

studies and case reports have identified increased incidence of maternal nipple pain,^{26,33} poor infant latch,²⁶ inadequate infant weight gain,^{23,34} and neonatal hypernatremic dehydration³⁵ in infants with ankyloglossia when compared with other breastfeeding neonates. Nipple pain alone as a marker of symptomatic ankyloglossia is insufficient, because between 34% and 96% of breastfeeding mothers experience nipple pain in the immediate postpartum period.³⁶ Timing or persistence of symptoms may be important, because most nipple pain peaks at about 3 days postpartum and decreases to mild levels for most women within 7 to 10 days.³⁶ A thorough feeding evaluation is described below.

PEDIATRICIAN'S ROLE IN DIAGNOSING ANKYLOGLOSSIA

The partnering of pediatricians and lactation specialists together for the sake of the nursing dyad is important and outlined in the algorithm below (Fig 5). A pediatrician considering the diagnosis of ankyloglossia leading to breastfeeding difficulty, especially with insufficient growth, should start with the differential diagnosis of poor weight gain and ineffective latch. Important aspects to review may include:

- A review of the prenatal course, including intrapartum and postpartum medications, breastfeeding history, breast surgeries, breast and nipple anatomy, and family history
- Infant feeding history including any abnormal features (coughing, choking, color change, bilious emesis, early tiring) and/or breastfeeding difficulties (nipple pain, nipple trauma, long feeding times, difficulty staying attached to the breast)

Perform a complete infant physical examination with special attention to:

- Visual inspection of the face, jaw, neck, and oropharynx
- Atypical features including dysmorphic features, micrognathia, retrognathia, and cleft lip and/or palate
- Assessment of tongue movement and coordination with a clean, gloved finger in the mouth to test the suck reflex and to palpate the hard and soft palate
- Appearance of lingual frenulum, including the inability of the infant to extend tongue over the lower alveolar ridge or lift tongue midway to the palate, or a heart-shaped tongue on extension
- Assessment of milk transfer using pre- and postfeeding weights, observation of a feeding session, and assessment of weight gain using World Health Organization growth standards.^{37,38}

The differential diagnosis of ineffective feeding or poor growth includes infection, congenital heart disease, congenital adrenal hyperplasia, inborn errors of metabolism, and

intestinal obstruction. Pediatricians need to work with pediatric nurses in their practice or refer to lactation professionals to assess latch and breastfeeding using a standardized tool such as the Latch, Audible Swallowing, Type of Nipple, Comfort, and Hold assessment score³⁹ or Infant Breastfeeding Assessment Tool.⁴⁰ If a dentist is consulted, the dentist can also collaborate with the team defined above, including the infant's primary health care provider. As always, a team approach to this issue is best.

TOOLS FOR EVALUATION OF ANKYLOGLOSSIA

Numerous tools for assessing the severity of ankyloglossia have been published in peer-reviewed journals and encourage formal scoring of the observed tongue movement (Table 1). These screening tools include: the Hazelbaker Assessment Tool for Lingual Frenulum Function, the shortened form of the Assessment Tool for Lingual Frenulum Function, the Frenotomy Decision Tool for Breastfeeding Dyads, the Bristol Tongue Assessment Tool, the Neonatal Tongue Screening Test, and Kotlow's grading system.^{41–46}

Unfortunately, none of the tools have been validated. The Agency for Healthcare Research and Quality reported that a standardized approach to identifying and classifying ankyloglossia and a good description of the natural history of ankyloglossia by severity, including long-term risk of feeding problems, are needed.⁶

TREATMENTS FOR SYMPTOMATIC ANKYLOGLOSSIA

As with any procedure performed on an infant, it is important to obtain and document informed consent, which includes explaining information such as alternatives (waiting/observation/revisiting lactation specialist), risks of bleeding and infection, pain control, and postprocedure care.

Historically and currently, the most common approach to infant frenotomy is scissor clipping of the frenulum, with or without previous clamping. Fingers, a grooved retractor, or cotton-tipped applicators can be used to retract the tongue. Typical blunt-tip scissors technique has not been reported to have complications^{17,47} and usually does not require anesthetic or sutures in the newborn infant.

Recently, there has been a marked increase in the use of laser for frenotomy by physicians, oral surgeons, and dentists.⁴⁸ There are no comparative data on the use of laser versus clipping for frenotomy in infants younger than 6 months that support routine use. The AAO-HNS reached a consensus that "there is insufficient evidence to support claims that one technique of frenotomy, such as laser, is superior to other techniques."¹³

Other treatments supported by some health care professionals include physical therapy, craniosacral therapy, or myofascial therapies.⁴⁹ These treatments also are not well-studied and often require out-of-pocket costs for families. Postfrenotomy stretching exercises in which the parents open