Clinical Policy Title: Frenectomy for Ankyloglossia

Clinical Policy Number: 11.03.03

Effective Date: October 1, 2014
Initial Review Date: April 16, 2014
Most Recent Review Date: May 20, 2015
Next Review Date: May 2016

Policy contains:
- Lingual frenectomy.
- Breastfeeding.
- Difficulties with speech, articulation and oral hygiene.

ABOUT THIS POLICY: Arbor Health Plan has developed clinical policies to assist with making coverage determinations. Arbor Health Plan’s clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies, along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of “medically necessary,” and the specific facts of the particular situation are considered by Arbor Health Plan when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. Arbor Health Plan’s clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. Arbor Health Plan’s clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, Arbor Health Plan will update its clinical policies as necessary. Arbor Health Plan’s clinical policies are not guarantees of payment.

Coverage policy

Arbor Health Plan considers the use of sublingual frenectomy to be clinically proven and, therefore, medically necessary under the following conditions:

- Recession in gingival tissue adjacent to lower anterior teeth.
- Tongue tip cannot extend upward to posterior alveolar ridge and/or molars, or to the anterior alveolar ridge and/or incisors.
- Significant dysfunction in feeding, speaking or maintaining oral hygiene, documented by:
  - Type of feeding difficulty (with height and weight records for impact on growth).
  - Speech/language pathologist evaluation for articulation and/or disorder.
  - Oral hygiene issues with failed attempts to resolve.

Limitations:
Sublingual frenectomy performed for dental or orthodontic purposes is not covered:
- Mandibular prognathism.
- Fitting of partial or complete dentures.
NOTE in Nebraska Dental Code D7960 would be covered although Dental Services are not paid under medical benefits unless performed in an Ambulatory Surgery Center setting these services would be payable.

Alternative covered services:
Lactation, speech pathology, or oral hygiene advice or consultation.

Background
Ankyloglossia is commonly known as “tongue tie,” a congenital anatomic malformation in which a shortened sublingual frenum (fibrous tissue band connecting the underside of the tongue to the floor of the mouth) restricts tongue movement and thus normal newborn feeding or speech. Severity can range from mild (a thin flexible membrane) to complete tethering by a robust rope-like band of tissue. Criteria for diagnosis are accordingly variable, as are prevalence estimates.

Frenectomy is a surgical procedure by which the abnormal frenum is restructured to permit a closer approximation of normal tongue motion, to fit dentures or for orthodontic purposes. It is performed on patients of all ages, usually with local anesthesia on an outpatient basis.

There are three types of surgical procedures to correct ankyloglossia, including frenectomy, frenotomy and frenuloplasty. In addition to the standard surgical procedure of frenectomy, physicians have the option of using Nd:Yap, which employs a laser to correct ankyloglossia. Frenectomy can involve use of one or two hemostats, a groove director or a laser (Junqueira).

Methods

Searches:
Arbor Health Plan searched PubMed and the databases of:
- UK National Health Services Centre for Reviews and Dissemination.
- Agency for Healthcare Research and Quality Guideline Clearinghouse and evidence-based practice centers.
- The Centers for Medicare and Medicaid Services.

Search terms were conducted in May 2015 using the terms “frenectomy” and “ankyloglossia.” Included were:

- **Systematic reviews**, which pool results from multiple studies to achieve larger sample sizes and greater precision of effect estimation than in smaller primary studies. Systematic reviews use predetermined transparent methods to minimize bias, effectively treating the review as a scientific endeavor, and are thus rated highest in evidence-grading hierarchies.
- **Guidelines based on systematic reviews**.
- **Economic analyses**, such as cost-effectiveness, and benefit or utility studies (but not simple cost studies), reporting both costs and outcomes — sometimes referred to as efficiency studies — which also rank near the top of evidence hierarchies.
Findings:
Lingual frenectomy is a safe and successful procedure, supported by moderate quality evidence for difficulties with breastfeeding, speech articulation and oral hygiene in patients of all ages. There is no evidence to support its use to modify mandibular prognathism or other malocclusion conditions, or to fit dentures. Post-operative symptoms and relapses are highly uncommon (Olivi).

However, not nearly enough evidence, including lack of randomized control trials, exists comparing patient outcomes after frenectomy, frenotomy and frenuloplasty (Suter). There is some evidence that use of a laser device (Er:YAG) may have potential advantages over conventional techniques (DeSantis). One study actually concluded that Nd:YAP had advantages over diode, another form of laser treatment, such as the fact that most Er:Yag patients did not require local anesthesia (Aras).

Summary of clinical evidence:

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| Junqueira (2014) | Key points:  
Comparison of frenotomy/frenectomy results using 1 – 2 hemostats, groove director, laser  
- All techniques successful in treating ankyloglossia. |
| Webb (2013) | Key points:  
Effects on breastfeeding and speech articulation:  
- Twenty studies (15 observational; five RCTs).  
- Objective improvements in breastfeeding, milk production, infant weight gain; subjective in maternal pain and satisfaction.  
- Recurrent tongue-ties requiring reoperation were the only adverse events. |
| North Carolina Division of Medical Assistance (2012) | Key points:  
Surgery of lingual frenum:  
- Recession in gingival tissue adjacent to lower anterior teeth.  
- Tongue tip cannot extend upward to posterior alveolar ridge and/or molars, or to the anterior alveolar ridge and/or incisors.  
- Significant dysfunction in feeding, speaking or maintaining oral hygiene, documented by:  
  o Type of feeding difficulty (with height and weight records for impact on growth).  
  o Speech/language pathologist evaluation for articulation disorder.  
  o Oral hygiene issues and attempts to resolve. |
| American Academy of Pediatric Dentistry (2010) | Key points:  
Pediatric oral surgery:  
- Frenectomy/frenuloplasty may be indicated to facilitate breastfeeding although supporting evidence is limited and a classification system for ankyloglossia in newborns is lacking an non-invasive measures such as lactation counseling. Support should be tried first.  
- Insufficient evidence for any impact of ankyloglossia on development of mandibular prognathism or role of frenectomy in correcting. |
<p>| Aras (2010) | Key points: |</p>
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| Junqueira (2014) | **Key points:**  
Comparison of frenotomy/frenectomy results using 1 – 2 hemostats, groove director, laser  
- All techniques successful in treating ankyloglossia. |  
**Comparing outcomes using diode laser and Er:YAG laser:**  
- Included 16 patients.  
- No differences with pain, charring or speaking on first and seventh days post-op.  
- Er:YAG patients had more pain in the first three hours post-op.  
- Most Er:YAG patients didn’t need local anesthesia (all diode patients did). |
| Suter (2009) | **Key points:**  
Treatment options for ankyloglossia:  
- Considered 64 articles.  
- Frenectomy, frenotomy, frenuloplasty are main surgical treatment options.  
- Ankyloglossia lacks uniform definition and classification, making comparisons between studies almost impossible.  
- No specific surgical method is preferable. |
| UK National Institute for Health and Clinical Excellence (NICE; 2005) | **Key points:**  
Breastfeeding:  
- Evidence does not suggest any major safety concerns.  
- Frenectomy for breastfeeding should be performed only by registered health care providers trained and credentialed for the procedure.  
- Further trials documenting impact on long-term breastfeeding success are needed. |

**Glossary**

**Ankyloglossia** — A congenital anomaly commonly known as tongue tie that decreases mobility of the tongue tip and is characterized by a shortened lingual frenulum (membrane connecting the bottom of the tongue to the floor of the mouth).

**Alveolar ridge** — The area of upper and lower jaw bones in which teeth are held.

**Anterior teeth** — Those at the front of the mouth, directly behind lips and often visible during speech, i.e., upper and lower central and lateral incisors and canines.

**Frenectomy** — Surgical procedure restructuring the abnormal frenum, restoring normal tongue motion.

**Mandibular prognathism** — A skeletal deformity in which the lower jaw is disproportionately large relative to the base of the skull and upper jaw. It causes the chin to appear protuberant and the teeth to come together improperly; in some cases the anterior teeth cannot be brought together at all, resulting in speech and chewing problems.

**References**

**Professional society guidelines/other:**  


**Peer-reviewed references:**


**Clinical trials:**

Systematic reviews cover trials published through 2015.

**Centers for Medicare & Medicaid Services (CMS) national coverage determination (NCD):**

No NCDs identified as of the writing of this policy.

**Local coverage determinations (LCD):**

No LCDs identified as of the writing of this policy.

**Commonly submitted codes**

Below are the most commonly submitted codes for the service(s)/item(s) subject to this policy. This is not an exhaustive list of codes. Providers are expected to consult the appropriate coding manuals and bill accordingly.

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<td>CDT Codes</td>
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<td>D7960</td>
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