TONGUE-TIE (ANKYLOGLOSSIA) – ASSESSMENT AND MANAGEMENT

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM
   • A baby diagnosed with tongue-tie has been appropriately assessed and managed
   • Parents whose baby is diagnosed with tongue-tie is appropriately supported

2. PATIENT
   • Any baby presenting with feeding difficulties where tongue-tie is suspected

3. STAFF
   • Registered midwives
   • Registered nurses
   • Student midwives
   • Medical officers

4. EQUIPMENT
   • Small sharp blunt edged scissors
   • Sterile gloves
   • Sterile gauze swab
   • Oral sucrose

5. CLINICAL PRACTICE
   • Refer to flowchart (Appendix 1)
   • Review baby and complete Hazelbacker Assessment Tool (Appendix 2) by paediatric medical officer. Add completed tool to integrated notes. Function and appearance score will determine if conservative management continues or frenotomy indicated
   • Discuss findings with parents. If frenotomy indicated provide written information (Appendix 3)
   • Determine Vitamin K status and family history of any bleeding disorders
   • Gain verbal and written consent for procedure if agreed management
   • Perform frenotomy (medical officer)1,2:
     o Perform hand hygiene as per NSW Health policy3
     o Wrap baby securely
     o Stabilise baby’s head (assistant required)
     o Administer analgesia in the form of oral sucrose
     o Don sterile gloves
     o Use the thumb to stabilize the jaw whilst placing the index finger under the baby’s tongue to gain clear access to the frenulum
     o Divide the frenulum with a small pair of sharp, blunt-edged scissors
     o Apply pressure to the floor of the mouth with a sterile gauze swab to stop any bleeding
     o Return baby to mother
     o Encourage mother to breastfeed baby as soon as practicable
     o Assess for bleeding after 15 minutes
     o Document procedure and outcome in integrated notes
   • Attend breastfeeding assessment at next feed noting any changes and documenting same
   • Liaise with Lactation Services if feeding issues persist
   • Referal to Breastfeeding Support Unit offered on discharge from the hospital service
TONGUE-TIE (ANKYLOGLOSSIA) – ASSESSMENT AND MANAGEMENT  cont’d

6. DOCUMENTATION
- Hazelbacker Assessment Tool for Lingual Frenulum Function
- Postnatal Feeding Plan
- Integrated notes
- Obstetrix

7. EDUCATIONAL NOTES
- Ankyloglossia (tongue-tie) is a congenital anomaly occurring in approximately two to ten percent of babies with a male to female ratio of 3:1
- Tongue-tie is characterised by an abnormally short and possibly thickened lingual frenulum which may restrict mobility of the tongue. It varies from a mild form where the tongue is bound only by a thin mucous membrane to a severe form where the tongue is fused to the floor of the mouth
- Associated breastfeeding difficulties are well documented and include problems with latching, sore nipples and poor weight gain
- Despite the evidence on the positive effects of frenotomy on breastfeeding there is a lack of consensus regarding tongue-tie management. Therefore careful assessment is required as it is important to determine whether the frenulum is interfering with breastfeeding and division is appropriate. The Hazelbacker Assessment Tool for lingual frenulum function has been designed for this purpose. This tool has been validated by research for face and content validity and inter-rater reliability
- There are various terms in the literature to describe tongue-tie division for example frenotomy, frenectomy, frenulotomy, frenuloplasty, tongue tie division or snip
- Post frenotomy an immediate improvement in maternal nipple pain and breastfeeding efficacy has been demonstrated
- Possible complications of frenotomy include excessive bleeding or infection however these complications are very rare
- Occasionally an ulcer may form that heals rapidly (usually within the week). Occasionally a rapidly closing wound may require reopening by stretching the wound
- Contraindications to frenotomy include newborns who have not been given IM Vitamin K, before the second dose of oral Vitamin K, or prior to workup if there is a bleeding disorder in the family
- If the mother is Hepatitis C positive breastfeeding post frenotomy should be delayed until any bleeding has ceased
- A tongue-tie may not have an initial effect on breastfeeding capacity however problems may occur once the baby’s demands increase and the mother is not able to successfully establish lactation
- Follow up for all babies who have had a frenotomy is recommended to assess how breastfeeding is progressing and provide further support if required. It may take extra time for breastfeeding to become established. There may be other issues besides the tongue-tie that are not resolved by frenotomy. Routine referral to the Breastfeeding Support Unit is recommended

8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP
- Breastfeeding – Protection Promotion and Support
- Supplementary Feeding of Breastfed Infants in the Postnatal Period
- Breastfeeding Support Unit (BSU)
TONGUE-TIE (ANKYLOGLOSSIA) – ASSESSMENT AND MANAGEMENT cont’d

9. REFERENCES
2. National Institute for Health and Clinical Excellence Interventional Procedure Guidance 149 Division of ankyloglossia (tongue-tie) for breastfeeding 2005
3. ACT Health Maternity Practice Guideline Number 3.3.19 Tongue Tie Assessment and Management 2009

Acknowledgements
ACT Health 2008 ‘Parental Information Tongue Tie’
The Women’s Hospital Melbourne 2008 ‘Tongue-tie: information for families’

REVISION & APPROVAL HISTORY
Endorsed Maternity Services LOPs group 13/8/13
Ongoing assessment of feeding as per infant feeding guidelines
Breastfeeding Assessment Tool completed on all breastfeeding mother/infant dyads

Tongue tie suspected. Assess for presence of at least 2 of the following:
- Tongue heart-shaped at rest
- Family history
- Sore nipples
- Decreased milk transfer
- Consistent poor sucking code

Conservative management. Feeding plan commenced incl frequent feeds/EBM and skin to skin. Revision of any positioning and attachment issues.

No feeding issues of concern identified. Observation and appropriate support continues. Follow up with Early Childhood Health Services after discharge from service. Provide contact details for Australian Breastfeeding Association.

Feeding issues resolve. Observation and appropriate support continues. Follow up with Early Childhood Health Services after discharge from service. Provide contact details for Australian Breastfeeding Association.

No resolution of feeding issues over next 24hrs despite ongoing assistance

Pediatric review using Hazelbacker Assessment Tool for Lingual Frenulum Function

Function Score >11 and Appearance Score >8 continue conservative management. Observation and appropriate support continues. Follow up with Early Childhood Health Services after discharge from service. Provide contact details for Australian Breastfeeding Association.

Function Score <11 consider frenotomy or Appearance Score <8 consider frenotomy

Discuss findings with parents. Provide parental information sheet (Appendix 3). If verbal consent received, complete consent form. Determine Vitamin K status and family history of any bleeding disorders Perform frenotomy. Document in integrated notes.

At next feed, breastfeeding assessment re-attended and documented, noting any changes

Ongoing observation and documentation of feeds. Continue postnatal plan if feeding issues persist and liaise with Lactation Services. Refer all post frenotomy babies to BSU on discharge from Maternity Services for follow up support within a week of discharge.
# APPENDIX 2

## HAZELBAKER ASSESSMENT TOOL for Lingual Frenulum Function

<table>
<thead>
<tr>
<th>Appearance Items</th>
<th>Function Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance of tongue when lifted</strong></td>
<td><strong>Lateralization</strong></td>
</tr>
<tr>
<td>□ 2: Round or Square</td>
<td>□ 2: Complete</td>
</tr>
<tr>
<td>□ 1: Slight cleft in tip apparent</td>
<td>□ 1: Body of tongue but not tongue tip</td>
</tr>
<tr>
<td>□ 0: Heart-shaped or V-shaped</td>
<td>□ 0: None</td>
</tr>
<tr>
<td><strong>Elasticity of frenulum</strong></td>
<td><strong>Lift of tongue</strong></td>
</tr>
<tr>
<td>□ 2: Very elastic (excellent)</td>
<td>□ 2: Tip to mid mouth</td>
</tr>
<tr>
<td>□ 1: Moderately elastic</td>
<td>□ 1: Only edges to mid-mouth</td>
</tr>
<tr>
<td>□ 0: Little OR no elasticity</td>
<td>□ 0: Tip stays at alveolar ridge or rises to mid-mouth only with jaw closure</td>
</tr>
<tr>
<td><strong>Length of lingual frenulum when tongue lifted</strong></td>
<td><strong>Extension of tongue</strong></td>
</tr>
<tr>
<td>□ 2: More than 1cm OR embedded in tongue (75-100%)</td>
<td>□ 2: Tip over lower lip</td>
</tr>
<tr>
<td>□ 1: 1cm (50%)</td>
<td>□ 1: Tip over lower gum only</td>
</tr>
<tr>
<td>□ 0: Less than 1cm (25%)</td>
<td>□ 0: Neither of above, OR anterior or mid-tongue humps</td>
</tr>
<tr>
<td><strong>Attachment of lingual frenulum to tongue</strong></td>
<td><strong>Spread of anterior tongue</strong></td>
</tr>
<tr>
<td>□ 2: Tip over lower lip</td>
<td>□ 2: Complete</td>
</tr>
<tr>
<td>□ 1: At tip</td>
<td>□ 1: Moderate or partial</td>
</tr>
<tr>
<td>□ 0: Notched tip</td>
<td>□ 0: Little OR none</td>
</tr>
<tr>
<td><strong>Attachment of lingual frenulum to inferior alveolar ridge</strong></td>
<td><strong>Cupping</strong></td>
</tr>
<tr>
<td>□ 2: Attached to floor of mouth OR well below ridge</td>
<td>□ 2: Entire edge, firm cup</td>
</tr>
<tr>
<td>□ 1: Attached just below ridge</td>
<td>□ 1: Side edges only, moderate cup</td>
</tr>
<tr>
<td>□ 0: Attached at ridge</td>
<td>□ 0: Poor OR no cup</td>
</tr>
<tr>
<td><strong>Spread of anterior tongue</strong></td>
<td><strong>Peristalsis</strong></td>
</tr>
<tr>
<td>□ 2: Complete, anterior to posterior (originates at the tip)</td>
<td>□ 2: Complete, anterior to posterior (originates at the tip)</td>
</tr>
<tr>
<td>□ 1: Partial: originating posterior to tip</td>
<td>□ 1: Partial: originating posterior to tip</td>
</tr>
<tr>
<td>□ 0: None OR reverse peristalsis</td>
<td>□ 0: None OR reverse peristalsis</td>
</tr>
<tr>
<td><strong>Snapback</strong></td>
<td><strong>Snapback</strong></td>
</tr>
<tr>
<td>□ 2: None</td>
<td>□ 2: None</td>
</tr>
<tr>
<td>□ 1: Periodic</td>
<td>□ 1: Periodic</td>
</tr>
<tr>
<td>□ 0: Frequent OR with each suck</td>
<td>□ 0: Frequent OR with each suck</td>
</tr>
</tbody>
</table>

**Appearance Total Score:** ________________  
**Function Total Score:** ________________

**Appearance Score:**  
10 = Normal tongue,  
<8 = Consider frenotomy

**Function Score:**  
14 = Perfect function (regardless of Appearance Score)  
11 = Acceptable function (If Appearance Score = 10)  
<11 = Impaired Function → consider frenotomy

Medical Officer: Name: ____________________ Signature: ___________________ Date:_________
APPENDIX 3

TONGUE-TIE: Information for parents

What is a Tongue-Tie?
A Tongue-Tie (TT) or ankyloglossia is a condition in which the thin piece of skin (frenulum) sitting underneath baby’s tongue is short and restricts tongue movement. It occurs in about 2-10 in a 100 of babies and may range from mild to severe. Babies with a TT may feed perfectly, although almost half experience difficulties.

Signs and symptoms to indicate the Tongue-Tie may be causing a problem
1. Poor attachment, baby unable to maintain effective attachment, mother experiencing discomfort
2. Sore nipples – misshapen after feeds
3. Poor milk transfer/poor weight gain

Assessment of Tongue-Tie
The recommendations for treatment will be made following an assessment process. The assessment includes baby’s mouth and tongue movement, feeding, maternal discomfort and exclusion of other causes of poor feeding. The size of the TT is not important as even a small TT may cause problems.

Release/snip of Tongue-Tie (Frenotomy)
Sometimes a release/snip of the TT will be recommended if you consent. Your baby will be securely wrapped and his/her head gently held still. Your baby will be given a sugar drops for pain relief. The doctor places a finger under the baby’s tongue to gain clear access to the TT. The TT is released with sterile scissors. Your baby will be returned to you immediately following the procedure so that you can feed and comfort him/her.

Complications
Rare complications of the procedure include bleeding and infection. If your baby has not had Vitamin K at birth or there is a family history of bleeding please discuss this with the doctor assessing your baby before the procedure. If you are Hepatitis C positive please discuss this with the doctor before the procedure.

Does releasing a Tongue-Tie hurt?
Logically, releasing a TT may hurt. However, a significant number of small babies (about 1 in 6) are asleep when their TT is released and remain asleep during the procedure. The milk from the first feed after the snip will also act as a pain killer. If possible feed your baby/provide a breastmilk feed before the procedure.

Wound and Aftercare
There is no specific aftercare required. A few drops of blood may be visible but the bleeding stops when putting pressure under the tongue with sterile gauze. The bleeding rarely causes a problem. There may be a small white patch under the tongue (a healing ulcer). It heals quickly and doesn’t cause baby any discomfort.

Tongue mobility following snip
In some circumstances the TT snip does not resolve the feeding issues. If you have any concerns following the procedure, please talk to the midwife caring for you and your baby. Follow up with the Breastfeeding Unit will be arranged for you after leaving hospital.

Where can I find more information?