



## Tongue and lip ties in infants, children, and adults

Tongue-tie, or ankyloglossia, is the name for a condition where the tongue is too tightly connected to the floor of the mouth and has limited movement. Lip tie is a condition where the upper lip is too tightly attached to the upper jaw and gums. These problems are often noticed in infants, as they can cause difficulties with breastfeeding. If not addressed in infancy, a tongue or lip tie can cause problems that continue into adulthood. Many adults with tongue or lip ties are unaware of the problem, but they can benefit from having the tie released. The benefits for some people can be life-changing and are well worth the time and effort.

### What problems are caused by tongue and lip ties?

**Speech issues:** Movement and position of the tongue and lips are crucial in order to properly form sounds. When the tongue is restrained through a tongue-tie, it may cause difficulty forming some sounds and words. Some people are able to compensate for this lack of mobility, but not everyone. In those situations, the only way to properly produce the sound is to release the tongue so it can move. Some patients go through years of speech therapy with minimal improvement until their tongue-tie is released.

**Crowded teeth:** Tongue-ties and crowded adult teeth are directly related. When the tongue has proper mobility, it rests near the roof of the mouth and presses upward with each swallow. During the growth years, this causes the mouth to grow laterally and provide adequate space for all of the adult teeth. In cases of tongue-tie, the tongue does not reach the roof of the mouth, so the mouth does not grow to its normal width, and there is not enough room for the teeth. Crowded and protruding teeth often result. Parents often say that their children's primary teeth were beautiful and straight but their adult teeth became crowded as they came in. There must be substantial spaces between the primary teeth to provide room for the larger permanent teeth.

**Overbite:** In addition to encouraging adequate growth of the upper mouth, proper tongue movement assists in normal growth of the face and jaw. When the tongue is tied down, the lower jaw often remains set back, producing a dental overbite. This is both a cosmetic and a functional problem in which the teeth simply do not fit together properly.

**TMJ Problems & Chronic Head and Neck Pain:** The tongue is connected to so many muscles throughout the head and neck that tongue-tie can throw all of the other muscles off balance. In adult patients, tongue-tie can manifest itself as chronic TMJ disorders, migraines, tension-type headaches, neck pain, snoring and sleep apnea, and inability to hold chiropractic adjustments. Releasing the tongue-tie can allow the body to relax, improving posture and relieving years of tension-causing problems.

**Breathing:** With the tongue tied down and the lower jaw set back, the base of the tongue is in the throat and can interfere with breathing. Both children and adults often try to compensate for this by keeping their head forward, producing postural problems, neck pain, and headaches. Furthermore, with the tongue blocking the throat, snoring and sleep breathing problems are common. Children with sleep breathing problems may not grow at normal rates, physically or mentally. Sleep breathing problems in adults often are associated with elevated blood pressure, elevated risk of heart attack and stroke, elevated cholesterol levels, acid stomach problems, anxiety, depression, and other health problems.

**Infants and solid food:** Infants with tongue-ties sometimes have difficulty when they first encounter solid foods. This may look like picky eating, but some tongue-tied children actually gag on solid foods or are unable to chew them properly, causing digestive problems.

**Oral hygiene:** The tongue is designed to move food around the mouth to allow proper chewing, but it also works to clean food off the teeth. With tongue-ties, foods may get caught in the corners of the mouth and even on the outer surfaces of teeth. This can result in bad breath, gingivitis (gum disease), and dental cavities.

**Breastfeeding:** Infants with tongue or lip tie often have difficulty maintaining a seal and cannot obtain enough milk to fill their stomachs. Straining to nurse often causes pain for the mother. Tongue or lip tied infants may swallow air while nursing, which can produce gastric distress. **Improper swallowing** learned as an infant may carry into adulthood and produce many of the problems listed above.

## How do we address these problems?

The first step is a simple examination of tongue mobility and observation of the ligament under the tongue. If tongue-tie is diagnosed, treatment options in addition to various therapies can include surgical release of the ligament with a laser or scissors. With a release, normal tongue mobility can develop almost immediately. The surgery is very simple and rarely has complications. Before and after surgery, tongue exercises are essential. Often, a team approach involving a speech therapist, a chiropractor, a craniosacral or myofascial therapist, a myofunctional therapist, and/or an orofacial myologist is needed.