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Q / Does frenotomy help infants with tongue-tie overcome breastfeeding difficulties?

EVIDENCE-BASED ANSWER

A / PROBABLY NOT. No evidence exists for improved latching after frenotomy, and evidence concerning improvements in maternal comfort is conflicting. At best, frenotomy improves maternal nipple pain by 10% and maternal subjective sense of improvement over the short term (0 to 2 weeks) (strength of recommendation [SOR]: **B**, randomized controlled trials [RCTs] with conflicting results for maternal nipple pain and

overall feeding).

No studies have evaluated outcomes such as infant weight gain following frenotomy.

Experts don't recommend frenotomy unless a clear association exists between ankyloglossia (tongue-tie) and breastfeeding problems. Frenotomy should be performed with anesthesia by an experienced clinician to minimize the risk of complications (SOR: **C**, a practice guideline.)

Evidence summary

Two RCTs found short-term (0-14 days) improvement in breastfeeding after frenotomy. One, which evaluated the effect of frenotomy on infants with significant ankyloglossia and breastfeeding difficulties, found short-term improvement in maternal nipple pain. Investigators randomized 58 infants (mean age 6 days) with ankyloglossia (rated 8 out of 10 on a standardized severity scale) to receive either frenotomy or no intervention.¹ They used the 50-point Short Form McGill Pain Questionnaire to measure maternal nipple pain at baseline, immediately after, and at 2, 4, 8, and 52 weeks.

Mothers in the intervention group reported a 10% greater reduction in nipple pain after frenotomy compared with the control group (11 points vs 6 points; $P=.001$). The improvement persisted at 2 weeks (graphic representation in study, P value not supplied) but not at 4 weeks or beyond.

An earlier, unblinded RCT randomized 40 infants (mean age 14 days) with an-

kyloglossia and breastfeeding problems to frenotomy or lactation support.² It found maternal subjective ratings of "improvement" (not quantified) by telephone interview at 24 hours (85% vs 3%; $P<.01$). Investigators performed frenotomy on all 19 of the unimproved control infants at 48 hours.

Frenotomy doesn't improve breastfeeding overall

Two newer RCTs evaluating frenotomy and LATCH (Latch, Audible swallowing, nipple Type, Comfort, and Hold) scores, which include a component measuring maternal comfort, found no breastfeeding improvements. (LATCH is a validated 10-point score with moderate predictive value for identifying mothers at risk for early weaning because of sore nipples.³)

A double-blind RCT that assessed frenotomy in 57 infants (mean age 32 days) with ankyloglossia and breastfeeding problems (severity of both unspecified) found no improvement in breastfeeding overall or nipple

pain.⁴ Investigators randomized infants to frenotomy or sham frenotomy and used independent observers to measure outcomes with the LATCH score and the Infant Breastfeeding Assessment Tool (IBFAT), a standardized method of assessing overall feeding.

They observed no significant differences in LATCH or IBFAT scores between groups. More mothers in the frenotomy group reported improved breastfeeding, but most were able to determine whether their baby had undergone frenotomy.

A single-blinded, RCT of early frenotomy in 107 younger infants with breastfeeding difficulties and mild to moderate ankyloglossia also found no improvement in LATCH scores.⁵ Researchers randomized infants younger than 2 weeks (blinded to researchers and unblinded to mothers) to either immediate frenotomy or standard care. They measured LATCH scores at baseline and after 5 days (by intention to treat).

Investigators found no difference in LATCH scores at 5 days postfrenotomy (pretreatment score 6.4 ± 2.3 , posttreatment 6.8 ± 2.0 ; not significant).

Recommendations

A 2011 position statement from the Community Paediatrics Committee of the Canadian Paediatric Society notes that ankyloglossia is a relatively uncommon congenital anomaly, and associations between ankyloglossia and breastfeeding problems in infants have been inconsistent.⁶ For these reasons, the Committee doesn't recommend frenotomy.

However, if the clinician deems surgical intervention necessary based on a clear association between significant tongue-tie and major breastfeeding problems, then frenotomy should be performed by a clinician experienced in the procedure and with appropriate analgesia. The Committee states that although ankyloglossia release appears to be a minor procedure, it may cause complications such as bleeding, infection, or injury to the Wharton's duct.

The Academy of Breastfeeding Medicine, a worldwide organization of physicians dedicated to the promotion, protection, and support of breastfeeding and human lactation, is currently revising its guidelines on neonatal ankyloglossia.⁷

JFP



There is no evidence of improved latching after frenotomy, and evidence concerning improvements in maternal comfort is conflicting.

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