

# The Future of Dentistry

## PART 1 OF A SERIES

---

Steven R. Olmos, DDS

Technology is the “buzz word”. It is what we get excited about. It allows us to be more accurate in our therapies. The construction of appliances whether fixed or removable are improved with these advances. Computers assist us in the production of prosthesis that we insert into teeth to restore their proper dimensions. One wonders how long it will be when the computer scans the patient’s teeth, removes demineralized/decayed structure produces the prosthesis and inserts. A certified dental technician would likely direct this process.

Imaging technology has evolved to provide us with amazing 3D views of structures both hard and soft (Computed tomography and Magnetic Imaging Resonance). This gives the clinician the ability to evaluate pathology in greater detail. It also brings up questions as to what produced that pathology.

Craniofacial pain (headache and facial pain/TMD) and sleep disordered breathing are intimately related. A recent study produced at Johns Hopkins University and published in *SLEEP*, vol. 32, No. 6, 2009, demonstrated an 88% percent overlap of symptoms in a study using young women (avg. 29.6 years old) of average weight (BMI, Body mass index of 25). The thought that not breathing is only for older obese men is outdated.

Medicine has asked dentistry to assist in the treatment of migraine and obstructive sleep apnea. There is copious literature to link the most difficult primary headaches (migraine, cluster, chronic paroxymal hemiplegia, hypnic) with breathing disorders.

Dentistry can and should play a significant role in helping treat patients suffering from chronic pain. One in three Canadians suffer from moderate to severe chronic pain (Canadian Pain Society 2007 Pain Awareness Survey, [www.painexplained.ca](http://www.painexplained.ca)).

The future is bright for dentistry. The need for dental physicians who incorporate and evaluate neurology, functional breathing and the orthopedics of the temporomandibular joint is increasing. It is what the ADA has directed us in the practice parameters of 1997; “The dentist should consider a differential disease classification that may include neuromuscular pain, myofascial pain, neurogenic pain, neurovascular pain, sympathetic and/or referred pain involving the *trigeminal* and/or *oropharyngeal systems*, or other medical conditions, which may contribute to or mimic TM disorders.”

This is what every general and specialty dentist is recommended to perform. The problem is that we were not given this information in dental school. A

survey of all dental schools in North America published in the ADA journal February 2007 gave this recommendation; “Owing to the lack of standardized predoctoral teaching of TMD, US and Canadian patients with TMD or facial pain are at risk when seeking appropriate primary care for their problems.”

The concepts of integrating the evaluation of these disorders needs to be taught at the undergraduate and graduate levels in dental schools. The good news is that it is happening at the University of Tennessee (UT) now. A system of triage for chronic pain, airway disorders and TM dysfunction has been adopted by the school. In collaboration with the American Academy of Craniofacial Pain (AACFP) the University of Tennessee College of Dentistry will open a Craniofacial Pain and Sleep Clinic. As committee chair of the AACFP for this effort and adjunct professor at UT I am excited about the ramifications. Improving the level of care is something we all aspire to. **OH**

---

*Steven R. Olmos, DDS, DABCP, DAAPM, DABDSM, DACSDD, FAAOP, FAACP, FICCMO, FADI, FIAO, Adjunct Professor, University of Tennessee, Memphis College of Dentistry.*

*Oral Health welcomes this original article.*