

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

- Assessment and management of a neonate suspected with tongue-tie and breastfeeding problems
- Appropriate support of parents whose neonate is identified with tongue-tie

2. PATIENT

- Neonate presenting with breastfeeding difficulties where tongue-tie is suspected

3. STAFF

- Medical, midwifery, and nursing staff
- Clinical Midwifery Consultant 2 (CMC2) Lactation

4. EQUIPMENT

- Small sharp blunt-tipped scissors
- Sterile gloves
- Sterile gauze swab
- Oral sucrose

5. CLINICAL PRACTICE

- Refer to flowchart (Appendix 1)
- Ensure full breastfeeding assessment has excluded other causes of breastfeeding problems
- File completed Hazelbaker Assessment Tool for Lingual Frenulum Function (HATLFF) (Appendix 2) in neonatal medical records.
- Discuss findings with parents and provide written information (Appendix 3)
- Discuss possible complications of the procedure with parents (bleeding, haematoma, ulceration, possibility of repeat procedure)
- Minimise complications by:
 - Performing neonatal examination including oral assessment
 - Ensuring vitamin K has been administered to neonate
 - Investigating family history of any bleeding disorders
 - Determining Hepatitis C status of mother and following management guidelines
- Complete written consent with parent(s) for procedure if performed at RHW and file in the integrated clinical notes
- Refer to private paediatrician or Westmead Tongue-tie Clinic, as alternatives, if requested by parent(s)
- Perform frenotomy (by experienced paediatric medical officer) in the BSU with the following technique:
 - Perform hand hygiene
 - Wrap neonate securely
 - Stabilise neonate's head (assistant required)
 - Administer analgesia in the form of oral sucrose
 - Put on sterile gloves
 - Use your thumb to stabilize the jaw whilst placing your index finger under the neonate's tongue to gain clear access to the frenulum
 - Divide the frenulum with a small pair of sharp, blunt-tipped scissors
 - Apply pressure to the floor of the mouth with a sterile gauze swab to stop any bleeding
 - Return neonate to mother
 - Encourage mother to breastfeed neonate as soon as practicable
 - Assess for bleeding after 15 minutes
 - Document procedure and outcome in integrated clinical notes

TONGUE-TIE (ANKYLOGLOSSIA) – ASSESSMENT AND MANAGEMENT cont'd

6. DOCUMENTATION

- Hazelbaker Assessment Tool for Lingual Frenulum Function (HATLFF)
- Breastfeeding Assessment Tool in the Maternal Clinical Pathway
- Medical Record – Maternal and Neonatal.
- Breastfeeding Support Unit (BSU) referral form
- Request/Consent for medical procedure treatment (For parents/guardians of patients less than 16 years of age)

7. EDUCATIONAL NOTES

- Ankyloglossia (tongue-tie) is a condition whereby the lingual frenulum attaches near the tip of the tongue and may be short, tight and thick.
- Tongue-tie is present in 4-11% of neonates
- Tongue-tie has been cited as a cause of:
 - poor breastfeeding because the neonate is unable to attach or stay attached to the breast
 - maternal nipple pain and damage
 - unsettled neonate
 - poor neonatal weight gain
- When the peristaltic action of the neonatal tongue is impeded, milk removal from the breast is restricted
- Range of motion is the most important factor in a neonate's ability to breastfeed with tongue tie
- A severely restrictive lingual frenulum will usually keep the tongue behind the gum line. Touching the lower gum ridge triggers reflexive biting which would normally be inhibited by the presence of the neonatal tongue
- Frenotomy may correct the restriction to tongue movement and allow more effective breastfeeding and less maternal nipple pain
- At RHW, HATLFF is used for assessment of appearance and function of the neonatal tongue suspected of having a tongue-tie. This tool has a high reliability in recommendation for frenotomy in neonates with tongue-tie
- Post frenotomy, an immediate improvement in maternal nipple pain and breastfeeding efficacy may be demonstrated
- Complications following frenotomies are uncommon, but, may include:
 - Excessive bleeding
 - Haematoma
 - Ulceration
 - Infection
 - Repeat procedure
- Contraindications to frenotomy include:
 - neonate who has not been given intramuscular (IM) vitamin K, or has not been administered the second dose of oral vitamin K
 - family history of bleeding disorder that has not been investigated
- If the mother is Hepatitis C positive, breastfeeding post frenotomy should be delayed until any neonatal bleeding has ceased
- Follow up for all neonates who have had a frenotomy is recommended to assess healing of frenotomy, progress of breastfeeding and to provide further support if required as 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.

TONGUE-TIE (ANKYLOGLOSSIA) – ASSESSMENT AND MANAGEMENT cont'd

8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- Breastfeeding – Protection Promotion and Support
- Supplementary Feeding of a Breastfed Neonate in the Postpartum Period
- Breastfeeding Support Unit (BSU)
- Vitamin K (Phytomenadione) Prophylaxis in a Neonate
- Hepatitis C Positive Mothers and Their Babies
- NSW Health PD 2017_013 Infection Prevention and Control Policy

9. RISK RATING

- Low

10. NATIONAL STANDARD

- CC – Comprehensive Care

11. REFERENCES

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3. Canadian Agency for Drugs and Technologies in Health, 2016, Frenectomy for the Correction of Ankyloglossia: A Review of Clinical Effectiveness and Guidelines, Rapid response report: Summary with critical appraisal
<https://www.cadth.ca/sites/default/files/pdf/htis/june-2016/RC0785%20Frenectomy%20Final.pdf>
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5. Ghaheri BA, Cole M, Fausel SC, Chuop M Mace JC 2016, Breastfeeding improvement following tongue-tie and lip-tie release: A prospective cohort study. *The Laryngoscope*, vol. 127, no.5, pp. 1217-123
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5516187/pdf/LARY-127-1217.pdf>
6. Ingram J, Johnson D, Copeland M, Churchill C, Taylor H, & Emond A. 2015, The development of a tongue assessment tool to assist with tongue-tie identification. *Archives of disease in childhood. Fetal and neonatal edition*, 100(4), F344-8
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4484383/pdf/fetalneonatal-2014-307503.pdf>
7. O'Shea J, Foster JP, O'Donnell C, Breathnach D, Jacobs SE, Todd DA, Davis PG 2017, 'Frenotomy for Tongue-Tie in Newborn Infants', *Cochrane Database of Systemic Reviews*, Issue. 3. Art. No.: CD011065
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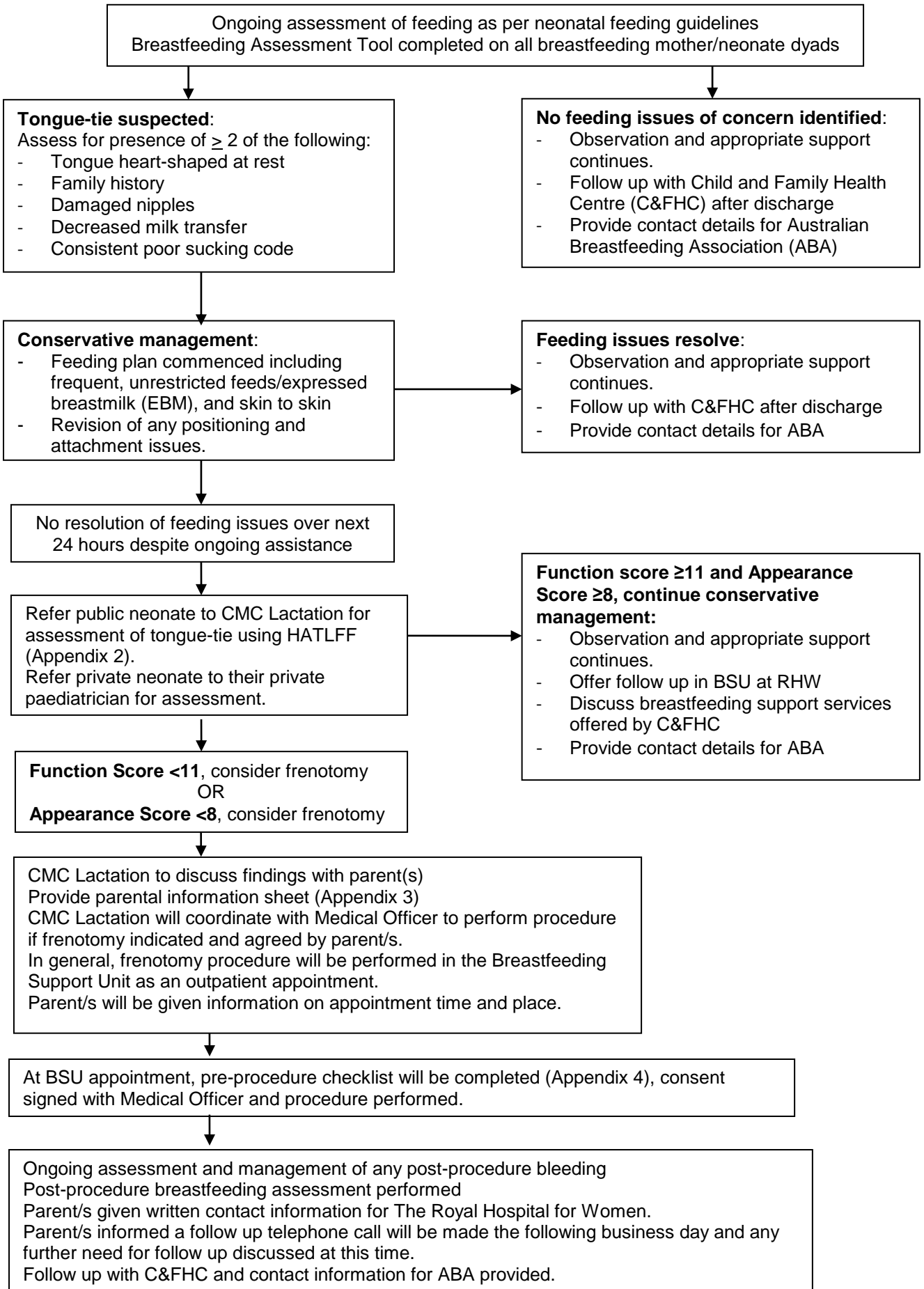
REVISION & APPROVAL HISTORY

Reviewed and endorsed Maternity Services LOPs 8/3/19
Approved Quality & Patient Care Committee November 2016
Reviewed and endorsed Materit Services LOPs 25/10/16
Approved Quality & Patient Safety Committee 15/8/13
Endorsed Maternity Services LOPs 13/8/13

FOR REVIEW : MARCH 2024

APPENDIX 1

Flowchart for Tongue-tie Identification, Assessment and Management



APPENDIX 2

HAZELBAKER ASSESSMENT TOOL for Lingual Frenulum Function



Holes Punched as per AS2626:1 - 2012
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Health South Eastern Sydney Local Health District	FAMILY NAME	MRN																											
	GIVEN NAME	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE																											
	D.O.B. ____/____/____	M.O. _____																											
	ADDRESS																												
Facility: _____																													
HAZELBAKER ASSESSMENT TOOL FOR LINGUAL FRENULUM FUNCTION																													
LOCATION / WARD _____ COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Appearance Items</th> <th style="width: 50%;">Function Items</th> </tr> </thead> <tbody> <tr> <td> Appearance of tongue when lifted <input type="checkbox"/> 2: Round or square <input type="checkbox"/> 1: Slight cleft in tip apparent <input type="checkbox"/> 0: Heart-shaped or V-shaped </td> <td> Lateralization <input type="checkbox"/> 2: Complete <input type="checkbox"/> 1: Body of tongue but not tongue tip <input type="checkbox"/> 0: None </td> </tr> <tr> <td> Elasticity of frenulum <input type="checkbox"/> 2: Very elastic (excellent) <input type="checkbox"/> 1: Moderately elastic <input type="checkbox"/> 0: Little OR no elasticity </td> <td> Lift of tongue <input type="checkbox"/> 2: Tip to mid mouth <input type="checkbox"/> 1: Only edges to mid-mouth <input type="checkbox"/> 0: Tip stays at alveolar ridge or rises to mid-mouth only with jaw closure </td> </tr> <tr> <td> Length of lingual frenulum when tongue lifted <input type="checkbox"/> 2: More than 1cm OR embedded in tongue (75-100%) <input type="checkbox"/> 1: 1cm (50%) <input type="checkbox"/> 0: Less than 1cm (25%) </td> <td> Extension of tongue <input type="checkbox"/> 2: Tip over lower lip <input type="checkbox"/> 1: Tip over lower gum only <input type="checkbox"/> 0: Neither of above, OR anterior or mid-tongue humps </td> </tr> <tr> <td> Attachment of lingual frenulum to tongue <input type="checkbox"/> 2: Tip over lower lip <input type="checkbox"/> 1: At tip <input type="checkbox"/> 0: Notched tip </td> <td> Spread of anterior tongue <input type="checkbox"/> 2: Complete <input type="checkbox"/> 1: Moderate or partial <input type="checkbox"/> 0: Little OR none </td> </tr> <tr> <td> Attachment of lingual frenulum to inferior alveolar ridge <input type="checkbox"/> 2: Attached to floor of mouth OR well below ridge <input type="checkbox"/> 1: Attached just below ridge <input type="checkbox"/> 0: Attached at ridge </td> <td> Cupping <input type="checkbox"/> 2: Entire edge, firm cup <input type="checkbox"/> 1: Side edges only, moderate cup <input type="checkbox"/> 0: Poor OR no cup </td> </tr> <tr> <td></td> <td> Peristalsis <input type="checkbox"/> 2: Complete, anterior to posterior (originates at the tip) <input type="checkbox"/> 1: Partial, originating posterior to tip <input type="checkbox"/> 0: None OR reverse peristalsis </td> </tr> <tr> <td></td> <td> Snapback <input type="checkbox"/> 2: None <input type="checkbox"/> 1: Periodic <input type="checkbox"/> 0: Frequent OR with each suck </td> </tr> <tr> <td> Appearance Total Score: _____ </td> <td> Function Total Score: _____ </td> </tr> <tr> <td colspan="2"> Appearance Score: 10 =Normal tongue <8 =Consider frenotomy </td> <td> Function Score: 14=Perfect function (regardless of appearance score) 11=Acceptable function (if appearance score=10) <11=Impaired function (consider frenotomy) </td> </tr> <tr> <td colspan="3"> Medical Officer/ Lactation Consultant; 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Signature: _____		Date: ____/____/____																											


S1004 - 070715

FRENULUM FUNCTION

CLC000493

APPENDIX 3

TONGUE-TIE: Information for parents

 Health South Eastern Sydney Local Health District	FAMILY NAME		MRN
	GIVEN NAME		<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE
Facility: HAZELBAKER ASSESSMENT TOOL FOR LINGUAL FRENULUM FUNCTION	D.O.B. ____ / ____ / ____		M.O.
	ADDRESS		
LOCATION / WARD			
COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE			

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 breastmilk transfer and intake/poor weight gain
4. Decrease breastmilk supply

Assessment of Tongue-Tie
 The recommendations for treatment will be made following an assessment process by a Lactation Consultant or experienced clinician. The assessment includes baby's mouth and tongue movement, a breastfeed, 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 a consent form must be signed. 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 breastfeed after the snip will also act as a pain killer. If possible feed your baby/provide a breast milk 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 pressure is applied 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. Contact details for follow up with Child and Family, a Lactation Consultant, Paediatrician or G.P will be arranged.

Where can I find more information?
 Australian Breastfeeding Association 'Tongue tie and Breastfeeding January 2015
<http://www.breastfeeding.asn.au/bf-info/tongue-tie>

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APPENDIX 4

Frenotomy Checklist

Prior to procedure

- Hazelbaker attended
- Consent form signed
- Baby had vitamin K injection at birth or 2 doses of oral vitamin K
- History of maternal thrombocytopenia/hepatitis C positive

Post Procedure

- Breastfeed assessment
- Information sheet to parents
- RHW contact information
- F/U planned