

## AADSM News and Updates

Reported by Donald Farquhar, DDS; Stacey Kreutz, DDS; Rose Sheats, DMD, MPH; Leslie C. Dort, DDS, Dip ABDSM

### AADSM 23RD ANNUAL MEETING

Dr. Gail Demko, President of the AADSM, welcomed members and attendees to the 23rd Annual Meeting of the AADSM on Thursday, May 29, 2014. The meeting began with the presentation of the AADSM awards. Dr. Satoru Tsuiki, DDS, PhD received the Pierre Robin Academic Award, Dr. Nancy Addy, DDS, Dip, ABDSM received the Distinguished Service Award and Dr. Charles Czeisler, MD, PhD was given the Honorary Membership Award for 2014.

Dr. Greg Essick, Chair of the AADSM Research Committee presented the following abstract awards:

- Clinical Excellence – Marie-Francoise Vecchierini, MD
- Clinical Research – Ghizlane Aarab, DDS, PhD
- Clinical Research – Scott Craig
- Student Excellence Award – Kristin Dillow, RDH
- Graduate Student Research Award – Tatsuya Fukuda, DDS
- Graduate Student Research Award – Brittany Minichbauer, RDH, BS

### Selected Meeting Highlights

#### Pre-meeting Educational Courses

##### Mini Board Review Course

*Todd Morgan, DMD; Robert Rogers, DMD; David Scharz, DDS*  
Drs. Morgan, Rogers and Schwartz provided a brief review of the sleep literature with specific reference to oral appliance therapy. Through didactic presentation and a number mock board review questions participants got an idea of what may be expected on future Board certification exams. For those planning on taking the 2014 American Board of Dental Sleep Medicine exam the session provided an opportunity to consolidate their knowledge base.

##### Advanced Dental Sleep Medicine

*Rose Sheats, DMD; Reshma Amin, MD; Shalini Paruthi, MD; Benjamin Pliska, DDS, MS; Carol Rosen, MD*

The advanced course was focused on pediatric sleep medicine. The dentist as “first responder” in the identification of sleep disordered breathing was a theme that was introduced at this course and echoed by many speakers throughout the meeting. Dr. Paruthi began the session reviewing the risk factor for sleep disordered breathing in children: adenotonsillar hypertrophy, obesity, cranial facial disorders and neuromuscular disorders. She encouraged dentists and pediatricians who both see children regularly to ask parents about snoring. Dr. Carol Rosen addressed the complicated association between sleep disordered breathing and ADHD. Dentists were encouraged to: screen for snoring and SDB by asking questions, get to know the experts

in the community, refer for objective evaluations when ADHD or SDB are suspected, and provide treatment in selected cases. Dr. Amin reviewed the many treatment possibilities for SDB in children. Dr. Pliska presented the dental and orthodontic treatment option for children with OSA. He discussed the limited yet promising evidence for mandibular advancement therapy as an orthodontic option for OSA.

#### General Sessions

Dr. Bruce Templeton, Chair of the Annual Meeting committee introduced Charles Czeisler, MD, PhD who gave the keynote address.

#### Keynote Address – Prevalence of Sleep Disorders in American Workers: Public Policy Implications

*Charles Czeisler, MD, PhD*

Dr. Czeisler gave a compelling summary of the impact of poor sleep on society. He dramatically highlighted the positive impact on productivity to be gained from minor changes to shift scheduling. He noted that the shocking statistic showing 1.75 million people fall asleep at the wheel every week was a call for awareness. He challenged dentists to be the “first responder” in helping to identify those at risk of having obstructive sleep apnea.

#### Comparative effectiveness of CPAP and Oral Appliance Therapy in Obstructive Sleep Apnea

*Peter Cistulli, MBBS, PhD*

Dr. Cistulli presented a summary of the recent research comparing CPAP and OA effectiveness. CPAP is more effective in reducing AHI but OA's have an effect similar to CPAP when comparing improvement in blood pressure and subjective outcomes. Information on objective compliance is now available for OA use. OA adherence objectively is longer than for CPAP and OA users are more accurate than CPAP users when reporting use subjectively. These results were found to be consistent for those with mild, moderate, and severe OSA

#### Sleep Medicine Malpractice: “Highway to the Danger Zone”

*Ken Berley, DDS, JD*

An attorney as well as a dentist who has been practicing dental sleep medicine for over 5 years, Ken Berley sent shock waves through the audience as he warned attendees of the “unusual level of risk” they assume when they treat patients with sleep disordered breathing. After receiving a whirlwind primer on relevant legal issues, dentists left Dr. Berley's gripping presentation determined to review their Informed Consent forms to ensure that their forms specify “explicit consent” rather than “implied consent.” Furthermore, Dr. Berley exhorted practitioners to develop a detailed “Waiver and Indemnification Form” to limit their liability in the event of patient non-adherence

to treatment recommendations including follow-up with their referring physicians.

### **Role of Adenotonsillectomy in the Management of Pediatric OSAS: Findings from the CHAT Study That May Inform Your Dental Sleep Medicine Practice**

*Carol Rosen, MD*

Results from this landmark randomized controlled trial on the potential benefits of early adenotonsillectomy (AT) to manage pediatric obstructive sleep apnea syndrome were published in the *New England Journal of Medicine* in 2013 (Marcus CL et al. *N Engl J Med.* 2013;368(25):2366-2376). The multi-center trial enrolled 453 children aged 5-9 years old who were confirmed on PSG to have moderate OSAS ( $2 \leq \text{oAHI} \leq 30$  or  $1 \leq \text{oAI} \leq 20$ ). Children were randomized to either early AT or Watchful Waiting with Supportive Care (WWSC) for 7 months. Using validated instruments, the investigators demonstrated no difference between groups in attention/executive functions. However sleep parameters as well as neuropsychological and health outcomes significantly improved in the AT group. Overall, the AHI normalized in approximately 80% of the AT group, but it is worth noting that 46% of the WWSC group normalized in the 7 month period. Disease severity, race and obesity were significantly associated with poorer outcomes.

### **Insomnia Assessment and Management “In the Trenches”**

*Donald Townsend, PhD*

Dr. Townsend discussed several options for treating perpetuating factors that keep patients above the insomnia threshold, including medication, cognitive behavioral treatment (CBT) and non-traditional methods. He noted that CBT involves sleep restriction, stimulus control, relaxation therapy, sleepy hygiene education, and cognitive restructuring. He added that the CBT must be matched to the contributing factor.

### **Temporomandibular Disorders (TMD): Evidence for an Association with OSA**

*Gregory Essick, DDS*

Dr. Essick described evidence for five hypothetical causative mechanisms underlying the observed association between TMD and OSA. Hypothetical causal pathways based on the available literature include the possibilities of impaired baroreflex sensitivity (impaired pain processing), increased sympathetic nervous system activity, activation of systemic pro-inflammatory pathways, psychological distress, sleep bruxism, and awake bruxism. These hypotheses require further research and evaluation.

In discussing findings from the ongoing large-scale NIH-supported “Orofacial Pain: Prospective Evaluation and Risk Assessment” study, he explained that this multi-center study is including investigation of the association of sleep disordered breathing and TMD disease in the initiation of first onset TMD as well as the odds of being at high risk for OSA in chronic TMD cases.

### **The Correlation between OSA and Nasal Breathing**

*Neal Nay, RPSGT, RST; John Tucker, DMD*

Drs. Nay and Tuscker discussed how nasal airway obstruction caused by external or internal valve collapse, deviated septum or

inflammation can affect CPAP and OAT therapy. Treating nasal restriction increases airflow should be considered as an adjunctive therapy.

### **Hypoglossal Nerve Stimulation Therapy for OSA**

*Ryan Soose, MD*

Hypoglossal nerve stimulation is a new emerging treatment option for OSA. It involves implanting muscle stimulator subcutaneously on the patient’s right side that stimulates the hypoglossal nerve via a pulmonary feedback lead. The tongue is stimulated and is displaced anteriorly, opening the airway. This is a new treatment option that requires further testing.

Dr. Soose presented the early results of patients who had received a hypoglossal nerve stimulating implant. The multi-center trial has had considerable success in reducing OSA in patients who received the device without major side-effects. Future work will help identify the appropriate patients to receive the device and to develop smaller devices to minimize impact on the implant on daily living.

### **Selection of OSA Patients for CPAP or Oral Appliance Therapy: Can Studies Performed During Sleep Guide Management Decisions?**

*Olivier Vanderveken, MD, PhD*

Dr. Vanderveken addressed the need for evidence based prediction of OA outcomes. He reviewed the results of studies using techniques during sleep to predict OA outcome. There is evidence to support a significant association between protrusive position and outcome but not between chin lift and treatment outcome. Results from drug induced sleep endoscopy (DISE) and area of airway collapse highly predictive of OA outcome.

### **Physician/Dentist Relations**

*Kelly Carden, MD, MBA*

A common concern reported by dentists beginning the practice of dental sleep medicine is the difficulty in getting referrals from medical colleagues. Although well-educated in dental sleep medicine, many clinicians report difficulty in establishing referral networks that would give patients access to oral appliance treatment. Dr. Carden presented a process for establishing relationships with physicians. She gave many valuable suggestions for beginning and maintaining relationships with physicians to facilitate the multi-disciplinary treatment of OSA.

### **New Insights into the Pathogenesis of Obstructive and Central Sleep Apnea and Obesity Hypoventilation Syndrome**

*Richard Schwab, MD*

This fascinating presentation reviewed imaging modalities that may help clarify the role of anatomic features in the pathogenesis of obstructive sleep apnea. Included in his summary of obesity findings, Dr. Schwab presented new research about alterations in distribution of tongue fat in apneics.

### **AADSM Annual Membership Meeting**

On Friday, May 30, 2014 the new leadership of the AADSM was introduced at the Annual Membership Meeting of the AADSM. Dr. Gail Demko became immediate past-president and introduced the AADSM board for 2014-2015.

**The AADSM Board for 2014-2015**

**Officers:**

President: Kathleen Bennett, DDS, Dip ABDSM  
President Elect: Harold Smith, DDS, Dip ABDSM  
Past-President: Gail Demko, DMD, Dip ABDSM  
Secretary/Treasurer: Leslie Dort, DDS, Dip ABDSM

**Directors:**

Grant Hensley, DDS  
Kevin Postol, DDS, Dip ABDSM  
Steve Scherr, DDS, Dip ABDSM  
David Schwartz, DDS, Dip ABDSM  
Rose Sheats, DDS, MPH  
Thomas Schell, DMD, Dip ABDSM

Completing their terms were Todd Morgan, DMD, Dip ABDSM  
and Michael Simmons, DMD, Dip ABDSM.

**American Board of Dental Sleep Medicine (ABDSM)**

This year the largest number of candidates sat for the ABDSM diploma exam. On Sunday, June 1 2014 fifty-five individuals sat for the exam. All members are encouraged to begin the process of becoming a diplomate. Visit [ABDSM.org](http://ABDSM.org) for information.

**The ABDSM Board for 2014-2015**

**Officers:**

President: Nancy Addy, DDS, Dip ABDSM  
President Elect: Steve Scherr, DDS, Dip ABDSM  
Past President: Jonathan Parker, DDS, Dip ABDSM  
Secretary-Treasurer: Ron Prehn, DDS, Dip ABDSM

**Directors:**

Leila Chahine: DDS, Dip ABDSM  
Katherine Phillips: DDS, Dip ABDSM  
Flavia Sreshta: DDS, Dip ABDSM