: [REDACTED]

ACQ#: [REDACTED]

DOB: [REDACTED]

DATE OF STUDY:

6/16/2015

REFERRING PHYSICIAN: Michael L. Cohen, M.D.

Tel: 9259440166

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CONSULTING PHYSICIAN: Michael L. Cohen, M.D.

**INDICATIONS**

This is a [REDACTED] patient, 69 inches tall and weighing 194 lbs (BMI 29) with a history of snoring, witnessed pauses in breathing while asleep and daytime somnolence. Other sleep complaint include: a dry mouth, nasal congestion and morning headaches. Epworth Sleepiness Scale=5. An overnight polysomnogram is indicated to rule out the clinical impression of obstructive sleep apnea.

**MEDICATIONS:** None listed.

Ambien was offered as a sleep aid, but declined by the patient.

**DIAGNOSIS**

**Axis A: Obstructive sleep apnea (severe) -780.53 / 327.23.**

**Axis B: Polysomnography**

**PROCEDURE**

An all-night comprehensive sleep study was performed in which the following medical parameters were recorded using Respiration Alice Computerized polygraph (with Alice Sleepware v. 2.7); left central (C3); central (CZ); occipital (OZ) and frontal (FZ) electroencephalogram; left and right electrooculogram; electrocardiogram; submental & anterior tibial electromyogram; nasal/oral airflow; oxygen saturation (pulse oximetry); chest & abdominal effort belts; sonogram (snoring and body position monitor). CPAP pressures were started at 5.0 cm/H<sub>2</sub>O and were increased by 1cm/H<sub>2</sub>O every 5 minutes to obviate apneas, hypopneas, RERAs, loud audible snoring and snore arousals. The study was attended by Jeannett Hernandez, a polysomnographic technician and the raw data was manually reviewed and interpreted by Michael L. Cohen. The recording started on 6/16/2015 at 8:55:24 PM, and ended on 6/17/2015 at 5:18:24 AM.

**Scoring Technologist:**

Richard Tuazon, ENDT, RPSGT.

**RESULTS**

1. Reduced sleep efficiency of 57.7% with normal sleep architecture. No REM sleep may lead to an underestimation of the severity of this patient's OSA. WASO (Wake After Sleep Onset) was calculated at 0.0 minutes.

**SLEEP STAGE BREAKDOWN (prior to CPAP titration)**

SLEEP STAGES:	MINUTES	% of TST (total sleep time)
Stage N1:	8.5	7.3
Stage N2:	73.5	63.4
Stage N3:	34.0	29.3
REM:	0.0	0.0

2. Severe sleep apnea with an Apnea / Hypopnea Index (AHI) of 76 per hour (prior to CPAP initiation).
3. Severe respiratory related sleep fragmentation with a Respiratory Disturbance Index (RDI) of 76 per hour prior to CPAP initiation (RDI = AHI + RERAs + Snoring per hour).
4. Oxygen desaturation index (number of desaturations per hour) = 22.6. SaO2 nadir of 90% (as consequence of a respiratory event); from a baseline (awake) of 96% (prior to CPAP initiation).
5. Soft snore vibrations were recorded in the sonometer indicator channel during manual scoring of sleep data but did not cause EEG arousals. These episodes were at low amplitude and did not appear in the sleep histogram.
6. HR was 86 bpm when counted manually. The patient's ECG reading was indistinguishable due to artifacts. If there is clinical suspicion for arrhythmias, then a 12 lead EKG should be performed.
7. No clinically significant limb movements seen.
8. CPAP level of 6 cm/H2O with medium F&P ESON nasal mask (C-Flex of 3) eliminated obstructive events. Sleep efficiency was 99.5%, sleep architecture was normal, and Oxygen saturation was stable above 90%.

**RECOMMENDATIONS**

1. A CPAP at a pressure of 6 cmH2O and C-Flex of 3. A medium F&P ESON nasal mask should be considered. A CPAP Machine with C-Flex and Data collection feature such as the Respironics "Pro" model is preferable.
2. Ensure proper mask fitting and add heated humidification to improve compliance.
3. Other therapeutic modalities such as dental device could be considered, but less likely to effectively treat this degree of OSA.
4. If dental device is utilized, a follow-up sleep study is recommended when possible to document success of the treatment.
5. Caution patient regarding driving if drowsy.

**To Referring Physician**

Please mail or fax follow-up information to Contra Costa Sleep Center (CCSC) regarding therapy provided to the patient. This is an Accreditation requirement by the American Academy of Sleep Medicine (AASM). Thank you.

If there are any questions regarding this study, please call us. We welcome questions and comments.



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Diplomate, American Board of Sleep Medicine