

## **Sleep Apnea Diagnosis and Local Dentists**

By

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A study published in *Sleep Research* revealed “significant respiratory and heart rate changes” were found in individuals who, through overnight sleep studies coupled with clinical examination and consultation, failed to meet the criteria for a diagnosis of obstructive sleep apnea (OSA).

The advice to address structurally impaired breathing, although insufficient to meet OSA diagnosis levels, was advised by a colleague last month at the Northern Virginia Dental Society’s first continuing education meeting devoted to dentistry and OSA, titled “Sleep Prosthodontics”. Jeff Rouse, DDS of San Antonio, Texas began his presentation by distinguishing between four different areas, including:

- Sleep dentistry as the study of mandibular (lower jaw) mouthpieces moving the tongue forward having an impact on the airway.
- Sleep prosthodontics as the study of the airway’s impact on the mouth, jaws, and closely associated structures.
- Airway prosthodontics in the airway open 24/7, including during eating, and,
- Airway occlusion as with chewing patterns losing harmony when stressed to breath.

He called for better recognition of structural conditions that induce compensations in growth and development of the head, neck, nasal passages and jaws, posture and behavior that often mask symptoms of OSA, which responds best to early diagnosis and treatment. He implored us to actively screen for this and begin intervention as soon as the problem is discovered.

Dr. Rouse then added that he considers

- OSA is the end stage of disease from the progressive impact of the stress response and that impaired ease of breathing establishes conditions that lead to breakdown in body functions that can impact all systems with symptoms ranging from fibromyalgia, chronic fatigue, irritable bowel syndrome, migraine/tension headaches, etc.
- Any level of OSA increases morbidity.
- Although CPAP and dental mouthpieces are main control strategies, neither are tolerated for long periods.
- Surgery does not reduce the apnea as much as CPAP but people live longer as they can’t avoid usage and all day relief is provided.
- Nasal breathing as opposed to mouth breathing is the first goal as it significantly reduces collapsibility of the airway.
- Women: OSA is low compared to men pre-menopause because of progesterone.

The best treatment is to address and establish ease of nasal breathing first then evaluate the need for further treatment, which can include a customized oral appliance, CPAP, possible orthodontics and/or surgery. These must be tailored to each individual and their response to treatment.