
ANKYLOGLOSSIA (TONGUE-TIE)

Ankyloglossia, which is also referred to as tongue-tie, is a condition where the tongue cannot move normally because it is attached to the floor of the mouth by the frenulum, which is too tight. The lingual frenulum is the band of tissue that attaches the undersurface of your tongue to the bottom part of the mouth. Adequate tongue movement is necessary for swallowing and speech. When tongue movement is restricted, evaluation by an ENT (ear, nose, and throat) specialist, or otolaryngologist, may be necessary to check for ankyloglossia or other conditions that can affect oral and tongue function. In infants and children, ankyloglossia can sometimes cause breastfeeding and speech problems. Mild restrictions of tongue movement may not cause any speech or swallowing difficulties.

In recent years, the number of infants and children being diagnosed with and undergoing treatment for ankyloglossia has been on the rise as the condition has become more known. However, high-quality research on ankyloglossia is limited, and currently there is controversy on this topic. There are two types of ankyloglossia commonly described: anterior (when the frenulum inserts farther out toward the tip of the tongue) and posterior ankyloglossia (when the frenulum is widened at the insertion of the tongue into the floor of the mouth). Experts have failed to reach agreement on a formal classification system and management strategies. This highlights the need for individual evaluation and treatment discussions based on each patient's circumstances. Ankyloglossia is usually identified from infancy through childhood. Some infants with ankyloglossia may have problems breastfeeding, but there are many other causes of latching difficulty that need to be considered.

The typical treatment of symptomatic ankyloglossia is a frenotomy, a surgery that involves cutting the band of tissue between the tongue and floor of mouth to release the tongue and help it move more freely. Not all patients

with ankyloglossia require or would benefit from surgery, so it is critical that each patient is evaluated based on their individual symptoms to avoid unnecessary surgery. For example, an infant who has a frenulum that attaches farther out on the tongue but is feeding well does not necessarily require surgery. See the "What Are the Treatment Options?" section for more details.

WHAT ARE THE SYMPTOMS OF ANKYLOGLOSSIA?

Symptoms of ankyloglossia may include:

- Nipple pain or irritation when breastfeeding experienced by mothers of newborn infants
- Problems latching on to the nipple during feeding experienced by infants

Ankyloglossia does not cause sleep apnea or snoring and does not typically affect speech, but it can occasionally cause problems with articulation in school-aged children. In older children and adolescents, ankyloglossia can cause social/mechanical issues including difficulty licking, difficulty keeping teeth clean, and a sense of social embarrassment. Adults with ankyloglossia may have difficulty cleaning their teeth with their tongue and problems playing wind instruments.

WHAT CAUSES ANKYLOGLOSSIA?

A tight lingual frenulum can cause ankyloglossia by limiting the motion of the tongue. In some cases, this band of tissue inserts too far out toward the tip of the tongue or is widened at the back of the tongue, causing problems with tongue motion. While the exact cause of ankyloglossia is still unknown, there tends to be a higher number of males with the diagnosis and is occasionally present in multiple family members. Ankyloglossia has also been associated with other genetic syndromes.

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WHAT ARE THE TREATMENT OPTIONS?

When considering treatment options for ankyloglossia and breastfeeding difficulty, it is important to remember that there is no one-size-fits-all solution. Factors such as patient age, types of symptoms experienced, other medical conditions, and surgical risks all affect the decision process between you and your doctor. Successful nonsurgical options focus on symptom management, such as working with a breastfeeding specialist on adaptive positioning and assistive devices in infants, or working with a speech therapist for articulation improvement in children.

If nonsurgical interventions do not resolve the problem or ankyloglossia is moderate to severe, a lingual frenotomy may be recommended. The procedure involves cutting the restricted frenulum with scissors, laser, or cautery device depending on the preference of the treating physician. The frenulum is divided until mobility is improved. In young infants, the procedure is often done in the doctor's office, while older children may require anesthesia. More severe cases may require a frenuloplasty.

While many infants benefit from frenotomy, not all infants with ankyloglossia experience symptoms or require any intervention. Also, frenotomy does not resolve or improve symptoms in all patients. A few rare risks of frenotomy may include bleeding, infection, scarring, salivary duct injury, and airway obstruction. Your doctor should understand the multiple factors that can impact successful breastfeeding. An ENT specialist, speech language pathologist, lactation consultant, and other breastfeeding specialists may be needed.

WHAT QUESTIONS SHOULD I ASK MY DOCTOR?

1. Are there any other factors, besides tongue-tie, that may be impacting breastfeeding in my child?
2. Are there nonsurgical options available to help with breastfeeding?
3. Is a frenotomy necessary?
4. What if ankyloglossia is not the cause of the breastfeeding difficulty?
5. When is the best time for a frenotomy to be performed?
6. What are the risks of frenotomy for my child?
7. Does my child have any conditions that may increase the risks associated with having a frenotomy?
8. Will my medical insurance cover this procedure?