

Jamie G\*

## A Case of Mild Obstructive Sleep Apnea and Nonadherence with APAP



\*Hypothetical patient.

Male | Age 52  
Vice President of Sales and Marketing  
Married with three children

*"I feel more relaxed, my concentration levels have increased, and I feel I have more energy even into the evening hours. I found the device easy to wear while working at the office or helping around the house on the weekend."*

### HISTORY

- Jamie reported low energy in afternoons but attributed them to heavy workload and very busy homelife with raising children.
- He was diagnosed with mild hypertension three years ago.
- Comorbid conditions: BMI 30, low levels of anxiety.
- Previous medication: Alprazolam for general anxiety disorder.
- Current medications: Chlorthalidone for mild hypertension and OTC daily multivitamin.
- Polysomnography (PSG) sleep study was ordered two years ago, and patient was diagnosed with mild OSA with an apnea hypopnea index (AHI) of 13 and APAP therapy was prescribed.

### PRESENTATION

- "I want to wake up feeling refreshed - not tired all of the time. I want to have the energy to tackle a busy day at work and at home."
- Chief complaints: Constant daytime fatigue, some irritability and difficulty thinking clearly. Jamie's spouse reported that he snored so loudly that she often slept in a different room to minimize her sleep disruption.
- Jamie was non-adherent with APAP therapy. He had difficulty falling asleep when wearing the APAP mask, experienced dry mouth after wearing the mask, and often removed the mask during sleep due to feeling claustrophobic. Jamie became frustrated and completely stopped using APAP as it didn't provide him with restorative sleep.
- Despite the low APAP pressure setting of 8cmH<sub>2</sub>O, Jamie was unable to tolerate therapy and discontinued use.

### FOLLOW-UP

- A new diagnostic sleep study was ordered. Jamie was diagnosed with an apnea hypopnea index (AHI) score of 14.
- The consequences of neglecting to address his mild OSA were reviewed and eXciteOSA® daytime therapy was prescribed for 20 minutes, once a day for 6-weeks. eXciteOSA® is an ideal therapy solution for non-adherent APAP users, or for those who are looking for a better option.
- Jamie was adherent in using the eXciteOSA® device as prescribed and was monitored via the eXciteOSA® physician portal.
- Jamie is motivated to continue to use the therapy ongoing, two times a week for 20 minutes each session. No further use of APAP is needed at this time.

See important clinical data on Page 2 that shows how eXciteOSA® daytime therapy positively impacts Pre- and Post-Therapy AHI, ODI, ESS and PSQI.



eXcite<sup>OSA</sup>



# An Innovative, Daytime Therapy That Targets the Root Cause of Mild Obstructive Sleep Apnea and Primary Snoring



**eXciteOSA® is the first, daytime therapy that works by using non-invasive intraoral neuromuscular electrical stimulation (NMES) – an electrical current to stimulate and improve muscle function of the tongue.** The improved responsiveness of these muscles prevents the tongue from collapsing, maintaining upper airway patency. This reduces obstructive events, its associated desaturations, and improves the quality of sleep.<sup>1-3</sup>

Driven by the eXciteOSA® app, the eXciteOSA® device encourages high adherence due to its daytime use, patient engagement with the app as well as monitoring capabilities for physicians to communicate with their patients.

Results from multiple clinical studies have proven that muscle activity can be improved with electrical stimulation technology.<sup>1-3</sup>

## Objective improvement in mild OSA with the use of eXciteOSA®

**AVERAGE % REDUCTION IN AHI, ODI AND ESS IN PATIENTS WITH MILD OSA PRE- AND POST-THERAPY WITH eXciteOSA®<sup>3</sup>**  
p<0.001

**79% of Patients Responded to Therapy\***



\*As measured by improvement in AHI

## Improvement in snoring with the use of eXciteOSA®

**AVERAGE % REDUCTION IN SNORING TIME AT >40DB IN PATIENTS PRE- AND POST-THERAPY WITH eXciteOSA®<sup>3</sup>**  
p<0.001



\*\*As measured by VAS

REFERENCES: 1. E.Wessoleck *et al.* Intraoral electrical muscle stimulation in the treatment of snoring. *Somnologie (Berl)*. 2018; 22(Suppl 2): 47–52. 2. A.Sama *et al.* Daytime Intraoral Neurostimulation with Snoozeal® for treatment of Snoring and Mild Sleep Apnea. CHEST Annual Meeting Notes, 2018. 3. eXciteOSA® White Paper (2020). Clinical study of 115 patients with snoring or mild OSA (Apnea- Hypopnea Index (AHI) <15 n=65) completed the trial. Objective snoring and respiratory parameters were recorded with 2 consecutive WatchPAT® night sleep studies before and after the use of the device. An intra-oral tongue stimulator device was used for 20 mins, once a day for 6-week period. (Internal publication by SMT for educational purposes and submission.)



**Signifier Medical Technologies LLC**

175 Highland Avenue  
Needham, MA 02494 USA

+1 844 MildOSA | info@signifiermedical.com  
www.exciteOSA.com