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 Duoquartz by Excel Photronics, 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 Periosafe MVP-7, which are specifically built around a patented soft-tissue technique for periodontitis — 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

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

At New York Dental Meeting?

If you are, you won’t want to miss our “Getting started...” Symposia, which are free for all attendees. If you’ve thought about getting started in endo, implants, cosmetic dentistry or digital dentistry then please join us!

Cosmetic 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 are creative in research.

Hygiene Tribune: smoking cessation, part 2

About 50 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.

By Joy L. Moeller, RDH, BS, COM

L. Problems that can be addressed

◗ Does your patient complain about 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 temporal mandibular 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 lisp when saying the “s” sounds?
◗ Do you see the tongue come forward against the teeth when swallowing?
◗ Is your patient a mouth breather contributing to anterior gingivitis or open-mouth rest posture?
◗ Does your patient grind or clench his/her teeth?
◗ Does your patient have chronic...
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 Periolas M.V.P. 7 by Millennium Dental Technologies as the laser is sold with instruction/ training in the laser and LANAP technique.

For lasers and hard tissue such as tooth and bone?

Erbium lasers are great for disinfection of teeth and for osseous surgery as they are specifically made to be removed using the drill; however, once they are removed the laser cannot be removed 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 underlying caries. If the caries is very deep, the erbium laser can be used in a direct/indirect pulp-capping technique with the immediate placement of a CE/R/E 3-D porcelain restoration. An erbium laser like the Waterlase MD by Biolase can also be used in the direct treatment of root canals as it has laser endodontic tips that are used post instrumentation for cleaning and disinfecting the canal.

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, of course, for 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 osteoporosis. 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 endocarditis, especially before open-heart surgery.

An Nd:YAG laser can reduce microbial colonies that inhabit periodontal 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.
Barrett, William Zickefoose, 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
- allergy
- 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 of tongue thrusting, thumb 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 oral muscle dysfunction and refer me for orofacial muscle therapy sooner?
- This is the third time my orthodontic surgical result has relapsed. Why hasn’t anyone referred me to an orofacial myofunctional therapist?
- My child was traumatized by wearing a “rake” in his mouth to stop his tongue thrust. His speech has gotten worse and he has withdrawn. After the rake was removed, the tongue thrust returned. Why wasn’t I given the option of seeing a therapist who specialized in treating this disorder with exercises?
- My child wore a palatal expander for a high narrow palate. After the expander was removed, the palate collapsed because the tongue was resting down. Why wasn’t I referred to an orofacial myofunctional therapist immediately following the expander being removed?
- I was told I was tongue-tied and needed a lingual frenectomy. After surgery, my tongue reattached and scar tissue formed and was worse than before we started! Why wasn’t I told to see a therapist immediately following surgery to prevent re-attachment?

Patients can learn to develop healthy muscle patterns. Healthy muscle patterns, when permanently habituated, can be proactive in preventing or treating:

- orthodontic relapses,
- articulation disorders,
- breathing disorders due to allergies or mouth breathing habits,
- TMD when it is a muscle or habit-related issue,
- digestive disorders from not chewing properly or swallowing air,
- postural problems,
- faster normalization of the facial muscles and neuro-muscular facilitation post orthognathic surgery.

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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 in need of orthodontic treatment or the patient was referred by a source in need of orthodontic treatment or 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 Zimring, 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.”

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