

# Long Term Effects of Untreated Tongue-Ties

Being tongue-tied is more than just a figure of speech. The condition is characterized by an unusually short or tight lingual frenulum, the small bridge of tissue that connects the front of the tongue to the floor of the mouth. In most people the frenulum is flexible enough to allow for normal tongue articulation. In the case of tongue-tie, however, the frenulum restricts proper mobility and more importantly palatal rest, leading to a wide variety of issues that grow in severity over time if left untreated. One of the most often overlooked conditions is a posterior restriction, which can cause swallowing problems and speech difficulties among other issues.

Many people associate tongue-tie with breastfeeding infants and children learning how to speak. While it's true that ankyloglossia is a hereditary condition, the problems associated with tongue-tie last long into adulthood. Untreated tongue-tie can lead to an array of breathing, dental, digestive, and facial development imbalances as well as a lifetime of difficulty eating and sleeping. Fortunately, myofunctional therapy is an effective method to help restore proper tongue mobility and alleviate symptoms associated with tongue-tie once the restriction is eliminated.

## **Importance of the Tongue**

How can one small muscular organ shape so many aspects of our health? The tongue's role in facial development is one of movement and resting pressure. Just like rocks are shifted and shaped by the gentle but ongoing splashing of water, the bones in our face are constantly nudged by the movements we make. The tongue is one of the more powerful and mobile elements of our face, giving it the ability to influence our teeth, digestion, breathing, jaw movements, and even the position of our neck and shoulders.

In the case of tongue-tie, the tongue's natural motion is inhibited, causing everything from colic to speech impairment. As a child ages new habits are adopted to compensate for the limited mobility. If left uncorrected, this seemingly mild condition can lead to crooked teeth, sleep apnea, and a host of other issues that last long into adulthood. More importantly, as the issue progresses the primary site of breathing switches from the nose to the mouth. Predominant mouth breathing has a direct negative impact on the body's ability to transport oxygen, regulate pH, control dilation of blood vessels and a host of other issues.

## **Tongue-Tie and Facial Development**

Oral posture, especially the positioning and movement patterns of the tongue, serve as guides to help the face develop properly. If tongue-tie is present and left untreated, this growth can create altered structures and habits that lead to a lifetime of health problems. Below are some of the most common issues associated with untreated tongue-tie.

*Crooked teeth* - The face grows in two directions: forward and horizontal. Tongue-tie in children can alter these forces, changing the arch lengths and creating impacted molars or crowded front teeth. After all, the tongue is the original orthodontic appliance! By diagnosing and treating tongue-tie early, the ability of the tongue to shape beautiful, u-shaped arches with plenty of room for all teeth can be effectively restored.

*Breathing and Hearing* - Untreated tongue-tie can block air passages and impede the proper swallowing, causing a buildup of mucous and frequent middle ear infections.

*Speaking* - Both children and adults can suffer from lisping and speech defects as a result of an immobile tongue. Additionally, the problem may progress to include muscle fatigue when speaking for some adults. Myofunctional therapy is a safe way to treat these symptoms before they become long-term issues.

*Chewing* - Jaw joint problems are a common complaint of people suffering from tongue-tie. Improper or insufficient chewing can also lead to frequent stomach ache and acid reflux if left untreated.

*External appearance* - Apart from health and wellness concerns, tongue-tie can cause visual abnormalities such as flattened cheekbones and a retruded jaw. These subtle deformities can cause the sclera (the whites of the eyeballs) to show more prominently than is normal.

### **Snoring, Sleep Apnea, and Tongue-Tie**

Interrupted breathing during sleep is one of the more noticeable symptoms of tongue-tie in adults. Forms of obstructive apnea are caused by the tongue blocking the airway at night, forcing the body to make movements to clear the passageway, which may lead to wakeful nights, bedwetting and grinding of teeth. A child sleeping with an open mouth may appear relatively innocuous, however in truth their brains are being deprived of about 18% of oxygen required for normal growth and development.

Most of the body is relaxed while we sleep, especially during REM cycles. The tongue moves passively forward out of the upper airway. Tongue-tie can directly prevent this motion. To compensate, adults and children alike may grind their teeth to tense the muscles in the upper airway in order to increase airflow for breathing.

Chronic sleep deprivation can alter the balance of your autonomic nervous system, wreaking havoc on your hormones, raising your cortisol levels (aka the “stress hormone”) while impeding your thyroid’s ability to stimulate hormones to regulate your metabolism. Additionally, your insular cortex and cerebellum are the first parts of the brain to suffer from asphyxiation, leading to continuous fogginess and reduced alertness. This cognitive impairment is often misdiagnosed as ADD/ADHD, since the symptoms are quite similar.

Orofacial myofunctional therapy can be remarkably effective at addressing the muscles involved with the airway as it relates snoring, apnea, and other sleep related problems. Many of these symptoms are a direct result of a restricted tongue not allowing for proper palatal tongue rest positioning and nasal breathing.

### **Diagnosing and Treating Tongue-Tie**

Early and accurate evaluation and treatment of tongue-tie by a medical professional who is trained to recognize all forms of tongue tie is crucial and extremely effective at preventing major issues before they arise. Unfortunately, many symptoms related to tongue-tie are often attributed

to other issues or ignored altogether, even in adults. To properly evaluate the presence or severity of a tongue-tie, a physical exam by an experienced Orofacial Myofunctional Therapist is necessary.

Tongue posture and mobility are central pillars of overall health and wellness. Tongue-ties cripple this from birth and serve as a nearly invisible cause of pain and discomfort. Myofunctional therapy has proven remarkably effective at preventing and eliminating the symptoms of tongue-tie, regardless of age or severity.

A proper diagnosis of the severity of tongue-tie is vital for long term health and wellness. It's a treatable condition that's best caught early to avoid years of pain and discomfort. If you think you or a family member may suffer from tongue-tie, [contact us](#) to set up an appointment.

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