


Tongue ties and breastfeeding: exploring the controversy

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Objectives

- Review definitions, etiology, presentations, treatment options, and outcomes
- Review current literature
- Discuss current experiences and local resources

Definition and Etiology

- Ankyloglossia
- Congenital anomaly
- Decreased mobility of tongue from a short and thick lingual frenulum
- Genetic link

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Presentation










- Mother:
 - Pain when nursing
 - Cracked, blistered, bleeding nipples
 - Blocked milk ducts
 - Mastitis
 - Poor or decreased milk supply

- Infant:
 - Poor latch
 - Colic
 - Gassy
 - Poor weight gain
 - 'Gum' or chew nipple
 - Choke or pop off when nursing to breath
 - Drooling
 - Clicking sound when nursing

Adapted from www.mommysporkamus.com

Could It Be a Tie?

Super Sleuthing for Tongue/Lip Tie

1. lip blister/crease

2. lip accordion

3. lip tuck

4. lip tether

5. two-tone tongue

6. high palate

7. tongue dents




8. tongue curl/cup

9. frenulum pop

Not meant as a diagnostic tool. www.staciebingham.com

Tongue-Tie Assessment

Lewenzel, A., Kellomaki, D.D.S., Pediatric Dentistry 489:1271

Severity Classification




- Class I
- Class II
- Class III
- Class IV

Tongue Mobility - Oral hygiene

- cannot clean tongue surfaces
- cannot clean cheek surfaces
- cannot clean palate

Tongue Mobility - mobility

- cannot wet lip
- cannot extend outward
- cannot extend upward
- rolling of tongue outward
- clinking of anterior border

Tongue Mobility - Orthodontic

- creating anterior diastemas
- pushing teeth toward tongue
- blanching of tissue

Tongue Mobility - Infants

- difficult nursing
- irritation of tongue

Tongue Mobility - Nutritional

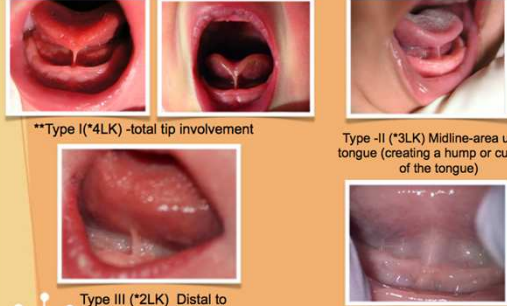
- gags easily
- abnormal salivation
- swallowing

Diagnostic Criteria

- Tip of tongue not past lip
- Abnormal swallow
- Lingual attachment
 - creates gap between teeth
 - puts force on teeth mal-positioning them
 - causes blanching of gums
- Unable to lick lips
- Nursing or bottle feeding difficulties



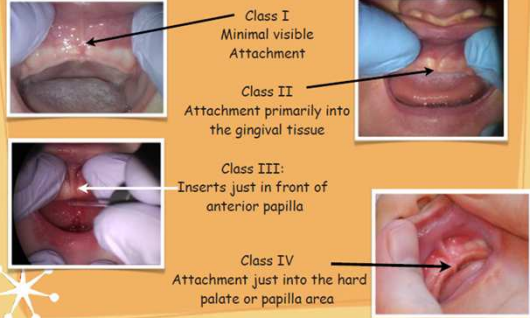
*Kotlow Diagnostic criteria (one) for clinically apparent tongue-ties in infants



- **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
Laurence Kotlow D.D.S. 2002

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


Laurence Kotlow D.D.S. 2002

Treatment Options

- Observe
- Medical management does not exist
- Surgical management

Observe

- Monitor feeding issues as infant
- Advise potential for dental, speech and feeding issues as child ages



Surgical Management

- Scissors, electrocautery or laser to detach frenulum = Frenotomy
- Simple and minor procedure
- Pain relief options
- Performed by primary care physicians, dentists, ENT surgeons, APN

Laser Surgery

- No GA, local possible
- 2-3 mins long
- Patient must be still
- No bleeding or infection risk
- Heal very fast
- Physical therapy 2-3/day for 14 days post-op



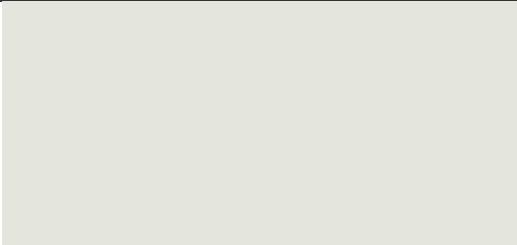
Electrocautery Revision

- No GA local possible
- Option only if mild case with minimal involvement of blood vessels
- Safe

Surgery

■ No GA	■ With GA
■ Minimal pain and bleeding	■ ~4mins under GA
■ Feeding improved immediately	■ Stitches usual
■ Fast	■ 10 day healing period
	■ Same day hospital stay

Current evidence



Canadian Pediatric Society

- "Current evidence seems to demonstrate that despite ankyloglossia, most newborns are able to breastfeed successfully"
- "Based on available evidence, frenotomy cannot be recommended"
- "association between significant tongue-tie and major breastfeeding problems is clearly identified and surgical intervention is deemed necessary, frenotomy should be performed"

CPS Position statement Ankyloglossia and breastfeeding 2014

American Academy of Pediatrics

- Neoreviews 2010
- "Untreated tongue tie can lead to untimely weaning and its attendant health risks. Frenotomy is a safe and effective procedure to release tongue tie and improve tongue function and breastfeeding outcomes."

Academy of Breastfeeding Medicine

- Currently in revision
- 2004
- "Conservative mgx maybe sufficient, requiring no intervention beyond breastfeeding assistance, parental education, and reassurance"

Randomized, controlled trial of division of tongue-tie infants with feeding problems

- Very few RCT's
- Small sample size
- 27/28 mothers had improved breastfeeding compared to 1/29 mothers in conservative mgx group
- 56% of tongue tie infants were able to adequately feed

Hogan et al J Paediatric Child Health 2005;41:246-250

A double blind, randomized, controlled trial of tongue tie division and its immediate effect on breastfeeding

- Found no improvement in breastfeeding overall or nipple pain
- More mothers self reported improvement in frenotomy group – possible bias

Bony et al. Breastfeed Med 2012;7:189-193


Efficacy of Neonatal Release of Ankyloglossia: A Randomized Trial

- Improvement in nipple pain and ability to breastfeed after frenotomy or a 'sham' frenotomy
- Both groups had improved pain but more so in frenotomy group
- Breastfeeding overall much improved in frenotomy group

Burk et al. Pediatrics 2011; 128

Summary

- Congenital anomaly with decreased mobility of tongue
- Severity and presentation varies
- Treatment options vary but majority opt for frenotomy
- Current evidence getting stronger for frenotomy but still lacking in standard definitions, classifications, and ideal patient to treat and when



Thank you

Questions and Comments