Tongue Tie

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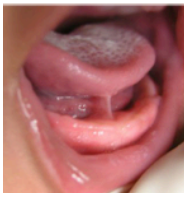
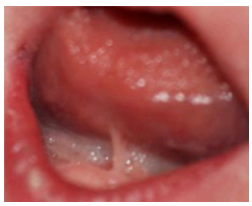
What is tongue tie?

Since the beginning of time, babies have been born with a web of tissue under their tongue. As pictured, the top end of the membrane attaches to the bottom side of the tongue, at the tip, at the base of the tongue, or anywhere in between. The bottom end of the membrane attaches to the floor of the mouth at the base of the tongue, or on the bottom gum - where a tooth will someday come in, - or anywhere in between those two places. A membrane might start out stretchy, and a tight membrane might stretch out over time. If the web of tissue seems to limit tongue movement enough to cause latching problems, I call it a tongue tie (ankyloglossia). We might decide to perform a frenotomy, which is the procedure to cut the membrane so the tongue can move better.





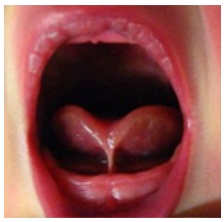
It's hard to say what percentage of babies have this web of tissue under their tongue, but look under your own tongue - it's quite common! In my experience, at least half of babies have at least a little bit of membrane under their tongue. It's unclear how many of those would qualify as "tongue tie." That depends on who's making the call, what research you choose to believe, and how tongue tie is defined.

To cut the membrane or not?

Just because you see a web of tissue under the tongue doesn't mean it needs removed. It will likely stretch over time, and concerns about future speech development are unfounded.[1]

A latching problem means the latch hurts mama, or the latch doesn't remove milk well. But, there are other reason some babies fail to remove milk well. Perhaps they lack stamina because they're premature or sick. Perhaps Mom has an underlying problem and can't produce enough milk, such that milk flows too slowly, and the baby gets frustrated at the breast.

If a tongue tie is causing problems with milk removal, it will also cause latch pain, in my opinion. But, tongue tie is only one of several potential causes of nipple pain. Thus, cutting a tongue tie provides no guarantee that nipple pain will resolve. Ask a breastfeeding expert to assess a nursing session. You can often improve latch pain by fixing your baby's position at the breast, and by improving the technique of latching. If pain improves, the web of tissue is not to blame, your baby is spared pain, and you save money.



If nursing technique is optimized, all factors are considered, and breastfeeding problems persist, you might decide the potential benefits of frenotomy outweigh the minimal risks of the procedure. And, it's easier to do the procedure in a newborn, versus an older infant, child, or adult. Sometimes eliminating that variable from the equation by proceeding with frenotomy can help you move on with confidence. But realize, breastfeeding is complex, intervening with frenotomy may not be the difference maker.

The decision to perform a frenotomy is based on the healthcare provider's training, experience, judgement, and desire to help a mom and baby. Find a breastfeeding expert and healthcare provider who will consider all options, including cost. If you trust their opinion, you can make an informed decision.

Options, Risks and Benefits of Frenotomy

- Ask a lactation expert to evaluate your baby's latch to make sure a frenotomy is necessary.
- There's no guarantee the latch will improve, as there are other factors involved.
- A frenotomy can legally be performed by a physician, physician assistant, nurse practitioner, and dentist.
- Risks of frenotomy include excessive bleeding, infection, and disruption of nerves and salivary ducts (very rare).
- Sterile scissors cut the membrane while the tongue is lifted with an instrument. It is a quick procedure done in the office. I don't use anesthetic, as there are potential complications that are best avoided.
- Minimal bleeding is most typical. Pressure is applied with gauze for a few minutes.
- A Vitamin K shot is given to all babies after birth, unless you refused it. It helps the blood clot. Report a family history of bleeding disorders.
- Excessive bleeding is rare. Silver nitrate cautery will stop the bleeding. The resulting chemical burn heals well, but is a bit painful.
- You will latch your baby immediately after the procedure. Rarely, your baby may resist for a feeding or two.
- Some providers do laser frenotomies. This requires a sophisticated and powerful machine, which requires training and experience in order to do this safely. There is risk of lasering excess tissue in such a small space, and laser frenotomy is expensive.
- I do not recommend massaging the wound after the procedure.

The ongoing controversy about tongue tie

Before the 1990s, frenotomies were rare. I know of a kid who had it done because the membrane under his tongue failed to stretch over time, and he couldn't lick an ice cream cone, and he had trouble eating soup from a spoon. When breastfeeding made a comeback in the 90's, lactation experts looked for reasons why some babies didn't latch well. Healthcare providers started paying more attention to this web of tissue under the tongue. In 2002, a research study was published by the American Academy of Pediatrics which concluded:

> *"Ankyloglossia (tongue tie) is a relatively common finding in the newborn population and represents a significant proportion of breastfeeding problems. Poor infant latch and maternal nipple pain are frequently associated with this finding. Careful assessment of the [tongue] function, followed by [frenotomy] when indicated, seems to be a successful approach to the facilitation of breastfeeding in the presence of significant [tongue tie]."*[2]

Since this time, the number of frenotomies performed on newborns have increased dramatically. Ideally this means that more babies are able to nurse better. But there is also concern that unnecessary frenotomies are being done out of desperation to try one more thing. As with any surgical procedure, the risks and benefits must be considered, including cost.

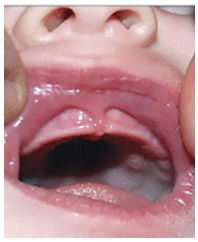
What about speech?

It seems reasonable that tongue tie might affect speech articulation, but research says,

> *"There are no data in the literature on any significant association between speech difficulties and tongue-tie in children. Therefore, we cannot recommend tongue-tie [surgery] in early infancy for the indication of the prevention of future articulation problems."*[1]

Speech pathology experts report that the human brain compensates for the obstacle of restricted tongue movement.

The upper lip tie debate



After about 2010, folks who consider themselves experts, became concerned about the membrane under the upper lip, and spread their opinions over the internet. Some lactation experts and parent forums started putting pressure on parents to consider a procedure to cut the membrane, claiming this would solve breastfeeding problems. However, there is no research to back up this claim. And, the procedure is painful and expensive.

In the past, very few people actually looked under the upper lip. If you do look, you'll see that every newborn has a noticeable web of tissue under their upper lip, and studies prove this.[3] If you look in the mouths of bigger kids and people, the web isn't even noticeable. As the mouth grows bigger, the tissue stays the same, so the membrane appears to shrink. In rare cases, a severe web may persist and leave a gap between the upper front teeth. Some cultures view this tooth gap as beautiful!

Is it reasonable to cut the web of tissue under a newborn's upper lip? I don't think so. It's a fairly significant, painful and expensive procedure to do without having the research to show that it interferes with latching in the first place. The Breastfeeding Medicine journal published a review of the research, cited below.[4]

Is it reasonable to cut it to prevent a future gap? Such a gap is quite rare, and mother nature should get the first chance at taking care of it. This area of the mouth is the "aesthetic zone," ie the smile. Aggressive and unnecessary manipulation of the gum tissue where it meets the teeth could potentially alter the appearance of a future smile. If the web of tissue fails to "go away" over time and creates a problem or a gap between the adult teeth, it is best dealt with by a skilled orthodontist during treatment with braces.

Upper lip frenectomy seems to be a last-ditch effort to fix a poor latch when nothing else has worked. Why perform surgery on something that isn't clearly the problem, will likely go away on its own, is costly and painful, and may alter the smile?

1. A.N. Webb et al./International Journal of Pediatric Otorhinolaryngology 77 (2013) 635–646. Volume 77, Issue 5, May 2013, pages 635-646. The effect of tongue-tie division on breastfeeding and speech articulation: A systematic review. Amanda N.Webb, Weibo Hao, Paul Hong. https://doi.org/10.1016/j.ijporl.2013.03.008

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3. The Superior Labial Frenulum in Newborns: What Is Normal? Chloe Santa Maria, MBBS, MPH, Janelle Aby, MD, Mai Thy Truong, MD, Yogita Thakur, DDS, MS, Sharon Rea, BA, IBCLC, and Anna Messner, MD. Global Pediatric Health. 2017; 4: 2333794X17718896. doi:[10.1177/2333794X17718896]

4. Upper Lip Tie and Breastfeeding: A Systematic Review. Rizeq Nakhash,1 Natanel Wasserteil,1 Francis B. Mimouni,1,2 Yair M. Kasirer,1 Cathy Hammerman,1,3 and Alona Bin-Nun1,3. BREASTFEEDING MEDICINE Volume 14, Number 2, 2019 a Mary Ann Liebert, Inc. DOI: 10.1089/bfm.2018.0174