

**S**nororing  
**N**arcolepsy  
**O**bststructive sleep apnoea  
**R**estless legs  
**E**xcessive daytime sleepiness



**Administration Centre**  
161 Nerang Street Southport QLD 4215  
phone (07) 5557 0055 fax (07) 5571 0682

**Dr John L Corbett**  
MBBS (Hons), FRCP (UK), FRACP,  
MA (Oxford), DPhil (Oxford), MACLM  
CONSULTANT NEUROLOGIST & SLEEP PHYSICIAN  
**Dr Sean L Tolhurst**  
BSc (Hons), BMBS (Hons), RPSGT, FRACP  
CONSULTANT THORACIC & SLEEP PHYSICIAN

freecall 1800 076 673 fax referral (07) 5571 0682 email snore@snoreaustalia.com.au web snoreaustalia.com.au

## DIAGNOSTIC POLYSOMNOGRAPHY (SAMPLE REPORT)

ALLAMANDA PRIVATE HOSPITAL

Dr John Corbett  
Snore Australia Sleep Disorders Centre  
161 Nerang Street  
SOUTHPORT QLD 4215

### Patient Details

Name: Mr John Random SMITH

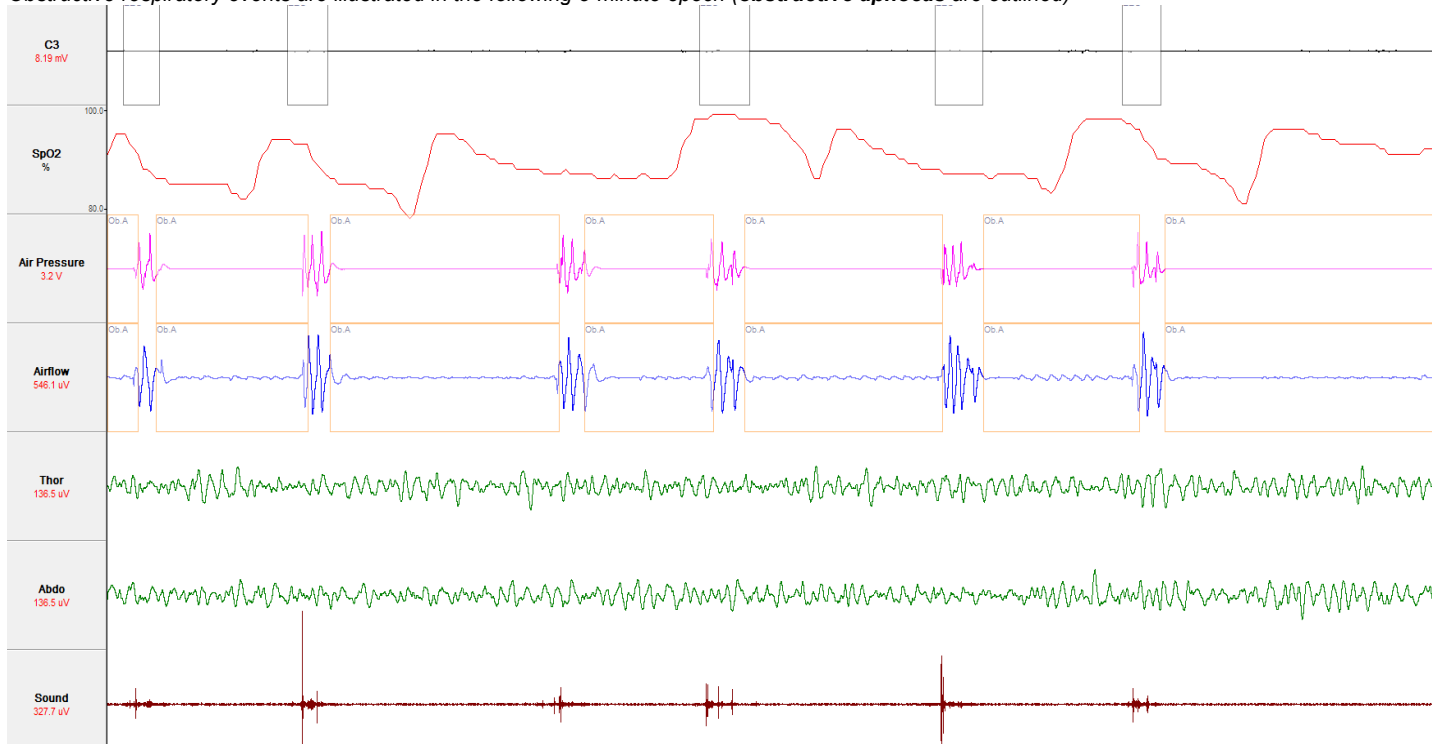
DOB: 13/12/1956

Study date: 12/12/2012

### Overview of Results

- Severe obstructive sleep apnoea and hypoventilatoin
- Loud snoring in all sleep-positions.

Obstructive respiratory events are illustrated in the following 5-minute epoch (**obstructive apnoeas** are outlined)



### Suggested Management













- CPAP titration study, given the severity of this patient's sleep-disordered breathing
- Weight-loss is likely to improve the severity of Mr Smith's OSA
- Consultation with one of our Sleep Physicians is available on request
- Safe driving: information on AustRoads guidelines is available on our website.

**Dr John L. Corbett**

**Study Information****Name:** Mr John Random SMITH**DOB:** 13/12/1956**Study date:** 12/12/2012**Procedure and Analysis**

An overnight, attended polysomnogram was performed to 'Level 1' specifications. Multi-channel EEG, EOG and EMG were recorded, in addition to ECG, nasal pressure and oro-nasal airflow, abdominal and thoracic effort, snoring, body position, oximetry and limb movements. Analysis was performed according to AASM criteria. Detailed information on interpreting sleep studies and abbreviations used in this report are available on the resources section of our website at [snoreaustalia.com.au](http://snoreaustalia.com.au)

**Sleep-related History****Usual bed time:** 10pm**Usual rising time:** 6:30am**Estimated hours of sleep:** 7 hours per night**Alcohol-intake:** special occasions only**Alcohol-intake on night of study:** none**Height:** 159cm**BMI:** 39kg/m<sup>2</sup>**Weight:** 98kg**Usual stimulant intake:** 4 per day**ESS:** 10/24 – moderate subjective daytime sleepiness**Occupation:** retired

Snoring		Waking unrefreshed		Poor memory/concentration	
Snoring disturbs partner		Impaired work/driving		Morning headache	
Partner sleep separately		Witnessed apnoeas		Restless legs	
Wakes with dry mouth		Gaspings/choking at night		Nocturia	

Legend:	Never 	Sometimes 	Usually 	Always 
---------	---	---	---	--

**Sleep Statistics**

Total sleep time	377min	Sleep-latency	9min
Sleep efficiency	90.2%	REM-latency	119min
NREM sleep	314min (83.3%)	Supine sleep	271.0min (71.8%)
REM sleep	63min (16.7%)	Lateral sleep	106.5min (28.2%)
Stage 1	45min (12.1%)	<b>Arousal index</b>	<i>per hour</i>
Stage 2	199min (52.8%)	NREM	17.2
Stage 3	69min (18.4%)	REM	24.8
Stage 4	0min (0.0%)	All	18.4
Stage REM	63min (16.7%)	<b>Snore volume</b>	<i>range (/10)</i>
		Supine	2-9
		Lateral	2-8

**Respiratory Statistics**

Event type	NREM sleep (events per hour)			REM sleep (events per hour)		
	Supine	Lateral	All positions	Supine	Lateral	All positions
Central apnoea	0.0	0.0	0.0	0.0	0.0	0.0
Obstructive apnoea	51.4	68.8	56.3	65.9	82.3	70.5
Mixed apnoea	0.0	0.0	0.0	0.0	0.0	0.0
Hypopnoea	26.3	11.5	22.1	33.0	0.0	23.8
Apnoea hypopnoea index	<b>77.7</b>	<b>80.2</b>	78.4	<b>98.9</b>	<b>82.3</b>	94.3

**Average supine AHI: 81.3****Average lateral AHI: 80.6****Overall AHI: 81.1****Observations**

**Leg movements:** 145 periodic leg movements occurred during the night; the leg index was 28 per hour of NREM sleep with approximately 6% associated with EEG arousals

**Sleep architecture:** there were adequate periods of REM and NREM sleep for analysis. The sleep-architecture was disrupted by frequent abnormal respiratory events and subsequent EEG arousals. Total time spent awake after sleep onset was 32 minutes

**Nasal airflow studies:** 762ml/sec at baseline

**SpO<sub>2</sub>:**

	NREM	REM
Baseline %	98	98
Mean %	91	87
Nadir %	67	67

**Sleep study assistants:** ZZ/KK**Reference:** 121212APH**Scorer:** MD

### Overnight Summary

Name: Mr John Random SMITH

DOB: 13/12/1956

Study date: 12/12/2012

#### Time & Epoch index

Epoch = 30 seconds

#### Light

On = light on, events analysed  
Off = light off, events not analysed

#### Sleep stage summary

R = REM sleep  
W = patient awake  
1-4 = stages of NREM sleep

#### Body position

R = patient right side  
B = patient on back/supine  
L = patient left side  
F = patient front/prone  
U = unmarked body position

#### SpO<sub>2</sub> %

Percutaneous epoch-by-epoch oxyhaemoglobin saturation

#### Respiratory events

Cn. A = central apnoea  
Ob. A = obstructive apnoea  
Mx. A = mixed ob/cn apnoea  
Hyp = hypopnoea  
Uns = unclassified event  
RERA = respiratory-effort-related arousal

#### Leg movements

Periodic limb movements (PLMs)

#### Arousals

EEG arousals

#### SpO<sub>2</sub> statistics

Graph = time spent at SpO<sub>2</sub> levels between ≤50 and 100%. Value in red indicates the mean

Table = hours spent in each specified SpO<sub>2</sub>% range

Nadir = lowest SpO<sub>2</sub> value reached

