

Treatment options for infants, children and adolescents

What is a Frenectomy? Who needs one?

Approximately 4-10% of children are born with a restrictive frenum leading to some degree of restriction in function (breastfeeding, eating, speech, sleep). Everyone has a lip or tongue frenulum, but when it is restrictive, we call it, also known as tongue-tie or lip-tie, or ankyloglossia. For infants and children with functional restrictions due to a lip or tongue tie, A **frenectomy** (cutting/release of the restrictive tissue) may be recommended for infants/children.

What are the symptoms?

Symptoms are going to vary in every infant, child and adult. The decision to revise is based on the presence of CURRENT functional symptoms (not esthetic, not in asymptomatic children), and whether those symptoms are atypical based on age and medical history. Presence of symptoms does not necessarily indicate a tongue tie is present.

Top 10 Breastfeeding Symptoms associated with Tongue-Tie (n=334 pt)		Eating Symptoms	Speech Symptoms
56.3%	Baby bobs on and off when latching/poor latch	<ul style="list-style-type: none"> Gagged/vomited when first introduced to food Currently gags/vomits (how often) Slow eater/ Takes a long time to eat Messy eating (open mouth chewing/food loss from front of mouth) Quantity of food consumed is abnormally low Picky about food types or textures Prefers small snacks over meals (grazing) Gassy or GI distension/discomfort Acid Reflux (previously/currently) Dislikes or doesn't eat meat Pouching/Holding food in mouth Dental hygiene issues/frenal irritation 	<ul style="list-style-type: none"> Speech dev is abnormally delayed-number of words Poor pronunciation – words sound different from spelling Poor enunciation (mumbles/slurs speech) Has been diagnosed with speech difficulties Speech Therapy attempted or is currently in speech therapy Trouble with any of the following sounds:
55.7%	Mother has nipple pain or deformed nipples associated with a poor latch		
53.9%	Baby is excessively gassy - has chronic burping, flatulence or hiccups		
52.1%	Prolonged or incomplete feeding (baby does not fully empty breast or bottle)		
50.9%	Baby falls asleep while attempting to nurse		
49.1%	Clicking noises during feeding - air intake during feeding, loss of suction while nursing		
48.5%	Supplementing with a bottle to assist proper feeding (by necessity)		
45.5%	There is milk leakage from the mouth or nose or both		
45.5%	When NOT feeding, there are signs of acid reflux including spitting up, gagging, vomiting		
38.9%	When latched, the latch is weak and only lasts for a short time		

L R T D N Th Sh Ch S Z

Tell me about the surgery.

- We use a CO2 laser for all frenectomy surgeries. The actual laser contact time is usually between 15-30 seconds per site- however we use it in quick short bursts with breaks to assess the surgical site and function of lip/tongue. Total surgery time should be less than 10 minutes in the vast majority of the cases. Only trained personnel are allowed in the room during laser use.
- Topical anesthetics are used for babies, while children receive more comprehensive pain management, We may use a combination of topical anesthetic, local anesthetic, a Benadryl-type sedative, or nitrous oxide depending on the needs of the child. All of that is pre-determined prior to surgery, so parents and staff can rest easy that everyone is on the same page. The vast majority of patients do not need to be put to sleep.
- For infants, crying is usually the result of us putting our fingers in the baby's mouth, rather than the result of pain. Babies generally stop crying after we stop lifting/stretching the lip or tongue. Pain/soreness is comparable to a mild pizza burn under the lip/tongue. Tylenol, ibuprofen, or arnica is generally enough to manage pain or soreness.
- The surgical sites must be stretched every 4-6 hours day and night for two weeks (weeks 1 and 2). For weeks 3 and 4, stretching during the day is sufficient. This is cited as the most difficult part of this procedure by nearly all parents.



Raymond Tseng, DDS, PhD

Dr. Ray completed his dental and graduate research training at The Ohio State University & completed his pediatric dentistry residency and nutrition post-doctoral fellowship at UNC Chapel Hill. As a specialist in children's growth and development, Dr. Ray has dedicated his practice to a multidisciplinary, evidence-based approach to help parents make informed decisions. He is a practitioner, clinician scientist, and subject matter expert on lip and tongue ties. Dr. Ray is on the board of directors for the International Consortium of Oral Ankylofrenula Professionals (ICAP). He is also the chair for the ICAP Scientific Affairs Committee (CIREAS), focused on research that identifies the best practices for treating lip and tongue ties.



What are the risks?

The frenectomy surgery is relatively risk free compared to other pediatric surgeries. General surgical risks include bleeding, pain and soreness, swelling and temporary fever, which should be managed with age-appropriate medications (Ibuprofen/motrin/advil is not to be used in infants under 6m). The risk of reattachment of the tissues is less than 1.9% in our clinic as of 12/23. General risks of the procedure center around symptom resolution – non-compliance with stretches can lead to slow response/resolution, incomplete resolution of symptoms, reattachment of the ties due to improper stretching, and not resolving the chief complaint. As with any surgery, results are not guaranteed. As a tongue tie is the result of several systems within a child, treatment and successful intervention may require other visits with healthcare professionals, and parents should be aware of those possibilities.



- **Evidence-Based Diagnosis**– Patients undergo a full functional exam and comprehensive review of symptoms. We will discuss all risks/benefits/options including monitoring. Data from symptom review and clinical exam are used to determine which sites (lip, tongue) to revise. An evidence-based approach is used, and the child must meet three criteria for treatment to proceed:
 - There must be **CURRENT** symptoms
 - There must be restrictive anatomy that corresponds to symptoms
 - Parents must be able to make an informed decision after considering risks/benefits



- **Integrative Baby Clinic** – Our bodyworker and Lactation consultant work with all babies on the day of their surgery – Pre-surgical craniofacial bodywork to loosen musculature and tissues, a functional laser frenectomy, and post-surgical private lactation support immediately after the revision. The clinic is also a support group for parents to share information.



- **Comprehensive, Multifaceted parental support** – We provide resources to parents to help them answer questions and get advice 24 hours a day. We have a private Facebook group that allows interaction with allied healthcare providers as well as other parents, video conferencing, messaging and phone conversations.



- **Follow-up visits** – Follow up visits are scheduled at 1 week (in person), 2 weeks (video or in person as needed) and 4 weeks (in person). We can also help facilitate contacts with allied health professionals (Lactation, Speech, Feeding, OT, PT, Bodywork if needed) as needed.



- **Free Revisions for 1 year** –Free revisions for 1 year from the original date of surgery. The free revision is done as long as all follow-up visits are completed, & lactation/bodywork sessions are completed and documented. Depending on your child's symptom resolution, this may require extra visits with other health professionals. Ask our coordinator for full details and requirements.



- **Dental Home - 24/7 Emergency Dental On-Call Services** – Pts have access to 24/7 emergency on call pediatric dental consult services for 12 months. Dental Home initiative allows for provision of emergency and routine pediatric dental care up to age 18.



- **Free Age 1 Dental Visit** – It's your birthday! Babies under 12 months of age during frenectomy can get a free cleaning, exam and fluoride treatment at their 1 year birthday as part of our dental home initiative at High House Pediatric Dentistry.

Wendy Pazol

Frenectomy Coordinator

Ray Tseng DDS, PhD

Pediatric Dentist

1705 High House Road, Cary, North Carolina 27513
984.884.7983 www.NCTongueTies.com
TongueTies@HighHousePedo.com