IAPD
International Association of Paediatric Dentistry

Management of Ankyloglossia: Foundational Articles and Consensus Recommendations, 2021

Amir LH, James JP, Donath SM. Reliability of the Hazelbaker assessment tool for lingual frenulum function. Int Breastfeed J 2006: 1-3.

Berry J, Griffiths M, Westcott C. A double-blind, randomized, controlled trial of tongue-tie division and its immediate effect on breastfeeding. Breastfeed Med 2012;7: 189-93.

Bin-Nun A, Kasirer YM, Mimouni FB. A dramatic increase in tongue tie-related articles: A 67 years systematic review. Breastfeed Med 2017; 12:410-4.

Coryllos E, Genna CW, Salloum AC. Congenital tongue-tie and its impact on breastfeeding. AAP section on breastfeeding, 2004. Available at: http://www.aap.org/breastfeeding/files/pdf/ BBM-8-27%20Newsletter.pdf. https://www.researchgate.net/publication/301346077. Accessed, May 16, 2020.

Hogan M, Westcott C, Griffiths M. Randomized, controlled trial of division of tongue-tie in infants with feeding problems. J Paediatr Child Health 2005;41:246-50.

Kupietzky A, Botzer E. Ankyloglossia in the infant and young child: Clinical suggestions for diagnosis and management. Pediatr Dent. 2005:27:40-6.

Lalakea ML, Messner AH. Frenotomy and frenuloplasty: If, when and how. Otolaryngol Head and Neck Surg. 2002; 13:93-7.

Marchesan IQ. Lingual frenulum: quantitative evaluation proposal. Int J Orofacial Myology 2005;31:39-48.

Messner AH, Walsh J, Rosenfeld RM, Schwartz SR, et al. Clinical consensus statement: Ankyloglossia in children. Otolaryngol Head Neck Surg 2020; 162:597-611.

Mills N, Pransky SM, Geddes DT, and Mirjalili SA. What is a tongue tie? Defining the anatomy of the in-situ-lingual frenulum. Clin Anat. 2019;32:749-61.

Mills N, Keough N, Geddes DT, Pransky SM and Mirjalili SA. Defining the Anatomy of the neonatal lingual frenulum. Clin Anat. 2019;32:824-35.

Miranda PP, Cardoso CL, Gomes E. Interventions on the alterations on lingual frenulum: systematic review. Int Arch Otorhinolaryngol 2016;20:275-80.

Obladen M. Much ado about nothing: Two millennia of controversy on tongue-tie. Neonatology 2010;97:83-9.

O'Shea JE, Foster JP, O'Donnell CPF, Breathnach D, et al. Frenotomy for tongue-tie in newborn infants (Review). Cochrane Database Syst Rev 2017; 11;3:CD011065.

Varadan M, Chopra A, Sanghavi AD, Sivaraman K, Gupta K. Etiology and clinical recommendations to manage the complications following lingual frenectomy: A critical review. J Stomatol Oral Maxillofac Surg 2019; 120:549-53.

IAPD Consensus Recommendations

Tongue-tie or ankyloglossia refers to an abnormally short, thickened or tight lingual frenulum that shows an alteration on its insertion and fixation, usually near the tip of the tongue. Children with ankyloglossia may have restricted tongue mobility resulting in speech or feeding difficulties. Ankyloglossia is present in 0.1% to 11% of newborns. Risk factors include being male (3:1) and positive family history. Ankyloglossia has been associated with breastfeeding problems due to difficulty to attach or stay latched onto the breast, and to maternal nipple pain.

Diagnosis depends on the assessment of the structure and function of the lingual frenulum, varying from simple visual inspection and/or palpation of the frenulum to a more complex multi-scale classification system. In recent years, with the encouragement of breastfeeding as the primary mode of infant feeding, the justification for frenotomy has shifted from improving speech problems to improving breastfeeding. Frenotomy is a simple incision of the lingual frenum; frenectomy is the removal of the lingual frenum.

1. Frenotomy is performed on infants who have breastfeeding difficulty. Indications for frenotomy may also include nipple pain with nursing, irritation of the nipple skin, and shallow/poor latching on. Consultation with the infant's medical provider and lactation consultant is encouraged prior to frenotomy for breast feeding difficulties. Frenotomy in infants is relatively quick and easy to perform. The tongue is elevated, and the frenulum is exposed, incised with a sharp, straight and blunt-ended scissor. Direct pressure is applied to the area. In infants, frenotomy is usually performed without the use of anesthetic and the incision is not sutured.

2. It remains to be proven whether frenotomy provides improvement in breastfeeding difficulties over the long term. However, frenotomy reportedly reduces short-term nipple pain among breastfeeding mothers.

3. The evidence for frenectomy is weak for improving problems such as speech disorders, malocclusion, difficulty licking, difficulty keeping teeth clean, increased risk of dental caries, lower central incisor diastema, tethering of gingival tissues lingual to the lower incisor, sleep apnea, and sense of social embarrassment. Frenectomy lengthens the frenulum and is indicated for patients over one year of age. Consultation with a speech pathologist is encouraged prior to frenectomy for speech concerns. Even though the process of lingual frenectomy is simple, the anatomical location and topography of the lingual tissue make it vulnerable to various postoperative and intraoperative complications. Speech therapy and postoperative exercises are indicated following lingual frenectomy.

4. The yearly number of ankyloglossia-related articles has increased in the last years. Most articles, however, bring insufficient evidence, but increasingly there are randomized controlled trials and systematic reviews which may improve the quality of the evidence.

How to cite: IAPD Foundational Articles and Consensus Recommendations: Management of Ankyloglossia, 2021. http://www.iapdworld.org/2021_08_management-of-ankyloglossia.