Niagara Snoring and Sleep Centre – Med*Sleep*

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Dr. I. Naqvi

CPAP INTERPRETATION REPORT

Patient Name:	HARRIOTT, Rochelle	Patient I.D. #:	HR120823-N7
Study Date:	08/12/2023	Gender:	Female
Type of Test:	Therapeutic Level 1 PSG	Height:	170.2 cm.
Age:	26	Weight:	95.3 kg.
Date of Birth:	01/15/1997	BMI:	32.9 kg/m²
Study Indications:	CPAP Titration	Neck Circumference:	39.37 cm.
Medications:	None specified		

SUMMARY

EEG

The total recording time of the polysomnogram was 7.5 hours. The total sleep time was 7.3 hours, equating to a normal sleep efficiency of 97.9%. The total arousal index was normal at 2.9 events/hour, and the awakenings index was normal at 1.5 events/hour. The latency to sleep onset was rapid at 0.8 minutes, and the latency to consolidated sleep (5 minutes of stage N2 sleep) was 9.8 minutes. The proportion of stage N3 sleep was decreased at 10.8% of the total sleep time. The proportion of stage R sleep was increased at 40.4% of the total sleep time, with a normal onset latency of 81.5 minutes. Sleep micro-architecture was unremarkable.

Continuous Positive Airway Pressure (CPAP)

The most recent diagnostic sleep study was performed on 06/03/2023 and demonstrated no obstructive apnea, with an apnea hypopnea index (AHI) of 4.6 events/hour. During the current study, CPAP was titrated from 6 to 10 cm H₂O using a small F&P Vitera full face mask. Mask air leaks were controlled within acceptable range (less than Resmed compensated leak of 24L/min) throughout titration. Snoring was eliminated at CPAP of 6 cm H₂O. The most satisfactory pressure was 8 cm H₂O, which resulted in an apnea-hypopnea index of 0.8 events/hour and a total arousal index of 2.8 events/hour. At this pressure the oxygen saturation ranged between 99.0% to 93.0%. The ECG showed a regular rhythm and the rate ranged from 60-104 BPM.

Movement Analysis

There were no periodic limb movements (PLMS) observed during sleep. At a CPAP pressure of 8 cm H₂O, the PLM index normal events/hour and the PLM arousal index was 0 events/hour. There was no significant motor restlessness noted while lying awake in bed.

Impression / Plan

CPAP 8 cm is recommended and supine REM sleep is observed and controlled. A full-face mask is used and mask leak is controlled. Arousal index is normal, and sleep hypoxemia is controlled on CPAP.

Sleep latency is abbreviated at 0.8 minutes and sleep efficiency is increased at 98%. She tolerated CPAP objectively well. REM latency is normal and distribution of REM sleep is markedly increased which may be a beneficial effect of CPAP. Periodic limb movements are absent.

Subject will be assessed in clinic.

Dr. George Yuan, MD, FRCPC

Respirology and Sleep Medicine

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Table 1. Titration Analysis Chart

Treatment Level (cm H ₂ O)	TIME			RESPIRATORY							OXIMETRY		
	Total (min.)	REM (min.)	NREM (min.)	Cen. Apnea	Obs. Apnea	Mxd. Apnea	Hypop- nea	A + H Total	AHI	Max. SaO₂%	Min. SaO₂%	Mean SaO ₂	
CPAP = 6	82.8	0.6	80.5	1	1	0	1	3	2.2	98.0	87.0	95.5	
CPAP = 7	26.6	26.6	0.0	1	0	0	7	8	18.0	99.0	87.0	95.9	
CPAP = 8	150.9	59.9	88.5	2	0	0	0	2	0.8	99.0	93.0	97.5	
CPAP = 9	116.6	68.6	46.0	2	0	0	0	2	1.0	99.0	88.0	97.7	
CPAP = 10	72.9	22.3	47.6	1	0	0	1	2	1.7	99.0	94.0	97.7	

Table 2. Titration Analysis Chart (Arousal Results)

Treatment Level (cm H₂O)	Total Arousals		Total PLMs		PLM Arousal		Resp. Arousal		RERA		Spon. Arousal	
	Number	Index	Number	Index	Number	Index	Number	Index	Number	Index	Number	Index
CPAP = 6	5	3.7	0	0.0	0	0.0	0	0.0	0	0.0	5	3.7
CPAP = 7	2	4.5	0	0.0	0	0.0	2	4.5	0	0.0	0	0.0
CPAP = 8	7	2.8	0	0.0	0	0.0	0	0.0	0	0.0	7	2.8
CPAP = 9	3	1.6	0	0.0	0	0.0	0	0.0	0	0.0	3	1.6
CPAP = 10	4	3.4	0	0.0	0	0.0	0	0.0	0	0.0	4	3.4

