A New Era of Dentistry?

As a pioneer in dental sleep medicine, Steven R. Olmos, DDS, sees a profession beyond traditional boundaries, with oral appliance/CPAP combination therapy as an increasingly viable option.

Steven R. Olmos, DDS, does not believe a weekend course is enough to prepare a dentist for a career treating sleep disorders. However, the 2008 recipient of the American Academy of Craniofacial Pain's (AACP) Haden-Stack Award for contributions to the field of TMD and craniofacial pain *does* believe it can be a great way to start.

For dentists who have the drive and curiosity to fully explore sleep disorders, Olmos contends that patient potential is enormous. As a career path, many go a step further and argue that the future of dentistry lies squarely in the realm beyond traditional restorative practices. "If dentists don't turn into dental physicians, they are going to be obsolete if all they can do is mill teeth," says Olmos, founder of TMJ & Sleep Therapy Centres in America and abroad. "My life's mission was to get these philosophies into a dental school, and that has already happened for the last 7 years."

In conjunction with his La Mesa, Calif-based *TMJ & Sleep Therapy Research Group*, Olmos now offers courses to prepare dentists for AASM-affiliated accreditations from the Academy of Dental Sleep Medicine (ADSM). These diplomate designations and board certifications are desired by many dentists, but precious little training is out there. "I produced what I call a mini residency in craniofacial pain and sleep," says Olmos. "The reason I did this a dozen years ago is that when I took all the proper examinations, I found there were no preparatory courses. I did not want others in the same boat."

The AACP has since developed its own mini residency for sleep in combination with Tufts University. "We are finally moving in the direction where there are places for dentists to go to get educated," enthuses Olmos. "It really should be in the dental schools, and students should be taught this at the undergraduate level, and not at the postgraduate level."

Olmos' mini residency starts with an introductory component in the classroom setting, with a total of three sessions in 2 days. From there, students are encouraged to take a hands-on course which is dubbed the advanced residency. This six-visit, 2-day course is a place to apply lessons on actual patients. "At the completion of that," says Olmos, "I have comfort that people really understand the didactic component and how to deliver appliances, how to make adjustments, and how to work with physicians for optimal care."

Courses at Tufts and the University of Tennessee (where Olmos serves as an adjunct professor) are in this vein, but they are few and far between around the rest of the country. Why the lack of programs? Ultimately, they are difficult to organize, and cultural change within medicine can be agonizingly slow.

Yet another boundary to widespread education is fear of violating the health care practitioners vow to *first do no harm*. "Often the biggest concern for dentists getting started in sleep medicine is causing jaw joint problems," says Olmos. "It's impossible to separate craniofacial pain from sleep disorders because of the high prevalence of overlap. Most people who have jaw joint problems—that were not hit by a baseball bat—usually have a breathing problem. Grinding teeth is usually about maintaining an airway and moving the jaw forward. Dentists are concerned because they know that if they put things in people's mouths they may make jaw problems worse."

Even the seemingly innocuous night guards are now, according to some studies, causing people with apnea to get 50% worse. "You can't separate people with jaw problems from people with breathing problems," says Olmos. "They are the same people."

Acceptance High, Awareness Still Low

Among health care practitioners in general, awareness of sleep disorders is relatively low, primarily because they have not been trained. Olmos estimates that most physicians are still treating comorbidities, such as hypertension and cardiovascular disease, as a separate problem.

Even if these physicians got a report about apnea, they would likely refer out to a DME provider, automatically placing CPAP as the only solution, or perhaps CPAP in combination with surgery. The last thought, if ever, is an oral appliance.

Literature increasingly shows that people prefer oral appliances, and Olmos sees a world in the not too distant future where it is not an either/or proposition. "Oral appliances may not be as efficacious as CPAP, but in my opinion it is never all or none," he explains. "I have CPAP patients with horrible jaw problems who need an appliance *and* CPAP. It's about finding the optimal treatment for each patient. Combining treatments *can* be optimal. Physicians are more open to that.

"There are people who simply can't tolerate CPAP, and there must be alternatives for them," Olmos continues. "Combinations of therapies certainly are indicated, and that should be the prime thought process. What is best for the patient given the circumstances?"

In a world in which 90% of people with sleep disorders have not been diagnosed, more options may not only be desirable, but ultimately essential. "We may all be overwhelmed someday," muses Olmos. "Modified CPAP therapy, in conjunction with oral appliances, may become essential to the equation."

Education, not vilification, will ultimately resonate with health care providers. "Sometimes wedges are put in by dentists who encourage hate toward CPAP, which angers physicians and polarizes," laments Olmos. "We should be working together for the best result. There is enough for everyone. We are in our relevant infancy at 50 years. Sleep disorders will end up being one of the biggest parts of medicine, because breathing is the highest priority. You can survive almost a month without eating, but how long without breathing?"

A Plan to Get There

In conjunction with his La Mesa, Calif-based *TMJ & Sleep Therapy Research Group (www.tmjtherapycentre.com)*, Olmos offers courses and TMNDX software to foster a systematic data intake for all new patients. Developed from a need to educate, the software and courses are based on the premise that the role of sleep in above-the-shoulder pain must always be thoughtfully considered.

A complete understanding of jaw joint problems must ultimately view the jaw joint as more than a mechanical problem of displacement. "At first, we said the jaw just needed to be relocated and maintained, but the driving mechanism is what happens when you are asleep," says Olmos. "Macro trauma is easily explained, and can be treated surgically. It is all the other cases of jaw joint pain, which are the majority of cases. Most times it is because of micro trauma caused by the repetitiveness of low threshold energy to the system."

The intake information looks at different physiological structures and walks dentists through the formulations and thought processes of how to identify, and then make, a diagnosis. "The problem in dentistry is that we are so quick to do a treatment, we never make a diagnosis," explains Olmos. "We try an appliance or treatment, but we don't know what we are treating, and that is the problem. The software helps develop a diagnosis, and then it asks you after you have a diagnosis, 'What kind of a plan do you have? What are your goals?' You have to have goals before you have a plan."

Different plans for different problems guide the thinking behind the software, which is also useful for orthodontics. "This is truly an interdisciplinary approach," adds Olmos. "As part of the software, we make it clear that other health care professionals will need to be brought into the system to make a person better. No dentist, or any one person in any type of profession can help people in chronic pain—because if you have had chronic pain in one area then you're going to have pains in other areas. These other areas may be out of the specialty of whatever provider is taking care of you."

Olmos' comprehensive system of triage could someday be the standard of care that all dentists use. "It is certainly what I am teaching at the University of Tennessee where I am an adjunct professor," says Olmos. "I am working with the American Academy of Craniofacial Pain and the University of Tennessee to produce a craniofacial pain and sleep clinic at the University, and it would be using these techniques from the software, and make that the standard of care for all the patients that are going through that program."

Clinicians interested in the software can download it at www.tmndx.com. In the works for the last 6 years and introduced 3 years ago, the system bills medical insurance, gathers input into a letter writing program, and generates communication letters to other practitioners and insurance companies. "We use it at our centers and have about a hundred who are using it now," says Olmos. "It's a great tool, but right now only specialists know about it. I'd like to see more dentists doing this kind of basic triage."

Steven Olmos DDS has been in private practice for over 27 years with the last 18 years devoted to the treatment of TMD, Orofacial Pain and Sleep Disordered Breathing. He is the founder of TMJ & Sleep Therapy Centre International, with licensed Centres located in the U.S., Canada and New Zealand (http://tmjtherapycentre.com/)