

A Case of Obstructive Sleep Apnea and Long-Term Use With eXciteOSA®



Female | Age 62 IT Consultant | Lives in the United Kingdom Married with 3 children and 2 grandchildren

"eXciteOSA" has made a real difference to my life and my quality of sleep. This in turn has made a difference to how I feel during the day. It has also made a positive impact on my husband as well. He sleeps better and I do not interrupt his sleep".

HISTORY: Introduction to eXciteOSA® Therapy

- In 2017 Marie first noticed her snoring problem. It disrupted her sleep, as well as her husband's. She noted she had not really snored before and felt her snoring was menopausal driven.
- No medications or comorbid conditions were reported.
- A polysomnography (PSG) sleep study was performed. Marie was diagnosed with obstructive sleep apnea.
- Marie was encouraged to enroll in a proof-of-concept clinical trial through Nottingham University Hospitals in the United Kingdom for the eXciteOSA® therapy.
- "Snoring aside, I'm an active scuba diver and I was finding it difficult to clear my mask and blow out through my nose. These two things combined were what pushed me to seek help."

PRESENTATION: Experience with eXciteOSA®

- Marie liked the eXciteOSA® device because it was a daytime solution. She did not like using the current nighttime solutions on the market. She found eXciteOSA® quite simple to use, and liked its compact size.
- Approximately four weeks after Marie began using eXciteOSA®, her husband began to hear changes in her snoring.
- Marie traveled internationally for work three to four days a
 week and taking eXciteOSA® with her was easy. She could
 wear it while she worked in her hotel room in the evenings.
- After the initial 6-week daily use period was over, Marie began
 to notice improvements in her restorative sleep. She also
 found that she was able to have consistently peaceful sleep
 during the maintenance period, during which she only had to
 use the device twice per week

FOLLOW-UP

- Marie has had no side-effects from using the eXciteOSA® therapy over the past three years.
- In March of 2020, Marie stopped using eXciteOSA® as she was feeling quite well with her existing sleep. However, after four months of not using the device, she noticed a return in her snoring and sleep patterns again.
- Marie commented, "I was snoring again, waking myself up and my husband noticed my sleep changed as well. He was not getting a good night's rest anymore".
- A new home sleep study was ordered and determined that Marie was still in need of wearing the eXciteOSA® device as her sleep had become more fragmented. Marie was prescribed eXciteOSA® for daytime use.
- A follow-up study was also ordered at 2 ½ weeks and Marie's ODI score was already reduced by 41.5% and her AHI score was reduced by 40.7%.
- "My experience with eXciteOSA® has been great. It is very easy to use during the day and not intrusive. Wearing eXciteOSA® just a few minutes a day makes a vast difference in how I feel throughout the day."

Welcome Daniel

The manufacture of the control of t

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



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

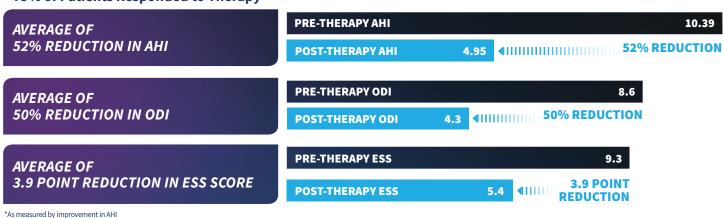
Driven by the eXciteOSA® app, the eXciteOSA® device encourages high adherence due to its daytime use, patient engagement with the app as well as monitoring capabilities for physicians to communicate with their patients.

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®

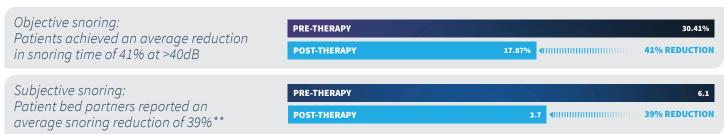
AVERAGE % REDUCTION IN AHI, ODI AND ESS IN PATIENTS WITH MILD OSA PRE- AND POST-THERAPY WITH eXciteOSA® 3 p<0.001

79% of Patients Responded to Therapy*



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



^{**}As measured by VAS



Signifier Medical Technologies LLC
175 Highland Avenue
Needham, MA 02494 USA
+1 844 MildOSA | info@signifiermedical.com

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) -151=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.)