Managing Obstructive Sleep Apnea with Provent Sleep Apnea Therapy

70 year-old woman diagnosed with obstructive sleep apnea and successfully treated with nasal expiratory positive airway pressure

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Introduction
Patient JV is a 70 year-old woman, with BMI of 33, diagnosed with obstructive sleep apnea (OSA) in 2008. She also has restless legs syndrome, hypertension and a history of thyroid disease and acid reflux.

A polysomnographic sleep study was performed showing an overall apnea-hypopnea index (AHI) of 28 events per hour, supine AHI of 52 events per hour and a nadir oxygen saturation of 77%. At this point, she was diagnosed with moderate severity obstructive sleep apnea, with moderate to severe oxyhemoglobin desaturations.

Treatment Approach
Continuous positive airway pressure (CPAP) therapy was recommended to treat her OSA. The patient declined CPAP because she did not wish to wear the mask or carry the machine during her frequent air travel.

Provent Sleep Apnea Therapy, a disposable, nightly-use prescription, nasal expiratory positive airway pressure (EPAP) therapy was offered as an alternative treatment. The patient found this option more appealing because of its small size, ease of use, and portability.

A sleep study was performed on patient JV with Provent Therapy showing dramatic improvements in her OSA in all sleep positions. Overall AHI was reduced to 1.8 events per hour and supine AHI was 3.5 events per hour (Figure 2) versus the overall AHI of 28 events per hour and supine AHI of 52 events per hour prior to treatment (Figure 1). The patient spent roughly the same percentage of sleep time supine in both studies.

Figure 1: Patient's polysomnography hypnogram prior to treatment

Figure 2: Patient's polysomnography hypnogram with PROVENT Therapy
Patient Feedback Regarding Provent Therapy

Upon follow-up interview, JV reported an excellent overall satisfaction level, noting that she:

- Likes the discreetness and dignity that it provides
- Finds it easy to use and very comfortable to wear when falling asleep and during sleep
- Appreciates being able to effectively treat her OSA while living an enjoyable lifestyle
- Plans to continue using it every night indefinitely

Physician Summary

While nasal positive airway pressure is generally considered to be the gold standard treatment for patients with moderate to severe obstructive sleep apnea, some patients are unwilling or unable to use this therapy, and Provent Therapy provides a very welcome alternative treatment approach. In JV’s case, this therapy turned out to be not only very well tolerated, but also very effective. JV currently reports a high level of satisfaction and compliance with the therapy after 10 months of use. Having this novel treatment provides physicians with an additional tool with which to treat apnea patients and allows patients to feel that they’re not being “forced to use a machine.”

Provent Therapy is a disposable, nightly-use, prescription device that incorporates a novel Micro-Valve design that is placed over the nostrils and secured with hypoallergenic adhesive. It is indicated for the treatment of obstructive sleep apnea (OSA) and works across mild, moderate, and severe OSA.

Sara Stolz, MD is a Diplomate of the American Board of Sleep Medicine and has been treating patients with sleep apnea for 19 years. She is Medical Director of Sleep Medicine Associates, which is based in the Seattle area and is the largest sleep medicine facility in the Pacific Northwest. This article was provided by Ventus Medical, Inc.