

A Team Approach to Dental Sleep Medicine

Jeffrey R. Prinsell, D.M.D., M.D.

President, American Academy of Dental Sleep Medicine; Founding President, American Board of Dental Sleep Medicine, Marietta, GA

Dentists in the American Academy of Dental Sleep Medicine (AADSM) would like to develop a closer professional working relationship with sleep physicians in the clinical management of sleep breathing disorders (SBD), including snoring, UARS, and OSA. Our current protocol is that the diagnosis of SBD which are potentially life-threatening medical disorders, should be determined by sleep physicians, and, conversely, that the management of selected SBD cases with oral appliance therapy (OAT) and oral surgery such as maxillomandibular advancement (MMA)—that is, “Dental Sleep Medicine”—should be performed by qualified dentists. This protocol must continue to be promoted and implemented for the health and safety of our patients (and to comply with our state licensure boards). Simply put, this scope of practice is just good (sleep and dental sleep) medicine.

The AADSM seeks to increase awareness of Dental Sleep Medicine in dental (there are 173,000 practicing dentists nationwide), medical and other health-related professional organizations, and, most importantly, with our patients and the public. We are challenged to share responsibility in responding to the key, albeit alarming, data on the healthcare risks and economic impact of the largely undiagnosed and untreated sleep disorders in the general population cited in the Institute of Medicine’s 461-page report released in April 2006 entitled “Sleep Disorders and Sleep Deprivation: An Unmet Public Health Problem” (<http://nap.edu>).

OAT, which repositions the mandible and tongue base anteriorly to enlarge and stabilize the oropharyngeal airway, requires customized selection, fabrication, fitting, and adjustments of mouthguard-like devices worn only while asleep, as well as long term follow-up and management of potential complications (such as malocclusion and temporomandibular joint dysfunction). The recently updated Practice Parameters of the American Academy of Sleep Medicine for treatment of OSA with OAT¹ (followed by a comprehensive review article²) validate the important role of OAT in the treatment of SBD, particularly mild to moderate OSA.

MMA, which permanently advances the soft palate and tongue base (suspended from the maxilla and mandible) to enlarge and stabilize the entire velo-oro-hypopharyngeal airway, can be combined safely with adjunctive extrapharyngeal procedures in

a single-staged operation. This is the most therapeutic surgery (excluding tracheostomy) for moderate to severe OSA. There are minimal risks of airway embarrassment “due to edema in the immediate postoperative period” or recurrent OSA “due to cicatricial scarring and contracture”, because the tissue dissection and bony osteotomies are performed outside the pharyngeal airway lumen.³

Ultimately, every accredited sleep center should have at least one qualified dentist, preferably a Diplomate of the American Board of Dental Sleep Medicine (ABDSM), as part of the sleep team. This should include active participation, together with sleep physicians and technologists, in regular presentations and review of cases, as well as to provide OAT and oral surgery for selected SBD cases. Currently, there are not enough ABDSM Diplomates who serve in this capacity, and those who do often attempt to cover multiple sleep centers. (This manpower shortage can be quantified by identifying what dentist is interviewed for each sleep center during the accreditation process. Unfortunately, the same dentist is often listed for many sleep centers, even though that dentist’s role may be limited.)

The annual meetings of the AADSM and the Association of Professional Sleep Societies (APSS) need to overlap and interact more intimately. Beginning in 2007, the AADSM meeting will shift from a Thursday-Saturday schedule to a Friday-Sunday schedule. This will create more educational opportunities for both organizations, i.e., allow registrants to attend each others’ courses, as well as the Sunday evening ASMF fund-raising dinner. Dual registration and membership should be a goal of both organizations. Although SBD is only one component of sleep medicine, attendance by dentists and oral surgeons, as well as otolaryngologists and pulmonologists, would increase significantly at SLEEP 2007 and beyond if these courses were consolidated, e.g., in a dual track on Monday. (Speaking for the AADSM, few, if any, dentists will stay an entire week just to attend a Thursday course, for example.)

To help achieve these goals, the AADSM plans to submit 2 course proposals to the SLEEP 2007 program committee. The first, *Dental Sleep Medicine for the Sleep Physician*, designed to educate sleep physicians on the dentist’s role, will include lectures on OAT, oral surgery, the medical-dental team approach (i.e., scope of practice protocol), and a panel discussion. The second course, *Multidisciplinary Treatment of OSA*, will consist of lectures by: a sleep physician (on behavioral therapies and CPAP); an otolaryngologist (on intrapharyngeal surgery such as soft palatal procedures); an oral surgeon (on extrapharyngeal, i.e., skeletal advancement such as MMA, surgery), and a dentist (on

Disclosure Statement

Dr. Prinsell has indicated no financial conflict of interest.

Address correspondence to: Jeffrey R. Prinsell, D.M.D., M.D., 1950 Spectrum Circle, Suite B300, Marietta, GA 30067; Tel: (770) 956-9856; Fax: (770) 956-9879; E-mail: drprinsell@mindspring.com

OAT). Ideally, all the specialties involved in the management of SBD can meet as an integrated team.

REFERENCES

1. Kushida CA, Morgenthaler TI, Littner MR, et al. Practice parameters for the treatment of snoring and obstructive sleep apnea with oral appliances: an update for 2005. *Sleep* 2006;29:240-3.
2. Ferguson KA, Cartwright R, Rogers R, et al. Oral appliances for snoring and obstructive sleep apnea: a review. *Sleep* 2006;29:244-62.
3. Prinsell JR, Maxillomandibular advancement surgery in a site-specific treatment approach for obstructive sleep apnea in 50 consecutive patients. *Chest* 1999;116:1519-29.