

## **Ankyloglossia (Tongue-tie) and tied maxillary frenum (lip-tie) – Guidelines**

### **Section I - Background**

Ankyloglossia is a congenital condition in which the lingual frenulum is abnormally short and may restrict mobility of the tongue. The infant's tongue is normally able to extend over and past the mandibular gum pad. Significant ankyloglossia prevents an infant from anteriorly extending and elevating the tongue, and this may alter the normal peristaltic motion of the tongue during feeding, resulting in the potential for nipple trauma and problems with effective milk transfer and infant weight gain. This condition is more commonly called tongue-tie.

Ankyloglossia, occurs in approximately 3.2% to 4.8% of term infants at birth and in 12.8% of infants with breastfeeding problems. The condition has been associated with an increased incidence of breastfeeding difficulties: 25% in affected versus 3% in unaffected infants.

Ankyloglossia that is associated with clearly identified feeding problems may be treated with a lingual frenotomy procedure (division of the lingual frenulum). Where there are no feeding problems, ankyloglossia may be considered a normal variant and this procedure may not be required. There is little high-quality evidence regarding this issue, with published information consisting largely of case series and observational studies

A tied maxillary frenum (lip-tie) has been associated with breastfeeding difficulties in a few published studies. The maxillary frenum is a vertical band of lip tissue extending from the inside portion of the upper lip attaching to the alveolar mucosa of the maxillary arch. This attachment may impede the lips ability to flange outward and maintain a seal for suction during breastfeeding. It may also lead to nipple trauma. Some practitioners advocate for the release of this tissue when identified as the cause of breastfeeding difficulties. The evidence supporting maxillary frenum's impact on breastfeeding and a labial frenotomy is limited.

### **Section II – Management**

1. Ankyloglossia in infants only becomes a concern when feeding problems are associated. If ankyloglossia is identified but no feeding problems exist, no further follow up is needed.
2. Clinical features of ankyloglossia may include:
  - Abnormally short frenulum, inserting at or near the tip of the tongue
  - Difficulty lifting the tongue to the upper dental alveolus
  - Inability to protrude the tongue more than 1 to 2 mm past the lower central incisors
  - Impaired side to side movement of the tongue
  - Notched or heart shape of the tongue when it is protruded
3. When a feeding problem is identified in an infant and there is concern that ankyloglossia is contributing to the problem, an international board certified lactation consultant (IBCLC) should be consulted. Most feeding problems in infants are not caused by ankyloglossia, thus it is paramount to have an IBCLC work with the breastfeeding dyad prior to a referral for frenotomy.
4. The IBCLC will conduct a thorough assessment of breastfeeding and infant's tongue mobility to determine whether ankyloglossia may be contributing to the feeding problem. Often times correcting contributing feeding issues is enough to resolve the problem without frenotomy.
5. After working to correct feeding problems with an IBCLC and ankyloglossia is still suspected as the underlying issue, a referral to the appropriate provider for evaluation for a frenotomy will be made. The referral will be made by the IBCLC only. This will allow appropriate care of the breastfeeding dyad before and after the procedure to give the best chance of a successful outcome to the procedure.

6. When discussing ankyloglossia and frenotomy with the customer-owners it is important to provide them with realistic expectations. Not all infants with feeding problems that have ankyloglossia will be good candidates for frenotomy. Thus even if referral is made the provider may decline to perform the procedure. Release of the ankyloglossia appears to be a minor procedure, but it may be ineffective in solving the immediate clinical problem and may cause complications such as infant pain and distress and postoperative bleeding, infection, or injury to Wharton's duct.
  
7. There is limited evidence supporting release of the tied maxillary frenum for improvement with breastfeeding. Release of the tied maxillary frenum is only available under general anesthesia through the ANMC hospital network. In most cases the risks of the surgery under general anesthesia would outweigh potential benefits and referral for surgical correction through ANMC is not merited. A referral to the IBCLC should be made to see what modifiable feeding factors can be corrected without surgery and potentially improve breastfeeding. The IBCLC may consider a referral to a speech and language pathologist for evaluation. Release of a tied maxillary frenulum may be accomplished in an outpatient clinic. Several non-ANMC providers in the Anchorage area offer the procedure and referral may be considered after evaluation by an IBCLC.

## References

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