

<b>Document Title:</b>	<b>MANAGEMENT OF FRENULOTOMY (TONGUE TIE) TO SUPPORT BREASTFEEDING</b>		
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<b>Author/Contact:</b> (Asset Administrator)	Cher Smith, Specialist Midwife for Infant Feeding		
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Anita Rao	Clinical Director for Women's and Children's Directorate	12 <sup>th</sup> September 2019
Amanda Dixon	Lead Midwife Acute Inpatient Services	
Chris Berner	Lead Midwife Clinical Governance	
Angela Woolfenden	Lead Midwife Community Services	
Rosie Newman	St Peters Senior Midwife	
Margaret Siggins	WJC, Braintree Senior Midwife	
Ruth Byford	Warner Library	16 <sup>th</sup> September 2019

<b>Related Trust Policies</b> (to be read in conjunction with)	04071 Standard Infection Prevention 04072 Hand Hygiene 04225 Examination of the newborn 09111 Breast feeding in the postnatal period
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## 1.0 Purpose

- 1.1 At Mid Essex Hospital NHS Trust, midwives who have received appropriate training will perform Frenulotomy on babies of six weeks of age or less. After 6 weeks of age an infant would be outside of a midwives sphere of practice. Mothers of babies over 6 weeks of age should be advised to see their GP who will then make an appropriate referral.
- 1.2 This guideline advises maternity and paediatric staff of the process for referring babies for assessment of a restrictive lingual frenulum (RLF) also known as tongue tie which is having a negative impact on the neonates feeding, particularly breastfeeding. (Refer to the guideline 'Examination of the newborn'; register number 04225)
- 1.3 This guideline also provides information for those involved in assessment and guidance for trained practitioners to perform Frenulotomy on infants.

## 2.0 Equality Impact Assessment

- 2.1 Mid Essex Hospital Services NHS Trust is committed to the provision of a service that is fair, accessible and meets the needs of all individuals.

## 3.0 Definition

- 3.1 A tight or short lingual frenulum may restrict the mobility and therefore function of the tongue.
- 3.2 RLF varies from a mild form in which the tongue is restricted by a thin membrane, to a severe form where the tongue is fused to the base of the mouth.
- 3.3 A visible lingual frenulum is part of normal tongue anatomy and as such does not require treatment unless it is **restricting** normal tongue function.

## 4.0 Aims of Performing Frenulotomy

- 4.1 **Restricted tongue mobility impairing breastfeeding**
- 4.2 Breastfeeding is a complex interaction between a mother and her baby, many factors can affect the ability to breastfeed. Many babies with a visibly tight lingual frenulum experience no problems with breastfeeding. For some babies a tight lingual frenulum can contribute to breastfeeding difficulties, including ineffective milk removal causing lengthy or frequent feeds. Ineffective removal of milk can lead to insufficient milk supply and babies may lose weight due to inadequate milk intake. In addition, with the compression of the nipple against the hard palate by the abnormal tongue movement and excessive suction used, the mother is very likely to experience nipple pain and / or nipple trauma, which can lead to engorgement and mastitis.

- 4.3 Research using ultrasound has identified how restricted tongue mobility due to tight lingual frenulum can affect the suckling mechanism and milk removal
- 4.4 **Conservative management** includes assistance with positioning and attachment, as well as hand / pump expression for the preservation of maternal milk supply, careful assessment is required to determine whether the lingual frenulum is interfering with feeding and whether division is the appropriate management.
- 4.5 **Posterior tongue tie immobility**
- 4.6 Posterior tongue tie immobility sometimes called posterior tongue tie is controversial as parents are generally given this diagnosis when they are presenting with restrictive tongue mobility but the frenulum is not visible.
- 4.7 The diagnosis therefore becomes more difficult to ascertain (based on clinical ability to assess tongue mobility). Treatment can involve the division of the mucosal layer at the base of the tongue to allow the tongue to move more freely with the potential risk of damaging important vessels and nerves that are present in the area.
- 4.8 **Points to Remember:**
- 4.9 Not all lingual frenulums will cause feeding difficulties, the presence of a RLF in an absence of feeding difficulties or weight problems does not warrant referral.
- 4.10 The health professional identifying the RLF will need to perform a full feeding assessment, including a full history and observed a feed (See Appendix A). Positioning and attachment should be corrected as needed.  
(<https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/breastfeeding-resources/positioning-and-attachment-video/> ).
- 4.11 If a baby is feeding well and is gaining weight there is no need to refer.  
If the parents are concerned that a tongue tie may affect their baby in ways not related to breastfeeding they must see their GP.  
(Refer to the guideline 'Breast feeding in the postnatal period'; register number 09111)

## 5.0 Referral Process to Midwife led Frenulotomy service

- 5.1 Staff involved in providing breastfeeding support should consider restricted tongue mobility as a potential cause of breastfeeding difficulty.
- 5.2 Many babies need 48-72 hours to develop adequate suckling skills. A referral for RLF assessment should not be offered to parents until a reasonable assessment of the impact of the tongue tie mobility on breastfeeding had been made.
- 5.3 The principles of positioning and attachment **all need** to be in place for efficient and effective breastfeeding. All mothers should receive skilled help from professionals who

have completed a minimum of the two day “Mid Essex Infant Feeding Training: Breastfeeding and Relationship Building” The exaggerated latch also known as the Flipple technique can help with optimal attachment (Refer to Appendix B).

- 5.4 In the first few days after birth the mother is often still learning correct positioning and attachment of her baby for breastfeeding. Many babies with a visible lingual frenulum will be able to breastfeed effectively following skilled support for the mother with regards to positioning and attachment.
- 5.5 Healthcare staff who suspect a RLF should complete a breastfeeding assessment (Appendix A) The Assessment tool can be found in the maternal postnatal notes. If positioning and attachment appear correct but tongue mobility appears restricted or a tight lingual frenulum is suspected then referral for further assessment and consideration of treatment is appropriate. (Appendix C)
- 5.6 Parents should be clearly advised that the referral is for **assessment**; this does not necessarily mean a frenulotomy will be performed. The decision to perform frenulotomy will rest with the trained frenulotomy practitioner.
- 5.7 Direct referral to ENT without the involvement of the frenulotomy practitioner should only be considered in exceptional circumstances.
- 5.8 Parents should be provided with the Tongue Tie division leaflet (PS17) which can be accessed here, <http://inform.eidosystems.com/>

## **6.0 Division of the Frenulum (tongue tie division)**

### **6.1 Pre-Division**

- 6.2 The Frenulotomy practitioner **should witness a breastfeed** to assess the degree to which tongue mobility impairs breastfeeding. This should involve the use of an assessment tool by trained assessor (See Appendix D). The assessment should document the degree of tongue restriction, suckling skill and oral examination, as well as breastfeeding difficulties suggesting non-nutritive sucking.
- 6.3 If the frenulotomy practitioner concludes that division of the frenulum may be appropriate, the assessor will have a full discussion with the parents to ensure they understand and consent to the procedure.
- 6.4 A detailed history will be taken with particular regard to any medical problems such as bleeding disorders (including family history). This should be documented and advice sought from the appropriate medical practitioner if necessary. If there is any history (including family history) or medical conditions such as bleeding disorder then the procedure should only take place in hospital setting by a surgical specialist (ENT). The practitioner should confirm that vitamin K has been given IM at birth.

- 6.5 The mouth should be inspected for any abnormalities (e.g. cleft palate or ranula) or infections which would prevent the procedure taking place. If abnormalities are found the baby should be referred for assessment by a paediatrician.
- 6.6 The presence of RLF should be confirmed and documented, including details of its thickness and vascularity. (Appendix D)
- 6.7 The practitioner should confirm that parents have read the information. They should ensure that parents fully understand the procedure and risks.
- 6.8 Parents should be given time to ask all the questions they wish and consider whether they should like the frenulotomy to proceed. If the parents decline to proceed they should be advised to return to their midwife, health visitor or the Specialist Midwife for Infant Feeding for further breastfeeding support.
- 6.9 An area within the clinic with sufficient privacy to give the mother the opportunity to feed her baby post procedure should be prepared for use.
- 6.10 The room that is identified to undertake the procedure must be suitable clinical room which meets infection control requirements and appropriate lighting.
- 6.11 Appropriate assistance should be available, to take care of any emergency including acute bleeding.
- 6.12 Parents may be offered the choice to either stay with baby or leave the room for the duration of the procedure.
- 6.13 The practitioner must have a protocol in place for rapid response in case of uncontrolled bleeding following lingual frenulum division. While uncontrolled bleeding following lingual frenulum division is rare it can present a life threatening situation for babies due to the low blood volume. Please refer to Appendix E for the guideline for management of bleeding post frenulotomy set out by the Association of Tongue Tie practitioners.

## **7.0 Division Procedure**

- 7.1 The treatment area should have a flat surface with good lighting.
- 7.2 All staff involved in the procedure should wash their hands as per hospital hand washing guidelines.
- 7.3 All practitioners undertaken the procedure should wear sterile gloves and wrap the baby carefully, but firmly, in a towel/blanket.
- 7.4 Position the assistant's hands of each shoulder so that the baby's head is held firmly between their wrists.
- 7.5 Using the index finger of the non-dominant hand. The practitioner places the tongue tie on the stretch, and holds the lower lip down with the thumb.

- 7.6 The tongue tie is divided using sterile scissors with rounded, not pointed, tips usually in one snip, though sometimes a second snip is necessary. The practitioner should then ensure that all of the restriction has been released.
- 7.7 Unwrap baby and pick him/her up to provide comfort. The floor of the mouth may need compressing with a sterile gauze swab. Cotton wool should **not** be used. Promptly return baby to mother.
- 7.8 Assist mother to put baby straight on the breast. Encourage the mother and assist as necessary. This will provide comfort and pain relief for baby, also breastmilk has antiseptic properties.
- 7.9 It is important to encourage early feeding following the procedure, to get used to the new freedom of tongue movement and to prevent granulation.
- 7.10 Bleeding should be minimal due to poor vascular supply to the frenulum, but ensure that all bleeding has ceased prior to sending the mother and baby home (See Appendix E).
- 7.11 Document the procedure by completing the Tongue Tie assessment form (Appendix D) as well as the Child health record (red book) and the baby's hospital hand held record if appropriate.

## **8.0 Post Procedural Care**

- 8.2 The frenulotomy practitioner will ensure that the parents have contact details of the postnatal ward and or the stand alone units so that any post procedure concerns can be addressed appropriately
- 8.3 The frenulotomy practitioner will follow up each case with a telephone call and discussion with the parents. This should be documented on the Tongue tie assessment form Appendix D

## **9.0 Contraindications for Midwives performing Frenulotomy**

- 9.1 Midwives who are trained to carry out frenulotomy should refer neonates to ENT If the frenulum is unusually thick and/or visible blood vessels are present.
- 9.2 A family history of unusual bleeding or clotting problems would indicate that frenulotomy by a midwife would be inappropriate.
- 9.3 If the Midwife is unable to perform frenulotomy for the above reasons then she should explain this to the parents and obtain consent for a referral to the ENT frenulotomy service. The referral form appendix ? should be fully completed and emailed to [Con2con@meht.nhs.uk](mailto:Con2con@meht.nhs.uk) please include TONGUE TIE – URGENT- (BABIES AGE) in the subject line of the email.



## **10.0 Staff and Training**

- 10.1 Prior qualifications necessary must include medical practitioners or registered nurses, midwives and health visitors.
- 10.2 The trainers comprise of a consultant paediatric and neonatal surgeon and infant feeding specialist.
- 10.3 The procedure must be taught by a competent practitioner who has completed the appropriate training.

## **11.0 Infection Prevention**

- 11.1 The practitioner performing the procedure is responsible for ensuring that all equipment used is sterile and has not passed its expiry date.
- 11.2 The practitioner should follow Trust guidelines on infection control by ensuring that they effectively 'decontaminate their hands' before and after each procedure.
- 11.3 The practitioner should ensure that they follow the Trust guidelines on infection prevention using aseptic non-touch technique (ANTT) when carrying out the Frenulotomy procedure.

## **12.0 Audit and Monitoring**

- 12.1 Audit of compliance with this guideline will be considered on an annual audit basis in accordance with the Clinical Audit Strategy and Policy (register number 08076), the Corporate Clinical Audit and Quality Improvement Project Plan and the Maternity annual audit work plan; to encompass national and local audit and clinical governance identifying key harm themes. The Women's and Children's Clinical Audit Group will identify a lead for the audit.
- 12.2 The findings of the audit will be reported to and approved by the Multi-disciplinary Risk Management Group (MRMG) and an action plan with named leads and timescales will be developed to address any identified deficiencies. Performance against the action plan will be monitored by this group at subsequent meetings.
- 12.3 The audit report will be reported to the monthly Directorate Governance Meeting (DGM) and significant concerns relating to compliance will be entered on the local Risk Assurance Framework.
- 12.4 Key findings and learning points from the audit will be submitted to the Clinical Governance Group within the integrated learning report.
- 12.5 Key findings and learning points will be disseminated to relevant staff.

## 13.0 Guideline Management

- 13.1 As an integral part of the knowledge, skills framework, staff are appraised annually to ensure competency in computer skills and the ability to access the current approved guidelines via the Trust's intranet site.
- 13.2 Quarterly memos are sent to line managers to disseminate to their staff the most currently approved guidelines available via the intranet and clinical guideline folders, located in each designated clinical area.
- 13.3 Guideline monitors have been nominated to each clinical area to ensure a system whereby obsolete guidelines are archived and newly approved guidelines are now downloaded from the intranet and filed appropriately in the guideline folders. 'Spot checks' are performed on all clinical guidelines quarterly.
- 13.4 Quarterly Clinical Practices group meetings are held to discuss 'guidelines'. During this meeting the practice development midwife can highlight any areas for future training needs will be met using methods such as 'workshops' or to be included in future 'skills and drills' mandatory training sessions.

## 14.0 Communication

- 14.1 A quarterly 'maternity newsletter' is issued to all staff to highlight key changes in clinical practice to include a list of newly approved guidelines for staff to acknowledge and familiarise themselves with and practice accordingly. Midwives that are on maternity leave or 'bank' staff have letters sent to their home address to update them on current clinical changes.
- 14.2 Approved guidelines are published monthly in the Trust's Staff Focus that is sent via email to all staff.
- 14.3 Approved guidelines will be disseminated to appropriate staff quarterly via email.
- 14.4 Regular memos are posted on the guideline and audit notice boards in each clinical area to notify staff of the latest revised guidelines and how to access guidelines via the intranet or clinical guideline folders.

## 15.0 References

Ballard, JL; Auer, C E; Khory, JC. (2002) Ankyloglossia assessment, incidence and effect of frenuloplasty on the breast feeding dyad. *Paediatrics*: 110 (5) p63

Berry J, Griffiths M, Westcott C. A double-blind, randomised controlled trial of tongue-tie division and its immediate effect on breastfeeding. *Breastfeeding Medicine*, 2012, 7: 189-193.

Buryk M, Bloom D, Shope T. Efficacy of neonatal release of ankyloglossia: a randomized trial. *Pediatrics*, 2011; 128: 280-286

Geddes DT, Langten DB, Goilow I, Lorili A, Hartmann PE, Simmer K. Frenulotomy for breastfeeding infants with ankyloglossia: effects on milk removal and sucking mechanism as imaged by ultrasound. *Pediatrics*, 2008; 122: e188-e194.

Hogan, M; Westcott, C; Griffiths, M. (2005) Randomized controlled trial of division of tongue-tie in infants with feeding problems. *Journal of Paediatric Child Health*. 41: p246- 50

Jackson R. Improving breastfeeding outcomes: the impact of tongue tie. *Community Practitioner*, 2012; 85:42-44.

NICE. Division of ankyloglossia (tongue-tie) for breastfeeding. *Interventional Procedure Guidance 149*, December 2005

Nursing and Midwifery Council. (2005) *Guidelines for records and record keeping*. NMC. London.

World Health Organisation (2001) *The Optimal Duration of Exclusive breastfeeding; A report of an expert Consultation Geneva WHO*.  
[http://www.who.int/nutrition/publications/optimal\\_duration\\_of\\_exc\\_bfeeding\\_report\\_eng.pdf](http://www.who.int/nutrition/publications/optimal_duration_of_exc_bfeeding_report_eng.pdf)

NICE Guidelines (2005) acknowledges the safety of the Frenulotomy procedure without the use anaesthetic when undertaken in the early month of infancy.

## Appendix A

Name.....

Hospital number.....

### Breastfeeding Assessment Tool

To be completed for all breastfeeding mothers prior to discharge from hospital (ideally within first 24 hours), day 5 and day 10 or if any concerns are identified.

How you and your midwife can recognise that your baby is feeding well				
What to look for/ask about	✓	✓	✓	✓
<b>Day</b>				
<b>Your baby:</b>				
has at least 8 -12 feeds in 24 hours*				
is generally calm and relaxed when feeding and content after most feeds				
will take deep rhythmic sucks and you will hear swallowing*				
will generally feed for between 5 and 40 minutes and will come off the breast spontaneously				
has a normal skin colour and is alert and waking for feeds				
has not lost more than 10% weight				
<b>Your baby's nappies:</b>				
At least 5-6 heavy, wet nappies in 24 hours*				
At least 2 dirty nappies in 24 hours, at least £2 coin size, yellow and runny and usually more*				
<b>Your breasts:</b>				
Breasts and nipples are comfortable				
Nipples are the same shape at the end of the feed as the start				
Understands how using a dummy/nipple shields/infant formula can impact on breastfeeding				
<b>Date</b>				
<b>Midwife's initials</b>				
<b>Midwife:</b> if any responses not ticked: watch a full breastfeed, develop a care plan including revisiting positioning and attachment and/or refer for additional support. Consider specialist support if needed.				
<b>Feeding plan commenced: Yes/No:</b>				
Plan to be documented in main notes if required				

\*This assessment tool was developed for use on or around day 5.

If used at other times:

<b>Wet nappies:</b>	<b>Stools/dirty nappies:</b>
Day 1-2 = 1-2 or more	Day 1-2 = 1 or more, meconium
Day 3-4 = 3-4 or more, heavier	Day 3-4 = 2 (preferably more) changing stools
Day 6 plus = 6 or more, heavy	
<b>Sucking pattern:</b>	<b>Feed frequency:</b>
Swallows may be less audible until milk comes in day 3-4	Day 1 at least 3-4 feeds
	After day 1 young babies will feed often and the pattern and number of feeds will vary from day to day. Being responsive to your baby's need to breastfeed for food, drink, comfort and security will ensure you have a good milk supply and a secure happy baby.

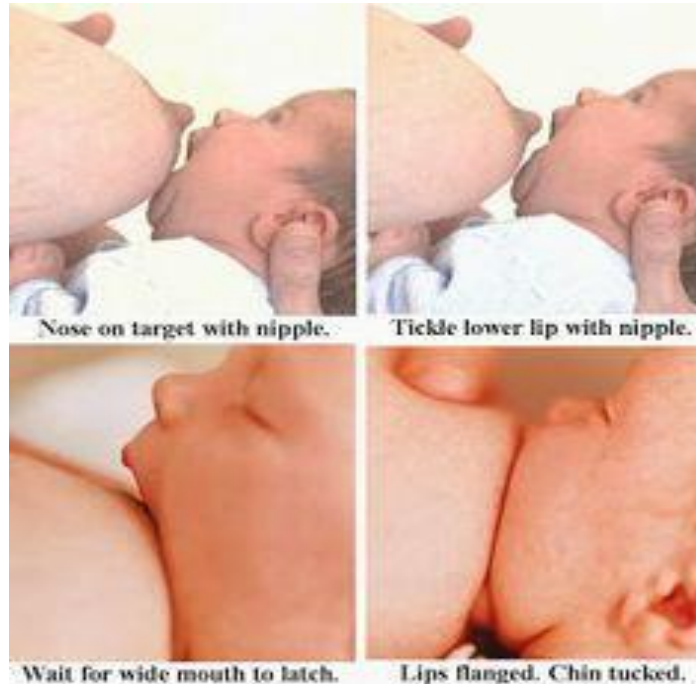
## Appendix B

### How to explain exaggerated attachment technique

The aim of this technique is to deepen the baby's attachment and get as much breast tissue into the baby's mouth. This will enable the nipple to go up and over the tongue and rest nearer the junction of the hard-soft palate. This should reduce compression of the nipple on the hard palate (as is found with attachment that is too shallow).

If the mother is going to feed from her left breast, she needs to cup the breast underneath with her left hand, keeping her fingers well away from the areola. There is always a tendency to want to move the fingers up, but this will affect the success of the attachment.

The thumb should indent the areola about an inch above the nipple. This should tilt the nipple back so it looks like its positioning away from the baby. This will have the effect of making the breast under the nipple bulge forward. Whilst maintaining this action, bringing the baby to the breast with head extended back and with a wide open mouth. Aim the nipple to the roof of the mouth, up and over the tongue and remove the thumb when the baby has taken a few sucks and is attached. The baby's bottom lip should make contact with the breast well away from the base of the nipple. Mothers should be helped to practice this technique until they feel confident in doing it.





## Appendix C

### Tongue Tie Referral Form

Please ensure you complete this referral form in CAPITAL LETTERS.

Your referral WILL NOT be processed if you do not complete all details in this form.

<b>Date of Referral:</b>	<b>Baby's Full Name:</b>
<b>Baby's Date of Birth:</b> <b>Baby's Gender:</b> <b>Baby's NHS Number:</b> <b>Baby's Hospital Number:</b> <b>Vitamin K given? Yes/No</b> <b>Date:</b>	<b>GP Name:</b> <b>GP Address:</b>
<b>Mother's Name:</b> <b>Full Address (including postcode)</b>  <b>Telephone Number:</b> <b>Family History of clotting/bleeding disorders: Yes/No</b> <b>Details.....</b> .....	<b>Referred by Name</b>  <b>Job Title</b>  <b>Contact Number</b>
<b>Presenting Problems (please circle all appropriate)</b> Sore nipples Engorgement Mastitis Weight loss Slow weight gain Static weight Sliding off breast Clicking Short, frequent feeds Unsettle baby Other	<b>Breastfeeding History (please circle)</b>  Breast only Expressed breastmilk via cup or bottle Formula via cup or bottle Nipple Shields  <b>Has positioning and attachment been assessed by a trained professional?</b> <b>Yes/No</b> <b>By Whom</b>
❖ If parents are concerned that a tongue tie may affect their baby in ways <u>not</u> related to breastfeeding they must see their GP.	❖ Please be aware that babies can feed normally with a tongue tie, and positioning and attachment are still key

Referrals to be faxed to St Peter's Birthing Unit on: 01245 513988.

For internal referral to ENT please email to [Con2con@meht.nhs.uk](mailto:Con2con@meht.nhs.uk) and include TONGUE TIE – URGENT- (BABIES AGE) in the subject line of the email. (If not suitable for frenulotomy by midwife)

## Appendix D

### Hazelbaker Assessment for Lingual Frenulum Function

Appearance Items	Function Items
<p><b>Appearance of tongue when lifted</b>                      2: Round or square                      1: Slight cleft in tip apparent                      0: Heart – or V-shaped</p> <p><b>Elasticity of frenulum</b>                      2: Very elastic                      1: Moderately elastic                      0: Little or no elasticity</p> <p><b>Length of lingual frenulum when tongue lifted</b>                      2: &gt;1 cm                      1: 1 cm                      0: &lt; 1 cm</p> <p><b>Attachment of lingual frenulum to tongue</b>                      2: Posterior to tip                      1: At tip                      0: Notched tip</p> <p><b>Attachment of lingual frenulum to inferior alveolar ridge</b>                      2: Attached to floor of mouth or well below ridge                      1: Attached just below ridge                      0: Attached at ridge</p>	<p><b>Lateralization</b>                      2: Complete                      1: Body of the tongue but not tongue tip                      0: None</p> <p><b>Lift of tongue</b>                      2: Tip to mild-mouth                      1: Only edges to mild-mouth                      0: Tip stays at lower alveolar ridge or rises to mid-mouth with jaw closure</p> <p><b>Extension of tongue</b>                      2: Tip over lower lip                      1: Tip over lower gum only                      0: Neither of the above, or anterior or mid tongue humps</p> <p><b>Spread of anterior tongue</b>                      2: Complete                      1: Moderate or partial                      0: Little or none</p> <p><b>Cupping</b>                      2: Entire edge, firm cup                      1: Side edges only, moderate cup                      0: Poor or no cup</p>
<ul style="list-style-type: none"> <li>- Significant ankyloglossia is diagnosed when the appearance score total is 8 or less and / or function score total was 11 or less.</li> <li>- Severe maternal nipple pain during breastfeeding, without alternate explanation as assessed by a trained health care professional is also grounds to consider Frenotomy if a tight anterior frenulum is noted.</li> </ul>	<p><b>Peristalsis</b>                      2: Complete, anterior to posterior                      1: Partial, originating posterior to tip                      0: None or reverse motion</p> <p><b>Snapback</b>                      2: None                      1: Periodic                      0: Frequent or with each suck</p>
<p><b>Ankyloglossia Grading:</b>                      Class I; mild ankyloglossia, 12-16mm                      Class II: moderate ankyloglossia, 8-11mm                      Class III: severe ankyloglossia, 3-7mm                      Class IVL complete ankyloglossia, less than 3mm</p>	<p><b>SCORE:</b>                      Appearance: -----(&lt;8 = ankyloglossia)                      Function: -----(&lt;11 = ankyloglossia)</p>



**Appearance of tongue when lifted** is determined by inspecting the anterior edge of the tongue as the infant cries or tries to lift or extend the tongue.

**The elasticity of the frenulum** is determined by palpating the frenulum for elasticity while lifting the infant's tongue.

**The length of the lingual frenulum** is determined by noting its approximate length in centimetres as the tongue is lifted.

**Attachment of the frenulum to the tongue** is determined by noting its origin on the inferior aspect of the tongue. It should be approximately 1 cm posterior to the tip.

**The attachment of the lingual frenulum to the inferior alveolar ridge** is determined by noting the location of the anterior attachment of the frenulum. It should insert proximal to or into the genioglossus muscle on the floor of the mouth.

**Lateralization** is measured by eliciting the transverse tongue reflex by tracing the lower gum ridge and brushing the lateral edge of the tongue with the examiner's finger.

**Lift of the tongue** is noted when the finger is removed from the infant's mouth. If the infant cries, then the tongue tip should lift to mid-mouth without jaw closure.

**Extension of the tongue** is measured by eliciting the tongue extrusion reflex by brushing the lower lip downward towards the chin.

**Spread of anterior tongue** is determined by first eliciting a rooting reflex, just before cupping, by tickling the upper and lower lip and looking for even thinning of the anterior tongue.

**Cupping** is measure of the degree to which the tongue hugs the finger as the infant sucks on it.

**Peristalsis** is a backward, wave-like motion of the tongue during sucking that should originate at the tip of the tongue and is felt with the back of the examiner's finger.

**Snapback** is heard as a clucking sound when the tethered tongue loses its grasp on the finger or breast when the infant tries to generate negative pressure.

## Tongue Tie Assessment Form

**GP:**

**NHS No:**

**Date:**

**Parents Name:**

**D.O.B:**

**Surname:**

**Phone number:**

**First name:**

**Date of Birth:**

**Hospital Number:**

**Gestation:**

**Birth Weight:**

**Family H/O bleeding disorders:**

**Is mother MRSA +: No / Yes**

**Vitamin K: IM / Oral / None**

**Current weight:**

**Date:**

1. Feeding	Yes	No	N/A
Breastfeeding			
Tried to breastfeed			
Continuous feeding			
Latch easily			
Nipple problems			
Expressing			
Nipple Shields			
Bottle feeding / easy?			
Length / quantity of feed			
Lip / lick problems			
Dribble			
Noise / clicking while feeding			
Excessive wind			
Is baby in good health?			
Any other Issues			

2. Family History	Yes	No
Comments		

### Assessment Tool for Lingual Frenulum Function

#### 3. Examination of the Tongue

Appearance Items	
<b>Appearance of tongue when lifted</b>	<b>Score</b>
<b>2: Round of square</b> <b>1: Slight cleft in tip apparent</b> <b>0: Heart – or V-shaped</b>	
<b>Elasticity of Frenulum</b>	
<b>2: Very elastic</b> <b>1: Moderately elastic</b> <b>0: Little or no elasticity</b>	
<b>Length of lingual frenulum when tongue lifted</b>	
<b>2: &gt;1 cm</b> <b>1: 1 cm</b> <b>0: &lt;1 cm</b>	
<b>Attachment of lingual frenulum to tongue</b>	
<b>2: Posterior to tip</b> <b>1: At tip</b> <b>0: Notched tip</b>	
<b>Attachment to lingual frenulum to inferior alveolar ridge</b>	
<b>2: Attached to floor of mouth or well below ridge</b> <b>1: Attached just below ridge</b> <b>0: Attached at ridge</b>	
	<b>Total</b>

Function Items	
<b>Lateralization</b>	<b>Score</b>
<b>2: Complete</b> <b>1: Body of tongue but not tongue tip</b> <b>0: None</b>	
<b>Lift of Tongue</b>	
<b>2: Tip to mild-mouth</b> <b>1: Only edges to mild-mouth</b> <b>0: Tip stays at lower alveolar ridge or rises to mild-mouth only with jaw closure</b>	
<b>Extension of Tongue</b>	
<b>2: Tip over lower lip</b>	

<b>1: Tip over lower gum only</b> <b>0: Neither of the above, or anterior or mid-tongue humps</b>	
<b>Spread of Anterior Tongue</b>  <b>2: Complete</b> <b>1: Moderate or partial</b> <b>0: Little or none</b>	
<b>Cupping</b>  <b>2: Entire edges, firm cup</b> <b>1: Side edges only, moderate cup</b> <b>0: Poor or no cup</b>	
<b>Peristalsis</b>  <b>2: Complete, anterior to posterior</b> <b>1: Partial, originating posterior to tip</b> <b>0: None or reverse motion</b>	
<b>Snapback</b>  <b>2: None</b> <b>1: Periodic</b> <b>0: Frequent or with each suck</b>	
	<b>Total</b>

**Scoring**

Function Item Score \_\_\_\_\_

Appearance Item Score \_\_\_\_\_

Combined Score \_\_\_\_\_

**Treatment Recommendations Based on Scoring**

14 = Perfect Function Score regardless of Appearance Item score. Surgical treatment not recommended.

11 = Acceptable Function score only if Appearance Item score is 10

< 10 = Function Score indicates function impaired. Frenotomy should be considered if management fails. Frenotomy necessary if Appearance item score is < 8.

4. Pain on division	Yes	No
Increased crying		

5. Bleeding	None	Few drops	Small	Pressure >1min	Suture	Diathermy
Amount						

6. Post procedure assessment	Yes	No
Any immediate difference?		
Signs of infection discussed and leaflet given		

7. 24 hour check	Worse	Better	Unchanged
Any difference to feed			
Any difference to symptoms			
Any other comments (Parents)			

Comments:

**Signature:**

**Date:**

**Appendix E: When Bleeding persists post frenulotomy.**

**A small amount of bleeding is to be expected and is normally managed by putting the baby to the breast which will compress the floor of the mouth.**

**If bleeding is persistent and continues after a 5 minute feed then the following steps should be taken**

- 1. Apply constant pressure to the wound using a small piece of sterile gauze for 5 timed minutes.**
- 2. If after 5 minutes of continuous pressure bleeding persists then further assistance should be sought from a Paediatrician /ANNP or emergency transfer arranged if outside the hospital setting.**
- 3. Pressure should continue until help is available or the bleeding ceases. Bleeding should be assessed every 5 minutes.**

**The association of Tongue-Tie practitioners guidance for management of bleeding post frenulotomy is available below.**



## Guideline for the management of bleeding post frenulotomy

A small amount of bleeding post division is common and to be expected. Allowing the baby to feed treats this best, as feeding will compress the floor of the mouth.

If there is an unusual amount of bleeding after division, it is likely to be dark venous bleeding. Bright red arterial bleeding is very rare.

1. Put some gauze on the raw diamond under the tongue and hold in place firmly with one finger. Sit down with the baby sitting up on your knee and continue to press for at least 5 timed minutes. When applying pressure ensure that the airway is maintained. Keep baby warm and calm.
2. If the gauze becomes soaked while you are pressing, you are not pressing in the right place. Replace the gauze and check you are pressing under the tongue on the raw diamond, but now press with two fingers, side by side, to ensure you are pressing on the outer edges as well as the centre. Sit down again and wait for at least 5 timed minutes.
3. Do not continually remove the gauze to see if the bleeding has stopped – wait for at least 5 minutes and then look.  
This should control 99.7% of bleeding. (1:300 chance of continued bleeding)
4. If there is still an ooze, using a tea bag soaked in cold water, press with one or two fingers for a further timed 5 minutes. Remove the teabag when the bleeding has stopped. Kaltostat may be used as an alternative to a tea bag.\* This should control 99.99% (1:10,000 risk of continued bleeding). (In paediatric dentistry, teabags are recommended by many people to stop bleeding from the gums).

If you are not in a hospital, consider calling an ambulance if initial control of the bleeding is impossible or if the bleeding recurs despite successful pressure control. This decision should be based on professional judgement and experience taking

into account the level of blood loss, the age, size and condition of the baby and distance to the nearest Accident and Emergency Department. (The location of the nearest ambulance station also needs to be considered as a lot of ambulances are not dispatched from hospitals.) It is never going to be easy, but everyone will err on the side of safety.

5. In a controlled, hospital environment, with suitable monitoring, put a few drops of 1:100,000 adrenaline on a gauze swab and press for 5 minutes, as before. (or lignocaine 1% with 1:100,000 adrenaline). There is no correct dose, but this seems to be a safe compromise between a stronger concentration of adrenaline and the theoretical side-effects of systemic absorption.



6. If all this fails, you will have to invoke surgical help... (estimated risk 1: 100,000) Silver Nitrate, electrocautery and suturing are options at this point.

*This group of babies have had a long period of sublingual pressure followed by*

*some form of surgery. This causes considerable oedema and some oral aversion, so they need to be kept under very close supervision, potentially as an inpatient for several days, until they are feeding normally. A prompt naso-gastric tube for initial stress-free feeds is very useful and avoids an unnecessary IV line.*

\*Kaltostat 10cm x 10cm may be easier to use than 5cm x 5cm and can be cut to make it smaller if needed. It can be obtained through the usual NHS supply chains for dressings or for private practice purchased from Amazon or online medical suppliers.

## Guidance on bleeding for parents

There have been a few reported cases of prolonged and/or heavy bleeding which has occurred sometime after the procedure when the babies have returned home. So, it would seem prudent to provide parents with advice on how to manage this in the very unlikely event it should occur. Below is an example of the kind of guidance you may choose to give to your clients:

*There have been reported cases of bleeding which has occurred sometime after tongue-tie division, usually on the same day, when the babies have returned home. If this occurs the bleeding is usually very light and is triggered by strenuous crying (resulting in the tongue lifting and disturbing the wound) or when the wound is disturbed during feeding, particularly if the wound is caught by a bottle teat or tip of a nipple shield.*

- 1. If you notice any blood in your baby's mouth then offer the baby the breast or bottle and feed them. This will usually stop the bleeding within a few minutes just as it did immediately after the procedure. If the baby refuses to feed then sucking on a dummy/pacifier or your clean finger will have a similar effect.*
- 2. If the bleeding is very heavy or does not reduce with feeding and stop within 15 minutes then apply pressure to the wound under the tongue with one finger using a clean piece of gauze or muslin for 5 minutes. Do not apply pressure under the baby's chin as this can affect breathing.*
- 3. If bleeding continues after this time continue to apply pressure to the wound and take your baby to hospital (call an ambulance if you live more than a very short distance from the Accident and Emergency Department).*

4.

If a baby needs to go to hospital, give a copy of this document to either the parents or directly to the paramedics/A&E staff. As significant bleeding after tongue-tie division is a rare event they are unlikely to be familiar with this type of bleeding or the potential subsequent feeding problems.





Authors: Mr Mervyn Griffiths, Consultant Paediatric Surgeon, Southampton and Sarah Oakley, Independent Nurse, Health Visitor and IBCLC updated December 2015. Reviewed by Mr Nigel Hall, Honorary Consultant Neonatal and Paediatric Surgeon, Southampton March 2017.

Review date March 2018.

#### References:

Bate-Smith EC (1972) Haemanalysis of Tannins: The concept of relative astringency. Agricultural Research Council Institute of Animal Physiology, Babraham, Cambridge

Ashok PK, Upadhyaya K (2012) Tannins are Astringent, Journal of Pharmacognosy and Phytochemistry, Vol. 1 No. 3 p 45 (Online Available at [www.phytojournal.com](http://www.phytojournal.com), ISSN 2278- 4136 ZDB-Number: 2668735-5, IC Journal No: 8192, Volume 1 Issue 3)

Pardis T, Khoroushi M (2014) A review of chemical hemostatic agents in restorative dentistry. Dent Res J (Isfahan). 2014 Jul-Aug; 11(4): 423-428.

All of these articles are available in full pdf format on the ATP website [www.tongue-tie.org.uk](http://www.tongue-tie.org.uk).

#### Notes about this guideline

This guideline was originally written by Mr Mervyn Griffiths, Consultant Paediatric Surgeon, Southampton and Sarah Oakley, Independent Nurse, Health Visitor and Lactation Consultant in 2014. It was revised in 2015 by Mervyn and in March 2017 was reviewed by Nigel Hall, Consultant Paediatric Surgeon, Head of Wessex Tongue-tie Service, Southampton. There are no published papers specifically on the management of bleeding in infants post frenulotomy. Heavy and prolonged bleeds are rare so the guidance here is based on strategies used by members of ATP that have been found to be effective. It is up to individual NHS Trusts to develop their own policies on this. Issues have been raised about the use to tea bags, which may disintegrate if too wet, but they are used in dentistry and there is evidence in the literature of their efficacy in controlling bleeding (see papers on the ATP website that accompany this guidance). Some NHS Trusts are concerned about using Kaltostat as there is potential for fibres to be left in the wound once the dressing is removed and it is not licensed for use in babies under one year. Other Trusts have taken the view that if it effectively stops bleeding and an escalation to more invasive treatment such as suturing, which can then prevent a baby feeding orally for several days and potentially damage the breastfeeding relationship, then it's use is justified. Alternatives to Kaltostat have been suggested. **Surgicel** is an option but is very expensive. There are cheaper cellulose-based haemostats available including Gelita Cel. ATP have sought advice from the manufacturer of Gelita Cel and they have confirmed that the **Gelita Cel Sponges** are suitable for use in the mouths of babies under age one. Their other products are not suitable. We are not aware of any cases where Surgical or Gelita Cel Sponges have been used but **if members of ATP could share their experiences with managing bleeding it will help the development of this guideline further**. Rebound bleeding after the use of Adrenaline has been raised as a potential problem but has not been reported in the cases where is has



been used in babies post frenulotomy. Silver nitrate is commonly used in the USA but does not seem to be used much in the UK.

## Appendix G: Preliminary Equality Analysis

**This assessment relates to:** Management of Frenulotomy (Tongue Tie) to Support Breastfeeding/ 09058

A change in a service to patients		A change to an existing policy	<b>X</b>	A change to the way staff work	
A new policy		Something else (please give details)			
Questions			Answers		
1. What are you proposing to change?			Full Review		
2. Why are you making this change? (What will the change achieve?)			3 year review		
3. Who benefits from this change and how?			Patients and clinicians		
4. Is anyone likely to suffer any negative impact as a result of this change? If no, please record reasons here and sign and date this assessment. If yes, please complete a full EIA.			No		
5. a) Will you be undertaking any consultation as part of this change? b) If so, with whom?			Refer to pages 1 and 2		

**Preliminary analysis completed by:**

<b>Name</b>	Cher Smith	<b>Job Title</b>	Specialist Midwife for Infant Feeding	<b>Date</b>	June 2019
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