CHILDREN’S ORAL HEALTH
TONGUE TIES AND LIP TIES

Tongue tie (also known as ankyloglossia or AG) is a condition some babies are born with that restricts the tongue’s range of motion. A tongue tie results when any band of tissue underneath the tongue is shorter, thicker, and/or tighter than usual. Under normal conditions, this band helps to stabilize the tongue for sucking, swallowing, eating, and speaking. A similar and sometimes co-occurring condition is a lip tie. A lip tie is when the piece of tissue behind the upper lip (known as the frenulum) is too thick or stiff. This can prevent the upper lip from moving freely. Children that have a tongue tie and/or lip tie could have problems with eating, swallowing, or speech. This Road to Community Health issue discusses how common these conditions are among children, potential problems that they may cause, and how they are diagnosed and treated.

TYPES OF TONGUE TIES

A tongue tie can either be an anterior tongue tie or posterior tongue tie. Anterior tongue ties are relatively easy to see because they are near a baby’s gumline when they raise their tongue. A posterior tongue tie is located deeper in the mouth, further underneath the tongue so it may be harder to see. Anterior and posterior tongue ties can cause the same problems.

HOW COMMON ARE TONGUE TIE AND LIP TIE

Tongue ties affect between 5%-11% of newborns and are three times more likely to occur in boys. Tongue tie occurs when the lingual frenulum fails to separate before birth. While the exact cause is not known, it tends to run in families and may be associated with genetic factors. Lip ties are less common than tongue ties, but are also believed to be genetic.

POTENTIAL PROBLEMS RESULTING FROM TONGUE TIE AND LIP TIE

Cases of tongue tie range from mild to severe. In many instances, babies with tongue tie will not show any symptoms or experience any problems. This is because the tissue may stretch as the child grows, or the child could adapt to the tongue restriction. In other instances, tongue tie may affect a child’s oral development and lead to problems with eating, speaking and/or swallowing. Lip ties may also cause problems with eating and oral health. Potential complications include:

- **Feeding issues** - A tongue or lip tie may make it hard for a baby to latch on and breastfeed properly. This can interfere with a baby's ability to get breast milk, lead to poor nutrition and limit growth. Children with tongue tie may also have problems chewing age-appropriate solid foods, may bite and chew food in the front of their mouth rather than on the sides where molars are located, and may use...
their hands to move food around their mouth when eating. Sometimes tongue tie may cause a child to frequently gag or choke on foods.

- **Speech problems** - Tongue tie can interfere with the ability to make certain sounds, particularly those that require tongue elevation such as "t," "d," "z," "s," "th," and "l". Some children may also have trouble making an “r” sound. Lip ties are unlikely to affect a child’s speech.

- **Poor oral hygiene** – As a child starts to eat solid food, tongue tie can make it difficult for the child to get rid of food debris from the teeth naturally with his or her tongue. This can lead to tooth decay and inflamed gums. Tongue tie can also lead to the formation of a gap or space between the two bottom front teeth. Lip tie could also cause early tooth decay and lead to a gap between the top front teeth.

- **Other oral problems** - Tongue tie can interfere with activities such as licking an ice cream cone, licking the lips, or playing a wind instrument. Tongue tie can also cause persistent dribbling. Children with severe lip tie may have difficulty eating from a spoon or eating finger foods.

**How to know if a child has tongue tie or lip tie**

Signs and symptoms may include:

<table>
<thead>
<tr>
<th>Tongue tie</th>
<th>Lip tie</th>
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<tr>
<td>Difficulty lifting the tongue to the upper teeth, gums or roof of the mouth</td>
<td>Poor latch while breastfeeding</td>
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<tr>
<td>Problems moving the tongue from side to side</td>
<td>Baby makes a clicking sound while nursing</td>
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<tr>
<td>A tongue that has a “v” shape or heart shape at its tip when sticking out (more severe presentation)</td>
<td>Colic and fussiness</td>
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<tr>
<td>Trouble sticking out the tongue past the lower gums and the front teeth</td>
<td>Poor weight gain</td>
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<td>Note: tongue ties can be difficult to identify and often require the expertise of a specialist for proper identification as there are different severities/types/appearances</td>
<td>Upper lip curls inward (often you can see the lip tie- the skin connects from the upper lip down the middle to the base of the gum line)</td>
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Both conditions can be diagnosed by a child’s pediatrician, pediatric dentist, or specialist such as an Ear Nose and Throat (ENT) doctor. They are typically detected during an exam of the child’s mouth and by asking the parent or caregiver about the presence of symptoms. Feeding, speech, or oral health problems may also be evaluated. Once diagnosed, the severity of the tongue tie or lip tie can be assessed and treatment options discussed.

**Treatment options**

- **Wait and see** - Some health care providers recommend treating tongue tie or lip tie in infants right away. Others advise parents to wait and see if the problem resolves on its own by the lingual frenulum (tongue tie) or frenulum (lip tie) loosening or stretching as the baby grows. If feeding, speech, or oral health problems develop, then the tongue tie or lip tie should be treated as soon as possible.
- **Frenotomy/Frenectomy** - Treatment often consists of a simple procedure called a frenotomy or frenectomy. This can be performed with or without anesthesia in a doctor’s, pediatric dentist’s, or specialist’s office, such as an ENT. The procedure involves clipping the frenulum often with a laser. It is typically quick, painless and results in little to no bleeding.

- **Frenuloplasty** - If the frenulum is too thick, then another procedure known as a frenuloplasty may be performed. This is a more extensive procedure that uses general anesthesia and requires stitches to close the wound after the frenulum is released. In the case of a tongue tie, tongue exercises may be recommended to aid in healing and enhance tongue movement.

When deciding on the best approach to address tongue and lip ties, parents and caregivers should consult with their doctor, dentist, occupational therapist and/or speech pathologist. A team approach can help families make a decision that is right for them and their child.