



*Breastfeeding should be
fun and enjoyable*

Why does it hurt when I breastfeed ?

Lawrence Kotlow DDS



**** Lawrence Kotlow DDS 2011*

second addition 2011

**The Surgeon General's Call to Action
to Support Breastfeeding**

2011



Regina M. Benjamin, M.D., M.B.A.
Vice Admiral, U.S. Public Health
Service Surgeon General

“For nearly all infants, breastfeeding is the best source of infant nutrition and immunologic protection, and it provides remarkable health benefits to mothers as well. Babies who are breastfed are less likely to become overweight and obese. Many mothers in the United States want to breastfeed, and most try. And yet within only three months after giving birth, more than two-thirds of breastfeeding mothers have already begun using formula. By six months postpartum, more than half of mothers have given up on breastfeeding, and mothers who breastfeed one-year-olds or toddlers are a rarity in our society.”

Message from the Secretary, U.S. Department of Health and Human Services

As one of the most universal and natural facets of motherhood, the ability to breastfeed is a great gift. Breastfeeding helps mothers and babies bond, and it is vitally important to mothers' and infants' health.

For much of the last century, America's mothers were given poor advice and were discouraged from breastfeeding, to the point that breastfeeding became an unusual choice in this country. However, in recent decades, as mothers, their families, and health professionals have realized the importance of breastfeeding, the desire of mothers to breastfeed has soared. More and more mothers are breastfeeding every year. In fact, three-quarters of all newborns in America now begin their lives breastfeeding, and breastfeeding has regained its rightful place in our nation as the norm—the way most mothers feed their newborns.

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Why does it hurt me when I breastfeed my baby ?



- *Many mothers often mistakenly assume that if they cannot successfully breastfeed there is something wrong with them. The opposite is true. Infants are often born with a combination of conditions called ankyloglossia or tongue-tied and/or a lip-tie. A tongue-tie occurs when the embryological remnant of the tissue attaching the tongue to the floor of the mouth does not disappear when an infant is born. A lip-tie is when the upper lip remains attached to the upper gum.*



Tongue-tie

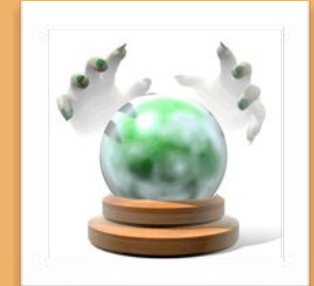


Lip-tie

Common myth(stakes) that interfere with proper care and treatment of newborns presenting with ankyloglossia



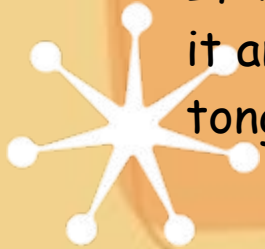
- ★ Tongue-ties do not exist.
- ★ Tongue-ties will correct themselves.
- ★ Tongue -ties will not affect breastfeeding.
- ★ A tight lingual frenum will stretch or tear without treatment.
- ★ Ankyloglossia does not cause maternal discomfort.
- ★ Ankyloglossia does not effect developing speech.
- ★ Surgery must be completed in the operating room under general anesthesia.
- ★ Children under age 3 months are too young to have surgery.
- ★ Colic or reflux is not related to tongue-ties



How to determine if your newborn infant is tongue-tied (completed in the delivery room immediately after birth)



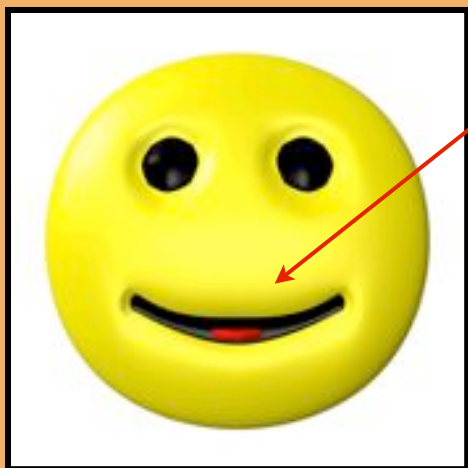
- Before an infant or a mother develops breastfeeding difficulties, use the following steps to check to determine if your infant may have a problem with the lingual frenum. Place your index finger under the tongue and sweep it across the floor of the infants mouth from one side to the other.
- A smooth mouth floor = No problem
- A small speed bump = Potential problem
- A large speed bump = Most likely will be a problem
- A small, medium or large membrane = Definitely will develop into a problem
- If the membrane feels very thin and strong like fine wire, push on it and look for tongue tip indentation and a slight bow of the tongue tip (submucosal posterior tie)





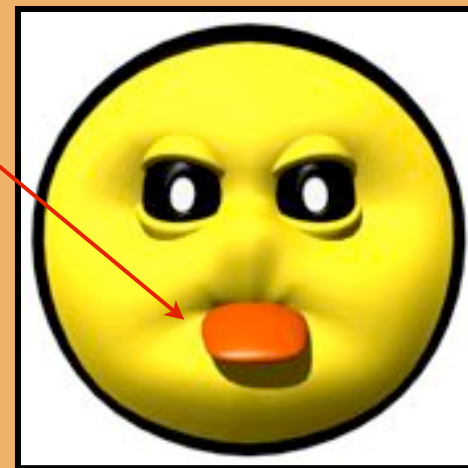
Examine your infant clinically

Ankyloglossia can be defined in Three ways



Anatomic & clinical appearance

Infant's and mother's symptoms



Ability to function



*Kotlow Diagnostic criteria (one) for clinically apparent tongue-ties in infants



**Type I(*4LK) -total tip involvement

Type -II (*3LK) Midline-area under tongue (creating a hump or cupping of the tongue)



Type III (*2LK) Distal to the midline. The tongue may appear normal

Type IV (*1LK) Posterior area which may not be obvious and only palpable, Some are submucosally located



**Lactation consultants diagnostic criteria

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Diagnostic criteria two

Examine for functional problems



Total tie down resulting in lack of up or down mobility



Cupping and hump formation



Heart shape, pointed tip



Unable to elevate and touch the hard palate



No extension beyond the lips



Diagnostic criteria three



Diagnostic symptoms indicating the possible need for a tongue and or lip-tie revision



★ *Infant Factors to consider

- ★ No effective latch-on
- ★ Un-sustained latch-on
- ★ Slides off nipple
- ★ Prolonged feeding times
- ★ Unsatisfied hunger after prolonged feeds
- ★ Falling asleep on the breast
- ★ Gumming or chewing on the nipple
- ★ Poor weight gain or failure to thrive
- ★ Unable to hold pacifier
- ★ Gas, Colic and /or reflux

★ Maternal Factors to consider

- ★ Creased, blanched or flattened nipples after feeding
- ★ Cracked, bruised or blistered nipples
- ★ Bleeding nipples
- ★ Severe pain with latch-on
- ★ Incomplete breast drainage
- ★ Infected nipples
- ★ Plugged ducts
- ★ Mastitis & nipple thrush

Examination by Dr. Kotlow and Preparation for surgery



You cannot properly diagnose a tongue -tie unless the infant is examined in this position



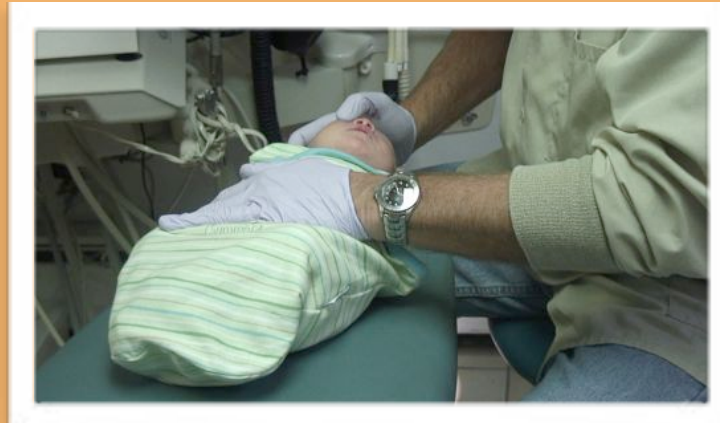
**Examination on parent's lap facing parent.
critical to diagnose and view a posterior tongue-tie



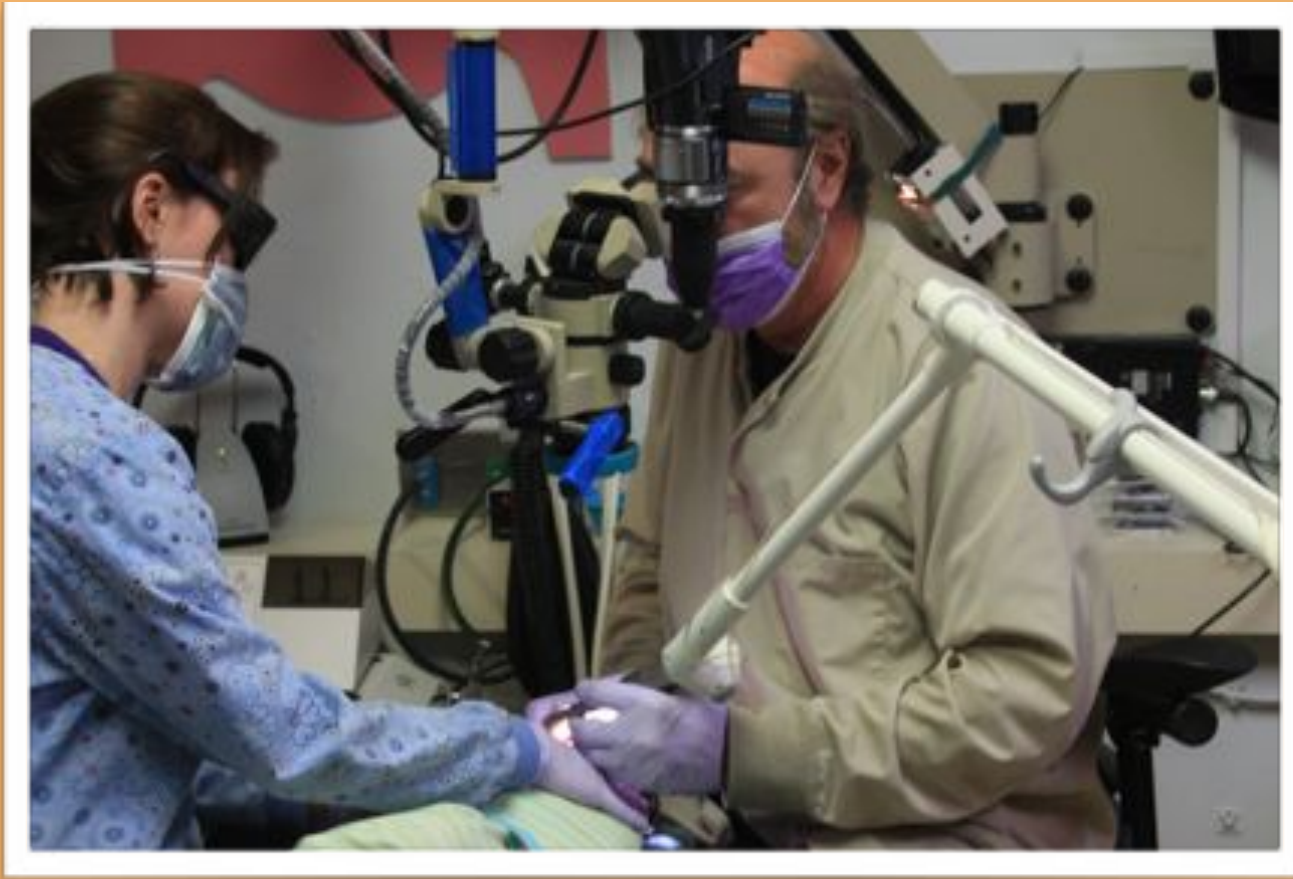
Infant being brought into surgical area



Infant placed in swaddling blanket to control
movements during surgery



Dr. Kotlow correcting abnormal frenum attachments



Surgical procedures completed on all infants and children in the dental office using lasers & surgical operating microscopes, no general anesthetic, no hospitals, no stitches are required.



What problems that may occur if the attachments remain untreated



Potential problems that may related to abnormal tongue and lip ties

What may develop over time

- * Nutritional problems
- * Colic
- * Reflux due to aerophagia
- * Drooling
- * Gagging
- * Sleep apnea
- * Changes in sleep patterns
- * Speech problems
- * Jaw growth & development abnormalities
- * Dental caries



Clinical examples of developmental problems due to tongue-ties



Heart shape, cupping
Clefting of the border of the tongue



Dental decay in
lower back
teeth



Orthodontics
Creating a gap
between the lower
front teeth



Limited mobility and
function of the
tongue



Pulling the lower teeth
towards the tongue





Simple pleasures that may be effected by a tongue that lacks proper function and mobility



Correcting an infant's tongue-tie & lip-tie

Prior to surgery Dr.Kotlow does not use any drugs or injections for numbing, but places a cotton roll with some sugar water into the infant's mouth. This calms the baby and allow him to see the infants sucking mechanism. Sugar water is clear and also can reduce the discomfort of the surgery. (breast milk also helps but is white and may interfere with visualization of the frenum). This also often shows the infant's inability to achieve a deep latch.



Prior to surgery the infant is allowed to suck on a cotton roll wet with sugar water. Note shallow latch on to cotton roll



Immediately post surgery the infant easily latches on to the cotton roll and easily brings it further into the mouth.



Surgical release of the lingual frenum in the dental office using lasers



Stretching the tongue upward to expose the frenum using a *grooved director.



Completed frenum release.

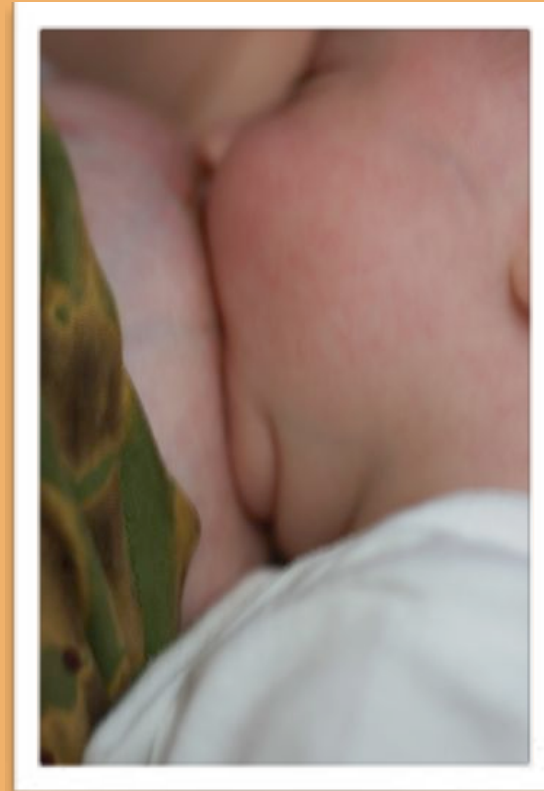


*available through "Miltex" and your dental supply dealer

Lip , chin and breast positions after surgery !



Pre-surgery with poor upper lip latch-on and tongue-tie



Immediately post-surgery with improved upper lip-latch on and improved painless breastfeeding



After surgery is completed



To help an infant adjust to his or her new found mobility and altered latch, parents can assist the infant by a variety of different massage techniques.

Slowly rotate fingers around the outside of the lips to entice your child to suck on your finger and help create a new sucking pattern. Pressure during sucking should be on your finger nail post surgery , not only on your knuckle.

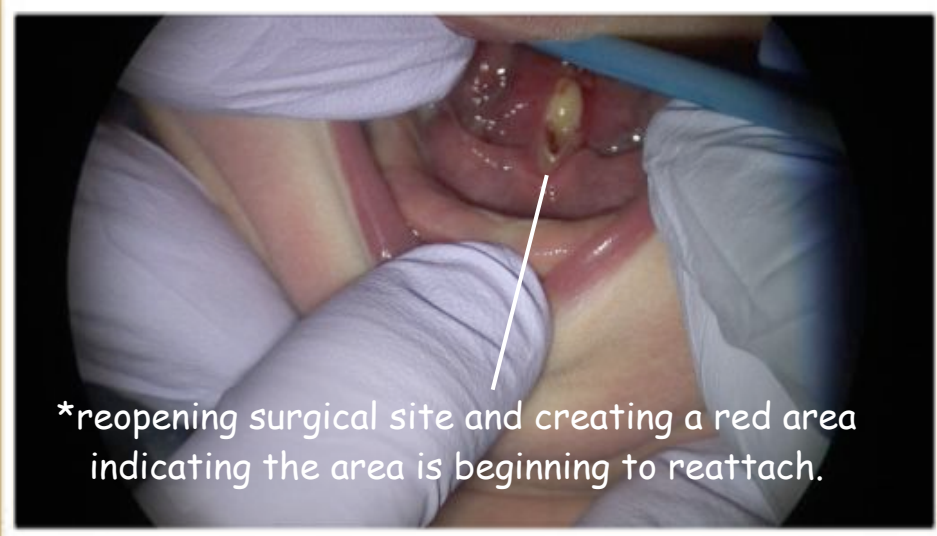


Lingual frenum revision post surgical care



Method one

Method two



*reopening surgical site and creating a red area indicating the area is beginning to reattach.



For approximately 7 days, stretching is completed-4 times daily, by elevating the tongue using a plastic tongue blade to prevent reattaching.

or

Placing both index fingers under the tongue and pushing upward and down toward the throat to keep surgical site from reattaching.

*Significant pressure must be applied to open the surgical site if it begins to grow back together, in order to prevent reattachment and make breastfeeding successful.



Pain medication, such as acetaminophen or a teething gel, is ok to use for discomfort.

Changes in infant Breastfeeding which may occur immediately or within a week after treatment



The mother may begin breastfeeding her infant as soon as the procedure is over and often will state , "this feels so much different".

4 day follow-up comments;

- Breastfeeding with less effort
- Infant is sleeping longer between feedings
- Breastfeeding was quieter: had been noisy, clicking and not very effective
- Nipples were healing
- Breastfeeding was more effective
- Colic, reflux & gas disappeared





What is a Lip-tie ?

A remnant of the tissue in the midline of the upper lip and the gum which holds the lip attached to the gum (gingiva) and may interfere with the normal mobility and function of the upper lip contributing to poor latch by the infant onto the breast and in some cases when mothers elect to at-will breastfeed during the night, without cleaning off the teeth after nursing, may contribute to decay formation on the front surfaces of the upper teeth.



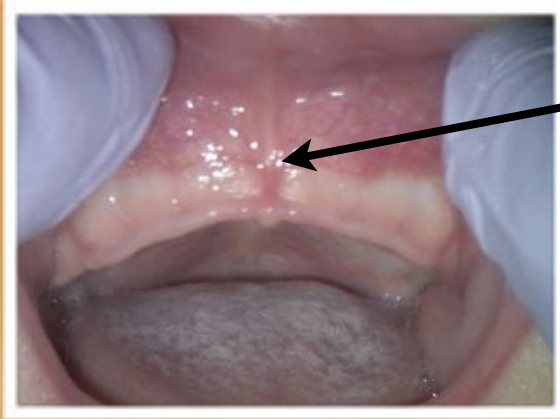
Latch Difficulties



Decay formation the front surfaces of the upper anterior teeth



Kotlow infant and newborn maxillary lip-tie diagnostic classifications



Class I
Minimal visible
Attachment



Class II
Attachment primarily into
the gingival tissue



Class III:
Inserts just in front of
anterior papilla



Class IV
Attachment just into the hard
palate or papilla area





Revising or releasing the upper lip-tie



Lip-tie prior to
laser surgery



Revision of lip-tie immediately post
surgery



Three week old with mother having mastitis and poor latch

Example if infant diagnosed with a posterior tongue-tie and lip-tie and the results of the surgical revision



Revision using lasers , quick healing, little bleeding, no stitches

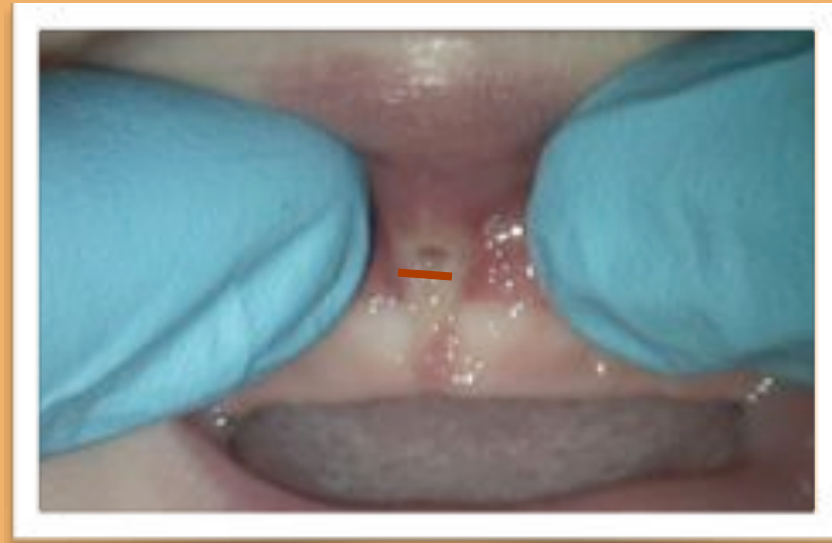


Revising the maxillary or labial frenum



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Post surgical care for the successful of the maxillary lip-tie revision



Appearance four days after surgery, the white area is normal healing

***To prevent the reattachment of the upper lip to the gum ,it is important to pull the upper lip upward to expose and open the surgical site at least two times a day.

In the mid-point of the white area, a small red line may occur in either the tongue or lip revision site, this is reattachment and the area needs to be stretched more forcefully



Recent Literature



Tongue-tie and breastfeeding: a review of the literature.

Edmunds J, Miles SC, Fulbrook P. Breastfeed rev 2011 March 19(1) 19-26

Darling Downs West Moreton Health Service District. janet_edmunds@health.qld.gov.au

Abstract

One factor that contributes to early breastfeeding cessation is infant tongue-tie, a congenital abnormality occurring in 2.8-10.7% of infants, in which a thickened, tightened or shortened frenulum is present. Tongue-tie is linked to breastfeeding difficulties, speech and dental problems. It may prevent the baby from taking enough breast tissue into its mouth to form a teat and the mother may experience painful, bleeding nipples and frequent feeding with poor infant weight gain; these problems may contribute to early breastfeeding cessation. This review of research literature analyses the evidence regarding tongue-tie to determine if appropriate intervention can reduce its impact on breastfeeding cessation, concluding that, for most infants, frenotomy offers the best chance of improved and continued breastfeeding. Furthermore, studies have demonstrated that the procedure does not lead to complications for the infant or mother.

PMID: 21608523 [PubMed - in process]





Helpful Links to web sites that may help parents and professionals

- ◆ *Dr. Kotlow's website* <http://www.kiddsteeth.com>
- ◆ *Newman Breast feeding site:* <http://www.nbci.ca>
- ◆ *International Association of Tongue-tie Professionals website:* <http://www.tongue-tie.net>
- ◆ *Carmen Fernando :* <http://www.tonguetie.net>

You can reach Dr.Kotlow @ KIDDSTEETH@AOL.COM

Information from this article may be used with proper acknowledgements for educational purposes when educating parents and other health care professionals





Acknowledgements

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