Helping mother’s breastfeed their newborn infants

Using our technology and knowledge of lasers to improve infant latch-on the mother’s breasts.

Lawrence Kotlow DDS


Foreword from the Surgeon General, U.S. Department of Health and Human Services

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. 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 old or older are a rarity in our society.

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Statistics

- 1972 - 22 percent of US mothers breastfed their infants
  1972 = 3,258,411 total births
- 716,850 breastfed infants
- 2009 - breastfeeding report card from the CDC found that 74 percent of women start breastfeeding, 33 percent were still exclusively breastfeeding at three months and 14 percent were still exclusively breastfeeding at six months.
  2009 = 4,131,019 total births
- 2009 = 3,057,000 breastfed infants
- 1,363,000 after 3 months
- 578,000 after 6 months

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Many Myth(stakes) & Fairy

Some times, we either fail to see the what is before our eyes and is obvious or we see it and fail to consider it.

A Myth is a fiction something which is untrue.

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Common ideas and myths that interfere with proper care and treatment of newborns presenting with ankyloglossia

- Tongue-ties do not exist.
- Tongue-ties will not effect nursing.
- Tongue-ties will correct themselves.
- A tight lingual frenum will stretch or tear without treatment.
- Ankyloglossia does not cause maternal discomfort.
- Ankyloglossia does not effect developing speech.

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Why mother’s give up breastfeeding

Two oral problems which result in mother’s giving up breastfeeding

*The maxillary lip-tie
*Formerly known as maxillary frenum

Ankyloglossia or tongue-tie

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Nursing should be enjoyable

Today’s goal is to take breastfeeding mothers from this

mastitis
Engorgement
biting

To this

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Medically necessary care

*Medically necessary care (MNC) is the reasonable and appropriate diagnostic, preventive, and treatment services and follow-up care as determined by qualified, appropriate health care providers in treating any condition, disease, injury, or congenital or developmental malformation. MNC includes all supportive health care services that, in the judgment of the attending dentist, are necessary for the provision of optimal quality therapeutic and preventive oral care.

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Why we need to be proactive in assisting mother’s breastfeeding

We need to define anecdotal evidence vs evidence based care

*Anecdotal- hearsay or evidence that is considered untrustworthy. It may true…… but the conclusion needs to be established by scientific means.

*Evidence based: the best evidence gained from the scientific method. Reviews the quality of evidence as well as the risks and benefits of care.

What is a tongue-tie?

Lawrence Kotlow DDS helping nursing mothers since 1974

As defined by the International Affiliation of Tongue-tie Professionals (www.tongue-tie.net)

The embryologic remnant of the tissue in the midline of the undersurface of the tongue and the floor of the mouth.

An (abnormal) attachment of the membrane that fastens the tongue to the floor of the mouth which may interfere with the normal mobility and function of the tongue.

What are the best criteria we can use to diagnose ankyloglossia?

Ankyloglossia can be defined in three ways

Anatomic & clinical appearance

Ability to function

Infant’s & mother’s symptoms

Diagnostic symptoms as an aid for diagnosis

Infant Factors to consider

No latch.

Un-sustained latch.

Slides off nipple.

Prolonged feeding durations.

Unsatisfied after prolonged feeds.

Falls asleep on the breast.

Gumming or chewing on the nipple.

Poor weight gain or failure to thrive.

Unable to hold pacifier.

Maternal Factors to consider

Creased or blanched nipples after feeding; flattened.

Cracked, bruised or blistered nipples; gives it up.

Bleeding nipples.

Severe pain with latch.

Incomplete breast drainage.

Infected nipples.

Plugged ducts.

Mastitis & nipple thrush.

Initial patient evaluation information

Nursing should be both enjoyable and pain free.

Diagnostic symptoms as an aid for diagnosis

Infant Factors to consider

Maternal Factors to consider

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Classification of newborn abnormal lingual frenums: based upon anatomic appearance

Type II (4*) -total tip involvement.

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

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

Type IV (I) Posterior area which may not be obvious and only palpable. Some are not visible if they are submucosally located.

Maternal Factors to consider

Total tie down resulting in No up or down function.

Cupping and hump.

Diagnosis based on function or lack of function.

Unable to elevate and touch the hard palate.

Unable to extend tongue past alveolar ridge.

Diagnosing lip and tongue ties

When? The initial evaluation should be immediately after birth.

Full evaluation in the dental office.

Where? In the birthing or delivery area.

During a knee to knee examination.

How? Using the finger sweep.
Diagnosing problems related to an infant with ankyloglossia (tongue-tied)

Preliminary initial evaluation

Just by running your finger under an infant's tongue from one side of the mouth the other side will give you an indication if the tongue attachment is a problem.

Interpreting your assessment-completed in the delivery room

Feel for problems!

- Use your finger moving under the tongue across the floor of the mouth.
  - 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.

A quick assessment to determine need for further evaluation

Examination of infants

The key to correctly examining an infant is proper placement on your lap. Place his face facing the mother.

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.

Kotlow Infant and newborn Lip-Tie classifications

Class I: No significant 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

Evaluating the exterior portion of the lip

Prior to surgery upper lip cannot relax nor fully extend upward and properly flange to allow a good latch.

Maxillary Lip-tie with central incisors showing decalcification

A simple surgical procedure
Pediatric reflux-clicking-Aerophasia

The tongue is held down in the center of the tongue causing the posterior tongue to hump up. The baby can not extend the tongue to remove it from the back of the mouth therefore causing gagging. The gagging causes the baby to regurgitate. This appears to be reflux. Release of the tongue may lead to elimination of gagging and thus eliminate reflux. In infants when the frenum has not been released, suggested medical treatment may be to put the baby on medication. After a lingual frenectomy is completed the reflux often goes away immediately especially with the "posterior" tongue ties.

Infant having colic symptoms: Aerophagia?

- Colic is an exhausting, unrelenting, and all consuming condition that causes an otherwise healthy infant to cry inconsolably. Occurs from about 2 weeks to 16 weeks.
- Aerophagia is excessive swallowing of air. When excessive amounts of air reach the stomach, abdominal distention, belching, vomiting and excessive gas may result.

The evening after surgery infant stopped crying, mother nursed longer and was without discomfort.

Oral Diagnosis: Class 3-4 tongue-tie (LAK) and Class IV maxillary lip-tie

Severe Class IV lip-tie with tongue-tie

Entire upper lip with callous

Five days post surgery

Healing nine days post surgery

Identifying the submucosal posterior tongue tie

Emmy’s Maxillary lip-tie release

8 months of age

Emmy age 5
Post surgery
Post pacifier

Emmy age 9

Correcting an infants tongue-tie and lip-tie

To protect and control infants movements during surgery we gently place the baby in an infant swaddler.
Correcting an infant’s tongue-tie & lip-tie

Prior to surgery we do not use and drugs or injections for numbing, but place a cotton roll with some sugar water into the infant’s mouth. This calms the baby and allow me to see his or her 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)

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 lips to entice your child to suck on your finger and create a new sucking pattern.

Stretching the upper lip

Successful surgery, without reattachment is now dependent on the parent’s ability to forcefully stretch both the upper lip and tongue to prevent reattachments of the surgical areas. Pull the upper lip upward until it touches the infant’s nose using enough force to open the entire surgical site and prevent the lip from becoming tied again. Post surgery a white area developing in the surgical area. This is normal and not an infection. This will disappear in another week.

What to do when things go wrong!

Successful surgery and preventing reattachment is dependent on a parent’s ability to forcefully stretch both the upper lip and tongue.

Method one: Place the index fingers on each side of the tongue and forcefully open the diamond shaped area with sufficient force to totally reopen the surgical site to prevent the reattachment. Push or pull downward towards the infant’s throat. Some bleeding may occur and this is not a concern.

Method two: This is often easier for parents to reopen the surgical area by placing a tongue blade above the area and push the lower jaw down and the underside of the tongue backward and upward using sufficient force to open the entire surgical area. Post surgery a white area develops in the frenum area. This is normal and not an infection. This will disappear in another week.

Thank you

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