## CLINICAL INQUIRIES



# Q/When should you treat tongue-tie in a newborn?

### **EVIDENCE-BASED ANSWER**

CONSIDER TREATMENT WHEN THE INFANT IS HAVING DIFFICULTY BREASTFEEDING. Infants with mild to moderate tongue-tie, or ankyloglossia, are likely to breastfeed successfully and usually require no treatment (strength of recommendation [SOR]: B, a prospective controlled trial and a case-control study). However, mothers of infants with any degree of

tongue-tie who have difficulty with breast-feeding despite lactation support report immediate improvement after frenotomy is performed on the baby. Complications from the procedure are minimal (SOR: **B**, a small randomized controlled trial [RCT] and multiple uncontrolled cohort studies and case series).

## **Evidence summary**

A small, prospective, controlled trial found no significant difference in breastfeeding success between infants with and without tonguetie. The authors selected 36 infants with untreated tongue-tie and 36 matched controls from among 1041 newborns. At 2 months, 30 infants with tongue-tie (83%) were breastfeeding, compared with 33 (92%) in the control group (P=.29). The authors graded infants with tongue-tie by subjective impression as either "mild" or "moderate," but found no significant difference in breastfeeding between grades.¹

A case-control study compared 49 infants with untreated tongue-tie (documented using a standardized assessment tool for lingual frenulum function) with 98 normal controls and evaluated the prevalence of breast vs bottle feeding. Mothers reported that breastfeeding was "going well" in 29 of 30 infants with tongue-tie (97%) and 63 of 67 controls (94%). At 1 month, both groups continued to breastfeed at equal rates.<sup>2</sup>

## When breastfeeding is difficult, frenotomy helps

Five studies that evaluated frenotomy (surgical division of the frenulum) in infants with tongue-tie who had breastfeeding difficul-

ties found improved maternal breastfeeding scores after the procedure.<sup>3-7</sup> In all trials, frenotomy caused minimal bleeding (a few drops) and minor crying ( $\leq$ 15 seconds), but no other complications.

In one trial, 40 infants (3-70 days of age) with tongue-tie and breastfeeding difficulties were randomized to receive frenotomy or intensive lactation support. Investigators graded the severity of tongue-tie and found no correlation with breastfeeding difficulty.

Nineteen mothers (95%) in the frenotomy group reported improved latching and decreased nipple pain, compared with 1 mother (5%) who received lactation support (*P*<.01; number needed to treat [NNT]=1.1). At 48 hours, all the mothers in the lactation support group elected frenotomy, after which 96% reported less nipple pain and improved latching. No long-term follow-up was done.<sup>3</sup>

■ A second trial randomized 25 infants (1-21 days of age) with tongue-tie (defined by an inability to protrude the tip of the tongue beyond the lower gum line) and breastfeeding difficulties (maternal nipple pain, poor latching) to receive either frenotomy or sham frenotomy. Investigators recorded nipple pain scores (with a maximum score of 10 for most intense pain) at the first breast-

Anthony Cho, MD; Gary Kelsberg, MD Valley Medical Center, Renton,

Sarah Safranek, MLS University of Washington Health Sciences Libraries, Seattle

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Infants with mild to moderate tongue-tie are likely to breastfeed successfully and usually require no treatment. feeding after the intervention. The infants then received the other procedure, followed by breastfeeding.

Immediately after true frenotomy, mothers reported a significant reduction in nipple pain scores (5.3 after the procedure compared with 7.1 before; *P*=.001). The investigators didn't report pain score changes after sham frenotomy.<sup>4</sup>

## Severity of tongue-tie doesn't affect breastfeeding success after frenotomy

A prospective, uncontrolled cohort study followed 35 infants (3-98 days of age) with tongue-tie and breastfeeding difficulties after they had a frenotomy. At 3 months, 29 of 35 mothers reported improved breastfeeding.<sup>5</sup>

Another prospective, uncontrolled cohort study followed 215 infants (mean age 19 days) with tongue-tie and breastfeeding difficulties despite lactation support. Investigators gauged the extent of tongue-tie by visual inspection before frenotomy.

At 24 hours after frenotomy, 57% of mothers reported improved breastfeeding and 64% breastfed through 3 months (compared with the British national average of 30%). The likelihood of breastfeeding at 3 months after

frenotomy didn't correlate with the original extent of tongue-tie.<sup>6</sup>

A prospective, uncontrolled case series measured the overall incidence of tonguetie—88 infants out of 2763 consecutive births (3.2%)—and the incidence of tongue-tie among infants with breastfeeding problems—35 infants among 273 presenting to a lactation center (12.8%). Mothers reported significant improvements in latching and nipple pain 3 days after frenotomy.<sup>7</sup>

#### **Recommendations**

The Community Paediatrics Committee of the Canadian Paediatric Society says that most of the time, tongue-tie is an anatomical finding without significant consequences for breast-feeding. Surgical intervention isn't usually warranted, but may be necessary if significant tongue-tie is associated with major breast-feeding problems.<sup>8</sup>

The Academy of Breastfeeding Medicine also says that breastfeeding assistance, patient education, and reassurance may be sufficient; if frenotomy is necessary, a physician should do it.<sup>9</sup>

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