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Deep cuts under babies' tongues are unlikely to solve breastfeeding problems

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It's unclear just how many infants are undergoing these procedures. Tanya Little/Shutterstock

Breastfed infants diagnosed with "tongue tie" are being unnecessarily treated with deep laser or scissor cuts under both their tongue and upper lip in the first weeks and months of life.

In order to avoid re-healing of the surfaces, parents are often instructed to pull the wounds apart multiple times a day for two or three weeks afterwards, causing further pain and discomfort.

It's unclear just how many infants are undergoing these procedures in Australia, the United Kingdom and North America. But there is little evidence to support the practice.

Classic tongue tie can usually be treated relatively painlessly with a simple snip, without the need for deep surgical cuts.



Classic tongue tie is treated with a non-invasive snip, called a frenotomy.

What is tongue tie?

A frenulum is any connective tissue fold that tethers or anchors mobile organs in the body. The frenula of the tongue or upper lip in babies have a wonderful diversity of thicknesses, lengths, points of insertion, and elasticity. They tether the tongue to the floor of the mouth, and the upper lip to the gum.

The diagnosis of tongue tie was traditionally reserved for membrane-like tissue connecting the undersurface of the tongue to the lower gum-line, or somewhere behind it, and causing visible restriction of the tongue's movement.

Midwives have long recognised that infant tongue tie can result in nipple pain for the mother and breastfeeding failure unless promptly snipped.

But from the 1950s, with the medicalisation of birth and the breakdown of traditional breastfeeding support, classic tongue tie was often left untreated.

The trend of over-treatment began in 2004, when a new diagnosis of "posterior" or "submucosal" (deep in the mouth and not easily visible) tongue tie was proposed in an American Academy of Pediatrics newsletter and then widely promoted in lactation circles. More recently, the diagnosis of "upper lip tie" has been added to the list.

Today, "tight" frenula are commonly diagnosed if a breastfeeding mother has nipple pain or bouts of mastitis, or if the baby has difficulty attaching to the breast, or fusses or pulls off the breast, or clicks and splutters during feeds, or gains weight poorly, or has reflux or wind.

The baby may then be referred to the dentist or surgeon for deep laser or scissors "release".

In some circles, only pointy tongues that extend to beyond the lower lip are deemed as safe. This unusual degree of tongue mobility has become the new gold standard, and shorter, squarer tongues with less elastic frenula are viewed as failures.

What does the research say?

Definitions aren't agreed upon, but it's useful to define a frenectomy as a cut that aims to sever the entire frenulum, down to the tongue muscle or gum.

A frenotomy, then, is a simpler snip that removes a congenital membrane from in front of the frenulum, but doesn't aim to remove the frenulum in its entirety.

Two recent systematic reviews have examined the effectiveness of frentomies and frenectomies.

The first, from 2014, concludes that half of breastfeeding babies with tongue-tie will not have problems. If there are difficulties, mothers report improvements after frenotomies or frenectomies. But it's difficult to determine how much of the effect is a placebo.

The other review, published in 2015, concludes there is a small body of evidence to suggest frenotomies or frenectomies may be associated with the mother reporting improvements in breastfeeding and nipple pain. But researchers say the strength of this evidence is low to insufficient.

Based on the research evidence, Australia's National Health and Medical Research Council's (NHMRC) 2012 Infant Feeding Guidelines state:

There is limited evidence that "tongue tie" occurs in appropriately 4-10% of healthy newborn infants (Evidence Grade D). There is limited evidence (Evidence Grade D) to suggest that infants with "tongue tie" more commonly experience breastfeeding difficulties.

(Level D evidence is of very low quality, based on no direct research evidence or with very uncertain estimate of effect.)

The NHMRC concludes:

while surgical management of tongue-tie has been tried... further controlled trials are required.

Other guidelines were written prior to the rise of "posterior" and "upper lip-ties" (such as the Academy of Breastfeeding Medicine 2004, National Institute for Health and Care Excellence 2005) or lean heavily on uncertain definitions and unreliable clinical tools, such as the Hazelbaker Assessment of Lingual Frenulum Function (ATLFF)).

Our guidelines aren't very helpful because of serious problems in the existing research. The nature of the tongue tie, associated breastfeeding difficulties and type of surgical intervention are poorly defined, as is the kind of breastfeeding support offered alongside the surgery.

We need long-term follow-up studies, including research that compares the effects of these procedures with high-quality breastfeeding support over time.

My clinical practice

In the absence of workable guidelines, clinicians such as myself have to fall back on theoretical frames and clinical experience.

In the clinic, I perform an oral assessment on babies who've been diagnosed with tongue and lip ties and whose parents want a second opinion. I do a simple frenotomy on any who have a classic tongue tie.

There are very occasionally babies with an unusual kind of classic tongue tie, best referred on to oral surgeons.

Mostly, I observe normal, if highly variable, tongue and upper lip frenula, attached to adequately mobile tongues and springy upper lips, all perfectly suitable for breastfeeding.

When I perform comprehensive breastfeeding assessments on babies with breastfeeding problems or fussiness, including those who've had oral surgery in the previous weeks or months, I find a range of underlying problems that have not been properly identified and addressed, though the women have usually seen multiple health professionals.

I regularly see babies who have become even fussier at the breast after they've had the deep laser or scissor cuts and the distressing wound-stretching exercises. We call this "oral aversion".

Occasionally, I find other unexpected side-effects of frenectomies: an under-surface of a tongue partly separated into two, or stitches inserted under the baby's tongue, or into the upper gum. Parents are told the stitches were because the tie was so bad. But stitches are only put in to control excessive bleeding.

My colleagues and I then offer our "gestalt" breastfeeding intervention – that is, our focused fit and hold work with mothers and infants, integrated with our evidence-based approach to unsettled infant behaviour.

In our experience, with the right help, the feeding difficulties and unmanageable fussiness usually resolve.

Support for breastfeeding women

Breastfeeding offers substantial short- and long-term health benefits to both mother and child.

Yet clinical breastfeeding support is not prioritised within the overcrowded primary health care agenda, and primary health care research is not prioritised within the national health research agenda.

In the meantime, parents can feel comfortable that a simple frenotomy for a classic tongue tie just as soon as possible after birth is likely to protect breastfeeding and, if severe, speech and oral hygiene down the track.

If the baby has been referred for deep surgical cuts due to a diagnosis of tongue and upper lip tie, it's worth getting a second opinion from a GP or paediatrician with special interest in breastfeeding.

A longer essay on this issue is published this week in the Griffith Review.