



Patient: John Adams **Study Date:** 25/03/2014

Study Type: Diagnostic (Ambulatory)

Interpreting Physician: D Cunningham

Date of Birth: 05/09/1950	Height: 179.5 cm	BMI: 25.2 kg/m ²
Gender: Male	Weight: 81.3 kg	ESS: 14/24

TECHNOLOGIST'S COMMENTS:

Technical Considerations:

This study was recorded using a Somte PSG. During the study C3-A2, C4-A1, LOC, ROC, ECG, EMG, Chest and Abdominal effort, nasal pressure, body position, oximetry and heart rate were recorded.

Sleep Perception: John's self-perceived sleep quality was worse than normal with a sleep latency of 20 minutes.

Sleep Architecture: Sleep architecture was fragmented. REM totaled 8.4% & SWS totaled 16.6%. The sleep efficiency was 85.0%, with a sleep latency of 12.5minutes (LPS 12.5mins) and a Total Sleep Time of 438.0minutes. There were 3 episodes of REM (2 whilst supine), with a REM latency of 84.5minutes. Arousals: Arousals were increased in frequency & predominantly respiratory.

Respiratory AI = 47.5/hr. PLM AI = 0.0/hr. **Total AI = 47.5/hr.**

Posture: Body position was variable throughout the sleep period, with supine sleep comprising 68% of TST (296.5mins).

Respiratory Disturbance: There were very frequent respiratory events observed in both REM & NREM, in all positions.

AHI_{TOTAL} = 63.0/hr. AHI_{REM} = 45.4/hr. AHI_{NREM} = 64.6/hr

Oxygen desaturation was significant, with SaO₂ dropping to a Nadir of 54% (NREM=58%, REM=54%), from an awake baseline of 95%. Snoring was present throughout.

Limb Movements:

Leg movements during sleep were frequent. Leg Movements = 29.9/hr (NREM = 29.5/hr; REM = 34.1/hr).

ECG Rhythm: Sinus rhythm was noted. The average heart rate was 55 bpm.

Dr Himanshu Garg MD RPSGT

PHYSICIAN'S CONCLUSION:

Snoring and very severe obstructive sleep apnea that was associated with marked oxygen desaturation.

Given the severity of sleep apnea, treatment with CPAP is warranted.

Dr David Cunningham MBBS FRACP FAASM
Sleep Physician



Patient Name: J.Adams

Study Date: 25/03/2014

Sleep Staging Information

Recording time from 20:33:17 to 09:10:53

Total Sleep Time: 438.0 min

WASO: 61.0 min

Latency to persistent sleep : 12.5min

Light out from 20:33:17 to 09:10:46

Sleep Efficiency : 85.0%

Sleep Onset Latency : 12.5 min

Arousal Index : 47.5/hr

Sleep Stage	Latency	Sleep Time	Sleep Stage	Latency	Sleep Time
Wake (61.0 min)					
N1(9.5 min)	0.0 min	2.2%	N3 (72.5 min)	19.5 min	16.6%
N2 (319.0 min)	0.5 min	72.8%	REM (37.0 min)	84.5 min	8.4%

Arousal Statistics

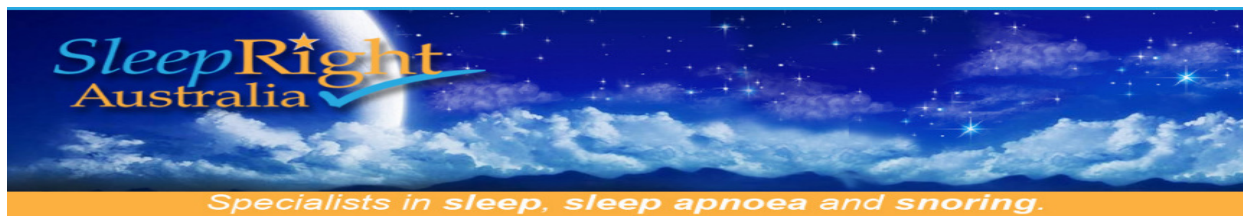
	# in REM	# NREM	# Total	REM/hr	NREM/hr	Total/hr
Respiratory	31	316	347	50.3	47.3	47.5
Limb	0	0	0	0.0	0.0	0.0
Spontaneous	0	0	0	0.0	0.0	0.0
RERA	0	0	0	0.0	0.0	0.0
Total	31	316	347	50.3	47.3	47.5

Periodic Leg Movement Summary

	REM	NREM	Total	Awake
# PLM	0	0	0	0
# PLM Associated Arousals	0	0	0	
PLM / hr	0.0	0.0	0.0	0.0
PLM Arousal / hr	0.0	0.0	0.0	

SpO2 Table

Desaturation Statistics		Saturation Levels	
Desaturation %	Number of Events	Saturation Levels	Hours:min:sec
>= 2	323	Time Below 95%	5:17:58.0
>= 3	270	Time Below 90%	2:30:1.0
>= 4	235	Time Below 85%	1:00:43.0
>= 5	198	Time Below 80%	0:30:42.0



Patient Name: J.Adams

Study Date: 25/03/2014

Respiratory Events Summary

	Obstructive	Mixed	Central	Total Apnoea	Hypopnoea
Number	224	123	6	353	107
AHI (with >= 3%desat)	30.7	16.8	0.8	48.4	14.7
Average Duration (sec)	31.9	38.2	23.9	33.9	24.9
Longest Duration (sec)				86.8	70.8

Number of Events (REM/NREM)

	REM	Non-REM	Total
Apnoeas	28	325	353
Hypopnoeas	0	107	107
Apnoeas + Hypopnoeas	28	432	460
Duration in Apnoea (sec)	1245.3	10729.8	11975.1
Duration in Hypopnoea (sec)	0.0	2664.8	2664.8
Duration in Apnoea + Hypopnoea (sec)	1245.3	13394.6	14639.9
Non-Arousing events (#/hr)	45.4 - 50.3	64.6 - 47.3	63.0 - 47.5
RERA (#/hr)	45.4 - 45.4	64.6 - 64.6	63.0 - 36.4

Respiratory Events by Sleep State and Body Position

	NREM			REM		
	Back	Other	All	Back	Other	All
Time during sleep	274.5	125.5	401.0	22.0	15.0	37.0
SaO ₂ % min average	85	91	86	70	81	75
SaO ₂ % lowest	58	60	58	54	60	54
Unsure /hr	0.0	0.0	0.0	0.0	0.0	0.0
Central Apnea /hr	0.7	1.4	0.9	0.0	0.0	0.0
Obstructive Ap./hr	40.7	11.9	31.6	35.5	0.0	21.1
Mixed Apnea /hr	11.4	26.6	16.2	0.0	60.0	24.3
Hypopnea /hr	17.9	11.9	16.0	0.0	0.0	0.0
Total AHI /hr	70.6	51.7	64.6	35.5	60.0	45.4

Average SaO₂ Desat. (%) 9

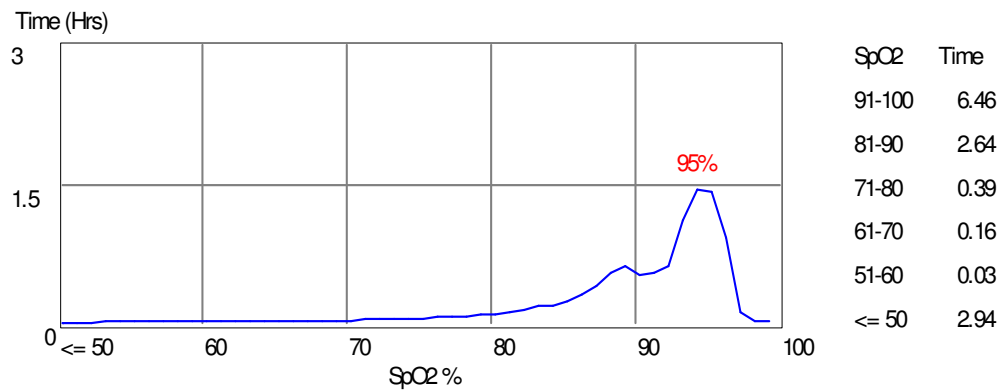
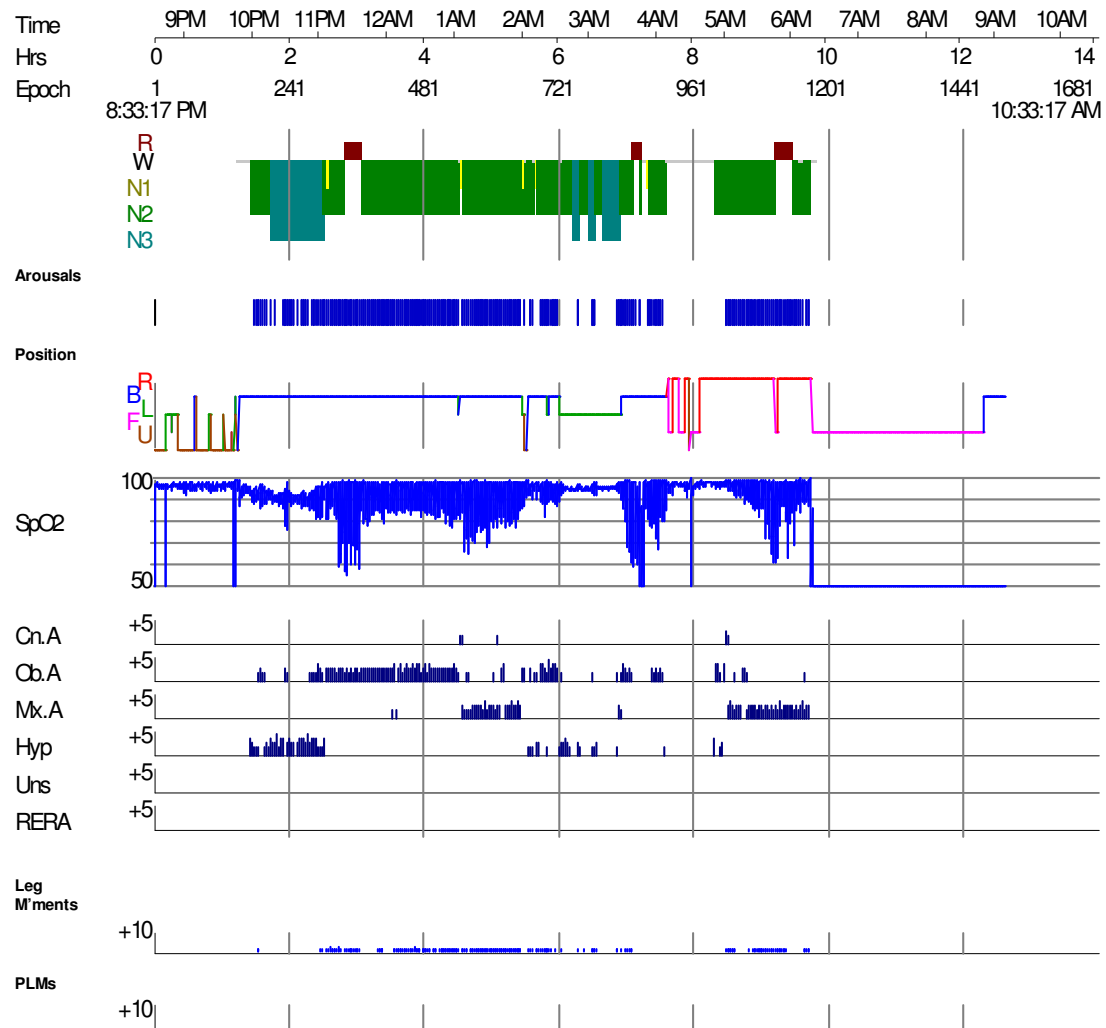
Respiratory event index (/hr) by position (sleep time)

	Sleep time in position (min)	Obstructive (#/hr)	Mixed (#/hr)	Central (#/hr)	Hypopnoea (#/hr)	All (#/hr)
Back	296.5	40.3	10.5	0.6	16.6	68.0
Left	57.5	8.3	3.1	0.0	19.8	31.3
Right	80.0	12.8	48.8	2.3	4.5	68.3
Front	3.0	0.0	60.0	0.0	0.0	60.0
Total	438.0	30.7	16.8	0.8	14.7	63.0



Patient Name: J.Adams

Study Date: 25/03/2014



[@127]