Tongue Ties and Breastfeeding: Exploring the Controversy

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

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 breathe
  - Drooling
  - Clicking sound when nursing

Adapted from www.mommypotamus.com

Tongue-Tie Assessment

Could It Be a Tie?
Super Snaking by Tongue Tie

1. Lip bumper/nurse
2. Lip rather
3. Tongue thrust
4. Tongue eversion
5. Tongue short
6. Tongue curl/cup
7. Tongue curling
8. Tongue curling
9. Tongue curling
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Diagnostic Criteria

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

Treatment Options

- Observe
- Medical management does not exist
- Surgical management

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

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

- Type I (∗4LKL) - Total tip involvement
- Type II (∗3LKL) Midline area under tongue (creating a hump or cupping of the tongue)
- Type III (∗2LKL) Distal to the midline. The tongue may appear normal
- Type IV (∗1LKL) Posterior area which may not be obvious and only palpable. Some are submucosally located

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
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**Laser Surgery**
- No GA, local possible
- 2-3 mins long
- Patient must be still
- No bleeding or infection risk
- Heals 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
- Minimal pain and bleeding
- Feeding improved immediately
- Fast
- With GA
- ~4mins under GA
- Stitches usual
- 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"

- 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."
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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


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


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