



SLEEP DISORDER CENTER

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POLYSOMNOGRAM INTERPRETATION REPORT

Patient Name: ธนธร พิพัฒน์พัลลภ	
Sex: Male	Study Date: 2025-11-06
Date of Birth: 1976-02-20	HN:
Age: 49	Referring Physician: Wish Banhiran, MD
Height: 167.0 cm	Sleep Specialist: Wish Banhiran, MD
Weight: 83.0 kg	Recording Technician: Perapat Pipatkemakorn
BMI: 29.8	Scoring Technician: Perapat Pipatkemakorn

Sleep Architecture: Testing in a diagnostic part has a total time in bed (TIB) of 09:26:00 minutes and the total sleep time (TST) was 08:14:30 minutes which resulted in **sleep efficiency (TST/TIB) of 87.4%**. The sleep latency was 00:10:00 minutes and the **REM latency was 02:35:00 minutes**. There were 64 arousals.

Sleep Staging & Body Position: Sleep stage distribution expressed as a percentage of TST was as follows; Stage N1: 23.3%, Stage N2: 47.0%, Stage N3: 0.0%, and Stage REM: 17.0%.

Respiratory Parameters: There were 26 apneas (26 obstructive apneas, 0 central apneas, 0 mixed apneas), 420 hypopneas and 0 respiratory-effort related arousals (RERAs). In the diagnostic Part, **the apnea-hypopnea index (AHI) was 54.1 events/h. The respiratory disturbance index (RDI) was 54.1 events/h.** The RDI was 49.7 during non-REM sleep stage and 72.1 during REM sleep stage. The RDI was 52.9 in the supine position.

Oximetry: The mean oxygen saturation during the study was 95.3%, with a **minimum oxygen saturation of 65.0%**.

Interpretation: Severe sleep disordered breathing with hypoxic burden

(the hypopnea definition was reduction of the nasal airflow at least 30%, duration more than 10 sec., and oxygen desaturation at least 3% based on the recommendation criteria by AASM manual for the scoring of sleep and associated events 2012B)

Recommendation: PAP, non-PAP, or multimodality treatment should be based on comprehensive multidimensional evaluation.

Wish Banhiran, MD, RPSGT, ABSM
Certified International Sleep Specialist

Diagnostic

Sleep Architecture Analysis	
Stage Light Off:	2025-11-06 22:13:05
Stage Light On:	2025-11-07 07:39:05
Total Record Time (TRT):	09:26:00
Total Sleep Time (TST):	08:14:30
Sleep Efficiency (SE):	87.4%
Sleep Latency (SL):	00:10:00
Sleep Stage N1 Occurs at:	2025-11-06 22:23:05
Number of Sleep Stage Changes:	330
Number of Arousals:	64
Number of REM Fragments:	30
REM Latency:	02:35:00
Stage W (after falling asleep):	01:01:30

Sleep Staging					
Sleep Staging	Stage W	Stage N1	Stage N2	Stage N3	Stage REM
Total Time	01:11:30	02:12:00	04:26:00	00:00:00	01:36:30
Sleep Time Percentage	12.6%	23.3%	47.0%	0.0%	17.0%

Arousal Index		
Parameter	Number of Times	Index (times per hour)
NREM	352	53.1
REM	80	49.7
TST	432	52.4

Respiratory Event				
Parameter	Obstructive	Central	Mixed	Total Apneas
Average Duration (s)	19	0	0	19
Longest Event (s)	47	0	0	47
Number of NREM	5	0	0	5
NREM Index	0.8	0.0	0.0	0.8
Number of REM	21	0	0	21
REM Index	13.1	0.0	0.0	13.1
Number of TST	26	0	0	26
TST Index	3.2	0.0	0.0	3.2

Respiratory Event (Number Of Snore: 5980 times Snore Index: 725.6 times per hour)					
Parameter	Total Apneas	Hypopnea	RERA	Cheyne-Stokes respiration	Total
Average Duration (s)	19	21	0	0	21
Longest Event (s)	47	61	0	0	61
Number of NREM	5	325	0	0	330
NREM Index	0.8	49.0	0.0	0.0	49.7
Number of REM	21	95	0	0	116
REM Index	13.1	59.1	0.0	0.0	72.1
Number of TST	26	420	0	0	446
TST Index	3.2	51.0	0.0	0.0	54.1
AHI(times per hour)	54.1		--	--	--
RDI(times per hour)	54.1			--	--

Respiratory Event (relation to body position)								
Respiratory Event	Supination		Prone		Lying on Left Side		Lying on Right Side	
	Number of Times	Index	Number of Times	Index	Number of Times	Index	Number of Times	Index
Total Time	07:10:39		00:00:00		01:03:51		00:00:00	
Obstructive	26	3.6	0	0.0	0	0.0	0	0.0
Central	0	0.0	0	0.0	0	0.0	0	0.0
Mixed	0	0.0	0	0.0	0	0.0	0	0.0
Total Apneas	26	3.6	0	0.0	0	0.0	0	0.0
Hypopnea	354	49.3	0	0.0	66	62.0	0	0.0
RERA	0	0.0	0	0.0	0	0.0	0	0.0
Cheyne-Stokes respiration	0	0.0	0	0.0	0	0.0	0	0.0
Total	380	52.9	0	0.0	66	62.0	0	0.0

Oxygen Desaturation Event (Blood Oxygen Desaturation $\geq$ 3%)		
Parameter	Number of Times	Index
Stage W	35	29.4
NREM	138	20.8
REM	58	36.1
TST	196	23.8
TRT	231	24.5

SpO2					
Oxygen Saturation	W	NREM	REM	TST	TRT
Max SpO2	99.0	100.0	100.0	100.0	100.0
Avg. SpO2	95.3	95.3	95.3	95.3	95.3
Min SpO2	79.0	89.0	65.0	65.0	65.0
Time Percentages of Different SpO2 Levels					
90% — 100%	98.1%	100.0%	97.9%	99.6%	99.4%
80% — 90%	1.8%	0.0%	1.6%	0.3%	0.5%
70% — 80%	0.1%	0.0%	0.4%	0.1%	0.1%
60% — 70%	0.0%	0.0%	0.1%	0.0%	0.0%
50% — 60%	0.0%	0.0%	0.0%	0.0%	0.0%
< 50%	0.0%	0.0%	0.0%	0.0%	0.0%

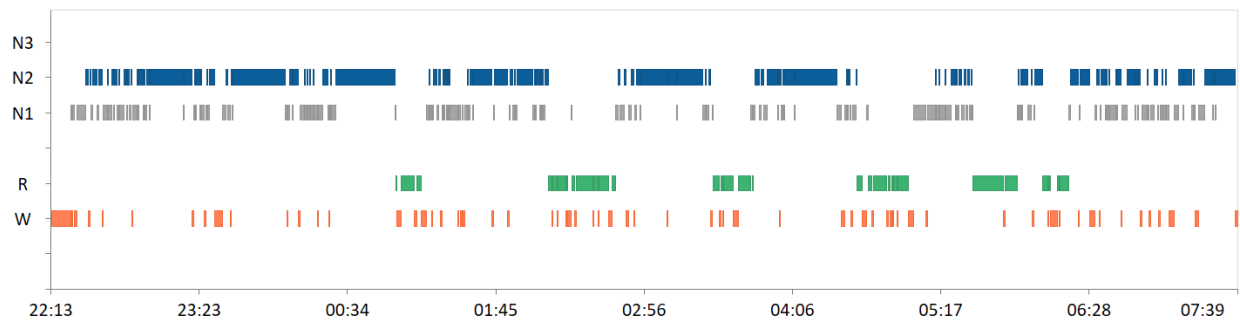
PR					
PR	W	NREM	REM	TST	TRT
Max PR	99	90	95	95	99
Avg. PR	74	68	67	68	69
Min PR	59	58	58	58	58

ECG Event					
Parameter	Bradycardia	Tachycardia	Cardiac Arrest	Narrow Complex Wave	Wide Complex Wave
Number of Times	0	0	0	0	0
Shortest Event (s)	0	0	0	0	0
Longest Event (s)	0	0	0	0	0
Total Time	--	--	--	--	--

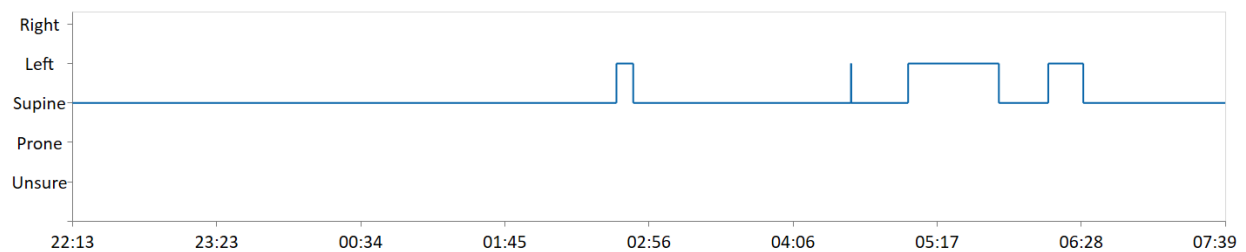
Blood Pressure			
Parameter	Max.	Min.	Average
Systolic Blood Pressure	-- / --	-- / --	--
Diastolic Blood Pressure	-- / --	-- / --	--

Limb Movement			
Parameter	LM	RM	PLM
Number of Stage W	0	0	0
Stage W Index	0.0	0.0	0.0
Number of NREM	0	0	0
NREM Index	0.0	0.0	0.0
Number of REM	0	0	0
REM Index	0.0	0.0	0.0
Number of TST	0	0	0
TST Index	0.0	0.0	0.0
Number of TRT	0	0	0
TRT Index	0.0	0.0	0.0

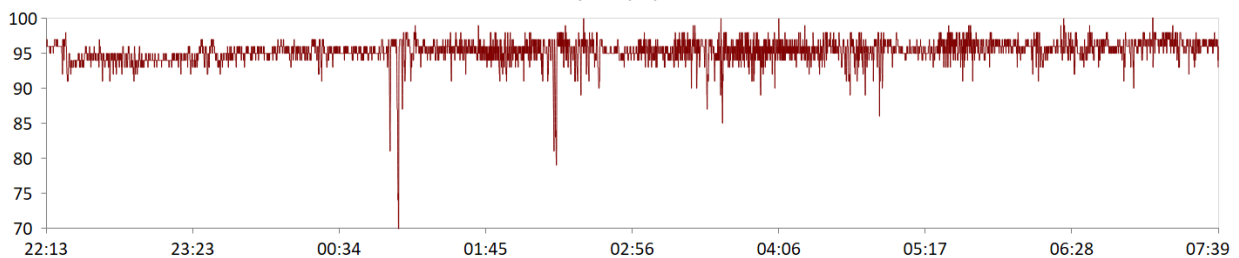
Sleep Stage



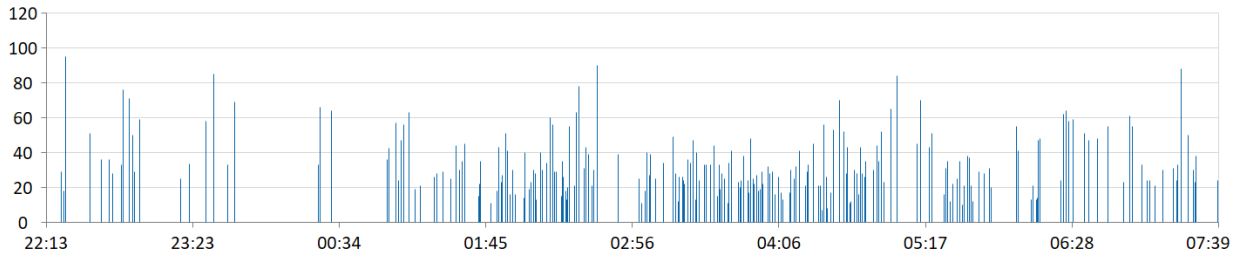
Position



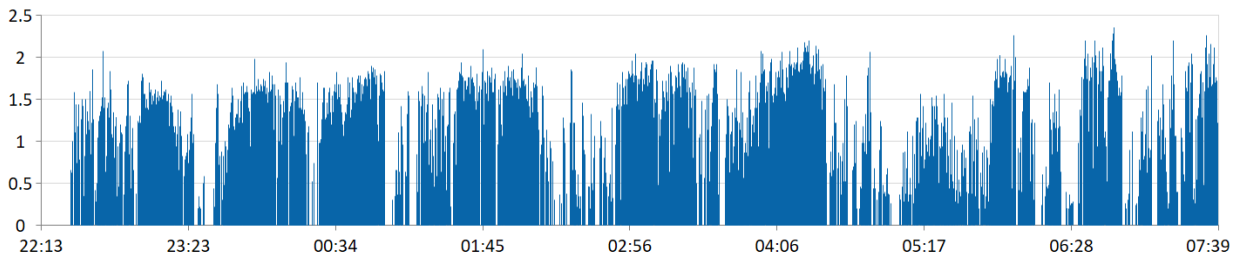
SpO2(%)



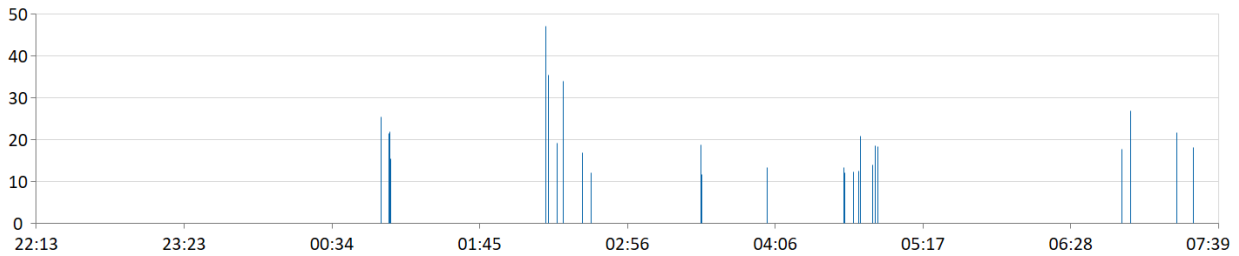
Oxygen Desaturation Event(S)



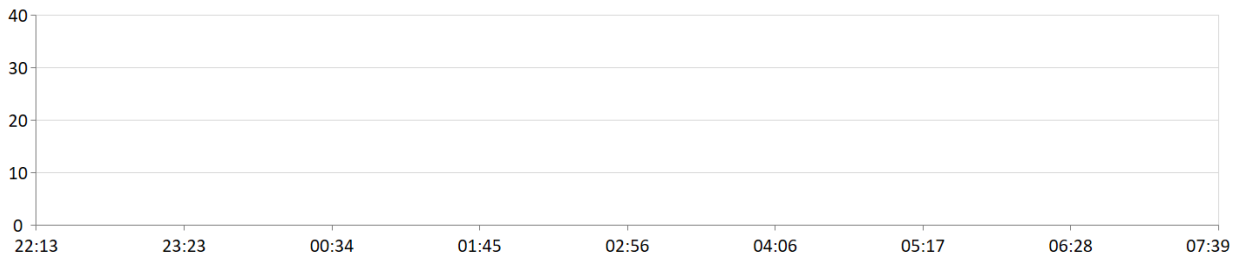
Snore(S)



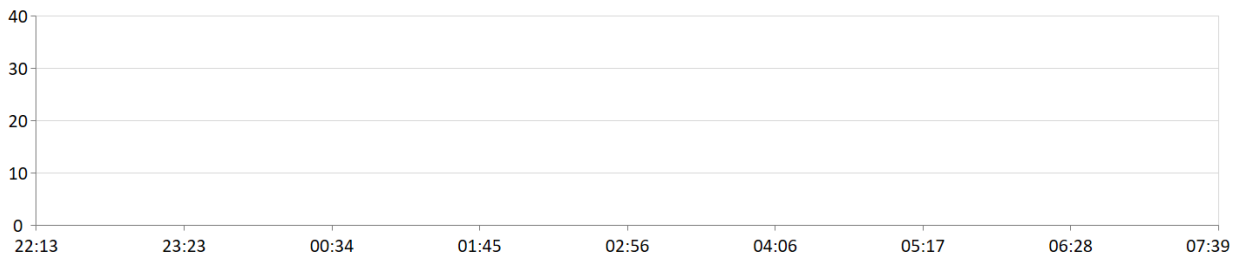
OSA(S)



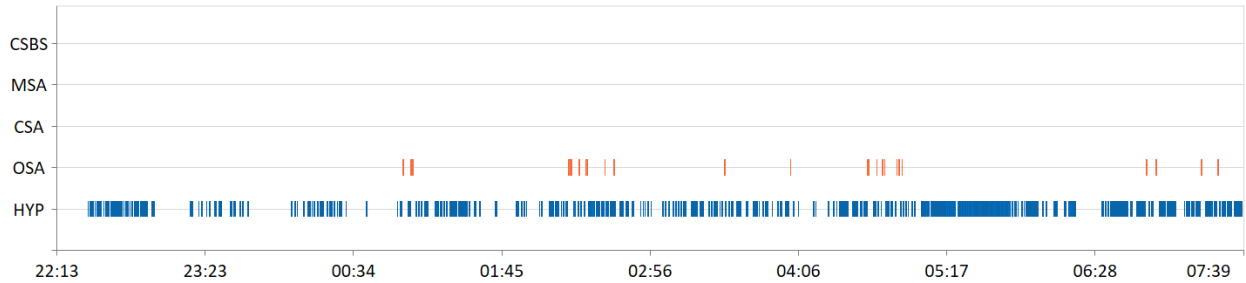
CSA(S)



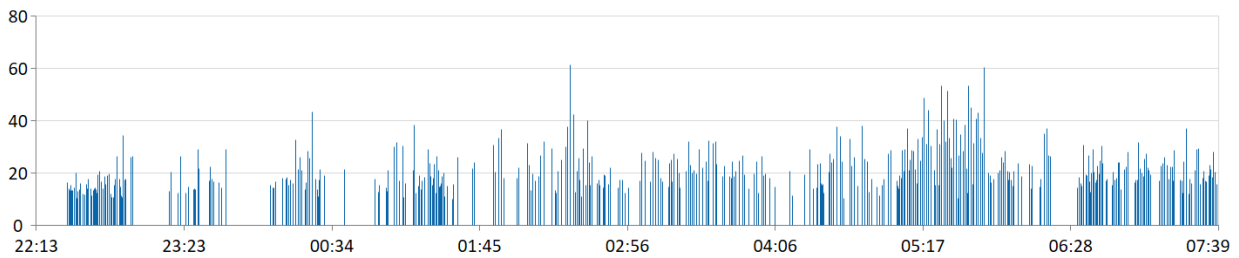
MSA(S)



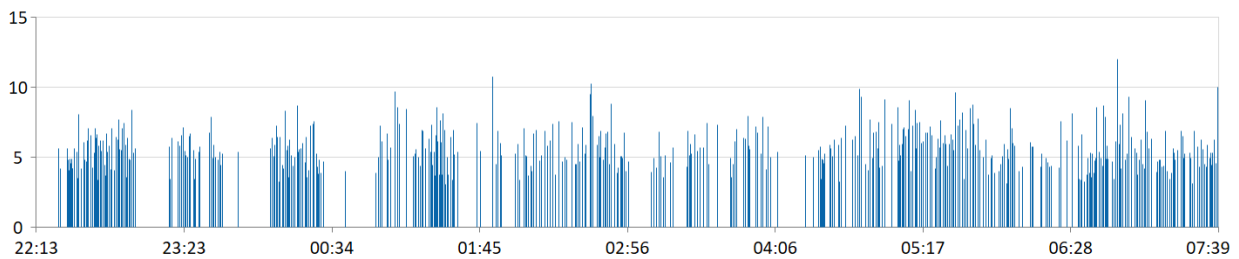
Respiratory Event(S)



HYP(S)



Arousal(S)



Left Leg Movement(S)

