

# Tongue Tied Over a Frenotomy?

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## Abstract

Approximately 5-10% of individuals are born with ankyloglossia, also known as 'tongue-tie'. Frenectomy, is a common treatment for ankyloglossia by un-attaching part of the frenulum. Current research is based on the initial impact of infant ankyloglossia as it pertains to infant feeding and swallowing. There is limited evidence to inform decisions about when or if mild-moderate ankyloglossia will have an impact on an individual's speech later in life. This lack of evidence has led to controversy surrounding infant versus adolescent frenotomies and their utility for preventing speech impairment. Further research is necessary to determine whether a frenectomy as a child prevents articulation errors as an adolescent. This presentation will review the different types of frenectomies, the disadvantages and advantages of receiving one, and why one might consider their child receiving one.

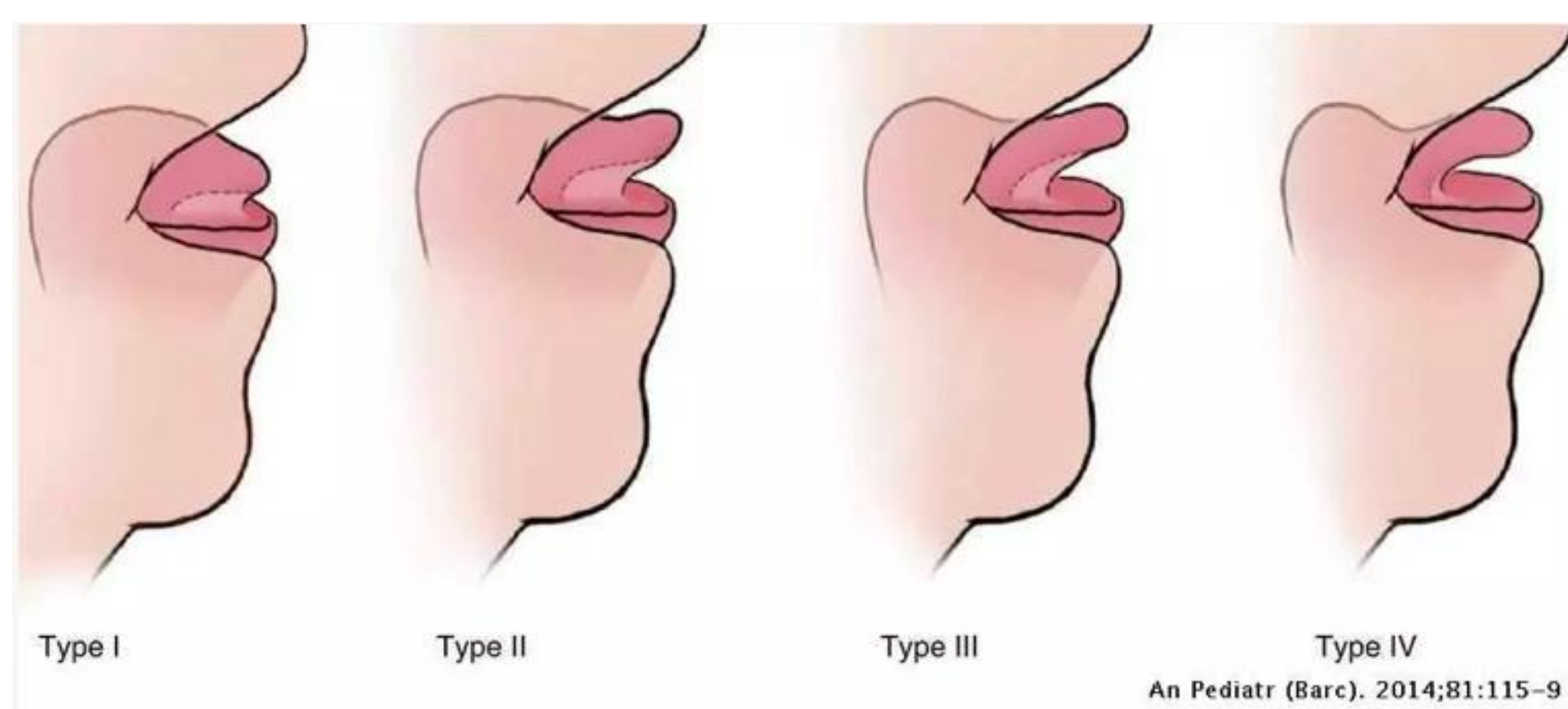
### Learner outcomes: Participants will be able to:

- Describe the classifications of ankyloglossia and the impacts on speech and swallowing.
- List the different types of frenotomies
- Compare advantages and disadvantages of frenectomies.

## Introduction

### Prevalence and classifications of ankyloglossia

- Ankyloglossia is a genetic congenital condition that appears when the frenulum fails to separate from the tongue before birth, often times anchors to the ridge behind the lower teeth.
- Approximately 10.7% of infants are born with tongue-tie with a boy to girl ratio ranging from about 1.5:1 to 2.6:1. (Hall & Renfrew, 2005)
- About 4% of tongue-ties grow back after being cut.
- Clinically acceptable normal range of free tongue is greater than 16mm. (Lawrence, 1999)
  - Class I: Mild 12-16mm
  - Class II: Moderate 8-11mm
  - Class III: Severe 3-7mm
  - Class IV: Complete ankyloglossia is less than 3mm



## Ankyloglossia impact

### General ankyloglossia impact:

- Decrease in range of tongue mobility. (Iftikhar, 2020)
  - Difficulties moving tongue side to side
  - Reduced length up and down
  - Lack of protrusion outward
  - Cant reach roof of mouth
- Pain/discomfort within the oral cavity

### Ankyloglossia impact on speech:

- No evidence based connection between ankyloglossia and speech disorders.
- Frenotomy's are typically done during speech sound development, therefor the child is still developing sounds which cannot be compared to before and after. (Wang J et al. 2021)

### Ankyloglossia impact on feeding:

- Difficulties latching during on feeding
- Causes nipple pain for the mother
- Poor infant weight gain (Cohain, 2018)

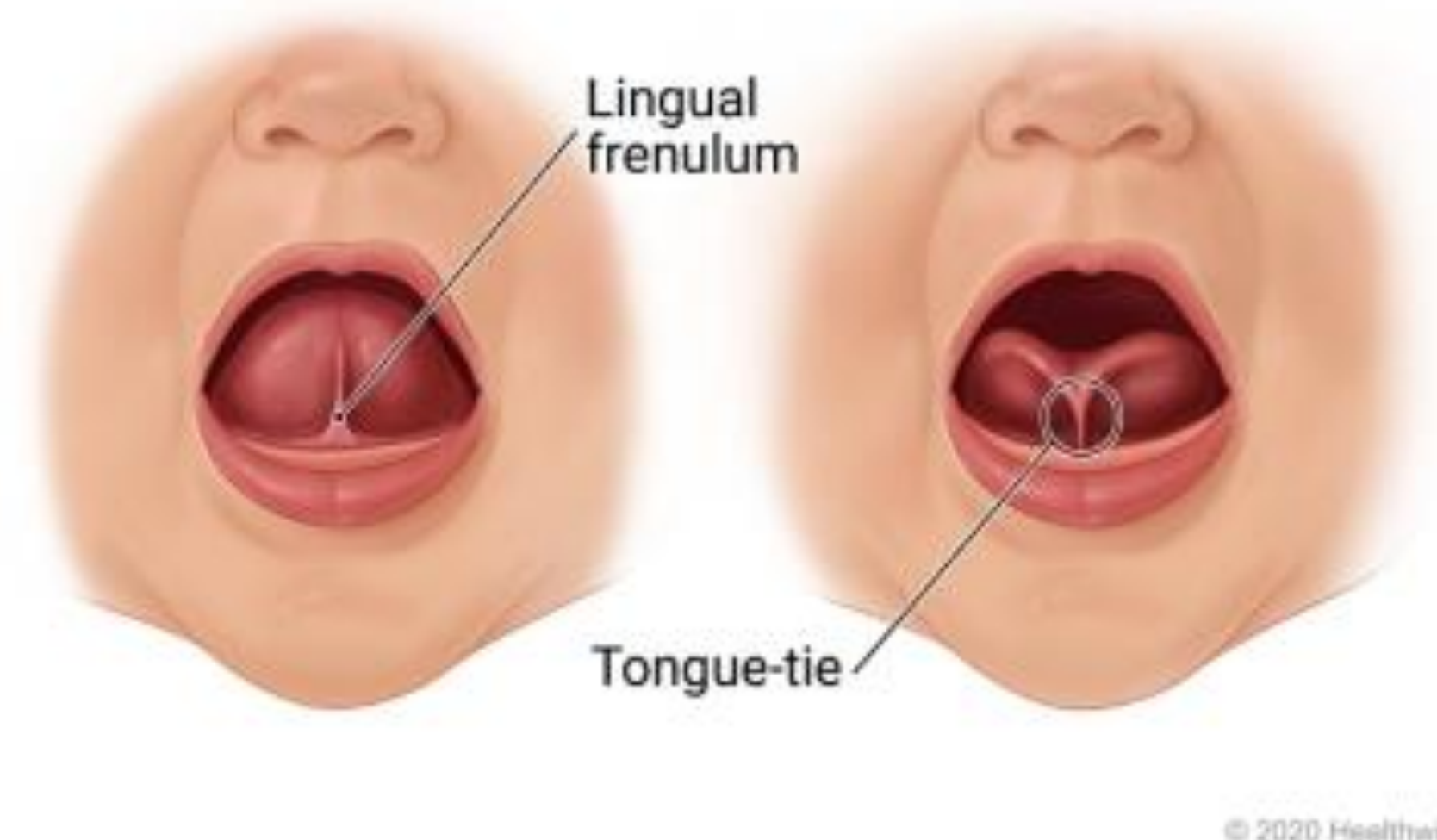


Image: (Healthwise Staff, 2021)

## Conclusion

Currently there is no standardize procedure to assessment if the ankyloglossia during infancy will impact speech later on. Current research states release of the frenulum will improve an infants ability to feed. For some their ankyloglossia has no impact on feeding nor speech and does not cause pain, therefor can be left alone. Based on current research a frenectomy should be considered for feeding difficulties and more research about ankyloglossia impact on speech should be conducted.

## Frenotomy comparison

Frenotomy Involves releasing the frenulum to allow movement of the tongue. Noted to cause minimal pain with a fast recovery. (Iftikhar, 2020)

Frenotomy types	Instrument/tool	Advantages and disadvantages
Laser Surgery	Lasor	Tinier cuts, causes less bleeding.
Electrocautery	Electricity or heat	Reduced bleeding and fast recovery
Frenuloplasty	Frenulum is cut and sutures are used to reattach the frenulum.	Post surgery requires lingua exercises.
Scissors/scalpel	Scissors or scalpel	Minimal bleeding. 4-5 day recovery.

## Pros and Cons of tongue-tie surgery in Newborns for breastfeeding

Pros	Cons
may help improve breastfeeding problems	may not help improve breastfeeding problems
babies may feed better and gain weight more quickly post-surgery	may cause infection and swelling
may prevent nipple pain for nursing parents	may ultimately be unnecessary
may prevent dental problems later in life	requires daily exercises and stretching after the procedure to prevent the condition from reoccurring
may prevent speech problems later in life	

(Iftikhar, N. , 2020).

## References

