Using a Dental Laser to Treat Snoring and Sleep Apnea

ARIZONA CENTER FOR LASER DENTISTRY

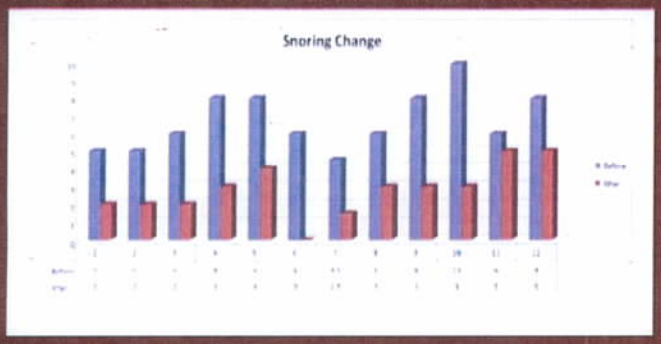
Snoring affects millions of Americans, and of those approximately 67% may have sleep apnea. Dentists are in a great position to diagnose and in some cases treat these problems with airway management. Helping patients improve their sleep can profoundly improve their health, their quality of life and the wellbeing of their loved ones.

There are numerous ways dental professionals can add sleep medicine to their practice, and the majority of these are 3D imaging diagnostic protocols and custom oral appliances. However, the Snorlase Snoring and Sleep Apnea Reduction Therapy protocol is a unique approach to treatment using the LightWalker dental laser with a proprietary protocol and hand piece that uses a specific spot size and power density.

Snorlase uses the photothermal capabilities of the Erbium laser to convert and initiate the formation of new collagen in mucosal tissue in the oropharynx, soft palate and uvula. The heat generated by the laser allows the collagen to re-form resulting in a tightening of the soft palate and surrounding tissues.

Before After

This causes a rise of the soft palate and tightening the tissues of the oropharynx resulting in an improvement in the airway. The outcome can be seen in the before and after images. The treatment is indicated for cases where the patient has been diagnosed with snoring or sleep apnea and either cannot or chooses not to wear an appliance or CPAP device. It also can be co-therapy with those devices and represents a less invasive alternative to current surgical options because it doesn't rely on chemical treatment or even anesthesia.



Snorlase has an extremely high success rate in producing a positive change in sleep patterns. Research has shown it can reduce and attenuate snoring, and provides an effective, non-invasive way to lessen the effects of sleep apnea. As with any treatment, there are potential risks with laser treatment. However, the risks are minimal and certainly less than alternative therapies if the protocol is followed correctly.

Previous studies have been performed in Europe over the last four years, but no studies had been done in the U.S. Thus far we were the first users of this protocol in the U.S. and a pilot clinical study was undertaken by our group. This small initial clinical study has been undertaken with results tabulated after a completed course of treatment and observations recorded on snoring, sleep quality, weight loss and sleep partners' comfort. The results showed a 30-80% improvement in snoring, sleep quality and sleep partner satisfaction. Participants included an obese patient, two smokers and 2 patients with diagnosed obstructive sleep apnea. The lower results were from the smokers and the obese patient.

Follow up studies with larger numbers of subjects will use Polysonography both before and after treatment and address OSA more specifically, but thus far Snorlase appears to be an exciting new option for dentists using the LightWalker laser.

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