



Intelligent, Interactive Monitoring

Clinically proven to:

- Reduce positional obstructive sleep apnea and snoring
- Improve sleep architecture and sleep continuity
- Reduce sleep apnea symptoms e.g., daytime sleepiness, depression, etc.

How it works:

- Delivers vibro-tactile feedback to limit back (supine) sleep
- Adapts feedback intensity to minimize awakenings
- Provides user time to fall asleep before initiating treatment

Pick Your Placement



Neck



Chest

Monitors up to 365 days of:

- User compliance
- Treatment efficacy
- Sleep efficiency
- Sleep fragmentation
- Loud snoring



ADVANCED
BRAIN MONITORING

2237 Faraday Ave, Suite 100, Carlsbad, CA 92008
(760) 720-0099 | advancedbrainmonitoring.com



Therapy Mode – Feedback On

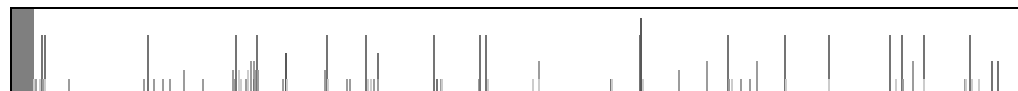
Wednesday, April 02, 2014 22:17

No. Supine Attempts: 11

Feedbacks/Attempt: Typical: 18 Minimum: 2 Maximum: 32

Behavioral Sleep/Wake

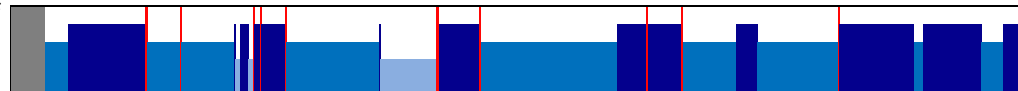
Movement Intensity



Time(hr)
Record 7.9
Sleep 6.8
%Eff 86.4
WASO(min) 48.5
Awaken/(hr) 6.7

Sleep Position

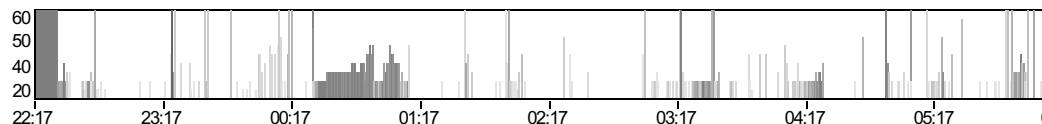
■ Supine ON ■ OFF
■ Left
■ Right
■ Prone
■ Upright



Supine
Time(hr) 0.1
% Time 1.1

Snoring Level

Decibels (dB)



%>50dB
Overall 1.3
Supine NA
Non-supine 1.3

Monitoring Mode – Feedback Off

Wednesday, March 26, 2014 22:11

No. Supine Attempts: 5

Feedbacks/Attempt: Feedback Off

Behavioral Sleep/Wake

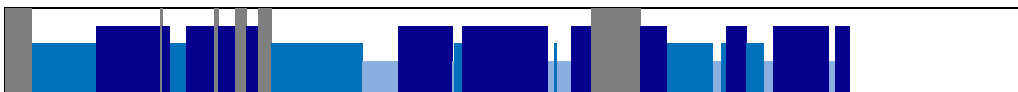
Movement Intensity



Time(hr)
Record 8.2
Sleep 6.6
%Eff 81.1
WASO(min) 77.5
Awaken/(hr) 8.1

Sleep Position

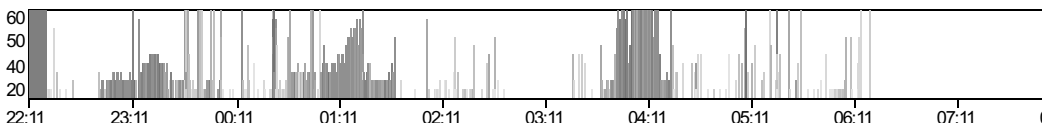
■ Supine ON ■ OFF
■ Left
■ Right
■ Prone
■ Upright



Supine
Time(hr) 0.7
% Time 10.2

Snoring Level

Decibels (dB)



%>50dB
Overall 13.8
Supine 100.0
Non-supine 4.0

Supporting Scientific Evidence

Journal of Clinical Sleep Medicine

Volume 10, August 2014, Page 863-871

Assessment of a Neck-based Treatment and Monitoring Device for Positional OSA

Key Findings:

- 83% of participants exhibited $\geq 50\%$ reduction in overall AHI, with a median AHI reduction of 79%
- Positional Therapy (PT) contributed to significant reductions in cortical arousals and awakenings, reduced N1 and increased N2 sleep
- When PT was delivered, sleep efficiency by neck actigraphy was within 10% of PSG in 87% of studies
- Supine position was under-detected by $> 5\%$ of sleep time in only 3% of the cases



BEHAVIORAL SLEEP MEDICINE

Volume 16, Jan-Feb 2018, Page 27-37

User Compliance and Behavioral Adaptation Associated with Supine Avoidance Therapy

Key Findings:

- Overall compliance based on ≥ 4 hr each night was 71%
- Regular use of ≥ 4 h/night over 70% of nights was 88%
- Poor early compliance predict long-term utilization; 92% of those non-compliant across the first 12 weeks of therapy remained non-compliant
- Patients did not habituate toward non-response to the supine avoidance stimulus
- Patients did not become 'trained' to avoid the supine position