




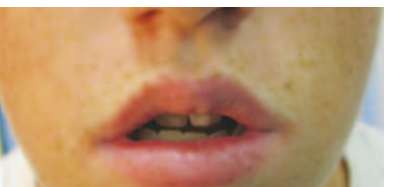


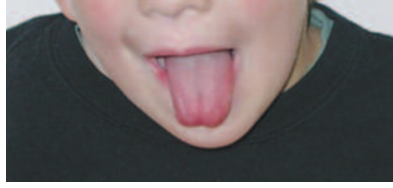


	OROFACIAL MYOFUNCTIONAL DISORDER	HOW OMT HELPS	WHAT HAPPENS IF NOT TREATED	OROFACIAL MYOFUNCTIONAL DISORDER	HOW OMT HELPS	WHAT HAPPENS IF NOT TREATED	
1. MOUTH BREATHING	 <p>BEFORE</p> <p>When the nose is congested or occluded mouth breathing is obligatory. However, often the habit of oral breathing is present even after the nasal breathing is restored.</p>	 <p>AFTER</p> <p>Identification of insufficient nasal breathing and proper referrals are made. Behavioral modification techniques and function re-training is implemented to change the mouth breathing habit and promote lip-together proper nasal breathing.</p>	 <p>UNTREATED</p> <p>Mouth breathing is meant to be an emergency situation. When it's chronic, a long face develops with undesirable changes to the maxilla, jaw, nose, mouth, neck and shoulders. Mouth breathing is linked to gum disease, sleep disorders, temporomandibular joint disorder behavior issues in children, forward head posture and more.</p>	9. CHEWING DISORDERS	 <p>BEFORE</p> <p>Chewing disorders are chewing with the mouth open; excessive chewing of gum; exclusive chewing on one side; avoidance of foods with certain textures such as meat, raw vegetables, seeds, some fruit and nuts; preference for soft or pureed food; pain or discomfort during chewing; abnormal jaw movements.</p>	 <p>AFTER</p> <p>Chewing is treated by activating and equilibrating the chewing muscles; by reducing or eliminating excessive chewing; by making the patient aware of habits; by optimizing the length and efficiency of chewing; and by collaborating with other professionals at normalizing nasal breathing and dental occlusion.</p>	 <p>UNTREATED</p> <p>Chewing relies on proper nasal breathing, occlusion and jaw movement. A disorder of these three conditions or an open-mouth habit create compensatory functions that in the long run may create TMJ disorders and negatively affect the digestive system.</p>
2. OPEN MOUTH POSTURE	 <p>BEFORE</p> <p>The habits continues to encourage abnormal growth and development and may lead to orthodontic problems, TMJD, peri-oral skin conditions, dry and cracked lips, narrow palate, nail and finger skin infections etc. Attention must be paid to underlying physiological, psychological disorders and behavior problems.</p>	 <p>AFTER</p> <p>After ruling out allergies, nasal obstruction and muscle low tone, OM therapists will modify the behavior of the patient to promote a lip seal, including normalizing the breathing if the patient is a mouth breather.</p>	 <p>UNTREATED</p> <p>If the cause of the open mouth posture is not corrected, the patient may develop a forward head posture, atypical swallowing, a long face syndrome, lack of negative pressure or a vacuum seal of the tongue on the palate and a narrowing of the palate. Malocclusion and OSA may also be present.</p>	10. FACIAL MUSCLE DYSFUNCTION	 <p>BEFORE</p> <p>Facial muscle dysfunctions (parafunctions) include lips open at rest, use of facial muscles to stabilize the mandible during swallowing, mannerism (puckering, pressing, shifting), excessive muscle tension, tension of the neck muscles, wrinkling of forehead, periorcular muscles and frowning of facial muscles. Usually accompany a tongue thrust swallow.</p>	 <p>AFTER</p> <p>OMT provides self awareness, behavioral modification techniques, relaxation techniques and optimization of chewing, swallowing, rest posture of lips, tongue and jaw to significantly reduce and eliminate facial parafunctions.</p>	 <p>UNTREATED</p> <p>Frequency, duration and intensity of facial muscle dysfunctions or parafunctions will be the deciding factors in developing facial and TMJ pain, malocclusion, swallowing discomfort, shoulder and neck pain or voice changes due to involvement of the neck and shoulder muscles. Tongue thrust, saliva pooling, dental plaque, drooling, facial wrinkles are also possible outcomes.</p>
3. ANTERIOR TONGUE THRUST	 <p>BEFORE</p> <p>Lack of nasal breathing or sleep disordered breathing may lead to the tongue moving or resting forward and pushing against the teeth (static). During the swallow, instead of pushing up to the palate the tongue moves forward or laterally, called anterior, bi-lateral, uni-lateral or bi-maxillary tongue thrust (dynamic).</p>	 <p>AFTER</p> <p>After ruling out allergies, nasal obstruction and muscle low tone, OM therapists will modify the behavior of the patient to promote a lip seal, including normalizing the breathing if the patient is a mouth breather.</p>	 <p>UNTREATED</p> <p>If the cause of the open mouth posture is not corrected, the patient may develop a forward head posture, atypical swallowing, a long face syndrome, lack of negative pressure or a vacuum seal of the tongue on the palate and a narrowing of the palate. Malocclusion and OSA may also be present.</p>	11. HYPOTONIC MASSETERS	 <p>BEFORE</p> <p>The masseters are both chewing muscles and postural muscles to keep the jaw in place during activities such as walking, running or jumping. The masseters are designed to crush food between the teeth, so when the teeth are in malocclusion and do not touch, the masseters are de-activated. In severe case they lose mass and the ability to chew or to support the mandible, with the mouth hanging open. Weak masseters are often present in TMJ disorders.</p>	 <p>AFTER</p> <p>By using flexible tubes or wafers, masseters can be "retrained" to chew properly and to assist the tongue and the lips in providing the proper jaw posture at rest. However, in case of a significant malocclusion, an orthodontic intervention may be necessary before OM treatment.</p>	 <p>UNTREATED</p> <p>The proper position of the jaw at rest is very important for the health of the TMJ and its position depends in part by the activation of the masseters. Weak masseters also impact dental occlusion, chewing, swallowing and the function of the temporalis muscles, which become hypertonic and painful.</p>
4. BI-LATERAL TONGUE THRUST	 <p>BEFORE</p> <p>Lack of nasal breathing or sleep disordered breathing may lead to the tongue moving or resting forward and pushing against the teeth (static). During the swallow, instead of pushing up to the palate the tongue moves forward or laterally, called anterior, bi-lateral, uni-lateral or bi-maxillary tongue thrust (dynamic). Forward static tongue rest position also may lead to abnormal development of the palate (restricted).</p>	 <p>AFTER</p> <p>After ruling out allergies, nasal obstruction and muscle low tone, OM therapists will modify the behavior of the patient to promote a lip seal, including normalizing the breathing if the patient is a mouth breather.</p>	 <p>UNTREATED</p> <p>If the cause of the open mouth posture is not corrected, the patient may develop a forward head posture, atypical swallowing, a long face syndrome, lack of negative pressure or a vacuum seal of the tongue on the palate and a narrowing of the palate. Malocclusion and OSA may also be present.</p>	12. SPEECH MISARTICULATIONS	 <p>BEFORE</p> <p>When the tongue stays low in the mandible, at rest, and thrusts during swallow and the nasal breathing is not optimal, then speech mis-articulations, often called lisps, develop or persist. The sound /s/ is produced like a /th/, with the tongue between teeth, which is incorrect in English language. Other problems are an excessive protrusion of the tongue for /l/, /th/, lateral lisp for /s/ and /z/, insufficient or delayed development of /r/.</p>	 <p>AFTER</p> <p>Speech pathologists are able to identify the origin of the misarticulations: anatomical (tongue tie), physiological (lack of proper nasal breathing or neurological (dyspraxia/apraxia) and provide adequate treatment. Other professionals can optimize oral functions or eliminate dysfunctions that accompany misarticulations.</p>	 <p>UNTREATED</p> <p>The speech misarticulations are more a social issue and a symptom of more significant orofacial dysfunctions, such as ineffective nasal breathing, tongue thrust, open mouth posture etc. Ignoring the underlying causes of orofacial dysfunctions that present themselves with lisps may contribute to changes in craniofacial growth and development, malocclusion and more.</p>
5. TONGUE-TIE	 <p>BEFORE</p> <p>Embryological remnant of tissue or aponeurosis of the genioglossus muscle in the midline between the undersurface of the tongue and the floor of the mouth that restricts tongue movement. Ankyloglossia is a severely restricted tongue-tie.</p>	 <p>AFTER</p> <p>The myofunctional therapist has been trained to assess the tongue and develop normal tongue functions. If there is a restricted lingual frenum or "tongue-tie", the myofunctional therapist will refer the patient to the proper doctor who will release the restriction surgically and immediately following the procedure the myofunctional therapist will re-pattern the tongue muscles to assure maximum benefit from the procedure.</p>	 <p>UNTREATED</p> <p>If the tongue is not able to function normally, the growth and development of the stomatognathic system is compromised. This may affect digestion, speech, breathing, dental occlusion, TMJ function, posture, sleep disordered breathing and chronic pain patterns of the head and neck.</p>	13. TONSILS / ADENOIDS	 <p>BEFORE</p> <p>The tonsils and adenoids are part of the immune system in children. Adenoids are situated in the posterior portion of the nose. Enlarged tonsils and adenoids reduced or prevent nasal breathing, proper function of the soft palate and middle ear and may cause OSA.</p>	 <p>AFTER</p> <p>Enlarged tonsils and adenoids are to be suspected when there is an open mouth posture; tongue thrust, painful swallowing, nasal voice and other possible signs. A referral to an ENT is recommended as enlarged tonsils and adenoids (not visible from the mouth) are a medical condition that needs to be addressed medically.</p>	 <p>UNTREATED</p> <p>Enlarged tonsils may lead to chronic open mouth posture, mouth breathing, bad breath, sleep disordered breathing, tongue thrust, dental malocclusion and some degrees of craniofacial anomalies. Enlarged (hypertrophic) adenoids may also contribute to sleep disorders, poor nasal breathing, chronic open mouth posture, changes in voice resonance (sounding too "nasal"), ear infections and symptoms and degrees of craniofacial anomalies.</p>
6. LIP-TIE	 <p>BEFORE</p> <p>Lip-tie also called a restricted labial or buccal frenum, is an embryologic remnant of tissue, also called mid-line deficiency, which may restrict normal lip function.</p>	 <p>AFTER</p> <p>The OMT has been trained to develop a lip seal and habituate proper function of the orbicularis muscle and peri-oral muscles. If the patient presents with lip-tie, after attempts to stretch the tissue are unsuccessful, normal functions are restricted and the therapist will refer the patient to have the restriction removed. Immediately following the procedure, the therapist will re-pattern the muscles and function.</p>	 <p>UNTREATED</p> <p>An untreated short upper lip may create an open mouth at rest position where malocclusion and periodontal disease are more likely to develop.</p>	14. TMD	 <p>BEFORE</p> <p>When the orofacial muscle function and patterns are incorrect, the symmetry, equilibration and range of motion of the TMJ may be dysfunctional, causing discomfort or pain.</p>	 <p>AFTER</p> <p>Re-patterning the muscle functions and creating awareness of habits that may interfere with proper jaw function will decrease or eliminate discomfort and dysfunction.</p>	 <p>UNTREATED</p> <p>Pain patterns and improper habits may increase. The patient may continue attempting to compensate for the dysfunction in order to relieve the pain. Often the patient will develop medications dependency, psychological problems, referred pain to neck, shoulders and back and general sensitization.</p>
7. ATYPICAL SWALLOW	 <p>BEFORE</p> <p>Although there is a range of normalcy in the swallowing pattern, usually, swallowing with a tongue thrust (forward or lateral), with lips open, with unstable jaw stabilized by tongue and facial muscles is considered to be atypical, which is a mild degree of swallowing disorder.</p>	 <p>AFTER</p> <p>By identifying and correcting breathing patterns, by repositioning the tongue at rest, by re-patterning the swallowing mechanism and by applying behavior modification techniques, OMT is able to correct and normalize the atypical swallowing.</p>	 <p>UNTREATED</p> <p>Atypical swallowing is the result of smaller but significant dysfunctions (lips open, jaw instability, tongue thrust) that by themselves or together may contribute to larger issues such as malocclusions, TMJD, facial pain and more.</p>	15. SLEEP DISORDERS	 <p>BEFORE</p> <ol style="list-style-type: none"> 1. Snoring 2. Sleep Apnea 3. Narcolepsy 4. Circadian Rhythm Sleep Disorders 5. Insomnia 6. Night terrors 7. Nightmares 8. Sleep walking 9. Sleep talking 10. Bedwetting 11. Sleep related movement disorders 12. Excessive Daytime Sleepiness disorders 	 <p>AFTER</p> <p>OMT may be an aid to assisting Sleep Medicine Physicians and Sleep Dentists attain a patent airway and educating patients as to the value of exercising muscles of the stomatognathic system. We can also reinforce the sleep physician or dentist's treatment plan and motivate the patient to continue treatment.</p>	 <p>UNTREATED</p> <p>Patient's condition may worsen especially if they ignore the physician or dentist's treatment plan. Sleep disorders are linked to malocclusion, TMD, and even death, in severe cases, obesity digestive problems and diabetes, worsening of periodontal disease, behavioral problems and learning delays in children, accidents and injuries.</p>
8. HABITS	 <p>BEFORE</p> <p>Habits are tongue, lip, pacifier and thumb sucking; leaning on one's hand, nail biting, lip licking, facial mannerism (excessive movements) etc. Sometimes, if the infants are not allowed sufficient time or uses an incorrect sucking technique, they may find satisfaction in sucking their fingers, or pacifiers or objects or their tongue. Intensity duration and frequency of the habit may affect tongue rest posture, mastication, TMJ, lips health, facial skin and more.</p>	 <p>AFTER</p> <p>The OMT is trained to apply self awareness and behavior modification techniques to eliminate the habit and optimize oral functions. The OM therapist uses prizes and rewards and follows the success in children for 30 days, while the family is coached on how to achieve long-term success.</p>	 <p>UNTREATED</p> <p>The habits continues to encourage abnormal growth and development and may lead to orthodontic problems, TMJD, peri-oral skin conditions, dry and cracked lips, narrow palate, nail and finger skin infections etc. Attention must be paid to underlying physiological, psychological disorders and behavior problems.</p>	16. BRUXISM AND CLENCHING	 <p>BEFORE</p> <p>Clenching is closing the teeth tightly, often for prolonged periods of time. It is a normal function when bearing down (as in weightlifting or constipation). The habit of clenching damages the teeth and the temporomandibular articulation; causes chewing muscle dysfunctions and pain. Bruxing is grinding of the teeth, usually at night and it's sign of sleep disordered breathing.</p>	 <p>AFTER</p> <p>OMT provides awareness of the habit to the person who clenches; helps identify the connections between stress and clenching, as a stress management parafunction; provides strategies to reduce or eliminate clenching; identifies some symptoms of disordered nasal breathing, which is often the main contributor to bruxing, or other symptoms of OSA, and make the appropriate referral.</p>	 <p>UNTREATED</p> <p>Clenching is a natural response to stress, but both prolonged stress and clenching have a well documented widespread effect on the orofacial muscles, and the mandibular and dental functions. Bruxism underlies sleep disorders, for which an appropriate assessment is needed. Bruxism also causes teeth damage, changes in occlusion, muscle pain, temporomandibular pain or discomfort.</p>

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17. LOW TONGUE REST POSITION	 <p>BEFORE</p> <p>Any time the nasal breathing is impaired, temporarily or chronically, the jaw drops and the tongue positions itself low and forward to open up the upper airways. A low tongue rest position (or posture) is either a necessity or a habit, when the nose is functioning but the brain retains the old mouth breathing habit. A LTRP can also be present without nasal involvement, with the tongue not being positioned against the palate.</p>	 <p>AFTER</p> <p>Since most dysfunctions of the mouth have an origin in the nose, OM therapists recognize that LTRP is the symptom of something more important, like lack of nasal breathing. In absence of nasal obstructions or neurological disorders and conditions, OM therapist can retrain the brain in changing the low position habit, by repositioning the tongue at rest, and by promoting lips seal.</p>	 <p>UNTREATED</p> <p>Both low tongue rest posture and its underlining causes have long term effects involving the TMJ health and function, stability of the dental occlusion, possible narrowing of the maxilla, or possible chronic open mouth posture.</p>	25. ALLERGIC SHIMMERS, VENOUS POOLING	 <p>BEFORE</p> <p>Also called Venous Pooling, it's the darker area underneath the eyes, often present in persons with allergies, whom can also exhibit scratching, twitching and wiping of the nose (allergic salute).</p>	 <p>AFTER</p> <p>Along with other signs and symptoms of allergies, myofunctional therapists can make the proper referral to ensure that patients are able to breathe comfortably through the nose. Also therapists can keep the patients motivated to stick with their hypoallergenic regimen.</p>	 <p>UNTREATED</p> <p>Ignoring these signs makes the therapist miss some possible connections with allergies, which can significantly impact nasal breathing and therefore impact all the other orofacial functions and facial growth and development.</p>
18. SNORING	 <p>BEFORE</p> <p>Snoring occurs when air flows past relaxed tissues in the throat causing the tissues to vibrate as one breathes, which creates irritating sounds. The irregular airflow may be caused by a passageway blockage and may influence the soft palate and uvula to collapse.</p>	 <p>AFTER</p> <p>OM therapists are able to identify signs and symptoms of snoring and sleep disordered breathing, of which snoring is one. By using sequential exercises to develop the proper tongue rest position and swallowing, activating the palatoglossus and genioglossus muscle, developing a lip seal and normalizing the breathing, the patient's snoring frequency and intensity will reduce.</p>	 <p>UNTREATED</p> <p>Snoring frequency and intensity may increase, leading to OSA and family problems. Oral sleep appliances and/or surgery may be recommended by sleep specialists to increase the airway space such as UPP or orthognathic surgery.</p>	26. EUSTACHIAN TUBES DYSFUNCTIONS	 <p>BEFORE</p> <p>The Eustachian tubes connect the middle ear with the posterior portion of the nose. They provide aeration, air pressure balance and drainage to the middle ear. Dysfunction of their opening may be due to allergies, atypical swallowing with tongue thrust, anatomical defects of the soft palate or TMJ disorders. Restricted maxilla</p>	 <p>AFTER</p> <p>The orthodontist will provide palatal expansion and orthodontic treatment before retraining the tongue to be a natural retainer for the new palatal shape, while eliminating oral habits that could cause orthodontic relapse. Further referrals for an allergist and ENT may be also needed to address the causes of insufficient nasal breathing.</p>	 <p>UNTREATED</p> <p>Eustachian tubes dysfunctions may lead to acute or chronic otitis media, earache, vestibular symptoms, delays in speech acquisition in young children and comprehension difficulties.</p>
19. MALOCCLUSION	 <p>BEFORE</p> <p>Malocclusion is the inability of the teeth to interlock properly during chewing and swallowing. Angle's classification of malocclusion looks at the relationship of maxillary and mandibular teeth.</p>	 <p>AFTER</p> <p>OM therapists can promote proper oral posture (tongue resting against the palate), lip seal, normalized nasal breathing, correct the muscular freeway space, and eliminate oral habits. However the time of intervention is crucial. A young child may have the occlusion naturally normalized while a grown adult may require orthodontics to correct it.</p>	 <p>UNTREATED</p> <p>Without addressing the underlining muscle dysfunctions, orthodontic relapses are possible. Other problems related to severe untreated malocclusions are insufficient nasal breathing, OSA, TMD and facial pain, periodontal disease, esthetic problems, self image issues, and digestive problems.</p>	27. ESTHETIC CHANGES	 <p>BEFORE</p> <p>Mis-use or dis-use of the orofacial muscles and functions cause esthetic problems such as unpleasant open mouth posture, tongue thrust, facial grimaces, mannerisms, wrinkles and furrows, which can create self image issues.</p>	 <p>AFTER</p> <p>Self awareness for stress symptoms, behavioral modification techniques, normalization of orofacial functions (swallowing, chewing), promotion of nasal breathing, elimination of parafunctions and habits, reducing muscle pain are all techniques that OM therapists use to help the patients achieve a more pleasant appearance.</p>	 <p>UNTREATED</p> <p>Often, unpleasant esthetic changes are a symptom of dysfunctions more significant and those are the ones that may be a problem. However, a healthy self image is psychologically very important and ignoring it may cause feelings of depression.</p>
20. CAVITIES AND GUM DISEASE	 <p>BEFORE</p> <p>Infectious diseases such as caries and periodontal diseases can compromise oral health. Colonizing bacteria form a complex community that adheres to tooth surfaces and form a biofilm, commonly called plaque. Because ingredients in saliva contains components that can directly attack bacteria, if a patient is mouth breathing or has a poor lip seal, the biofilms may become more virulent.</p>	 <p>AFTER</p> <p>OM therapists can promote nasal breathing, lip seal, eliminate tongue thrust and low tongue rest position, promote or stimulate chewing, promote proper swallowing and use the tongue to clean the teeth and the oral cavity from food residue. Proper chewing and swallowing, along with proper diet and oral habit elimination can be of aid to management of oral health.</p>	 <p>UNTREATED</p> <p>When the underlining causes of teeth and gum diseases are not addressed, tooth loss, periodontal diseases and gum recession, may prevail. According to current medical literature, periodontal disease is linked to systemic diseases, patients may be more susceptible to cardio vascular disease, diabetes, digestive disorders and other life threatening problems.</p>	28. MACROGLOSSIA	 <p>BEFORE</p> <p>Macroglossia is the term given for the tongue when it seems too large for the oral cavity and it may spill outside the occlusion of the teeth into the vestibule between the lips and the teeth. It's often seen in disorders of genetic origin such as Down's syndrome.</p>	 <p>AFTER</p> <p>OM therapists will screen the tongue for restricted frenum, re-pattern and activate all of the muscles of the tongue, and develop a palatal tongue rest position. The oral volume will also need to be increased with expansion of the palate and orthodontics, thus working with a multidisciplinary team.</p>	 <p>UNTREATED</p> <p>If the tongue is not given proper room and retrained in proper unrestricted function, the patient will not be able to chew, breathe nasally, and swallow correctly which may lead to digestive problems, OSA, TMD, orthodontic/ orthognathic surgery relapse, and self-image problems.</p>
21. CHANGES IN SALIVA	 <p>BEFORE</p> <p>Saliva has multiple purposes and its enzymes provide the beginning of the digestive system. Too little saliva affects chewing, swallowing, teeth and gums health, speech, sleep breathing and digestion. Drooling could indicate too much saliva production, which is socially difficult to manage and causes facial skin rashes. Salivary output and quality depends on chewing, medications, stress, neurological disorders, traumas, or mouth breathing.</p>	 <p>AFTER</p> <p>Changes in the quantity (assessed with a tongue depressor, see image) and quality of saliva may require medical interventions, depending on the cause of the change. However, OM therapists are able to identify hyper- or hypo-salivation and address it in a multi-disciplinary manner. Moreover, better chewing skills may be taught, along with other strategies to optimize salivation.</p>	 <p>UNTREATED</p> <p>Drooling in children is distressing for parents and caregivers. Chronic reduction of saliva (often called xerostomia) or changes in its quality impact teeth and gum health, digestion, and creates bad breath. Xerostomia also impacts sleep by reducing the surfactant properties of the oropharyngeal mucosa of soft palate and pharynx.</p>	29. ABNORMAL BREATHING	 <p>BEFORE</p> <p>The most important breathing abnormality is lack of proper, effortless and quiet nasal breathing, as air transiting through the nose receives many benefits that oral breathing does not provide.</p>	 <p>AFTER</p> <p>After the nasal cavities have been cleared by allergists and ENTs, the OM therapist ensures that the habit—therefore the neuropsychological aspect of breathing—is addressed through techniques to promote lips seal and nasal breathing. Obstructive Sleep Disorders (OSA) and snoring are also abnormal breathing patterns.</p>	 <p>UNTREATED</p> <p>Reduced or lack of nasal breathing, especially during a child's development is linked to unfavorable facial growth, orofacial muscle dysfunctions, gum disease, a narrow maxilla, dental malocclusion, TMJD, sleep disorders, postural changes of the neck and shoulders and learning and cognitive problems.</p>
22. RESTRICTED MAXILLA, HIGH PALATE	 <p>BEFORE</p> <p>A normal palate is shallow and with a large arch. When the tongue rests low habitually, there is a prolonged thumb sucking habit and proper nasal breathing is absent the force of the cheeks push the maxilla inward, changing the shape of the palate and the nasal cavities that share the palate, causing further nasal restrictions.</p>	 <p>AFTER</p> <p>Because the palate divides the oral from the nasal cavity, a high narrow palate could be the symptom or the cause of difficult nasal breathing, with other disorders linked to it: craniofacial disorders, TMJD, malocclusion, muscle hypotonia, chewing and swallowing disorders, sleep disorders and more.</p>	 <p>UNTREATED</p> <p>Because the palate divides the oral cavity from the nasal cavities, a high narrow palate could be the symptom or the cause of reduced or absent nasal breathing, with all the disorders that are linked to it: craniofacial disorders, TMJD, malocclusion, muscle hypotonia, chewing and swallowing disorders, sleep disorders and more. Not retraining the tongue and orofacial muscles after palatal expansion leads to need a permanent retainer or orthodontic relapse and further malocclusion.</p>	30. TINNITUS	 <p>BEFORE</p> <p>Perception of a noise in the ear, chronic or intermittent, sounding like a whistle, or rushing water or a buzzing or a hissing and more. Tinnitus is more common in people with TMJ disorders and is more bothersome in a quiet environment.</p>	 <p>AFTER</p> <p>Although tinnitus must be diagnosed by an ENT and assessed by an audiologists, given its multi-causal aspects, OMT may be assisting by normalizing orofacial functions and jaw stability, thus reducing or eliminating the symptom.</p>	 <p>UNTREATED</p> <p>Although tinnitus per se is not damaging, the TMJD, when that's the cause of it, is responsible for many other symptoms, of which tinnitus is just one of them.</p>
23. TONGUE SCALLOPING	 <p>BEFORE</p> <p>When the tongue constantly pushes against the teeth, especially in adults, the tongue develops indentations on the side. Scalloping is very common in people who have OSA or a restricted oral volume as in certain malocclusions.</p>	 <p>AFTER</p> <p>During an oral examination it's easy for a OM therapist to identify the scalloping and to flag it to the referring physician, along with other probable signs or symptoms of sleep disordered breathing.</p>	 <p>UNTREATED</p> <p>Scalloped tongue per se is not a worrisome condition, but because it's caused by a chronic tongue thrust in adults, it suggests possible insufficient nasal breathing, or sleep disordered breathing or dental malocclusion as the trigger for the tongue thrust. Therefore a multidisciplinary assessment and treatment of the underlining causes of scalloping is needed.</p>	31. INFANT FEEDING PROBLEMS	 <p>BEFORE</p> <p>Failure to latch on the breast, drooling, GERD, SIDS, sleep difficulties, tooth eruption problems, development of a high narrow palate, ADHD, breathing problems such as asthma and mouth breathing.</p>	 <p>AFTER</p> <p>Identify early and refer for a release of any restriction to the frenulum, labial, lingual and/or buccal, identify and refer mom to a lactation consultant and an osteopathic physician or other body worker, stimulate the tongue and promote its movement, promote range of motion of the jaw.</p>	 <p>UNTREATED</p> <p>The child may develop texture sensitivity issues and other digestive disorders, SIDS, posture problems, high narrow palate, malocclusion, speech problems, breathing disorders, self regulation and behavioral issues.</p>
24. CRANIOFACIAL DYSFUNCTION	 <p>BEFORE</p> <p>Unlike genetic malformations such as cleft palate or afacial dysmorphism, the chronic impact of OMDs causes changes in the growth a development of the craniofacial complex, with malocclusions, restricted maxilla, small jaw and changes in the head position and in orofacial functions such as chewing, swallowing and speech.</p>	 <p>AFTER</p> <p>OMT aims to prevent the formation of cranio-facial dysfunctions by testing babies for a tongue tie; assessing and restoring proper nasal breathing (in absence of allergies or obstructions); identifying signs of sleep disorders; stabilizing the mandible to support tongue function; and normalizing orofacial functions such as tongue and lips resting position, chewing and swallowing.</p>	 <p>UNTREATED</p> <p>There is reciprocal influence of structures (bones, teeth, cartilages, muscles) and functions (nasal breathing, swallowing, chewing). Poor functions influence the growth of the structures, which in turn change or limit the proper functions. The result is an unfavorable growth and development of the face and mouth, often creating the need for maxillofacial surgery and extensive orthodontic treatments, or prolonged pain and discomfort.</p>	32. FORWARD HEAD POSTURE	 <p>BEFORE</p> <p>A forward head posture (FHP) is when the head is not properly aligned on the neck and shoulders but it's positioned forward, changing the center of gravity of the head and then of the whole body.</p>	 <p>AFTER</p> <p>Awareness of the head position is the first step. Neuropsychological and behavioral techniques are implemented to make the person aware of his/her posture at rest, during chewing and swallowing.</p>	 <p>UNTREATED</p> <p>Because the head is heavy, any degree of chronic positioning away from the center line of the body causes significant muscle strain to head, neck, shoulders and hips and impinges on airways. Over time the strain causes pain, then physiological changes then anatomical changes to bones, muscles, fascia and connective tissues.</p>