

The Tongue-Tie Debate:

Evidence-Based Insights on Treatment and Outcomes

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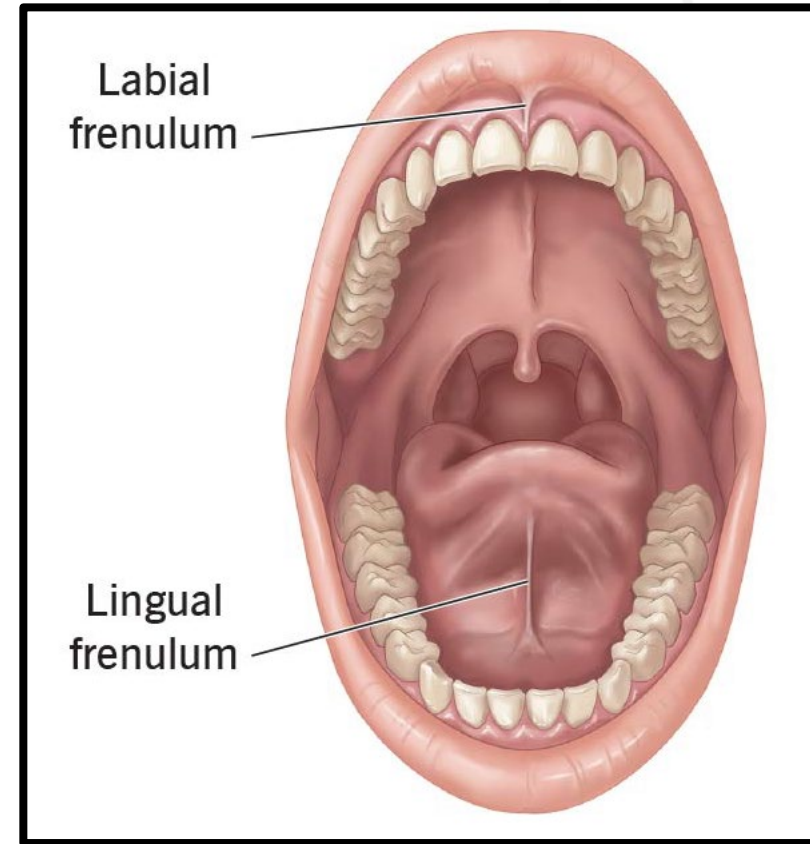
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Tongue-Tie: Important Definitions

Lingual Frenulum: normal connective tissue anchoring tongue to mouth floor

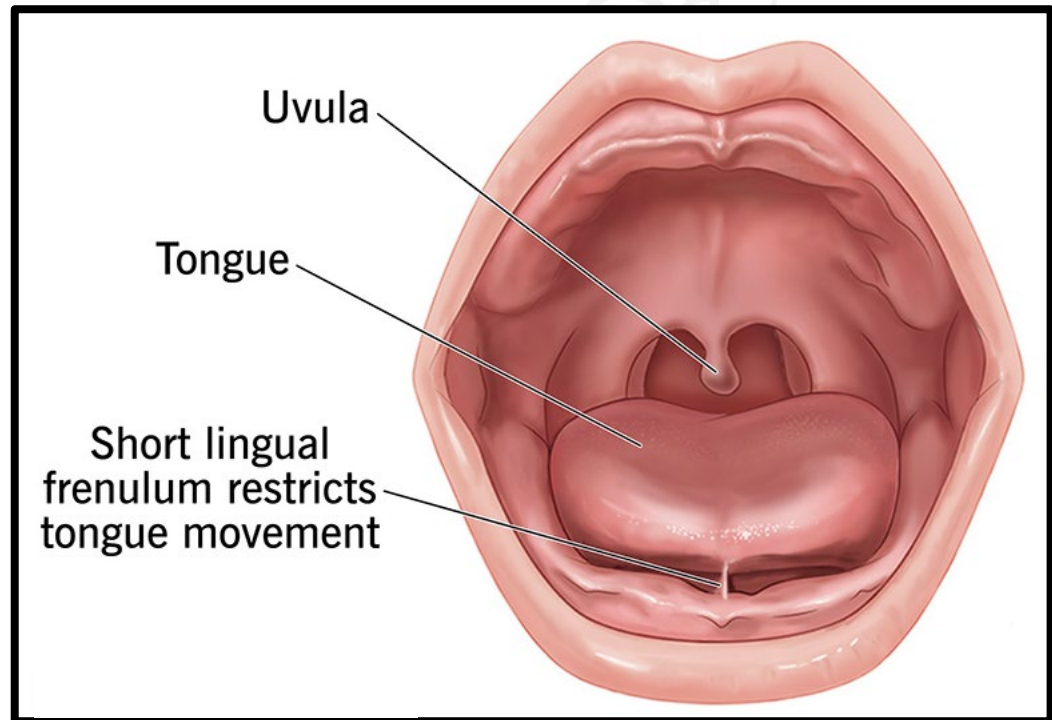


Normal Tongue Anatomy

Tongue-Tie: Important Definitions

Tongue-Tie: congenital condition with ***restrictive*** lingual frenulum

- Impairs tongue mobility and function
- Associated with breastfeeding difficulties
- Limited evidence to support causal relationship with speech/language delays, sleep apnea, dental problems



Tongue-Tie Anatomy

Tongue-Tie: Clinical Significance & Global Relevance

Affects **~3–11% of newborns**

Can impair breastfeeding, leading to **early weaning** and **poor infant weight gain**

Frenotomy referrals **increased 834%** from 1997 - 2012, which sparked concern regarding **overdiagnosis** and **unnecessary surgical intervention**

Clinical variability and diagnostic uncertainty contribute to **inconsistent management worldwide**

Tongue-Tie: The Coryllos Classification System

Type 1: Attaches to tongue tip



Type 3: Attaches to mid-tongue



Type 2: Attaches 2-4 mm from tongue tip



Type 4: Attaches to tongue base



Tongue-Tie: The Coryllos Classification System

Type 1: Attaches to tongue tip



Types 1-2 = Anterior

Type 3: Attaches to mid-tongue



Types 3-4 = Posterior

Type 2: Attaches 2-4 mm from tongue tip



Type 4: Attaches to tongue base



Tongue-Tie: Diagnosis and Treatment

- Oral exam with frenulum palpation
- Coryllos grading
- Breastfeeding assessment:
 - LATCH score + maternal pain

| | 0 | 1 | 2 |
|--------------------------------|---|---|--|
| L Latch | Too sleepy No sustained latch or suck | Repeated attempts for latch or suck Hold nipple in mouth | Grasps breast Tongue down Lips flanged Rhythmical sucking |
| A Audible swallowing | None | A few with stimulation | Spontaneous and intermittent (<24 hrs) |
| T Type of nipple | Inverted | Flat | Everted (after stimulation) |
| C Comfort | Engorged Cracked, bleeding, large blisters, or bruises | Filling Reddened, small blisters or bruises | Soft Non-tender |
| H Hold | Full assist (staff holds infant at breast) | Minimal assist (staff holds, then mother takes over) | No assist from staff Mother able to position and hold infant |

- Treatment options:
 - Frenotomy = Clinic-based tongue-tie release



Tongue-Tie: Clinical Research Application

- Evidence supports improved breastfeeding after anterior tongue-tie (ATT) frenotomy
- Posterior tongue-tie (PTT) frenotomy benefits remain poorly understood

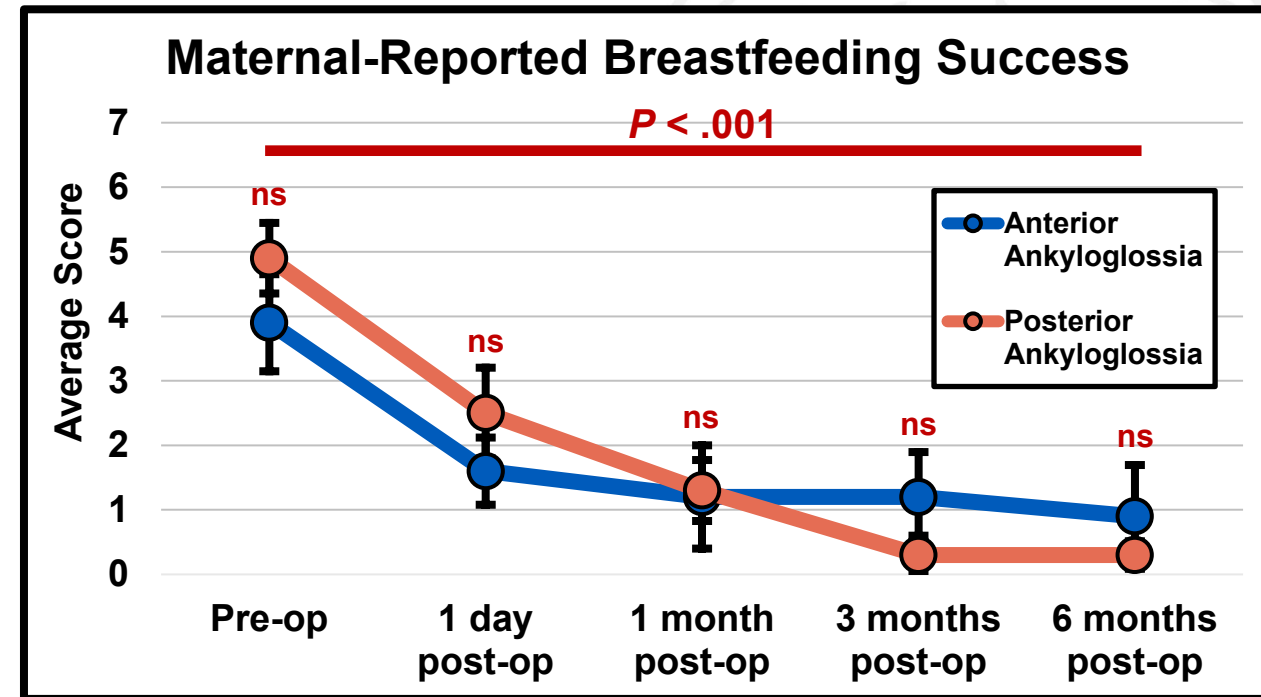
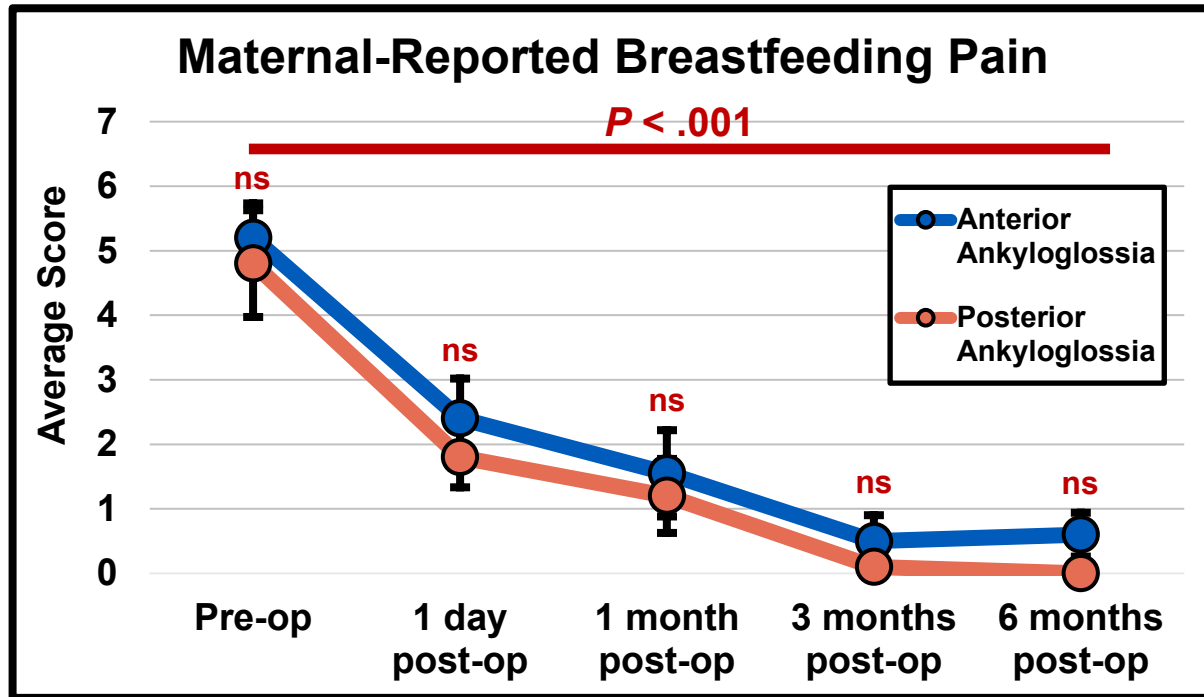
Study Question:

Do breastfeeding outcomes post-frenotomy differ between infants with ATT versus PTT?

Tongue-Tie: Clinical Research Application - Methods

- Prospective longitudinal study on 79 breastfed infants (0 - 3 months) undergoing frenotomy for tongue-tie
- Breastfeeding mothers rated pain and breastfeeding success on a 0-10 Visual Analog Scale (VAS), with 0 indicating no pain and complete breastfeeding success, respectively
- VAS scores were recorded pre-frenotomy and at 1 day, 1 month, 3 months, and 6 months post-frenotomy and compared between ATT and PTT groups

Tongue-Tie: Clinical Research Application - Results



VAS scores decreased significantly over time post-frenotomy

There was no difference in VAS scores between groups at any time point

Tongue-Tie: Clinical Research Application - Conclusion

- Posterior tongue-tie **may merit intervention**
- Study **reduces** diagnostic and treatment **ambiguity**
- Supports **evidence-based shared decision-making**
- Potential **to improve maternal and infant health outcomes**

References

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Thank You!

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