Are you a ‘cutting edge dentist’?

By Robin Goodman
Group Editor

Dr. Martha Cortes, current president of the American Academy of Cosmetic Dentistry New York Chapter and former co-chair of dentistry with the American Society for Laser Medicine and Surgery, took some time to talk about lasers with Dental Tribune.

What is the state of lasers in dentistry today?

Dental lasers are state-of-the-art technologies. Every dentist should own one and use it as an integral part of his or her practice, especially as they are much more affordable than they were 15 years ago when I got my first laser; I had the the Duopulse by Excel Quantoxon, which has two separate lasers in one unit: a holmium and neodymium laser. I still have this unit in my office and use it as a backup laser to my newer ones. Lasers can be used by themselves or as an adjunct tool as they are versatile and precise. A simple diode laser can be used to disinfect tooth structure, in crown lengthening, frenectomy, biopsy, periodontal disease and gingival sculpting, etc.

There are lasers like the Perilase MVP-7, which are specifically built around a patented soft-tissue technique for periodontalitis — laser assisted new attachment procedure [LANAP]. There are hard-tissue (modifies lasers) as well as soft-tissue (modifies lasers) and there are lasers available today that combine both a soft and hard tissue laser in one unit. It all depends on the practice one has, or the one that you want to develop. Bottom line is that you cannot consider yourself a dentist on the cutting edge if you do not have and use a laser as part of your daily regimen regardless of what type of dentistry you practice.

How about lasers and soft tissue such as gum and pulp?

I have developed a direct pulp capping technique involving a laser and the immediate placement of a porcelain restoration [CEREC], which has a great success rate as the laser can reach places that antiseptics and antimicrobials cannot reach because of their shallow penetration into bacterial colonies [biofilms]. Lasers can be used on the delicate tissue of the pulp without causing necrosis by using the correct settings and the right lasers.

Nd:YAG’s and diodes are great for sculpting the gingival tissue in crown lengthening, smile makeovers and gingivectomy. Both can be used in treating gum disease, although the diode is not as ideal as the NeYAG laser, as it is hotter, can cut deeper.

In endo, implants, cosmetic dentistry you’ve thought about getting started in one? If you are, you won’t want to miss our “Getting started …” Symposia, October 20–26, 2008, New York Dental Meeting.

Hygiene Tribune: gingival health

As dentists, we can directly affect the esthetics of the teeth and gingiva. However, we can also indirectly affect the lips and face by how we care: where dentistry and orofacial esthetics of the teeth and gingiva.

As dentists, we can directly affect the esthetics of the teeth and gingiva. However, we can also indirectly affect the lips and face by how we care: where dentistry and orofacial esthetics of the teeth and gingiva.

Cosmetic Tribune: gingival health

About 30 percent of patients in any given practice are current smokers. Although 70 percent of smokers say they are “interested” in quitting, only 10 percent to 20 percent plan to quit in the next month.

The critical missing element to complete care: where dentistry and orofacial myofunctional therapy meet (Part 1 of 2)

By Joy L. Moeller, RDH, BS, COM

1. Problems that can be addressed

Does your patient exhibit an open bite?

Does your patient exhibit chronic headaches?

Does your patient have an open-mouth rest posture?

Have your patient’s teeth moved after orthodontic treatment?

Does your patient exhibit an open bite?

Does your patient complain of temporomandibular joint dysfunction (TMD) or neck pain?

Is the patient’s tongue always “in the way” when you are drilling, scaling or examining the teeth?

Does your patient exhibit a scalloped tongue from pressing against the teeth?

Do you see the tongue come forward against the teeth when swallowing?

Is your patient a mouth breather contributing to anterior gingival or open-mouth rest posture?

Does your patient grind or clench his/her teeth?

Does your patient have chronic mouth rest posture?

Have your patient’s teeth moved after orthodontic treatment?

Does your patient exhibit an open bite?

Does your patient complain of temporomandibular joint dysfunction (TMD) or neck pain?

Is the patient’s tongue always “in the way” when you are drilling, scaling or examining the teeth?

Does your patient exhibit a scalloped tongue from pressing against the teeth?

Have you noticed oral habits such as thumb or finger sucking, nail biting, lip licking or hair twirling or chewing?

Does your patient exhibit chronic mouth rest posture?

Have your patient’s teeth moved after orthodontic treatment?

Does your patient exhibit an open bite?

Does your patient complain of temporomandibular joint dysfunction (TMD) or neck pain?

Is the patient’s tongue always “in the way” when you are drilling, scaling or examining the teeth?

Does your patient exhibit a scalloped tongue from pressing against the teeth?

Have you noticed oral habits such as thumb or finger sucking, nail biting, lip licking or hair twirling or chewing?
Are you From Page 1

and has a potential greater zone of thermal damage in the wrong hands; it should not be used on pockets deeper than 4 mm. The Nd:YAG can be used to pocket depths above 12 mm. Those interested in the Nd:YAG for gum disease should really look at the Periolase MVP-7 by Millennium Dental Technologies as the laser is sold with instruction/ training in the laser and LANAP technique.

And for lasers and hard tissue such as teeth and bone?

Erbiurn lasers are great for dis- infection of teeth and for osseous surgery as they are specifically made for disinfecting and cutting hard tissue. They are also ideal for preparing class I and class V restorations as these materials; however, they cannot be used on metal or porcelains, as these cannot be cut by a laser.

Metals and porcelains must first be removed using the drill; however, once they are removed the laser can be used directly to remove any remaining metal or porcelain.

What are your thoughts on a connection between heart disease and periodontal disease?

I love it when patients tell me that they are fit and in good shape except for, of course, the severe gum disease they have. Unfortunately, we have grown up with faulty medical/dental health models that describe the body as distinct and disconnected units, and this shows up in how we view disease and the body. Severe infection in the body is dangerous as it can spread, especially to vulnerable organs.

Periodontitis is a bi-directional manifestation of disease. It can be seen as a manifestation of systemic disease such as diabetes, cutaneous disease, joint disease and osteopo-rosis. It can also be seen separately from systemic ones as its own complete disease with the great potential of releasing bacterial emboli into the blood system that can travel to the heart, lungs and other major organs. It has been linked to cardiovascular disease since the late nineties and rightly so, as oral bacteria are not contained but spread and are particularly dangerous for heart patients who are vulnerable to endo- carditis, especially before open-heart surgery.

An Nd:YAG laser can reduce microbial colonies that inhabit peri- odontal pockets by 97 to 100 percent, as the laser is precise, site specific and does not rely on secondary or tertiary effects to kill microbes. It destroys microbes and their colonies on contact without any side effects.

Editor’s Note: Please see Cosmetic Tribune in this edition for a clinical article by Dr. Cortes and her contact information.

Full complete care From Page 1

stomachaches, burping, drood- ing, hiccups or acid reflux?

Does your patient have a forward head posture?

Does your patient have a short frenum or a tight labial frenum?

When you check for oral cancer on the sides of the tongue, have you found lesions from tongue thrusting causing chronic irrita- tion?

These are all signs and symptoms of an orofacial muscle asymmetry that can be addressed by an orofacial myofunctional therapist.
Barrett, William Zirckefoose, and Galen Peachey founded the International Association of Orofacial Myology (IAOM). Currently the IAOM is the main professional organization in the world promoting and developing orofacial myofunctional therapy.

The team approach

Today the field is expanding to include many professions. Through a team approach, the patient can experience the best of all worlds and achieve remarkable results. The interdisciplinary approach to patient wellness includes but is not limited to:

- orthodontics
- general dentistry
- speech-language pathology
- dental hygiene
- periodontics
- oral surgery
- ear, nose and throat specialty
- cranial osteopathy
- allergology
- pediatric dentistry
- pediatrics
- physical therapy
- chiropractics
- gastroenterology
- plastic surgery

Failure to help many patients

Through 50 years of practicing orofacial myofunctional therapy, some questions patients or their parents asked me include:

- Why didn’t someone tell me about this earlier?
- I knew I had a tongue thrust, I didn’t know there was a special person to help me.
- Why didn’t someone tell me my habit-related issue, orofacial muscle dysfunction related. Why didn’t someone recognize my facial muscle dysfunction because they told me it was stress related.

- Why didn’t someone tell me I had a tongue thrust, I didn’t know there was a special person to help me.
- Why didn’t someone tell me I had a tongue thrust, I didn’t know there was a special person to help me.
- Why wasn’t I referred to an orofacial myofunctional therapist.
- My child wore a palatal expander to help me.

- My child was traumatized by sucking or nail biting could be easily eliminated in therapy?
- I have tried multiple splints, functional appliances, medications and occlusal adjustments for my TMD problem. I was even referred to a psychologist for counseling because they told me it was stress related. Why didn’t someone recognize my facial muscle dysfunction and refer me for orofacial muscle therapy sooner?

- This is the third time my orthognathic surgical result has relapsed. Why hasn’t anyone referred me to an orthodontist who specialized in treating this disorder post orthognathic surgery.

- My child was traumatized by sucking or nail biting could be easily eliminated in therapy?
- I have tried multiple splints, functional appliances, medications and occlusal adjustments for my TMD problem. I was even referred to a psychologist for counseling because they told me it was stress related. Why didn’t someone recognize my facial muscle dysfunction and refer me for orofacial muscle therapy sooner?

- My child was traumatized by sucking or nail biting could be easily eliminated in therapy?
- I have tried multiple splints, functional appliances, medications and occlusal adjustments for my TMD problem. I was even referred to a psychologist for counseling because they told me it was stress related. Why didn’t someone recognize my facial muscle dysfunction and refer me for orofacial muscle therapy sooner?

- My child was traumatized by sucking or nail biting could be easily eliminated in therapy?
- I have tried multiple splints, functional appliances, medications and occlusal adjustments for my TMD problem. I was even referred to a psychologist for counseling because they told me it was stress related. Why didn’t someone recognize my facial muscle dysfunction and refer me for orofacial muscle therapy sooner?

- My child was traumatized by sucking or nail biting could be easily eliminated in therapy?
- I have tried multiple splints, functional appliances, medications and occlusal adjustments for my TMD problem. I was even referred to a psychologist for counseling because they told me it was stress related. Why didn’t someone recognize my facial muscle dysfunction and refer me for orofacial muscle therapy sooner?

- My child was traumatized by sucking or nail biting could be easily eliminated in therapy?
- I have tried multiple splints, functional appliances, medications and occlusal adjustments for my TMD problem. I was even referred to a psychologist for counseling because they told me it was stress related. Why didn’t someone recognize my facial muscle dysfunction and refer me for orofacial muscle therapy sooner?

- My child was traumatized by sucking or nail biting could be easily eliminated in therapy?
- I have tried multiple splints, functional appliances, medications and occlusal adjustments for my TMD problem. I was even referred to a psychologist for counseling because they told me it was stress related. Why didn’t someone recognize my facial muscle dysfunction and refer me for orofacial muscle therapy sooner?
How can orofacial myofunctional therapy help the general dentist?

Orofacial myologists can assist the dentist in many aspects of his or her practice:

- Re-educate muscle patterns that promote a stable orthodontic result.
- Reduce the time spent in fixed appliances.
- Normalize the inter-dental arch vertical rest posture dimension, the freeway space, also called the oral volume.
- Identify and eliminate orofacial noxious habits that interfere with stable occlusal results.
- Teach nasal breathing and remodel the airway through nasal cleansing and behavior modification.
- Reinforce compliance with wearing rubber bands, functional appliances and retainers.
- Develop a healthy muscle matrix and eliminate habits that contribute to TMD.
- Correct head and neck posture problems.
- Stabilize the periodontal condition by reducing tongue thrusting pressures and mouth breathing habits.

Because most of our patients are in need of orthodontic treatment or treatment by a functional dentist, if the patient was referred by a source outside of dentistry, we are certainly a great potential referral source for dentists.

The best time for the dentist to refer the patient to an orofacial myofunctional therapist is before intervention by appliance therapy. It is always best to do the least invasive treatment first and eliminate habits that are interfering with treatment. This will ensure that the muscles are working with the forces of the appliances. Also, another good time to refer would be before the braces come off, depending on the patient’s facial structure and motivation. We can work together to help the motivated patient achieve amazing results.

To elaborate on the importance of the working relationship between OMTs and the dental community, I have reached out to some of my esteemed colleagues for commentary.

According to Dr. John Kishibay, an orthodontist from Santa Monica, Calif., who is a professor at USC School of Dentistry: “Orofacial myofunctional therapy must be part of the treatment plan from the beginning. This way the patient understands from day one that the muscle adaptation is important for long-term stability. Especially important would be the orthognathic patient. The patient must learn to use the new space in an ergonomic manner, in both a functional patterning and habit elimination awareness.”

Dr. William Hang, an orthodontist practicing in Westlake Village, Calif., believes that OMT problems are one cause of poor facial development. He says: “Stability will continue to be an elusive, unachievable goal with poor facial balance frequently being the norm of the post orthodontic result. Myofunctional therapy must become the first line of defense in the quest for proper facial development rather than the rescue squad when the orthodontic result is going up in flames. When orthodontists embrace myofunctional therapy, they stop treating symptoms and begin to focus on treating the cause of poor facial development [altered oral rest posture].”

Dr. Jerry Zimrining, a practicing orthodontist for 44 years in Los Angeles, believes that attaining proper occlusion is a state of balance between the teeth, the muscles and the bones. He states, “Both my daughter and my grandson were treated with myofunctional therapy with excellent results that would not have been possible without this valuable treatment. I feel strongly that myofunctional therapy should be part of every orthodontic practice.”

Dr. Richard L. Jacobson, a Diplomate of the American Board of Orthodontics who has been in the exclusive practice of orthodontics in Pacific Palisades, Calif., for the past 28 years, stated: “We know that form follows function and function can follow form. Therefore, it is vital to identify those patients that need myofunctional therapy. In these patients myofunctional therapy by a specialist is essential. Treatment is effective and orthodontic stability is enhanced.”

The author would like to thank Karen Macedonio, a Certified Life Coach (and patient), Barbara J. Greene, COM, and Licia Coceani-Paskay, MS, CCC-SLP, COM for their assistance with writing this article. A complete list of references is available from the publisher.

To find a therapist near you, go to www.iom.com and look at the directory.