

Myofunctional Therapy: Enhancing Your Dental Hygiene Career

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Dental hygiene is a lifelong career that stimulates your mind and skills. Dental hygienists have established inroads in corporate and public health care settings and opened other doors that use their skills as well. Myofunctional therapy (also known as orofacial myology) is one exciting avenue of career expansion. Approximately 650 hygienists are listed as practicing myofunctional therapy on various websites, Facebook interest groups and through educational programs across the United States.¹⁻⁴ Many more are training and using their knowledge as part of patient assessment in the clinical setting to recognize orofacial dysfunction.¹⁻⁵

OROFACIAL MYOLOGY PRACTITIONERS

While the practice of orofacial myology is compatible with dental hygiene practice, it has not been within its traditional scope. The Nebraska (2012) and Iowa (2018) state dental boards have declared that myofunctional therapy is part of the practice of dental hygiene.^{6,7} There are no state licensures in orofacial myology for any profession. The International Association of Orofacial Myology (IAOM) awards the COMTM credential to those who have successfully completed certification encompassing written and clinical examination, continuing education and demonstrated proficiency in the specialty. You must hold a dental, dental hygiene or medical license to be eligible to take classes.¹⁻⁴ Dental hygienists, trained in orofacial myofunctional therapy, work in an interdisciplinary manner with other professionals that include medical and dental practitioners in general and specialty practices.^{2,5,8-10}

An online poll of the Facebook group OMT for the RDH on February 9, 2020 found that most responding dental hygienists who practice myofunctional therapy do so either as independent orofacial myofunctional therapists in the office setting, or at their own practices under these guidelines. Of the 85 individuals who saw the poll, 33 people clicked on an answer or commented. Of these, 24 practice independently, eight work for a dentist and one for a speech-language pathologist.

The poll elicited written comments showing that most independent practitioners love being their own boss; however, the stress of owning and setting up their own business, doing their own appointment scheduling, billing, insurance submission, report writing and also seeing a patient load that supports their basic living needs entails a lot of work outside of patient care hours. The independent practitioners still feel that it was the best choice for them because they can structure their own hours, realize a greater salary once they are established and mold the practice to their standards.

Additionally, the poll showed that most of the dental hygienists who provide myofunctional care in an office setting are paid an hourly salary, and that support staff does some of the scheduling and all of the billing and insurance work. The office shares in paying for instruments and therapy tools. Some dental hygienists see myofunctional patients after hours. While their stress levels are lower because they can integrate myofunctional therapy with hygiene patients in the daily schedule without overhead costs, they have less autonomy and negligible outside referrals. Only the male RDH respondent felt he had the autonomy he needed.

CAUSES OF OMDS

Orofacial myofunctional therapy's primary goal is establishing normal breathing patterns and oral rest posture of the tongue and lips. While the theoretical tenets of orofacial myofunctional disorders (OMDs) are derived from dental science, their treatment is neither dental nor speech therapy. Orofacial myology corrects muscle dysfunction problems, which influence dental occlusion; facial shape; chewing; swallowing; and tongue, lip and jaw resting postures.^{1-5,8-19}

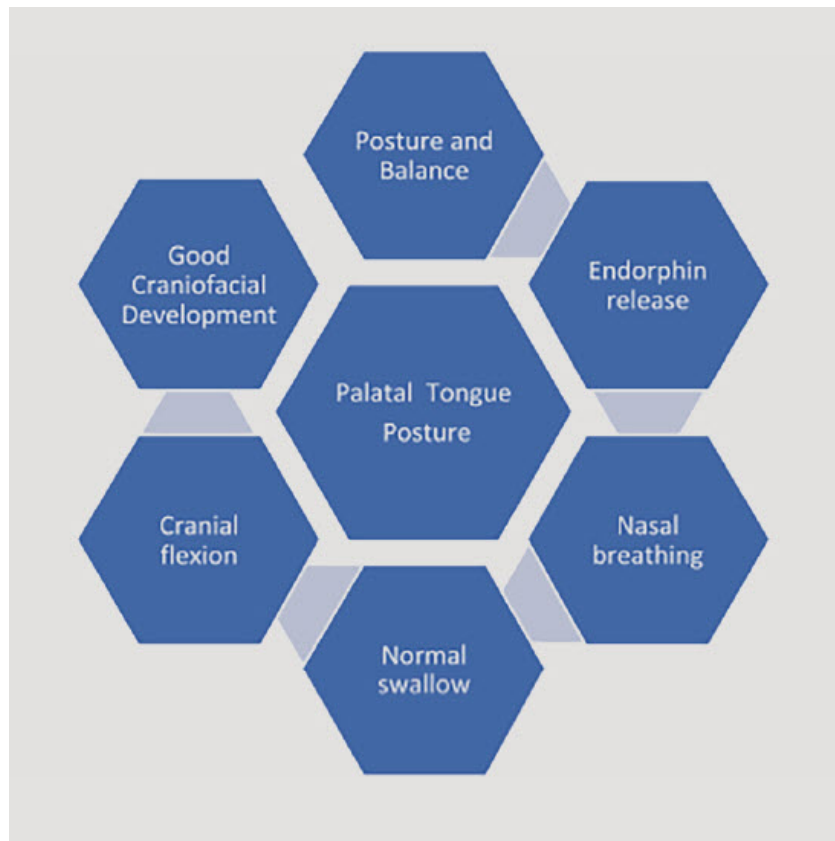
Many peer-reviewed articles published in well-known medical journals recognize the place and function of orofacial myofunctional therapy in the dental setting to treat noxious parafunctional oral behaviors such as bruxism, clenching and muscle bracing, as well as efforts to create a sufficient oral-dental freeway space.^{2,10,20} Therapy can be used in conjunction with orthodontia to improve relapse rates of malocclusions and open bites, as well as dental alveolar protrusions.^{15,20,21}

OMDs negatively influence orofacial growth and development.^{1,2,5,11-14,22} When there is a dysfunction of the muscle patterns of the orofacial complex, OMDs result. The dysfunctional muscle patterns may contribute to dental malocclusion, orthodontic relapse, periodontal disorders, TMJ dysfunction, distortion of speech, and eating and swallowing dysfunction. ^{2,8,11,16,21,23}

OMDs may be caused by one or more of the following factors:²⁴

- Restricted nasal airway due to enlarged tonsils and/or adenoids, deviated septum, and/or allergies
- Improper oral habits such as thumb or finger sucking, cheek/ nail/cuticle biting, teeth clenching/ grinding, and tongue, lip or cheek sucking
- Extended use of a pacifier or long-term use of sippy cups
- Structural or physiological abnormalities which may include a short lingual frenum
- Neurological deficits and developmental delays

- Hereditary predisposition



All of these causes lead to a low resting tongue posture, which is an inability to keep the tongue off of the floor of the mouth, either through habit or development. This leads to a cascade of events that affect homeostasis. The tongue resting on the palate is essential for normal growth and development.^{16,21,25,26}

WHY IS RESTING POSTURE SO IMPORTANT?

Resting the tongue on the palate aids balance and posture. Placing your tongue on your palate activates the infrahyoid and suprahyoid muscles, which helps you hold your head up and reduces forward head posture and cervical extension. A forward head posture causes mouth breathing and increases the chances of developing a Class 2 malocclusion.^{10,26-28}

Endorphins are also released at the palate. Tongue pressure releases serotonin and dopamine, which helps put the body into the parasympathetic state of rest and digest. This is why giving up digit or pacifier sucking is so difficult. The palatal pressure is missing from the tongue because of a low tongue posture. Sucking a finger or an object is the body's way of relaxing by creating palatal pressure.^{5,29}

When the tongue is up, the lips are closed and nasal breathing occurs. Nasal breathing imparts 18% more oxygen to the brain. This stimulates brain cells, encourages positive body and facial growth and development and aids in diaphragmatic breathing.^{5,30}

A normal swallow starts on the palate with the tongue tip at the incisive papilla. The pressure of the oral phase swallow travels down the median palatine suture line. This develops into a peristaltic wave to complete the swallow. A normal swallow does not include gulps or noise because the soft palate is sealed and negative pressure is used to move the bolus into the pharynx. A normal swallow does not put pressure on the temporomandibular joints or move the mandible in anterior-posterior patterning that can pinch the articulating discs.³¹

Cranial flexion and extension also happen with that swallow, occurring around 1,000 times per day. This slight movement of the suture lines is what pumps the cerebral spinal fluid aided by respiration. The proximity of the temporal, sphenoid and occipital bones also aids in the flexion and extension of the cranial sutures and in good oral development.^{5,32-34}

Craniofacial development occurs as part of the process of the good resting and working posture of the tongue. This includes a maxilla that grows laterally because the tongue is on the palate opposing the forces of the cheek muscles, which will create a crossbite. The maxilla will also grow forward, increasing the airway and decreasing the chance of a long soft palate with gagging or oral sensitivity. Long soft palates are associated with tongue ties, low tongue posture and Class two malocclusion because of incorrect tongue and lip postures.^{35,36}

OROFACIAL MYOLOGY AND ACCESS TO PRIMARY CARE

The American Dental Hygienists' Association's (ADHA) 1992 policy on the practice of myofunctional therapy "acknowledges that the scope of dental hygiene practice [already] includes the assessment and evaluation of orofacial myofunctional dysfunction; and further advocates that dental hygienists complete advanced clinical and didactic continuing education prior to providing treatment."³⁷ ADHA has policies relating to the integral part the dental hygiene practice plays in the health care delivery system, in cooperation with other health care professionals, to serve the overall health needs of the patient.³⁷ These policies define the primary dental hygiene care provider as a person "who administers a range of services which are defined by the scope, characteristics, and integration of care."³⁷

PRACTICE OF OROFACIAL MYOLOGY

Orofacial myology involves the assessment and therapeutic resolution of respiration, tethered oral tissue, swallow and rest posture as they relate to occlusion in integrative care with the referral source. Swallowing has four phases: preparatory, oral, pharyngeal and esophageal.^{31,38} Dental hygienists may screen and provide instruction on phases one and two, which involve the process of chewing, gathering food, sealing the tongue across the palate and lifting the tongue and soft palate.^{31,38} Because of this, orofacial myology, as it pertains to swallowing and tongue coordination, is within the limits of the license and training of a registered dental hygienist. ^{16,38-40}

Other health professionals work with the phases of swallowing:

- Occupational and physical therapists, and lactation consultants: Phases 1-238
- Speech-language pathologists (SLPs): Phases 1-322,³⁸
- Medical doctor: Phases 1-438,⁴¹

A SLP may not practice orofacial myology as it relates to temporomandibular joint disorders and myofascial pain unless they have a certificate in an appropriate medical or dental specialty. Similarly, a dental hygienist may not practice orofacial myology as it relates to abnormal speech patterns without additional graduate education and certification to become a speech therapist or SLP.

CONCLUSION

The 2000 Surgeon General's report on oral health called for all health care professions to collaborate to provide total health care for all patients. Dental hygienists are first responders who see patients throughout the lifespan starting at 12 months old or younger and are qualified to assess and evaluate oral issues that affect the growth and development of young children.

A dental hygienist who has completed the initial 28 hours of orofacial myology course requirements is qualified to become a certified orofacial myologist through independent testing. These dental hygienists provide therapeutic treatment that promotes healthy growth and development of children and offers restorative interventions for patients of all ages. They create a positive impact that will last for the rest of their patients' lives.

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