

Preface

Sleep Medicine in Dentistry

This issue of the *Dental Clinics of North America* is designed to enlighten the reader about the current status of various topics in sleep medicine that are of interest to the dentist. The overall intent is for this text to explore various aspects of sleep medicine that are or may be common in the everyday practice of dentistry.

SECTION I: INTRODUCTION TO SLEEP MEDICINE

This is a basic overview and introduction to sleep and sleep medicine. The focus is on sleep-related breathing disorders (snoring and sleep apnea) because this is the most common sleep disorder that involves the dentist, from the standpoint of recognition as well as treatment. The dentist who becomes involved in the treatment of sleep apnea patients will need to become aware of other sleep disorders as well. These include insomnia, restless leg syndrome, and periodic limb movement disorders, to name a few. All of these disorders may involve both adults and children; however, it is only recently that attention has been paid to the younger age group. The most common finding is snoring and this may be a sign that the patient is at risk for sleep apnea.

SECTION II: EVALUATION AND RISK ASSESSMENT FOR SLEEP DISORDERS

In this section the assessment of a patient is covered from the standpoint of screening as well as from a more comprehensive aspect. This includes a clinical evaluation of the head, neck, and airway to what the most up-to-date imaging demonstrates to the results of a sleep study and how the dentist would evaluate the findings from such a study.

SECTION III: HEALTH AND MEDICAL CONSEQUENCES OF SLEEP DISORDERS

Sleep apnea and to some degree even snoring has an impact on the health and well-being of the patient. Dentists are involved more than ever in the overall health of the patient. This involves not only the health of the patient but also areas of everyday concern that the dentist sees and may treat. Therefore the need to understand the relationship between common conditions seen by the dentist is important. This includes orofacial pain/temporomandibular disorders as well as bruxism. Sleep disorders and especially sleep breathing disorders have a bidirectional relationship to a wide variety of health-related consequences.

SECTION IV: ORAL APPLIANCES: THERAPY FOR SLEEP-RELATED BREATHING DISORDERS

Oral appliance therapy is becoming more and more accepted for the management of sleep apnea and snoring. Today many patients prefer an alternative to continuous positive airway pressure (CPAP) and most often this is the oral appliance. In 2006

the American Academy of Sleep Medicine published the practice parameters for the use of oral appliances and it was determined that the oral appliance is an option for patients who desire it when diagnosed with mild to moderate sleep apnea.¹ In this section, there will be a focus on the current status of oral appliances and their effectiveness. In addition a review of the use of home sleep testing (portable monitors) for the determination of oral appliance effectiveness is reviewed. Last, reimbursement is an issue and this is also reviewed.

SECTION V: OTHER THERAPIES FOR SLEEP-RELATED BREATHING DISORDERS

There are many other ways in which sleep disorders and particularly snoring and sleep apnea may be addressed. CPAP or positive airway pressure has historically been the gold standard for the management of sleep apnea. This text will not cover this since this is a form of therapy most often provided by the sleep medicine physician and is not something the dentist will provide for patients. However it is necessary for the dentist to know about the patient who is using CPAP. The use of CPAP would indicate that a diagnosis of sleep apnea has been made. Sleep apnea is a medical condition and should be acknowledged in a health history. In addition it has been shown that CPAP can have a negative impact on the skeletal structures as well as impact tooth position and even alter the occlusion.² Surgery has a role in the management of sleep apnea as well. A wide variety of surgical procedures is available and must be considered based on the anatomic situation being addressed. Many times surgery can also be done adjunctively with CPAP or with an oral appliance. Last, consideration needs to be given to other alternative therapies that can help in the management of snoring and sleep apnea. These include weight loss, better sleeping habits (sleep hygiene), and more exercise. An improved awareness of the importance of sleep can lead to improved quality of life overall. Sleep, not only the quality but also the amount, is just as important as exercise and diet according to the National Sleep Foundation.

CONCLUSION

This text is designed to be informative and to open up a greater awareness of issues encountered by the practicing dentist as it relates to sleep and sleep medicine. There are many textbooks that cover sleep/sleep medicine in a more comprehensive and scientific manner as well as organizations with an interest in sleep medicine and these are reviewed in the Appendix. It is the hope and intent that this text will be enlightening and timely as it relates to a discipline in medicine that has major implications for the involvement of the practicing dentist.

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2. Tsuda H, Almeida FR, Tsuda T, et al. Craniofacial changes after 2 years of nasal continuous positive airway pressure use in patients with obstructive sleep apnea. *Chest* 2010;138(4):870–4.