### **Medical Policy**



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Joint Medical Policies are a source for BCBSM and BCN medical policy information only. These documents are not to be used to determine benefits or reimbursement. Please reference the appropriate certificate or contract for benefit information. This policy may be updated and is therefore subject to change.

\*Current Policy Effective Date: 9/1/24 (See policy history boxes for previous effective dates)

Title: Frenum Surgery (Frenulum Surgery, Frenumectomy, Frenulectomy, Frenectomy, Frenotomy)

#### **Description/Background**

A frenectomy is a surgical procedure that involves the excision of a connecting fold of membrane (frena) that attaches 1 surface to another. Inside the mouth, frena are located under the tongue (lingual frenum), inside the upper lip above the top of the 2 front teeth and below the bottom 2 front teeth (labial frenum), and between the cheeks and the gums (buccal frena).

Frenum attachments and their impact on oral motor function and development have become a topic of emerging interest among the community as well as various specialties of health-care providers. Studies have shown differences in treatment recommendations among pediatricians, otolaryngologists, lactation consultants, speech pathologists, surgeons, and dental specialists. Clear indications and timing of surgical treatment remain controversial due to lack of consensus regarding accepted anatomical and diagnostic criteria for degree of restriction and relative impact on growth, development, feeding, or oral motor function. Although the etiology of this condition remains unknown, there appears to be a higher predilection in males towards anomalies of frenum attachments, whether it is ankyloglossia or hypertrophic/ restrictive maxillary labial frenum.

Successful breastfeeding is dependent upon an infant's ability to correctly latch onto a mother's breast. If an infant is born with oral soft tissue abnormalities such as tongue-tie or lip-tie, breastfeeding may become challenging or impossible.

Consensus on ankyloglossia's role in breastfeeding difficulties is lacking. Currently, the U.K. National Health Service and the Canadian Paediatric Society recommend treatment only if it interferes with breastfeeding.

#### **Ankyloglossia**

Ankyloglossia (tongue tie) is a congenital condition characterized by an abnormally short, thickened, or tight lingual frenulum, or an anterior attachment of the lingual frenulum, which may be partial or complete and restricts mobility of the tongue. It variably causes reduced anterior tongue mobility and has been associated with functional limitations in breastfeeding; swallowing; articulation; orthodontic problems, including malocclusion, open bite, and separation of lower incisors; mechanical problems related to oral clearance; and psychological stress.

The diagnosis of partial ankyloglossia is made when the tongue cannot contact the hard palate and when it cannot protrude more than 1 to 2 mm past the mandibular incisors. Complete ankyloglossia is present when there is a total fusion between the tongue and floor of mouth. Diagnosis of ankyloglossia should not be made before development of the primary dentition, because the tip of an infant's tongue is not fully developed and appears short.

Ankyloglossia may limit the mobility of the tongue. The need for any intervention at all depends upon how freely the tip of the tongue can move. Ankyloglossia may contribute to a a speech problem, at least in mild or moderate cases, and even in severe cases, not all children will have speech difficulties.

Most cases of ankyloglossia will resolve, usually by the age of 4, as the tongue grows, and the frenulum lengthens. Toddlers and preschoolers with expressive language difficulties should be closely evaluated for tongue mobility. An excessively tight frenulum in an infant that restricts tongue movement and ability to latch on effectively to the breast or take milk from a bottle should be considered for surgical repair.

Indications for surgery include presence of a speech impediment, feeding difficulty, periodontal pocketing or psychological problems. Correction should be delayed until the child is 4 years old because of the possibility of spontaneous elongation of the tongue as it is used in normal articulation. General anesthesia or conscious sedation is needed for younger patients. Nerve block or local infiltration is usually adequate for older patients. After identification of the submandibular duct papillae, the incision is carried posteriorly until the tip of the tongue can contact the palate and extend beyond the incisors.

#### Midline Maxillary Frenum

"Maxillary lip-tie" describes the segment of the mucous membrane located between the upper lip and midline of the anterior maxillary arch containing loose, connective tissue and inserts into the maxillary arch free (not attached to bone) gingival or the attached gingival tissue. There is no muscle contained within this tissue.

When a lip-tie restricts the movement of the upper lip, it may be difficult for the baby to latch effectively. When an infant is properly latched on, the lip is flanged and the infant is able to suckle both the areola and nipple, not just the nipple. The upper lip should be untethered and able to easily flange upward to create a seal around both the upper portion of the areola and the nipple. When the nipple fails to be positioned near the junction of the hard and soft palates, the infant can compress only the nipple with his or her gum pads and fails to bring adequate breast tissue into the mouth, a breastfeeding mother may feel pain and/or experience breakdown of nipple integrity and the infant may fail to transfer an adequate supply of milk.

#### **Regulatory Status:**

N/A

#### **Medical Policy Statement**

The safety and effectiveness of surgery to the lingual (under the tongue) frenulum have been established. It may be considered a useful therapeutic option when criteria are met.

The safety and effectiveness of surgery to the maxillary anterior labial (class III or IV) frenulum in the infant have been established. It may be considered a useful therapeutic option when criteria are met.

#### **Inclusionary and Exclusionary Guidelines**

#### Inclusions:

Indications for ankyloglossia surgery (must meet one):

- There is documentation of an infant's inability to adequately breast or bottle feed due to ineffective latch.
- Physical examination of a child (may be as young as nine months of age) by a qualified
  medical provider confirms the presence of "tongue tie" causing difficulty in the child's
  speech due to the inability to manipulate the tongue. For example, the child may be unable
  to protrude his tongue past his lips, which would impair his speech.
- Speech therapy evaluation confirms expressive language difficulties as a result of tongue immobility.

Indications for midline maxillary labial frenum surgery (must meet one):

- An infant with a history of not gaining weight
- There is documentation of an infant's inability to adequately breast or bottle feed due to ineffective latch
- A mother experiencing painful breastfeeding
- Class III lip-tie: frenum inserts between the areas where the maxillary incisors erupt
- Class IV lip-tie: the frenum wraps into the hard palate and into the anterior papilla

#### **Exclusions:**

- Services that are dental in nature
- Routine frenulum (clipping) surgery at the time of delivery of the newborn

**CPT/HCPCS Level II Codes** (Note: The inclusion of a code in this list is not a guarantee of coverage. Please refer to the medical policy statement to determine the status of a given procedure)

#### **Established codes:**

40806 40819 41010 41115 41520

Other codes (investigational, not medically necessary, etc.):

N/A

#### **Rationale**

Ankyloglossia, or tongue-tie as it is more commonly known, is more common than midline maxillary frenum (lip-tie). Pransky performed a retrospective review of patients from a dedicated breastfeeding difficulty clinic. Of the 618 total patients, 290 (47%) had anterior ankyloglossia, 120 (19%) had posterior ankyloglossia, and 14 (2%) had upper-lip tie.

Ankyloglossia exists when the lower frenulum (a small fold of mucous membrane under the tongue that attaches the tongue to the floor of the mouth) extends toward the tip of the tongue and restricts free movement of the tongue excessively. If this condition causes poor feeding in an infant because of the decreased mobility of the tongue or poor development of expressive language in a child 4 years of age or older, surgery may be indicated.

Lingual frenectomy (frenotomy) has been reported to result in immediate improvement in problems related to breast-feeding in a majority of cases. There are multiple anecdotal reports in the lactation literature describing rapid resolution of maternal nipple pain, better latching and enhanced infant weight gain following frenectomy. Mothers may note a marked difference in the baby's nursing ability as early as the first feeding after frenotomy. Frenotomy is not a panacea for all breast-feeding problems, however. Given the evidence currently available, frenotomy may be viewed as a safe, effective and practical approach to treatment of breastfeeding difficulties in infants with ankyloglossia in whom alternative explanations for poor feeding and failure to thrive have been properly assessed.

Speech results following frenectomy (frenotomy) are good, assuming that patients who are chosen for surgery have articulation problems characteristic of tongue-tie, and not speech and language delay or an unrelated speech issue.

Lip-tie exists when labial mucosa attaches to the area where the central incisors will erupt or wraps over the alveolar ridge to attach on the palate. It restricts the movement of the upper lip thereby preventing the infant from latching onto the breast during feeding. When the nipple is not positioned near the junction of the hard and soft palates, the infant can compress only the nipple with his or her gum pads and fails to bring adequate breast tissue into the mouth, a breastfeeding mother may feel pain and/or experience breakdown of nipple integrity and the infant may fail to transfer an adequate supply of milk.

Revision of the lip-tie has shown an increased ability of the upper lip to flange upward, allowing the infant to develop a more effective latch and improve the breastfeeding experience for both infant and mother.

#### Frenum Surgeries:

Although there is limited evidence in the literature to promote the timing, indication and type of surgical intervention of the frenum for functional limitations, surgery should be considered on an individual basis. When indicated, surgery of the frenum by various methods: Z-plasty, single/dual hemostat, or simple clipping to release the frenum and correct the anatomic situation, may be successful in alleviating the problem. Each of these procedures involves a surgical incision, establishing hemostasis and wound management. Dressing placement or the use of antibiotics is typically not necessary. The use of electrosurgery or laser technology for frenum surgery has demonstrated a shorter operative working time, a better ability to control bleeding, reduced intra- and post-operative pain and discomfort, fewer post-operative complications (e.g., swelling, infection), no need for suture removal and increased patient acceptance. These procedures require additional training as well as skillful technique and patient management.

#### **Supplemental Information**

#### PRACTICE GUIDELINES AND POSITION STATEMENT

#### **Canadian Paediatric Society**

The Canadian Paediatric Society (2015; reaffirmed 2024) indicates that most infants with ankyloglossia are asymptomatic and do not exhibit feeding problems. Management is usually conservative, requiring no intervention beyond parental education, lactation support and reassurance. Based on available evidence and the ongoing controversy, frenotomy cannot be recommended for all infants with ankyloglossia. There may be an association between ankyloglossia and significant breastfeeding difficulties in some infants. This subset of infants may benefit from frenotomy (the surgical division of the lingual frenulum). When an association between significant tongue-tie and major breastfeeding problems is clearly identified and surgical intervention is deemed to be necessary, frenotomy should be performed by a clinician experienced with the procedure and using appropriate analgesia.

National Institute for Health and Care Excellence – UK National Health Service NICE (2005) interventional procedures guidance for ankyloglossia in infants support conservative management including breastfeeding advice, and careful assessment to determine whether the frenulum is interfering with feeding and whether its division is appropriate.

#### American Academy of Otolaryngology – Head and Neck Surgery

The American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS; 2020) reached consensus that, in some communities, infants and children are being over diagnosed with ankyloglossia and having unnecessary surgery. There was strong consensus among members of the panel that the maternal and infant breastfeeding dyad should be recognized as a vulnerable patient population and that care should be taken to ensure adequate support services, education and counseling, and shared decision making. The group found some marked differences in opinion regarding controversial topics, such as the definition (and even

the existence) of posterior ankyloglossia and lip tie. While the group was able to come to consensus that frenotomy in infants with ankyloglossia can lead to an improvement in breastfeeding, not all infants with ankyloglossia need to have a frenotomy, and there are other more common causes of breastfeeding difficulties. Consensus was reached that before a frenotomy is performed on an infant with breastfeeding difficulty, it is appropriate to evaluate the child for other potential head and neck sources of breastfeeding problems. A frenulum procedure is also an option in older children with speech articulation and/or other mechanical social issues, but the evidence is limited and of relatively poor quality. Similarly, the level of evidence surrounding intervention for the maxillary frenulum and possible upper lip tie is poor. Further study is needed to refine patient selection and outcome assessments in these areas. The application of these statements is expected to result in an improved understanding of the controversies surrounding ankyloglossia in children and lead to more family-centered care.

In 2024 AAO-HNS released a bulletin which indicates that Otolaryngologist-head and neck surgeons should be at the forefront of the science of ankyloglossia and must be the preferred specialists to comprehensively evaluate and treat when symptomatic.

#### **American Academy of Pediatric Dentistry**

Recognizing evidence is limited, the American Academy of Pediatric Dentistry (2020) supports additional research on the causative association between ankyloglossia and breastfeeding difficulties or speech articulation problems and between hyperplastic labial frenulum and increased risk of caries or periodontal disease due to interference with adequate oral hygiene. Further randomized controlled trials and other prospective studies of high methodological quality are necessary to determine the effects of frenotomy/frenectomy.

In 2022, the AAPD revised their guideline to indicate recognition "that a restrictive oral frenulum may affect a child's health by hindering the ability to breastfeed or speak." The frequency of surgical intervention has increased exponentially over the last 2 decades. The AAPD recognizes an evidence-based policy on frenula would make information more accessible to dentists, physicians, other allied health professionals, and parents and help reduce the number of unnecessary or incorrectly timed procedures."

#### **Australian Dental Association**

Diagnosis of ankyloglossia should not be based solely on anatomic appearance. The presence of a functional limitation, such as difficulty in breastfeeding, and an anatomically restricted lingual frenum should both be present for a diagnosis of ankyloglossia. In the absence of a functional limitation, the lingual frenum should be considered functionally normal. Surgical management should not take place without the presence of a well-defined structural problem, which is causing functional issues. Likewise, surgical management should not be undertaken based on speculation about future problems despite lack of current problems. There is insufficient evidence to support the surgical release of the labial or buccal frena in infants to assist with breastfeeding difficulties, speech outcomes, or orthodontic issues including midline diastema closure. Further research, preferably through RCTs or high-quality observational studies employing objective outcomes, is required. Further understanding of many aspects is required, particularly the effects of surgical management on improving functional limitations and the long-term effects of surgical intervention on neonates, as memories of pain may be recorded biologically, and consequently, alter brain development and subsequent behavior.

# **Government Regulations National:**

There is no national coverage determination.

#### Local:

There is no local coverage determination.

(The above Medicare information is current as of the review date for this policy. However, the coverage issues and policies maintained by the Centers for Medicare & Medicare Services [CMS, formerly HCFA] are updated and/or revised periodically. Therefore, the most current CMS information may not be contained in this document. For the most current information, the reader should contact an official Medicare source.)

#### **Related Policies**

N/A

#### References

- 1. American Academy of Pediatric Dentistry. "Policy on the management of the frenulum in pediatric dental patients." *The Ref Manual of Ped Dentistry*. 2023:71-76.
- 2. American Academy of Pediatric Dentistry. Policy on management of the frenulum in pediatric patients. The Reference Manual of Pediatric Dentistry. Chicago, III.: American Academy of Pediatric Dentistry; 2022:80-5.
- 3. American Association of Oral and Maxillofacial Surgeons. "Parameters of care: clinical practice guidelines for oral and maxillofacial surgery." *Supp to J of Oral and Maxillofacial Sur*. 2017. Sixth edition.
- Australian Dental Association. Ankyloglossia and Oral Frena Consensus Statement. 2020. <a href="https://ada.org.au/getmedia/336ed653-b7b6-42f8-9837-0f44e77b2662/ADA Guidelines Ankyloglossia-and-Oral-Frena-Consensus-Statement.pdf">https://ada.org.au/getmedia/336ed653-b7b6-42f8-9837-0f44e77b2662/ADA Guidelines Ankyloglossia-and-Oral-Frena-Consensus-Statement.pdf</a>. Accessed April 29, 2022.
- 5. Ballard, JL., et al. "Ankyloglossia: Assessment, incidence and effect of frenuloplasty on the breastfeeding dyad." *Pediatrics*, Vol. 110, No. 5, November 2002, pp. e63, 1-6.
- Buryk, M., et al. "Efficacy of neonatal release of ankyloglossia: a randomized trial." Pediatrics. Volume 128, Issue 2, 2001, pp. 280-288. [Epub].
- 7. Chu, MW., and Bloom, DC. "Posterior ankyloglossia: a case report." *Int J Pediatr Otorhinolaryngol*, Vol. 73, No. 6, June 2009, pp. 881-883.
- 8. Canadian Paediatric Society. "Position statement: Ankyloglossia and breastfeeding." 2015;20(4):209-13, reaffirmed Jan 2024; <a href="https://www.cps.ca/en/documents/position/ankyloglossia-breastfeeding">https://www.cps.ca/en/documents/position/ankyloglossia-breastfeeding</a>. Accessed April 29, 2022.
- 9. Francis DO, Chinnadurai S, et al. "Treatments for Ankyloglossia and Ankyloglossia With Concomitant Lip-Tie [Internet]." Rockville (MD): Agency for Healthcare Research and Quality (US); 2015 May. (Comparative Effectiveness Reviews, No. 149.) Executive Summary.
- 10. Ghaheri, B., Tylor, D. "Ankyloglossia Untangled." 2024. <a href="https://bulletin.entnet.org/clinical-patient-care/article/22886524/ankyloglossia-untangled">https://bulletin.entnet.org/clinical-patient-care/article/22886524/ankyloglossia-untangled</a>. Accessed April 9, 2024.

- 11. Kotlow, L. "What are the advantages of laser frenectomy in children?" *Journal of the Canadian Dental Association*. Vol. 71, No. 2, February 2005, pp. 120-121.
- 12. Kotlow, LA. "Diagnosing and understanding the maxillary lip tie (superior labial, the maxillary labial frenum) as it relates to breastfeeding." *Journal of Human Lactation*, 2013 Nov;29(4):458-64. doi: 10.1177/0890334413491325.
- 13. Kummer, A. "Ankyloglossia: To clip or not to clip? That's the question." *The ASHA Leader*. Vol. 10, No. 17, Dec. 27, 2005, pp. 6-7.
- 14. Kupietzky, A. "Ankyloglossia in the infant and young child: Clinical suggestions for diagnosis and management." *Pediatr Den.* Vol. 27, No. 8, January 1, 2005, pp. 40-46.
- 15. Lalakea ML, Messner AH. "Ankyloglossia: does it matter?" *Pediatr Clin North Am.* 2003 Apr;50(2):381–97.
- 16. Messner, AH., Walsh, J., Rosenfeld, RM., et al. Clinical Consensus Statement: Ankyloglossia in Children. *American Academy of Otolaryngology Head and Neck Surgery Foundation*. 2020, Vol. 162(5) 597–611.
- 17. Mueller, DT. and Callanan, VP. "Congenital malformations of the oral cavity." *Otolaryngol Clin N Am*. Vol. 40, 2007, pp. 141–160.
- 18. National Institute for Health and Care Excellence. "Division of ankyloglossia (tongue-Tie) for Breastfeeding." 2005. <a href="https://www.nice.org.uk/guidance/ipg149/chapter/2-the-procedure">https://www.nice.org.uk/guidance/ipg149/chapter/2-the-procedure</a>. Accessed April 4, 2024.
- 19. Pransky S.M., Lago D., Hong P. "Breastfeeding difficulties and oral cavity anomalies: The influence of posterior ankyloglossia and upper-lip ties." *Int J Pediatr Otorhinolaryngol*. 2015 Oct;79(10):1714-7. PMID: 26255605
- 20. Ruffoli, R., et al. "Ankyloglossia: A morphofunctional investigation in children." *Oral Dis*, Vol. 11, No. 3, May 1, 2005, pp. 170-174.
- 21. Segal, L. M., et al. "Prevalence, diagnosis and treatment of ankyloglossia: Methodologic review." *Can Fam Physician*, Vol. 53, No. 6, June 1, 2007, pp. 1027-1033.
- 22. Suter, V. G., et al. "Ankyloglossia: Facts and myths in diagnosis and treatment." *J Periodontol*, Vol. 80, No. 8, August 1, 2009, pp. 1204-1219.
- 23. The Reference Manual of Pediatric Dentistry: Best practices Oral Surgery and Oral Pathology. "Management Considerations for Pediatric Oral Surgery and Oral Pathology." 2015. p 402-411.
- 24. UK National Health Service; National Institute for Health and Clinical Excellence. "Division of ankyloglossia (tongue-tie) for breastfeeding." Dec, 2005. [March 23, 2015]. (NICE Interventional Procedure Guidance 149).
- 25. Wallace, H. "Tongue tie division in infants with breast feeding difficulties." *Int J Pediatr Otorhinolaryngol.* Vol. 70, No. 4, pp. 1257-1261.

The articles reviewed in this research include those obtained in an Internet based literature search for relevant medical references through 4/9/24, the date the research was completed.

# Joint BCBSM/BCN Medical Policy History

Policy Effective Date	BCBSM Signature Date	BCN Signature Date	Comments
6/13/02	6/13/02	6/13/02	Joint medical policy established
7/5/05	7/5/05	7/21/05	Routine maintenance
9/1/07	7/1/07	6/04/07	Routine maintenance
1/1/09	10/13/08	12/30/08	Routine maintenance
1/1/10	10/13/09	10/13/09	Codes 40806 and 40819 changed from established to noncovered as they relate only to the dental procedures.
11/1/10	8/28/10	8/17/10	Clarified definitions and exclusions
11/1/12	8/21/12	8/21/12	Routine maintenance
11/1/13	8/20/13	8/27/13	Routine maintenance; policy retired
9/1/18	6/19/18	6/19/18	Codes 40806 and 40819 moved to established
9/1/19	6/18/19		Routine maintenance
9/1/20	6/16/20		<ul> <li>Routine maintenance</li> <li>Title changed from "Frenulum" to "Frenum" Surgery</li> <li>Added MPS and inclusions for maxillary anterior labial surgery</li> </ul>
9/1/21	6/15/21		Routine maintenance
9/1/22	6/21/22		Routine maintenance
9/1/23	6/13/23		<ul><li>Routine maintenance (slp)</li><li>Vendor Managed: N/A</li></ul>
9/1/24	6/11/24		<ul><li>Routine maintenance (slp)</li><li>Vendor Managed: N/A</li></ul>

Next Review Date: 2<sup>nd</sup> Qtr, 2025

# **Pre-Consolidation Medical Policy History**

Original Policy Date		Comments
BCN:	10/12/98	Revised: 6/28/01

BCBSM: N/A	Revised: N/A
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# BLUE CARE NETWORK BENEFIT COVERAGE POLICY: FRENUM SURGERY (FRENULUM SURGERY, FRENUMECTOMY, FRENECTOMY, FRENOTOMY)

#### I. Coverage Determination:

Commercial HMO (includes Self-Funded groups unless otherwise specified)	Covered; criteria apply.
BCNA (Medicare	Refer to the Medicare information under the Government
Advantage)	Regulations section of this policy.
BCN65 (Medicare	Coinsurance covered if primary Medicare covers the
Complementary)	service.

#### II. Administrative Guidelines:

- The member's contract must be active at the time the service is rendered.
- Coverage is based on each member's certificate and is not guaranteed. Please
  consult the individual member's certificate for details. Additional information regarding
  coverage or benefits may also be obtained through customer or provider inquiry
  services at BCN.
- The service must be authorized by the member's PCP except for Self-Referral Option (SRO) members seeking Tier 2 coverage.
- Services must be performed by a BCN-contracted provider, if available, except for Self-Referral Option (SRO) members seeking Tier 2 coverage.
- Payment is based on BCN payment rules, individual certificate and certificate riders.
- Appropriate copayments will apply. Refer to certificate and applicable riders for detailed information.
- CPT HCPCS codes are used for descriptive purposes only and are not a guarantee of coverage.