Trey H*

A Case of Mild Obstructive Sleep Apnea and Nonadherence with APAP



HISTORY

- Trey reported constant daytime sleepiness, fatigue, and irritability.
- Comorbidity conditions: BMI 28, type 2 diabetes and occasional smoker.
- Current medications: Metformin and statin.

Male | Age 37 Roofing Contractor Married with one child

"I now understand how much my snoring affected my relationship, and how much my mild OSA affected my job. I couldn't be happier with the results of my eXciteOSA® therapy."

PRESENTATION

- "When I was prescribed APAP, my first concern was how it will look on me during sleep. I was worried that my wife wasn't going to find me attractive anymore. I needed to find another solution."
- Chief complaints: Constant daytime fatigue and not thinking clearly which impacted his quality of life. His spouse reported that he snored loudly every night.
- Trey admitted that he didn't fulfill his prescription two years ago following a sleep study that found his apnea hypopnea index (AHI) to be 11.
- The symptoms of his mild OSA soon began to interfere with the physical demands of his job. Trey would need to take multiple breaks throughout the day due to excessive tiredness. Trey began to seek out alternative therapy solutions.

FOLLOW-UP

- A new home sleep test was ordered and Trey was diagnosed with mild OSA with an AHI of 14.
- eXciteOSA® was prescribed as a daytime therapy for 20 minutes, once a day for 6 weeks and the consequences of neglecting to address his mild OSA were reviewed. This solution was offered due to Trey's high risk of non-adherence with APAP and his unwillingness to wear nighttime therapies to address his mild OSA.
- Trey was adherent with using the eXciteOSA[®] device and was monitored via the eXciteOSA[®] physician portal. In his followup exam after the 6 week therapy, Trey noted his snoring reduced significantly.
- The results of the follow-up home sleep exam showed that Trey's AHI was lowered to 5.
- Trey was prescribed ongoing use of eXciteOSA® two times a week for 20 minutes each session.



CITP^{OSA}

eXCIte^{osa}

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.¹⁻³

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.¹⁻³

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® 3 p<0.001

79% of Patients Responded to Therapy*

AVERAGE OF 52% REDUCTION IN AHI	PRE-THERAPY AHI	10.39
	POST-THERAPY AHI	4.95 4111111111111111111111111111111111111
AVERAGE OF 50% REDUCTION IN ODI	PRE-THERAPY ODI	8.6
	POST-THERAPY ODI	4.3 41111111111550% REDUCTION
AVERAGE OF 3.9 POINT REDUCTION IN ESS SCORE	PRE-THERAPY ESS	9.3
	POST-THERAPY ESS	5.4 4 111111 3.9 POINT REDUCTION

*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® 3 p<0.001

<i>Objective snoring: Patients achieved an average reduction in snoring time of 41% at >40dB</i>	PRE-THERAPY 30.41%		
	POST-THERAPY	17.87% <************************************	
Subjective snoring: Patient bed partners reported an average snoring reduction of 39%**	PRE-THERAPY	6.1	
	POST-THERAPY	3.7 <************************************	
**As measured by VAS		Signifier	

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.)

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