# Detailed Case #

• Pre-treatment PSG or OCST

Note: Pre and post-treatment sleep study reports should include both the summary page(s) and data page(s). The AHI and lowest oxygen saturation levels or O<sub>2</sub> saturation time below 90% must be circled on both the summary and data pages on each sleep study report so they can quickly and easily be identified.



## SLEEP STUDY REPORT

PATIENT NAME:

DATE OF STUDY:

01-29-2013

STUDY NUMBER: 13-0140-GL

DATE OF BIRTH:

### REFERRING PHYSICIAN:

IDENTIFICATION AND PRESENTING COMPLAINTS:

is age 39, 5

feet 6 inches tall, and weighs 200 pounds. He has undergone nasal surgery in the summer of 2012 and he lost at least five pounds, and he feels his energy level and sleep quality are improved. He has not been using CPAP and the current study was done to assess the status of his sleep apnea. He expresses interest in oral appliance therapy for the future.

**RECORDED PARAMETERS:** The patient's nocturnal polysomnogram was a continuous monitoring of the frontal, central, and occipital electroencephalographic (EEG) derivations, the electrooculogram (EOG), the electromyogram (EMG) from the muscles beneath the chin and the right and left anterior tibialis muscles, arterial blood oxygen saturation and pulse rate, nasal/oral respiratory airflow, thoracic and abdominal respiratory movements, snoring, body position, and the electrocardiogram (ECG).

SLEEP ARCHITECTURE AND CONTINUITY: Sleep latency was 5.5 minutes. REM latency was 311.5 minutes. Sleep efficiency was 92 percent. There were 374 minutes of sleep out of 407.5 minutes. There was 23.9 percent REM sleep.

RESPIRATORY MONITORING: The whole night apnea/hypopnea index was 14.1 per hour. Supine the apnea/hypopnea index was 20.1 and prone it was 6.0 per hour. Side position sleep was not recorded. The lowest oxygen saturation level recorded was 86 percent SaO2.

PERIODIC LIMB MOVEMENTS: There were no significant periodic limb movements.

EKG: EKG revealed sinus rhythm.

## IMPRESSION/RECOMMENDATIONS:

- Mild to moderate obstructive sleep apnea. The whole night apnea/hypopnea index was 14.1 per hour and supine it was 20.1 per hour. The lowest oxygen saturation level recorded was 86 percent SaO2.
- This appears approximately the same as a prior study of March 2012. At that time, there was a whole night apnea/hypopnea index of 16.6 per hour and 87 percent oxygen saturation nadir. The supine apnea/hypopnea index was 19.7 and prone was 11.6 per hour. No significant difference is noted with the current study.
- The patient has tried CPAP in the past and was not able to use it. He expresses interest in oral appliance therapy as a next step, which would certainly be reasonable.

DIAGNOSTIC POLYSOMNOGRAM DATA  DOB: PSG Date: 01/29/2013					
Lights Out:	10:17 PM	Sleep Efficiency:	91.8%		
Lights On:	05:05 AM	Sleep Latency (Min.):	5.5		
Total Bed Time (Min.):	407.5	REM Latency (Min.):	311.5		
Total Sleep Time (Min.):	374.0		And the second second second second second		
PERCENT TOTAL SLEEP TIME:		MINUTES TOTAL SLEEP TIME:			
Stage N1 % of TST:	7.9	Minutes Stage N1:	29.5		
Stage N2 % of TST:	48.7	Minutes Stage N2:	182.0		
Stage N3 % of TST:	19.5	Minutes Stage N3:	73.0		
Stage R % of TST:	23.9	Minutes Stage R:	89.5		
BASELINE SaO2:	i				
Awake:	91%	PLM Index:	0.8		
REM:	96%	PLM Index/Arousal:	0.3		
NREM:	95%	Arousal Index:	23.6		
Lowest SaO2 Asleep:	86%	Mean Heart Rate Asleep:	77		
Apnea/Hypopnea Index (per hour):	14.1	AHI/TIME VALUES:			
Cotal Respiratory Events:	88	Supine AHI/Minutes of Sleep:	20.1/214.5		
Central Apneas:	1	Lateral AHI/Minutes of Sleep:	0.0/0.0		
Aixed Apneas:	0	Prone AHI/Minutes of Sleep:	6.0/159.5		
Obstructive Apneas:	:0	REM AHI/Minutes of Sleep:	10,1/89.5		
Typopneas:	87	NREM AHI/Minutes of Sleep:	15.4/284.5		

Thank you very much for the opportunity to participate with you in further assistance, please do not hesitate to contact me at

care. If I may be of any

Electronically Signed By:

Board Certified Sleep Medicine Specialist BL/cp/oh

# Detailed Case #

• Post-treatment PSG or OCST

Note: Pre and post-treatment sleep study reports should include both the summary page(s) and data page(s). The AHI and lowest oxygen saturation levels or O<sub>2</sub> saturation time below 90% must be circled on both the summary and data pages on each sleep study report so they can quickly and easily be identified.



## SLEEP STUDY REPORT

PATIENT NAME:

DATE OF STUDY:

08-15-2013

STUDY NUMBER: 13-1158-GL

DATE OF BIRTH:

### REFERRING PHYSICIAN:

IDENTIFICATION AND PRESENTING COMPLAINTS: was studied to evaluate his oral appliance which is used for treatment of obstructive sleep apnea. He is 40 years of age, 5 feet 6 inches tall, and weighs 212 pounds. His current device was at 13 turns of advancement upon presentation to the sleep laboratory. One advancement to 15 turns was tried but he felt at 13 turns was a much as he could tolerate. Comparison is made with a January 2013 diagnostic study when the whole night apnea/hypopnea index was 14.1 and supine apnea/hypopnea index was 20.1 and prone apnea/hypopnea index was 6.0 with 86 percent in SaO2 nadir.

RECORDED PARAMETERS: The patient's nocturnal polysomnogram was a continuous monitoring of the frontal, central, and occipital electroencephalographic (EEG) derivations, the electrooculogram (EOG), the electromyogram (EMG) from the muscles beneath the chin and the right and left anterior tibialis muscles, arterial blood oxygen saturation and pulse rate, respiratory airflow, thoracic and abdominal respiratory movements, snoring, body position, and the electrocardiogram (ECG).

SLEEP ARCHITECTURE AND CONTINUITY: Sleep latency was 5.5 minutes. REM latency was 207 minutes. Sleep efficiency was 89.8 percent. There were 366.5 minutes of sleep out of 408 minutes. REM sleep was only 2 percent of the night, or 7.5 minutes. Medications could play a role, as he is on REM suppressant medication.

ORAL APPLIANCE TITRATION: He has a DynaFlex oral appliance which as fashioned by D.D.S. set at 13 turns of advancement on presentation to the sleep laboratory. This was studied at 15 turns as well. At 13 turns there was an apnea/hypopnea index of 4.3 per hour and at the 15 turns it was 1.4 per hour. The device was set back to its 13 turn setting at the end of the study.

**PERIODIC LIMB MOVEMENTS:** There were periodic limb movements noted at 33.7 per hour with only 1.0 per hour arousals.

EKG: EKG showed sinus rhythm.

# IMPRESSION/RECOMMENDATIONS:

- The patient's DynaFlex oral appliance gave very good control of sleep apnea. At its current setting of 13 turns, the apnea/hypopnea index was normal at 4.3 per hour. Studied at 15 turns, the apnea/hypopnea index was 1.4 per hour. If he is doing well clinically, the device should be left at the 13 turn setting. It was set at 13 turns at the end of the study.
- There were periodic limb movements noted. They do not require treatment unless they are symptomatic in association with restless legs or sleep fragmentation.

	r	DOB: ( PSG Date: 8/15/2013	
Lights Out:	10:19 PM	Sleep Efficiency:	89.8%
Lights On:	05:07 AM	Sleep Latency (Min.):	5.5
Total Time in Bed (Min.):	408.0	REM Latency (Min.):	207.0
Total Sleep Time (Min.):	366.5		5
PERCENT TOTAL SLEEP TIME:		MINUTES TOTAL SLEEP TIME:	· %
Stage N1 % of TST:	4.4	Minutes Stage N1:	16.0
Stage N2 % of TST:	83.5	Minutes Stage N2:	306.0
Stage N3 % of TST:	10.1	Minutes Stage N3:	37.0
Stage R % of TST:	2.0	Minutes Stage R:	7.5
BASELINE SaO2:			
Awake:	96%	PLM Index:	33.7
REM:	95%	PLM Index/Arousal:	1.0
NREM	96%	Arousal Index:	9.5
Lowest SaO2 Asleep:	91%	Mean HR Asleep:	59
At Adjustment of:	13 turns, DynaFlex appliance		
Apnea/Hypopnea Index (per hour):	4.3		
Total Respiratory Events:	17	the date and a still lead at some Abids who is reduced principles of the second of the	
Central Apneas:	0	and the second s	And the second second second second second
Mixed Apneas:	0		
Obstructive Apneas:	0		
Hypopneas:	17	en la la la companya de la companya del companya de la companya del companya de la companya de l	
Recommended Adjustment of:	13 turns		

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