

# Tongue & Lip Tie Atlas

Examples

The following Pictures were organized to be representative of Tongue & Lip Tie as they relate to infants and long term oral consequences.

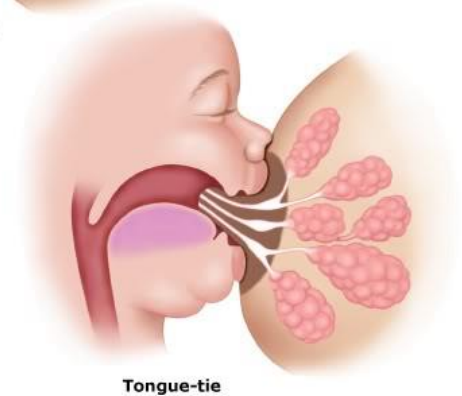
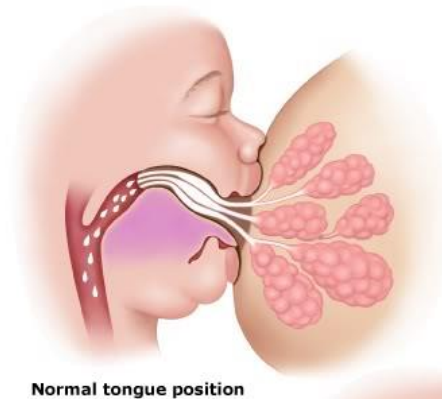
How they relate to your specific breastfeeding condition will be determined on an individual basis by a physical exam and a complete medical, birthing and breastfeeding history.

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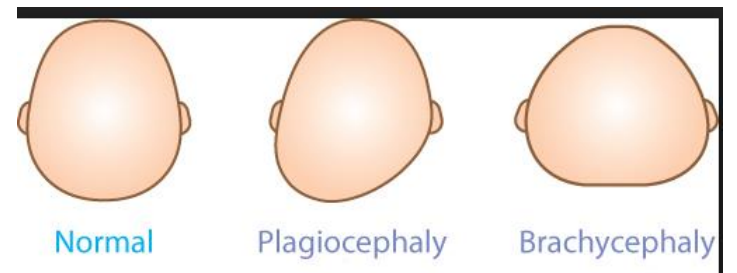
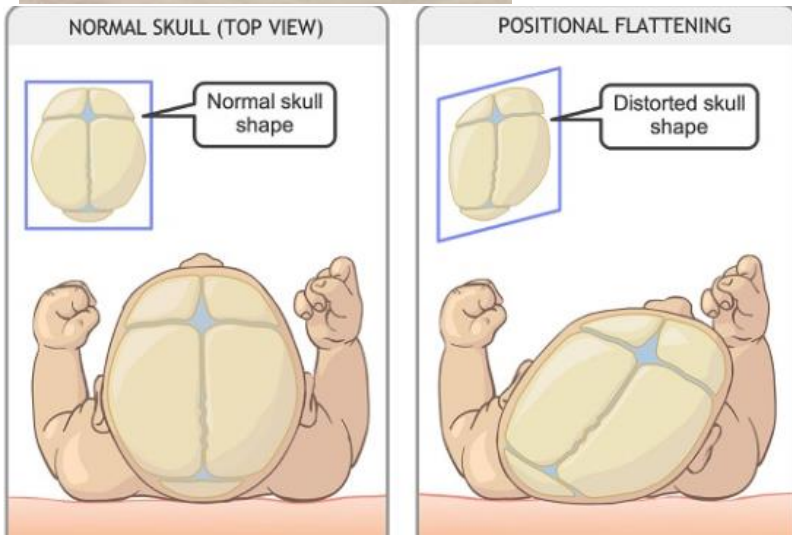
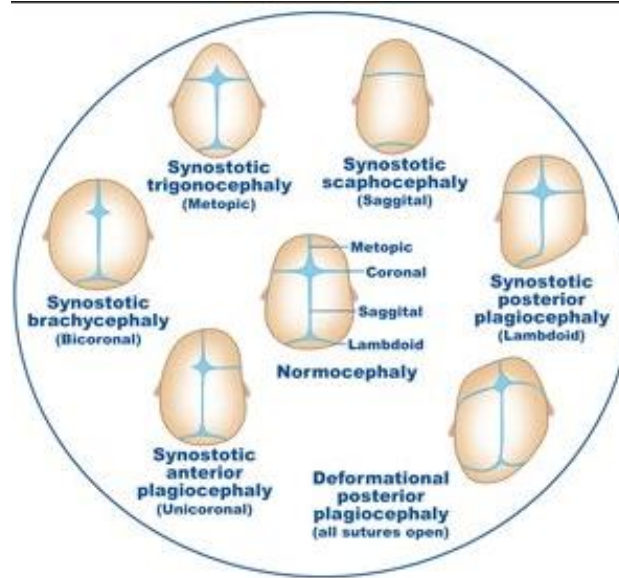
# Simple Head & Neck Anatomy for Infant Latch

## “Suck-Swallow-Breathe”

1. 60 muscles
2. 22 cranial bones
3. 34 articulations
4. 6 of the 12 cranial nerves
5. Cascading effects when structural problems



# Simple Head & Neck Anatomy Birth Posture Considerations



**Tongue Tie:** the presentations vary by classifications for **anterior**,  
**posterior** and a “**controversial**” **deep** or **submucosal**  
**This is a Normal Tongue presentation**

**Blading and spread**



**Lift and cup**



**Tongue Frenum:** Normal-healthy-elevates at least  $\frac{1}{2}$  of the way to the roof of the mouth with jaw open. Normal V-shape of Wharton's Ducts.





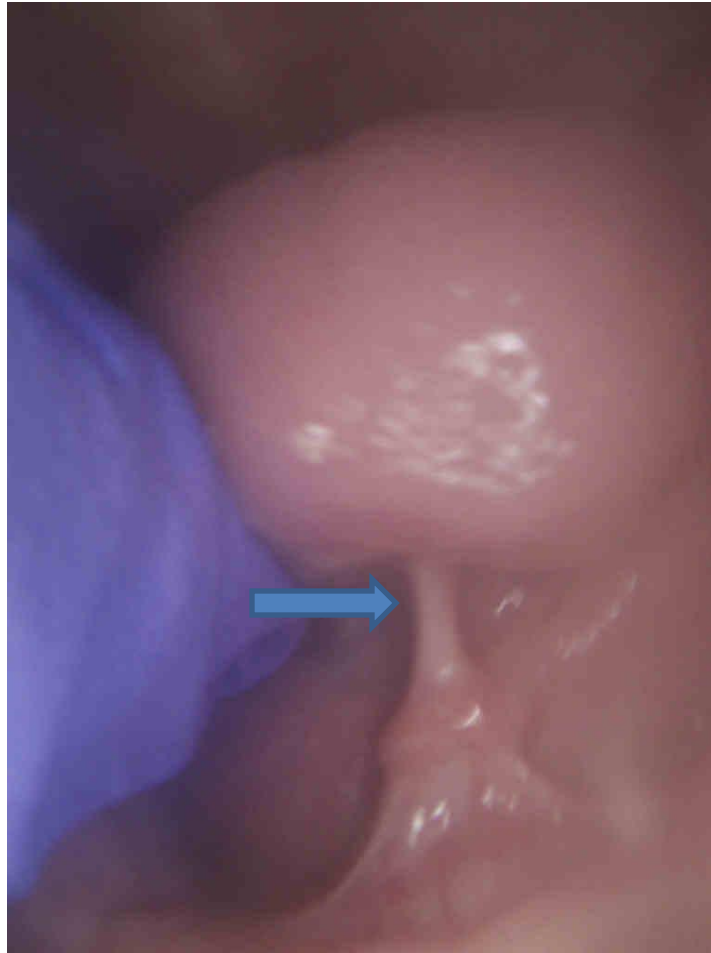
# Anterior Tongue Tie

**fused to alveolar ridge** and hiding the salivary glands (often leads to saliva choking, gagging and drool due to mechanical restriction of duct orifice. \*(Once glands build up enough saliva they can drain because of increase intra glandular pressure over whelms the ducts sphincter).



# Posterior Tongue Tie

## Eiffel Tower Presentation



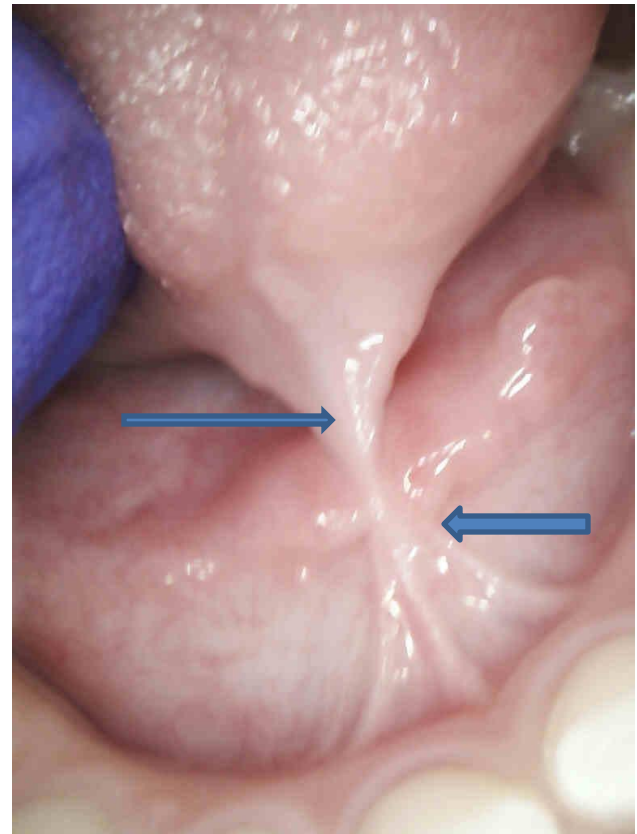


# Complex Tongue Tie

**Visual** (*cannot extrude and point tongue*)

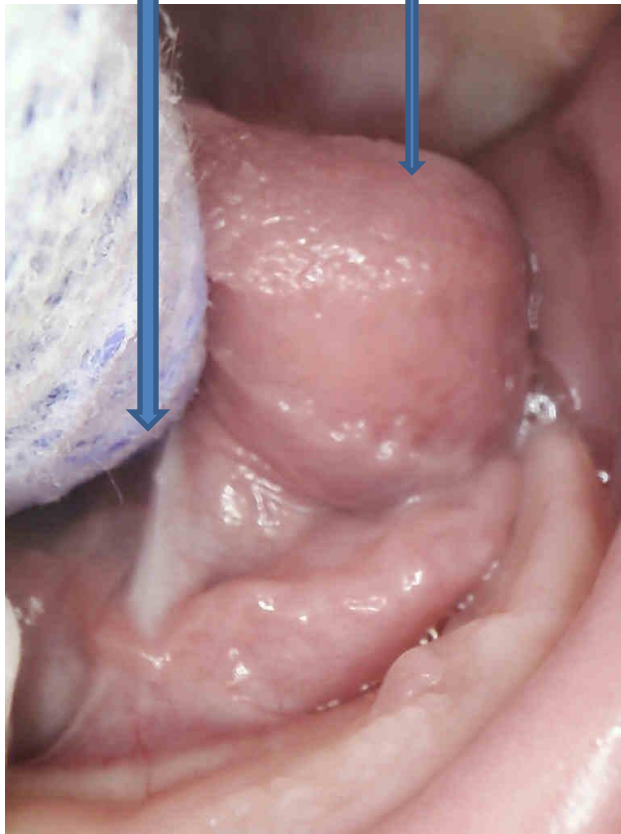


**Digital exam** (*with obvious tension lines*)

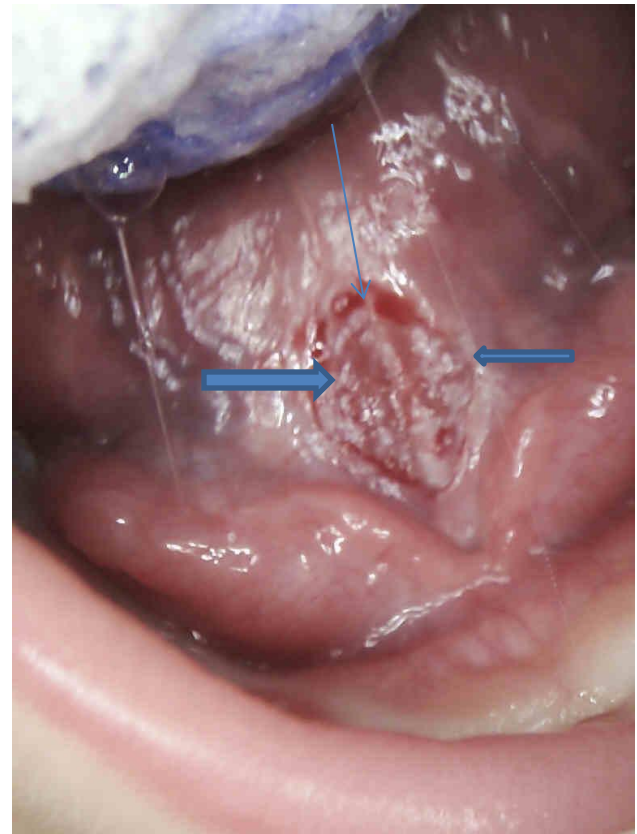


# Posterior Tongue Tie- Laser treated

**Eiffel Tower- bunched body of tongue**



**Perfect release with septum of Genioglossus and bellies of muscle**

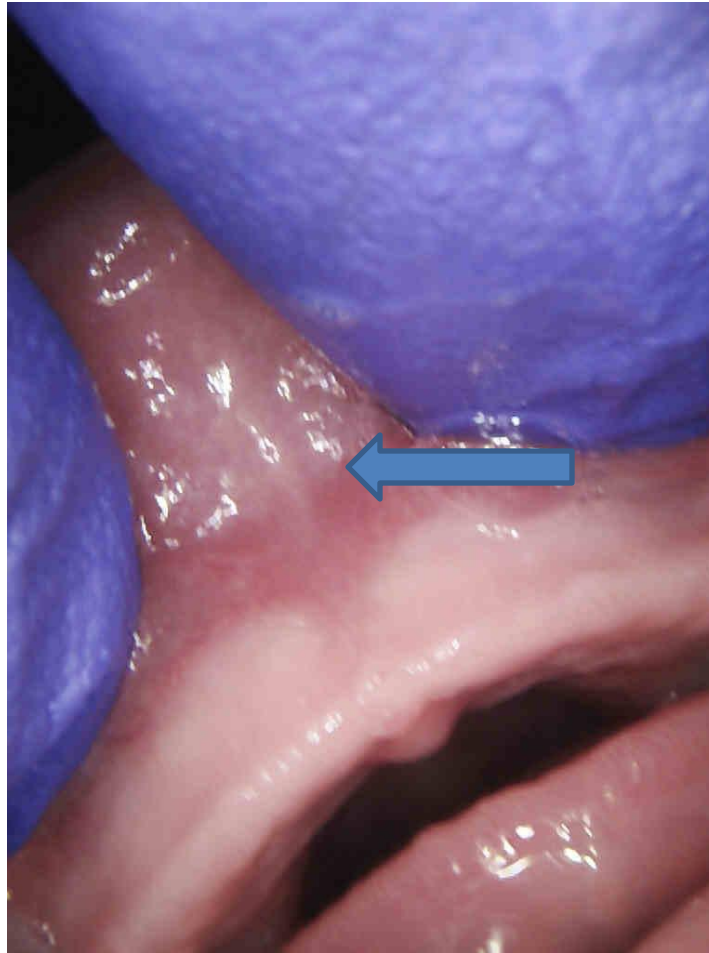


# Lip Tie Appearances

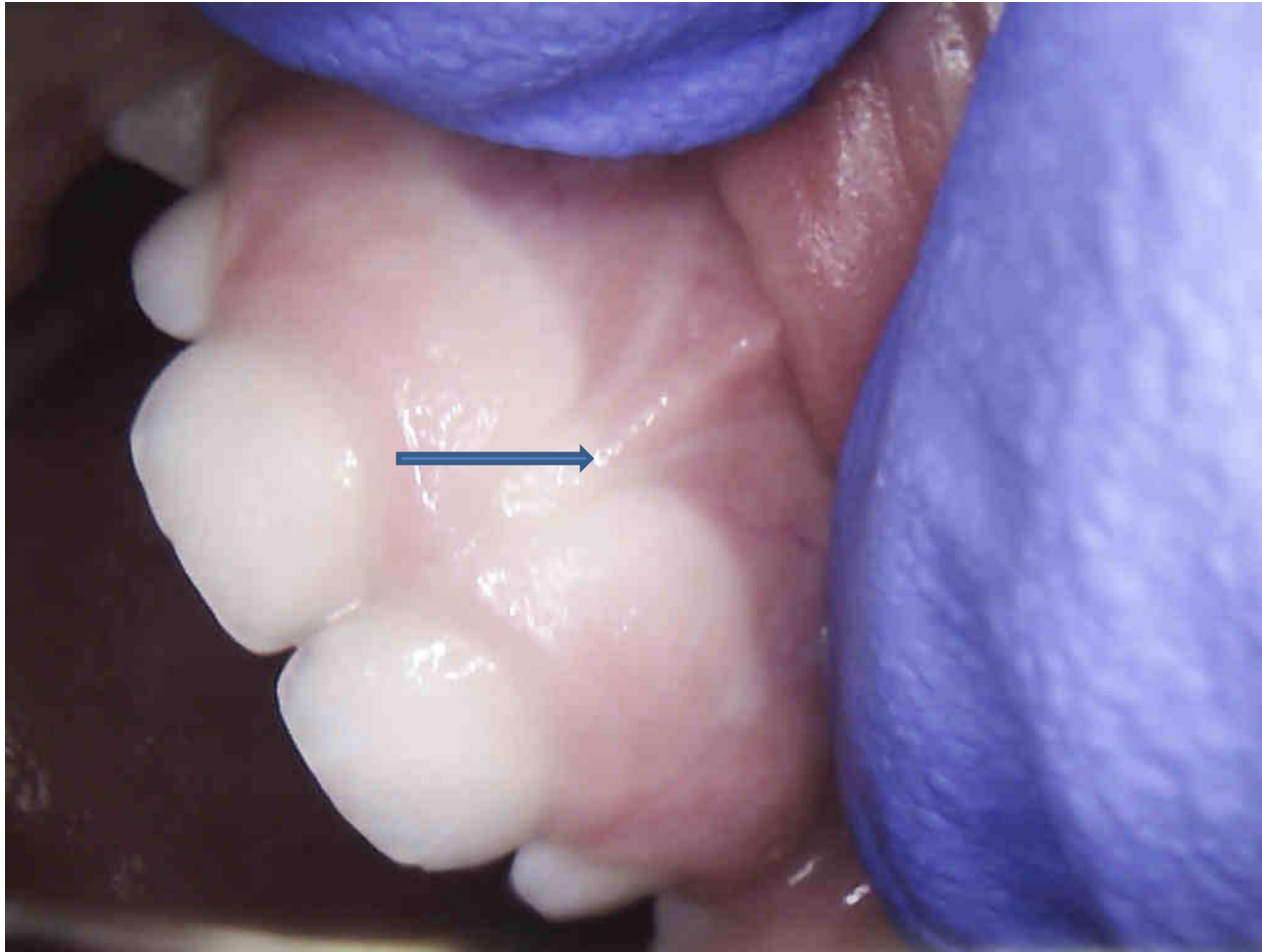
Classification by insertion 1-2-3-4

**NOT diagnostic for a treatment.** Just  
a classification for appearance

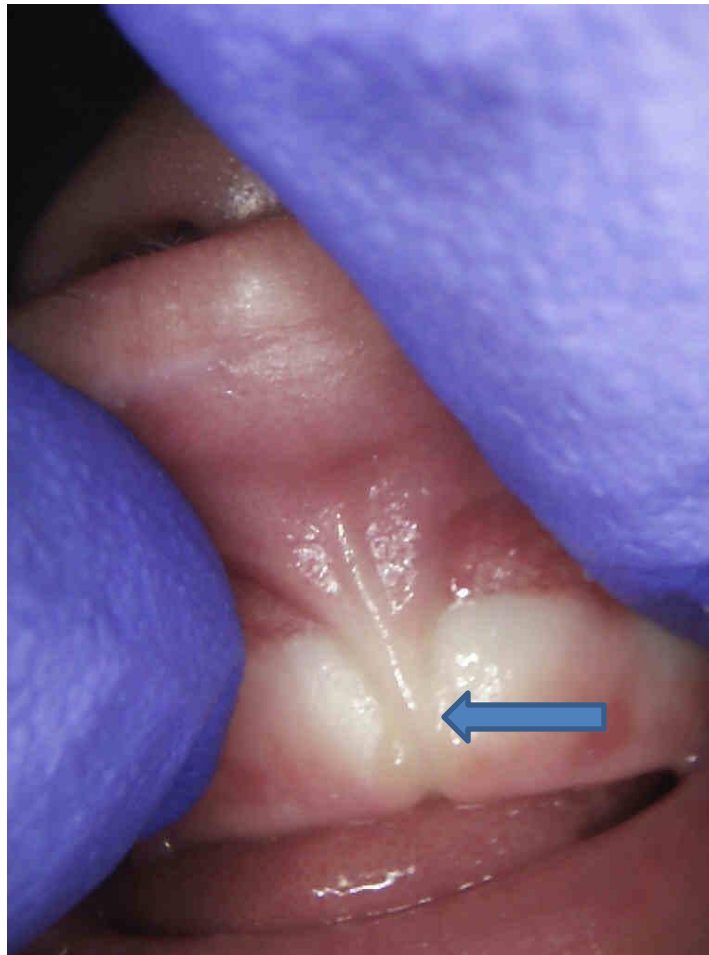
# Class 1: LIP Frenum normal insertion in mucosa at vestibule



# Class 2 Lip Tie: insertion into attached gingiva margin and mucosa

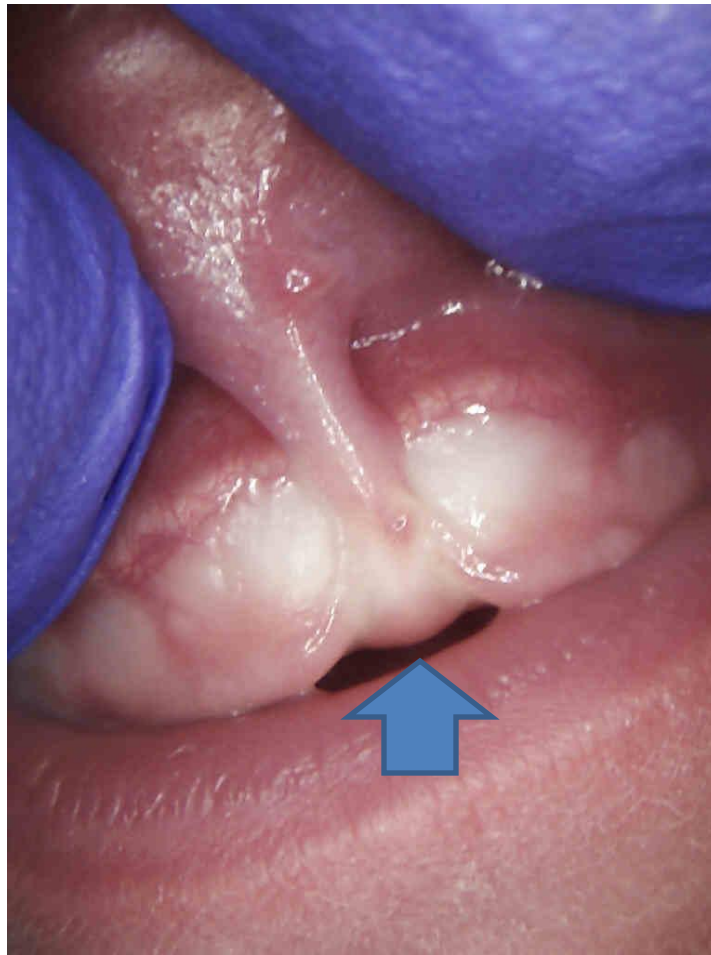


## **Class 3 Lip Tie:** insertion through the incisive papilla with a wedging cleft



# Class 4 Lip Frenum

frenum extends into the palate (roof of the front of the upper jaw)



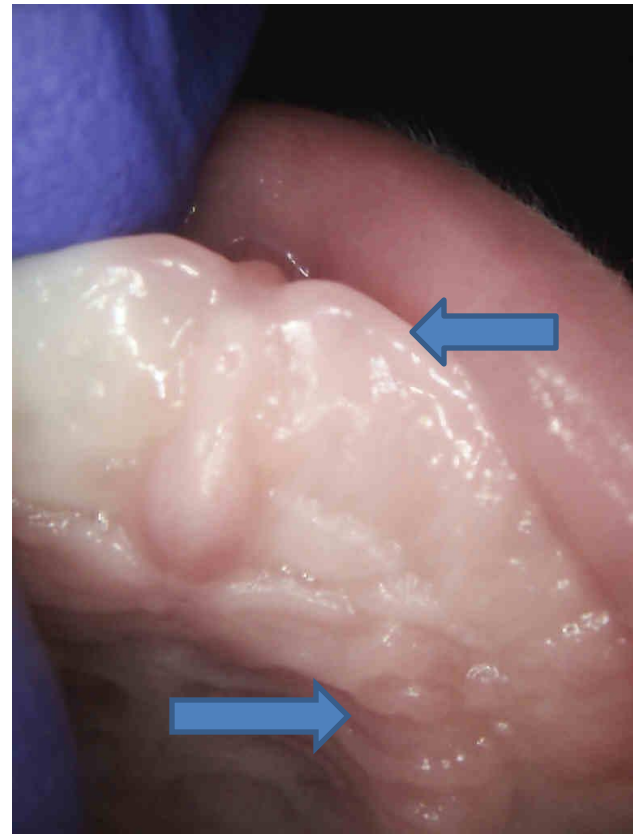


# Deformed Pre-Maxilla

Class 4 fibrous tension and pursed lip



Pre-maxilla palatal view **flattened** premaxilla (cannot retain a nipple)

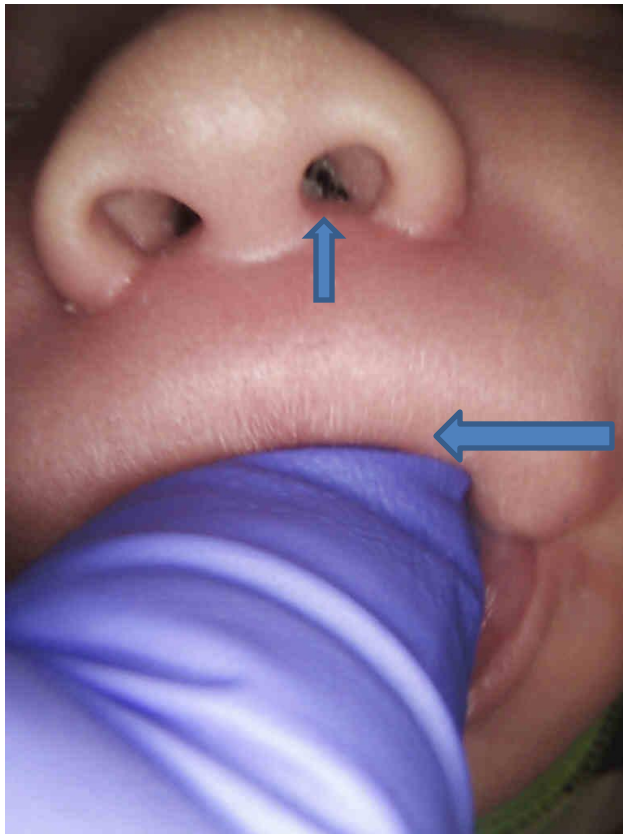


# Some Considerations

Pursing , eversion, breathing,  
laser-healing, decay, speech, apnea,  
spacing and orthodontics

# Pursed Lips

**Pursed lip and compresses nostrils**  
(limiting respiration through nose)



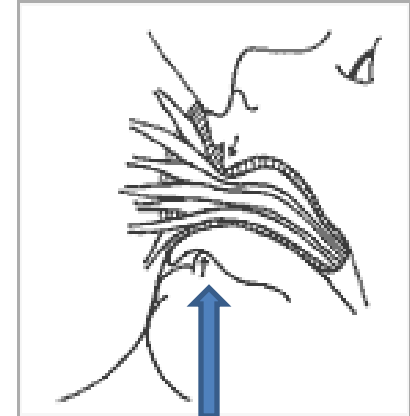
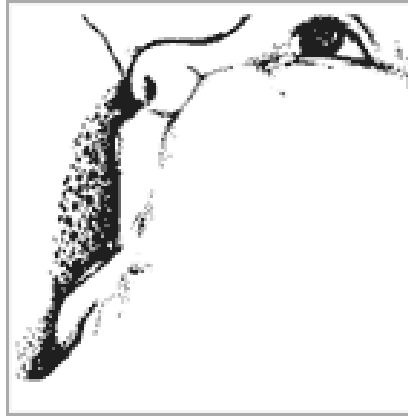
**Profile view** (narrow lip and full philtrum)



# Good vs. Poor Latch

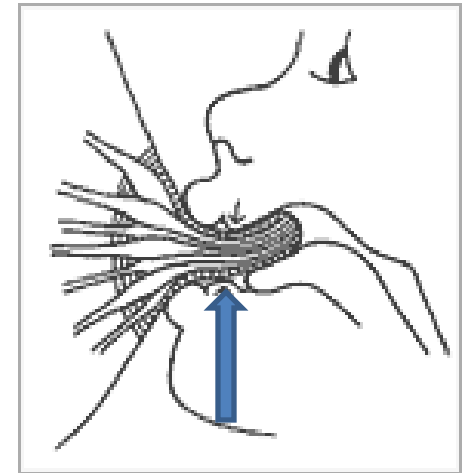
- **Wide gape**

- The nipple is far back in the mouth
- Note **tongue over alveolar ridge**



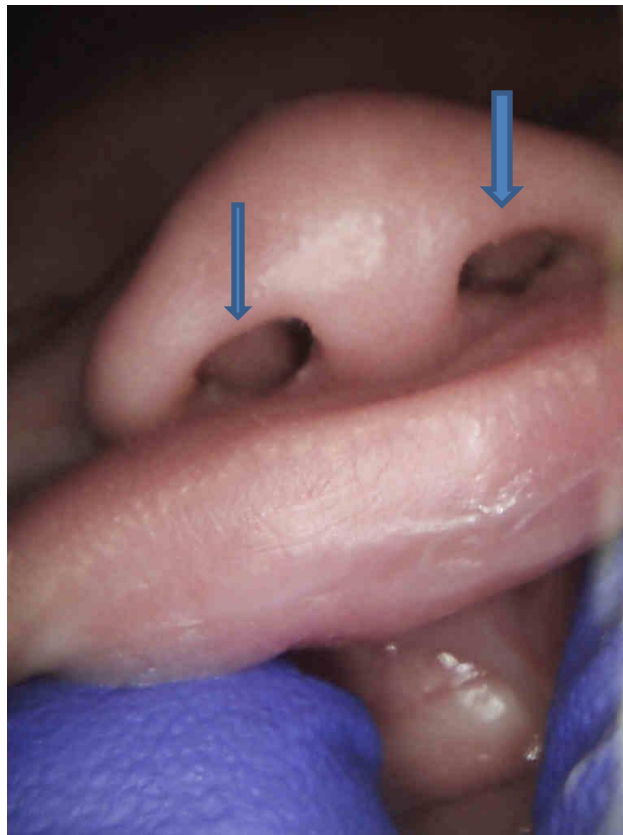
- **Short or Small Gape**

- Baby grasps only nipple and **tongue cannot reach over the alveolar ridge & under the nipple**
- Baby will not be able to use the jaw and tongue to remove milk and the nipple will get sore

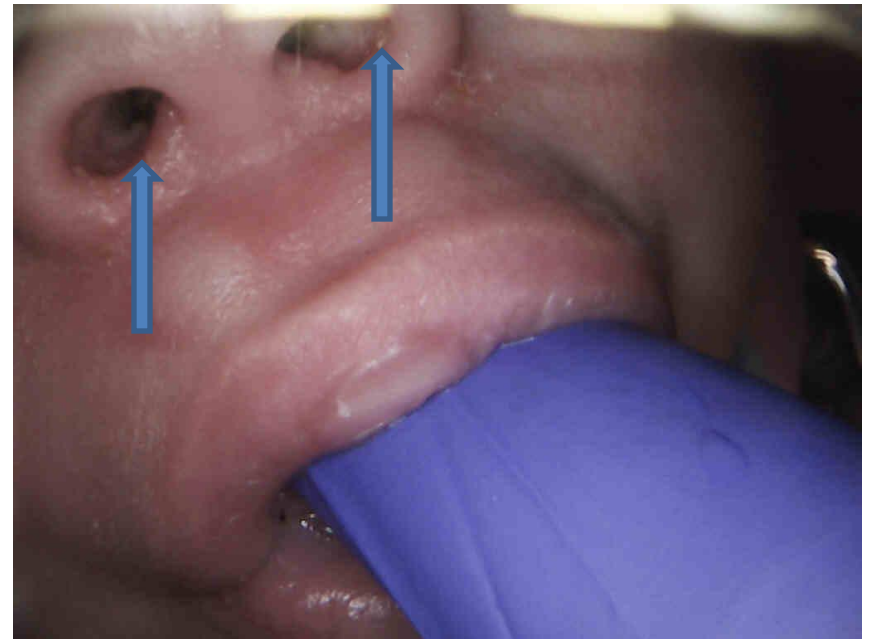


# Improved Nasal Breathing (affects: suck-swallow-breathing-bobbing off)

**compressed**



**Open**



# Laser Healing

**Immediate after CO2 laser treatment**



**7 days of healing (Eschar-white healing patch)**



# Laser Healing Final

**7 days healing**



**14 days complete healing**





# Dental Decay and the Frenum

**Chronic shallow latch history  
Gave up on breastfeeding after a few weeks**



**Cannot tolerate tooth brushing and  
complains of “gums hurt” when  
bristles rub against frenum**



# Frenum & Dental Decay

**No Breastfeeding BUT has Caries**

**Class 4 No Caries**



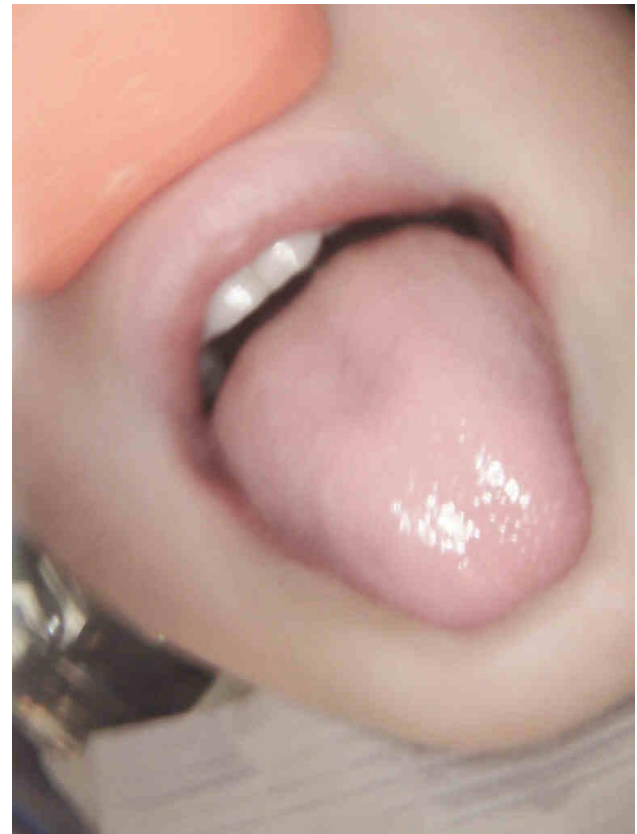
# 4 Year Old Poor Breastfeeding History

currently gagging and food texture and speech problems

**No ability to point tongue**



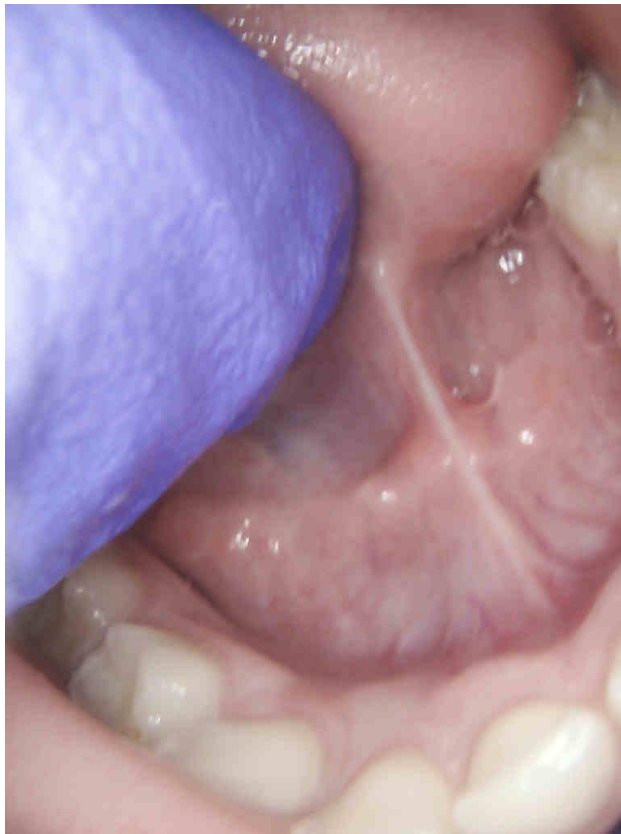
**Immediate ability to point tongue**



# 4 Year Old Poor Breastfeeding History

currently Gagging and Food Texture and Speech problems

**Posterior tongue tie**



**Immediate CO2 release**

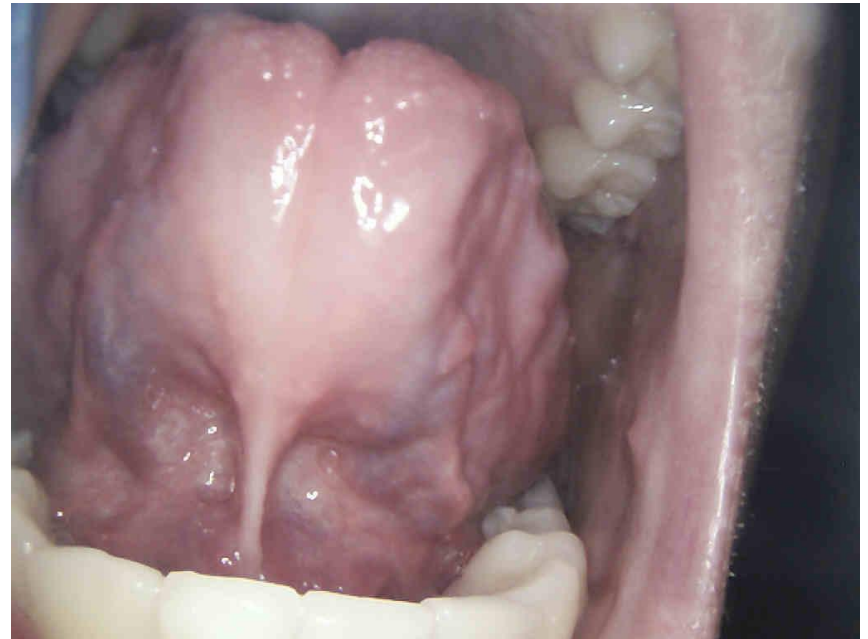


# Adult Tongue Tie

(17 years old, the myth is that the frenum will stretch. It did **not** stretch.)

**Snoring and speech problems from inability to extend tongue and have an open airway**

**Inability to lift tongue and move laterally**





# 17 year Old ( before and after comparison)

**Prior treatment**



**After treatment (this was a  
2 week follow up)**



# 7 Year Old

**Diastema space**



**Post Treatment closure**





# 8 Year old with dental spacing compare after treatment result

**Before Treatment**



**Spaced closed on its own after several year  
(no other orthodontic care was required)**



# Mother Breastfeeding Intake

**Thank you for scheduling an appointment with me. The goal of this consultation is to determine if there is a physical oral problem affecting your ability to breastfeed your baby.**

Please answer the following questions so that I may better understand your current breastfeeding issues.

Patient name: \_\_\_\_\_

D.O.B. \_\_\_\_\_ Birth Weight: \_\_\_\_\_ Current Weight: \_\_\_\_\_ Today's date: \_\_\_\_\_

Birth History: Hospital / Home Birth Term in weeks \_\_\_\_\_ Vaginal/C-Section Forceps/Vacuum assisted Y/N

Drugs used: Pitocin: Y/N others \_\_\_\_\_

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**Mother-** Do you have any of the following (please check all that apply).

- Painful nursing
- Are your nipples, bruised, cracked, everted, flat, inverted, blistered, blanched, flattened, lipstick shaped, bleeding or misshaped nipples after nursing?
- Breast swelling or Clogged ducts
- Mastitis
- Thrush of the nipples
- Milk supply: strong letdown, adequate, losing supply, not certain
- Have you altered your diet? Y/N If yes, why? \_\_\_\_\_

Do you use a shield to breastfeed? \_\_\_\_\_ Right – Left –Both sides

Have you had any breast surgery or trauma? Yes / No Reduction-Augmentation - Other (circle)

How many times a day do you breastfeed? \_\_\_\_\_ How long for each side? \_\_\_\_\_

**Infant-** Does any of the following apply (please check all that apply)

Has your baby been previously diagnosed with a lip or tongue tie? Y/N

If yes, was it treated somewhere else? Y/N

If yes, when \_\_\_\_\_ where \_\_\_\_\_ how \_\_\_\_\_ by who \_\_\_\_\_ ?

Has your baby taken or is currently taking any prescribed medications? Y/N

If yes, which ones? \_\_\_\_\_

Has your baby had his/her Vitamin K drops or shot? Y/N Is there a family history of tongue or lip ties? Y/N

Have you seen a Chiropractor, Osteopath or CST for your baby? Y/N

Is there any posture or shoulder tension or head position favoritism? i.e. sleeps with head arched back ? Y/N

**When nursed is the feeding:**

- Diapers: Yellow / Green / Brown Seeded / Mucous / Bloody (circle all that apply)
- Prolonged, incomplete or baby slides off of the nipple Y/N
- Baby bobs mouth on and off to latch Y/N
- Baby falls off the breast and sleeps Y/N
- Lip or tongue feels weak---can or cannot retain a pacifier in mouth by self (circle)
- Lip or tongue cycles through sucking and movement for a short time then stops and recycles Y/N
- Can you hear your baby breathe? Y/N Typical baby breathing: lips apart or lip together (Circle)
- Chronic burping, flatulence and or hiccups? (circle that which applies)
- Distended or bloated belly (circle)
- Signs of reflux such as chronic spitting up, gagging or vomiting Y/N (circle that which applies)
- Signs of discomfort such as arching of the back or clenching of the hands Y/N
- Clicking noise or loss of suction while nursing: none, occasional, frequent, inconsistent (circle)
- Breast milk leakage from mouth, nose or both (circle that which applies)
- Does your baby's tongue feel like sandpaper rubbing against you? Y/N
- Is there a crease mark on your baby's upper lip after nursing? Y/N
- Is your baby losing weight? If yes, how much? \_\_\_\_\_ Y/N
- Does nursing sound like there is drinking, gulping or other noises? (circle that which applies)
- Do you supplement with a bottle to assist with proper feeding? Y/N breast milk, formula or both
- Is there a sustained strong or clamping latch? Y/N

Any other nursing concerns: \_\_\_\_\_ 01/22/2018

# Doctor Intake Physical Exam

## Infant Frenectomy Consultation Considerations

Patient name: \_\_\_\_\_ D.O.B.: \_\_\_\_\_ Date: \_\_\_\_\_  
 Position: Supine/ Upright Vitals: HR \_\_\_\_\_ O2/Co2: \_\_\_\_\_ RR: \_\_\_\_\_ Temp. \_\_\_\_\_

Classification of the lip tie: 1 2 3 4

Presentation: Thin / Thick/ Mixed Fibrous /Fleshy/Mixed Corded / Triangular

### Lip evaluation:

- Callus and or blisters present on the upper lip? Y / N
- Defined Philtrum? Y / N
- Full upper lip? Y / N
- Upper lip curls up and out (flanges)? Y / N
- Lip purses? Y / N
- Upper lip stretches and rolls to the tip of the nose? Y / N
- Gums blanch when raising lip? Y / N
- Muscle tone tight or flexible
- Thin lipped compared to lower Y/N \_\_\_\_\_ mm. upper / mm. lower \_\_\_\_\_ % \_\_\_\_\_

### Tongue evaluation:

- Anterior Tongue-Tie Frenum Width: none - slight- <1mm - moderate 2-5mm - severe > 5mm
  1. Barrier to finger sweep: fence / speed bump
  2. Blanching gum when tongue retracts
  3. Sore or blister on tip of tongue
- Shape of Tongue: Notched / forked / cupped / heart-shaped / folds down / square / blades / rounded/ blunted
- Posterior tie:(posterior finger speed bump, tenting ( Eiffel tower), fence, cord
  1. Short < 5mm. / Medium 5-10 mm. /long > 10 mm.
  2. Lingual fiber: Thin/ Wide-Corded/Fleshy/Mixed- Shallow/Deep-Fascia-thin/thick
  3. Fiber Inserts: anterior 1/3, middle 1/3 , posterior 1/3
  4. Deep /Hidden ( seen with retraction—*Submucosal* )
- Finger suction: None - weak - strong -- even pressure - pinching clamp or bite
- Tongue cycle: continuous *progressive wave* - short burst with *prolonged rest* - humping push - pistons in and out
- Lower Jaw – tremors / tight / tension lines
- Tongue : posterior elevation- anterior lift - anterior point – extends beyond gums  
Y/N - sides curl – blades – cups
- Palate: Flat - Normal - High Arched - Bubble Palate – Cleft : soft tissue/ boney
- Asymmetry: Head Tilt: Y (right-left) /N Face: Midline Symmetry: Y/N  
 Jaw Symmetry: Y/N Shoulder Preference: R/L Cranial Vault Symmetry: Y/N  
 Eyes Level: Y / N Mouth and Eyes Level: Y/N Anterior Posterior Strain: Y/N  
 other \_\_\_\_\_

09/22/2017

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