

Orofacial Motricity

Orofacial motricity is one of the areas of Speech Therapy that focuses on the study, prevention, evaluation, diagnosis and treatment of structural and functional changes in the region of the mouth (oro) and face (facial). The speech therapist in this area is called myofunctional therapist (MFT) and evaluates in a holistic, individual and differentiated way, the facial and intraoral muscles and the balance of the stomatognathic functions (suction, chewing, breathing, swallowing and speech).

Craniofacial growth and development depends on genetic factors and external stimuli that are given by the muscle activity during the stomatognathic functions and facial mimic.

The primary function responsible for this craniofacial growth and development is breastfeeding. Have you noticed that all babies are born with a recessed chin (pseudo retrognathia)?

It is through **SUCTION**, performed during breastfeeding, where a specific muscle group with a certain strength is activated to obtain milk that will provide bone growth. When babies are fed with artificial milk, the activated muscle group is different; the movements are more vertical and less force is needed, compromising the mandibular growth. In addition, the teat of the bottle is not as elastic as the breast that triples in volume in the baby's mouth, adapting and following the oral growth of the baby, on the contrary in the bottle it is the mouth that will adapt to the teat and that may bring changes in bone structure. Babies born prematurely under 35 weeks of age do not yet have a mature suction reflex, requiring earlier intervention of the MFT to stimulate this very important function, which prepares the orofacial muscles for the masticatory function.

CHEWING is the function that gives continuity to breastfeeding in craniofacial growth; therefore, the correct introduction of complementary food is essential. The oral cavity is closely related to the central nervous system and the masticatory stimulus will promote a muscular response depending on the food that is given to the child. With the different textures of the food, the stimulation and gradual "training" of chewing is promoted, which stimulates the muscles and the movements of rotation of the mandible, to promote growth of the facial bones. When this does not occur and the texture of the food given does not require sufficient chewing effort, we can compromise bone growth of the face or generate asymmetrical growth, responsible for future dental problems, such as lack of space for permanent teeth, unilateral or bilateral crossbites and low orofacial tonicity, which can impair breathing.

Have you noticed that all babies just know how to **BREATHE** through their nose?

Unfortunately, due to several factors, this function may cease to be nasal and become oral, bringing a series of complications. Let's see our orofacial resting posture (when we are not talking, eating or drinking) should be with the lips closed and the tongue glued to the palate (roof of the mouth) and thus a kind of intraoral "vacuum" is formed so that all the muscles are toned.

If the child starts to breathe through the mouth, the lips open, the tongue lowers for the air to pass and this entire "vacuum" is lost, in other words, the whole musculature loses tone (hypotonia). Being the muscle that makes the bone structure grow, an oral breathing will bring structural malformations responsible later for changes in the dental occlusion. The tongue, occupying a low posture, in the oral cavity, ceases to exercise its function as a modulator of the palate and it begins to grow in a wrong way, often in an ogival shape (upwards) and with atresia of the jaws (narrow jaw).

Breathing through the nose is essential because the nose has the function of heating, humidifying and filtering the air, preventing foreign bodies from entering, contrary to what happens when we breathe through the mouth, in which there is a decrease in oxygen saturation in the body and where all impurities enter the body more easily, allowing the development of infections of the upper airways (ears, nose and throat). Usually these children become more sleepy or hyperactive with difficulty in paying attention and concentration, usually have a longer narrow face (dolichofacial), dark circles (due to the decrease in O₂), chubby cheeks (hypotonia), open and chapped lips, short upper lip (hypofunctional because there is no lip contact), everted lower lip, noisy breathing and stuffy nose sensation, noisy chewing with an open mouth

and postural changes (anteriorization of the head to facilitate the opening of the airways, projection of the abdomen and changes in the spine) .

DEGLUTITION may also be altered by hypotonic orofacial muscles, for example swallowing by projecting the tongue forward, choking, associated head and / or body movements, among others.

Regarding the function of **SPEECH**, it is known that the expansion of the phonological system occurs between 1 and a half years and 4 years of age. At this stage there are still changes in speech that are accepted for this age group. By the age of 5, most children, with a standard development of speech, already have in their phonetic inventory all the sounds of their mother tongue. Children often come to the clinics with speech disorders that have nothing to do with the development of chronological acquisition of speech sounds, but with myofunctional changes. Hypotonia or changes in bone structure can cause inaccurate speech with tight articulation. Apparently, these children have difficulties in articulating the r sound, the l sound or the lh sound, to which, at times, sigmatism is added (typically called "lisp" due to the sound caused by changes in the articulation of the s, z, ch, j sounds).

The intervention in Orofacial Myofunctional Therapy, goes through a set of guidelines, strategies, massage therapy and training of stomatognathic functions, carried out by the MFT, enhancing the muscular balance that will influence the restructuring of oral functions and phonoarticulatory organs, modifying or avoiding functional deviations in craniofacial growth, often together with dental appliances, physiotherapy / osteopathic intervention and after the evaluation of an otolaryngologist.

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