Breastfeeding should be

fun and enjoyable

Why does it hurt when I breastfeed?

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 condition called ankyloglossia or a tongue-tie. A tongue-tie occurs when the embryological remnant of the tissue attaching the tongue to the floor of the mouth has not disappeared during fetal development.

How to determine if your newborn infant is tongue-tied

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)

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

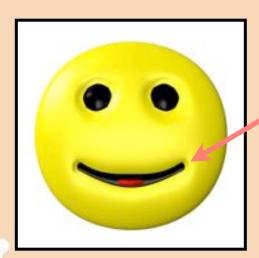
- Tongue-ties do not exist.
- Tongue -ties will not effect nursing.
- Tongue-ties will correct themselves.



- Al tight lingual frenum will stretch or tear without treatment.
- Ankyloglossia does not cause maternal discomfort.
- Alnkyloglossia does not effect developing speech.

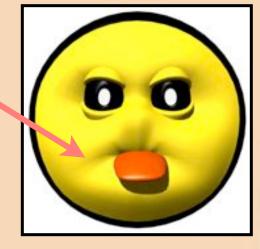
Examine your infant clinically

Ankyloglossia can be defined in two ways



Anatomic & clinical appearance





Ability to function

Examine for anatomic problems





Type 1(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 submucosally located

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Examine for functional problems







Total the 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

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No extension beyond the lips



Diagnostic criteria for neonatal tongue frenum revision

- *Infant Factors to consider
 - *No latch
 - ★ Un-sustained latch
 - *Slides off nipple
 - *Prolonged feeds
 - ★ Unsatisfied after prolonged feeds
 - Falls asleep on the breast
 - Tumming or chewing on the nipple
 - Poor weight gain or failure to thrive
 - Thable to hold pacifier



- Teased or blanched nipples after feeding:
- Cracked, bruised or blistered nipples
- *Bleeding nipples
- Severe pain with latch
- 🛨 Incomplete breast drainage
- *Infected nipples
- Tlugged ducts
- Mastitis & nipple thrush

Examination by Dr. Kotlow and Preparation for surgery



Examination on parent's lap

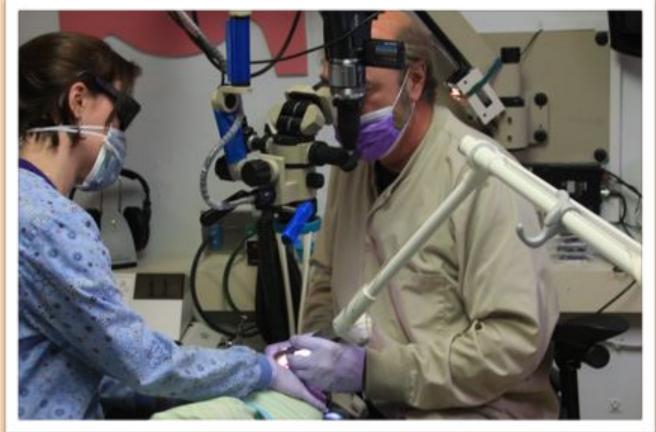


Infant being brought into surgical area



Infant placed in Swaddling blanket

Dr. Kotlow correcting abnormal frenum attachments



Surgical procedures completed in the dental office using surgical operating microscopes, no general anesthetic, no hospitals, no stitches are required.

What might happen if we do not treat?

Potential problems that may evolve as newborn infants grow older What problems we may not see immediately

- *Nutritional problems
- *Colic
- * (# I problems: reflux
- *Drooling
- * Gagging
- *Sleep apnea
- *Changes in sleep patterns
- *Speech problems
- *Jaw growth & development



Future potential problems



Clefting of the border of the tongue
Heart shape, cupping



Limited mobility and function of the tongue



Dental decay



Pulling the lower teeth towards the tongue

Orthodontics



Creating a gap
between the lower
front teeth

Simple pleasures that may be effected by a tongue that lacks

proper function and mobility







Surgical release of the lingual frenum



Stretching the tongue upward to expose the frenum



Completion of the frenum release

Lip, chin and breast positions after surgery



Pre-surgery with breastfeeding difficulties due to poor upper lip latch due to the maxillary frenum and tongue-tie



Immediately post-surgery with improved upper lip latch & tongue seal resulting in improved painless

breastfeeding

Lingual frenum revision post surgical care Method one



Daily elevating of the tongue using a tongue blade to prevent reattaching.

Pain medication if needed
Ora-gel if needed

Method two



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

Changes in infant Breastfeeding immediately after treatment

• The mother began nursing the infant as soon as the procedure



was over and indicated this feels so much different".

4 day follow-up

- Nursing less effort
- Slept longer between feedings



- Nursing was quieter: had been noisy and not very effective
- Nipples were healing
- Nursed for longer period of time
- Colic & gas disappeared

Albnormal maxillary frenum or labial frenum attachment

Latch Difficulties



Decay formation the upper front teeth



Potential complications due to the continued attachment of the upper lip to the infant's gums

Kotlow Infant and newborn maxillary frenum classifications

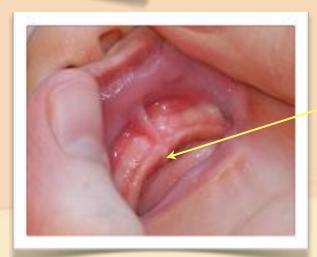


Class II

Attachment primarily into the gingival tissue



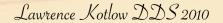
Class III:
Inserts just in front of anterior
papilla



Class IV

Alttachment just into the hard palate or papilla

area



Revising or releasing the upper frenum



Attachment prior to surgery



Area immediately post surgery

Three week old with mother having mastitis and poor latch: revising the tongue





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







Revising the maxillary or labial frenum

Post surgical care for the maxillary frenum





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.

Helpful Links to web sites that may help parents and professionals

- → Dr. Kotlow's website
- → Newman Breast feeding site:
- ◆ International Association of Tongue-tie Professionals website: http://www.tongue-tie.net
- → Academy of Breastfeeding Medicine website:
- ♦ Carmen Fernando:

http://www.kiddsteeth.com

http://www.nbci.ca

http://www.bfmed.org

http://www.tonguetie.net

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