



THE MAXILLARY FRENUM- ANATOMIC VARIATIONS OR “LIP-TIE” ?

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BACKGROUND

In the literature and in anatomy books there is no accurate definition of the normal thickness, insertion and origin location of the maxillary labial frenum in newborns and adults. We are facing a rise in surgical intervention of the labial frenum even though there is uncertainty regarding the definition of normal and abnormal frenum appearance. There are some suggestions of classifications of Lip tie, where we suggest they should be called classification of labial frenum anatomy. According to Flinck et al. the upper labial frenum was attached to the crest of the alveolar ridge in 76.7% of the children, palatally in 16.7% and buccally in 6.7%. While there is increasing knowledge and awareness of the impact of the lingual frenulum on breastfeeding, there is far less information about the maxillary frenulum’s impact on nursing.

OBJECTIVE

To demonstrate the variability in maxillary labial frenum appearance and the implications of frenulum attachment to breastfeeding

METHODS

25 babies were refed to the clinic for Labial maxillary frenum frenotomy. Photos of the maxillary frenum were taken. Breastfeeding was assessed; lactation counseling was given and frenotomy of the lingual frenum was preformed if indicated without surgical intervention of the maxillary frenum.

RESULTS

No significant correlation was observed between Maxillary frenum appearance and breastfeeding difficulties

CONCLUSIONS

There is uncertainty of the normal and abnormal clinical appearance of the maxillary frenum. It is unclear whether the appearance of the frenulum in the newborn population has any correlation with its appearance in childhood and later life. No conclusive diagnosis was made to assess the necessity of maxillary frenotomy and breastfeeding improvement might be circumstantial

FUNDING SOURCES

None

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Case 1

TONGUE TIE TYPE 1 & LABIAL FRENUM TYPE 3



Before lingual frenotomy



Maxillary frenum, thick and flexible



After lingual frenotomy



5 months follow-up



10.5 months follow-up

5.5 months old, exclusive breastfeeding. BW=3200gr; Mean weight gain 220 gr. Per week.

According to his mother- discomfort during breastfeeding, frequent detachments. Recently getting some milk-expressed bottles.

Oral examination - Bubble Palate, type 1 tongue tie, functional restriction. Lip-tie type 3 - Papillary attachment. Lingual frenotomy was carried out. Maxillary frenum was left untreated.

5 months post frenotomy - Breastfeeding combined with complementary foods, relaxed breast feedings, proper milk transfer, proper weight gain. A small diasthema between maxillary deciduous centrals.

Case 2

TONGUE TIE TYPE 3; LABIAL FRENUM TYPE 3



Thick maxillary frenum



Before lingual frenotomy



High, narrow palate



Before lingual frenotomy



After lingual frenotomy

2 months old, BW=3850gr, proper weight gain, exclusive breastfeeding. Clicking sounds during breastfeeding.

Oral examination- high-narrow palate, tongue tie type 3, functional restriction. Thick maxillary frenum, flexible, type 3. Lingual frenotomy without maxillary frenotomy was carried out.

4 months follow-up- Breastfeeding without clicking sounds. Proper weight gain.



Case 3

THICK MAXILLARY FRENUM



Before oral examination, "Making friends"



With his father, showing a small central diasthema



Thick maxillary frenum, no blanching when retracted



6 months follow-up, a small diasthema is demonstrated



6 months follow-up, a small diasthema is demonstrated

8.5 months old, exclusive breastfeeding combined with complementary foods, proper weight gain.

Oral examination- wide palate, functional tongue movements, thick maxillary frenum, flexible, type 3. mandibular centrals have erupted. His father has a small diastema between maxillary centrals. No frenotomy was made.

6 months follow-up- proper weight gain, complementary foods combined with breastfeeding. Maxillary centrals and laterals have erupted. A small diastema between maxillary deciduous centrals.



Breasfeeding Club