Tongues tied about tongue-tie

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'I HOPE WE'RE NOT boring you,' I say politely to my friend's husband. (Since boredom isn't an option for my husband, I don't even glance his way.) We have to speak loudly because it's lively tonight at *Zio Mario's*.

'No no no, please go ahead,' he replies affably, sipping his shiraz. So my friend and I eat tiramisu and continue our conversation, leaving the men to make their own. Threads of silver wind through her dark shoulder length hair. She's been a hard-working GP for thirty years, about the same as me. Like me, she's done her PhD, she's affiliated with the university, she researches and publishes in the international medical literature.

'I'm shocked,' she repeats seriously.

I'd been telling her about the stream of parents I see in our clinic whose babies either have had, or have been advised to have, deep incisions into the tissue under the tongue and also under the upper lip, often by laser. I am aware that these deep cuts, and the prescribed tearing apart of the new wound multiple times a day over the following weeks, may worsen breastfeeding outcomes for some. I'd been inclined to think of this phenomenon as certain

health professionals' earnest and contagious belief in the power of the 'quick fix'. In less generous moments I'd thought of it as unethical, as the slide into easy money. I'd despaired that health professionals can still, with impunity, promote expensive surgical procedures in the absence of credible research to show benefit.

But my friend believes that I should take a stand.

'It's not intentional damage,' I offer hesitantly. 'No-one in this field *means* to do harm.'

She smiles a little, as if to say: *of course no-one means harm, but that's not the point*. I continue, anyway.

'It's so emotive to discuss, especially for parents who've had it done. Imagine, you go through all the distress of the nipple pain, the sleepless nights, the screaming baby, the impossible feeds, you think you're going mad – then someone you trust tells you there is a reason. You pay a large sum of money for the surgery. The process is caring, smoothly run, professional. Things seem to settle down. Wouldn't *you* hate the person who dares to stand up and question what everyone else told you to do?'

'Yes,' she says, flatly.

'It's a health system problem,' I protest. 'It's got nothing to do with the parents, they are making decisions as best they can according to the advice they receive.'

The babies are referred to the dentist because their mothers have asked a lactation consultant or midwife or child health nurse for help with breastfeeding problems. The babies might find it difficult to get onto the breast, they might back-arch and pull off once they're on, they might cry and fuss during feeds. They might click and slurp and splutter as they suckle, or puke a lot. A few are not gaining weight well. Others have bloated tummies and pass a lot of wind. The mothers might have pain or wedging or blanching of the nipple after breastfeeds.

The dentists performing these laser cuts instruct parents to tear open the new wounds at least three times a day for a fortnight afterwards (we were told six times a day, some parents have said), so that the cuts don't close up again. That's sweeping with a finger under both tongue and upper lip, then stretching the wound, over and over.

'It's awful,' parents tell me anxiously, 'we hate doing the exercises. The baby cries. But we can't risk it growing back.'

Not that it actually grows back, but the body naturally tries to adhere up opposing surfaces that have been incised. For a while, babies were commonly receiving multiple revisions, up to five times in one local case I knew of, but now lactation consultants and dentists insist on these exercises post-surgery, so that the fibrin and collagen fibres healing up the wound are pulled apart regularly throughout the day.

We don't know if this actually results in improved tongue mobility and improved breastfeeding – there are no reliable studies. When I examine babies who've had those deep treatments, I find that the site has contracted over time anyway, as scars do, into a pale little patch, or into a stubby white string under the tongue. I can't see that these incisions have improved tongue function or breastfeeding, at least no more than the associated encounters with a breastfeeding specialist and the passage of time might. In fact, I have seen situations where babies become uptight and fussy about anything going in their mouth after they've had the cut, so that breastfeeding becomes even more difficult (we call this 'oral aversion') – or where the parents, after receiving the diagnosis, decide the whole thing is too expensive and distressing, and wean. Other parents come in to see me weeks or months afterwards, with ongoing breastfeeding difficulty.

What if we waited for evidence for every important health advance? ask health professionals advocating surgical treatments for posterior tongue-tie and upper lip-ties in their blogs and on Facebook.

I know what they mean. Often important advances are viewed, at first, as alternative, and then gradually incorporated into the mainstream, through a complex process of which research is often only one belated part.

'Ah, but what they've forgotten,' my friend interjects, still enjoying her tiramisu, 'is that in the absence of well-conducted trials, medical *advances'* – she looks knowingly at me over the top of her glasses – 'which, by the way, are often most vigorously promoted by those with vested financial interest…'

I sigh and nod a little.

'…Medical *advances*,' she continues, 'are often tested by experimenting on large populations of people, and medical *reversals* – a complete about-face in clinical approaches as the evidence accrues – occur about half the time.'[1]

'Exactly,' I reply. 'And if you put a simplistic intervention into an evolving and complex system – like a breastfeeding mother-baby pair – you risk unintended consequences.'[2 3]

Primary care researchers talk a lot about this. We know there is a high risk of undesirable outcomes from a 'quick-fix' approach to a complex health problem.[4] My friend and I have watched this play out often during our lives as GPs, and we've learnt to be very cautious about the latest exciting new intervention or drug. The professor in disease prevention at the Stanford University School of Medicine agrees with us, arguing that 'ineffective, harmful, expensive medical practices are being introduced more frequently now than at any other time in the history of medicine.'[5]

In the meantime, as one lactation consultant said to me when I ran into her at the shops: *posterior tongue-ties are popping up everywhere.*

So too are upper lip-ties. Dentists advise parents to do both at the same time, to be on the safe side, since it's only an extra couple of hundred dollars. *Where you find a tongue-tie, you'll find a lip-tie*, they say.[6] Combined deep incisions of the tongue and lip cost around $900 in a popular Brisbane dental clinic, with perhaps $200 rebated by private health insurance. I've been told, though I can't confirm it, that this dentist does sixteen infants in a day. Another well-known local dentist charges over $1000. *The younger the baby gets them done, the better,* parents are told.

They may then be referred for weekly visits to a chiropractor or craniosacral therapist over the following month or more, to aid recovery. Breastfeeding is definitely not for the poor.

IN THE ABSENCE of clear agreement, it seems most useful to define a *frenotomy* as partial division of a frenulum, and *frenectomy* as its complete removal. The word *frenulum* derives from the Latin *frēnulum*, meaning 'little bridle'. A frenulum is a small fold of tissue that secures or restricts the motion of a mobile organ, functioning anatomically as a protective connective tissue anchor, or tether, or tie. Frenula are found in various parts of the body. In the mouth, normal healthy frenula tie the tongue to the floor of the mouth (the lingual frenulum), or tie the lips to the gum (the labial frenula).

The congenital anomaly of a visible membrane in front of the frenulum under the tongue is, I'd argue, best conceptualised as different to the tongue (or 'lingual') frenulum proper, which lies behind it. This classic (or 'anterior') tongue-tie often results in seriously constrained tongue movement. It runs under the tongue to the lower gum ridge or floor of the mouth, has few nerves or blood vessels, and mostly looks like a veil, although sometimes it can be quite thick. This remnant might be minimal, let's say 10 per cent along the under-surface of the tongue and connected to the floor of the mouth, or it might be right to the tip, 100 per cent along the under-surface of the tongue and tethered down to the ridge of the gum. The tip of

the tongue might be heart-shaped (which is not to say a little divet in the tip of the tongue is necessarily abnormal).

Traditional midwifery knowledge, common sense and research performed before 2005 all tell us that this membranous remnant may be associated with breastfeeding difficulties and nipple damage, particularly if it is prominent, and a prompt frenotomy protects breastfeeding.[7]

Nipple damage, as any woman who has experienced it knows, is excruciatingly painful. The tissue becomes inflamed and swollen, and cracks open. If allowed to continue, chunks of flesh slough and disappear, blood flows when the baby sucks, and breastfeeding (unless rescued with skilful intervention) can be utterly ruined. Not every mother whose baby has a variant of classic tongue-tie has breastfeeding problems, but why not snip a membranous remnant immediately to be sure? It seems, from the reaction of babies, to be quite painless: there's a couple of drops of blood, women often notice immediate relief if they put the baby to the breast, and the whole thing is over. Significant classic tongue-tie is also likely to interfere with articulation and the capacity to manage food in the mouth in later childhood.

A paediatrician mused to me that her colleagues have basically given up and are doing frenotomies themselves now. 'Otherwise the mother just goes down the road to have it done by the dentist,' she added. This has to be an excellent outcome of an otherwise very worrying epidemic, and maybe it took an epidemic to achieve it: classic tongue-ties are now, finally, being released with a quick snip of the scissors early on, before women can be hurt.

A serious and severe tongue-tie ('complete ankyloglossia') that adheres the tongue to the floor of the mouth is an extremely rare occurrence that few health professionals see, and is entirely different to the short thick frenulums and shorter squarish tongues that are currently labelled as signs of posterior tongue-tie. The babies that I see for a second opinion concerning the diagnosis of posterior tongue-tie and upper lip-tie display what I consider to be normal anatomical variants, both under the tongue and under the upper lip – in the context, sadly, of treatable breastfeeding problems that have not been properly addressed.

Unfortunately, there are no baseline studies to tell us what the range of normal frenula look like. Has anyone had a look to see, for instance, if babies with the same wonderful range of frenulum variants are breastfed without problems in the developing world or other cultures? I can say that the diversity of babies' oral structures is quite marvellous, like the breathtaking variety of hair and skin colour and height and bone thickness and genital and breast size that characterise us as humans. The baby whose little pink tongue soars out over and beyond the lower lip, curling down towards the chin like a giraffe's, may be an anatomic variant at one end of the spectrum of tongue length, but it appears that this is currently being taken as the

new norm, and surgical intervention is prescribed at the merest hint of breastfeeding problem if the tongue and frenulum don't conform to this strange, long-tongued ideal.

I notice those who most passionately promote deep-tissue frenectomies have now dropped the 'posterior' and just talk about tongue-ties, or restricted oral connective tissue. *There's no such thing as a small tongue-tie*, my patients are told. The difference between 'anterior' and 'posterior' tongue-tie has been blurry since 2004, when the diagnosis of the posterior (or 'sub-mucosal') tongue-tie was first proposed.[8] Existing assessment tools (if we look closely) are subjective and unreliable, or fail to integrate the vital impact of mother-baby fit and hold on tongue function and milk transfer. [9] [10] [11] [12]

Any attempt to assess the tongue's mobility by visual, oral and finger-suck examination is indicative at best, once a classic tongue-tie has been attended to. Certainly the upper lip frenulum doesn't impact on capacity to make a seal at the breast, regardless of its shape – I'd argue that the old idea of the phalanged 'special K' lips has little relevance in contemporary breastfeeding support. The diagnosed upper lip-ties that I see are simply normal variants, nestled under a lovely springy upper lip perfectly suitable for breastfeeding (as you'd expect, from an evolutionary point of view). The function of the tongue is only meaningfully assessed in context – that is, in interaction with multiple variable anatomic features such as the baby's chin and palate, the mother's breast shape and elasticity, and – vitally – the fit and hold while breastfeeding.

Behind the sail of the tongue-tie lies the invisible mast, the mainstay of the tongue-tie, parents are told.[13] Our twenty-first century war against the young baby's lingual frenulum involves elimination of this 'mast' – that is, complete destruction of the frenulum, nothing less. It's typically lasered away to expose, as the tongue pulls back, a large diamond-shaped patch of bare muscle. This soon sloughs over with healing fibrin and collagens. Then the resultant scar tissue becomes the necessary connective tissue anchor, inevitably contracting over time as scar tissue does. What are the long-term consequences of this replacement of our babies' lingual frenula with scar tissue? We do not know.

Unfortunately, cutting deeply under that little tongue is not without immediate risk, and is not likely to be pain free. A while ago I saw a baby whose laser frenectomy had gone so deeply into the connective tissue that the under-surface of the tongue had separated into two distinct bellies. Another mother told me that her baby's posterior tongue-tie was so bad (although he'd gained weight well) that the dentist had to repair it with stitches. I knew that sutures could only have been necessary because the scissors had damaged vascular tissue: the dentist needed to control the bleeding.

The trend to refer only to tongue-tie, without attempting to differentiate between a classic membranous remnant and what has previously been referred to as a posterior tongue-tie, results in a dangerous blurring of definitions. Calibrating treatment according to definitions across spectrums of difference is fundamental to quality clinical care and research. It seems to me that sidestepping the problem of definitions is intellectual laziness.

Or perhaps it is less honest than that – it allows a lucrative business model to operate on the terrain of familiar and comfortable terminology, without having to address important ethical questions. Failing to distinguish between a classic membranous remnant and other kinds of 'tongue-tie' allows proponents to co-opt research that demonstrates the effectiveness of classic tongue-tie, and claim it applies to any kind of 'tongue-tie' (which could be, say, a normal frenulum variant). Due to this terrible confusion of definitions, research publications concerning tongue-tie since about 2005 are gravely methodologically flawed.[14 15]

Moreover, existing research into the efficacy of frenotomy or frenectomy assumes that every mother-baby pair has received a standardised and high-calibre breastfeeding intervention first, before referral for frenotomy, since ongoing breastfeeding difficulty is a key factor in deciding that the tongue and upper lip are 'tied'. Yet no one is quite sure what constitutes a high quality clinical breastfeeding intervention. Lactation consultants are not examined on their clinical breastfeeding support skills, though they sit a multi-choice exam. And many women are still given advice that makes breastfeeding more likely to fail. It's also not clear in existing research if measured improvements in breastfeeding post-frenotomy relate to the surgery, or to the concurrent ill-defined breastfeeding interventions, or to the passage of time.[16 17]

In other words, from a research point of view, it's a shambles. A kind of pseudo-science prevails concerning this topic, where poor research methodologies are ignored or not comprehended by prominent and authoritative advocates of deep-tissue incisions, where the need for theoretical frames are derided, where articles are thrown around the internet as proof without any credible analysis of the data, that is, without critical thought about how that data is interpreted.

Worst of all, a poisoned, divisive discourse dominates, with advocates of deep-tissue frenectomies unashamedly questioning the competence or experience of those health professionals who are more cautious. Like me. Lactation consultant colleagues here and overseas who are sceptical about the value of these deep cuts fear to speak out. Being labelled incompetent by colleagues or by parent groups online threatens livelihoods. Our tongues have

been tied. A disturbing and anti-intellectual groupthink has taken hold in the field of breastfeeding support.

BECAUSE HEALTHY FUNCTION helps sculpt structural alignment, it makes sense that early release of a classic tongue-tie will protect healthy oral function and structure for life. But it's difficult to make sense of untested claims that frenectomy for other babies with breastfeeding difficulty optimises orthodontic outcomes.

In an analytic research paper I published in *Breastfeeding Medicine* a couple of years ago, I suggested that we frame that confluence of breastfeeding problems and less mobile tongue excursion as, in some cases, connective tissue tension or tightness.[18] Advocates of deep-tissue frenotomy have now adopted this terminology and refer to restricted oral connective tissue, but have not yet grasped the implications. Problems of tongue function caused by muscle and connective tissue tension are amenable to breastfeeding interventions that relax the tissue and repair healthy function, without the need to cosmetically alter structure.

Factors that impact on infant tongue function are complex. A stressful birth, technological interventions and disrupted early feeding experiences may culminate in spirals of frustration, distress and physical tension for both mother and baby, including physical tension in a baby's oral musculature and connective tissues. Most importantly of all, infant tongue function is affected by the way the baby – with his or her uniquely shaped little mouth, chin and body – fits into the mother's uniquely shaped belly, arms, thighs and breasts, since human bodies, breasts and oral structures are so splendidly variable.

The act of fitting a baby into the mother's breast and body often doesn't go well in our society, for all sorts of reasons. The result is a widespread problem of positional instability when trying to breastfeed, which causes the baby to back-arch, cry and fuss at the breast, or refuse to feed even though displaying signs of a desperate hunger. Parents will notice that a baby who is crying and upset will also tend to reflux more, due to high levels of sympathetic nervous system arousal (though this refluxing rarely causes problems, and is quite different to the problem of painful gas in the colon).[19]

There have, however, been significant advances in our knowledge of how to support healthy fit and hold in the past decade.[20] [21] It grieves me that health professionals, in their precious time with an exhausted woman, who may have unbearably painful breasts and nipples or a distressed and unsettled baby, engage in long discussions concerning tongue and lip-tie and surgical intervention and imagined future implications, without attending to the multiple other factors that impact on efficiency of milk transfer or feeding-related crying and fussing.

Patients regularly tell me they went to a lactation consultant for help with mastitis or 'latch' problems, and came away with referral for double frenectomies (and advice to give the baby probiotics and to eliminate dairy and to see a craniosacral therapist) – without receiving any seriously skilful fit-and-hold work.

Women need help with fit and hold before all else, so that they and the baby can experiment with the art of heathy, well aligned and positionally stable breastfeeding, over and over and over throughout those early days and nights. Positionally stable breastfeeding for maybe six hours or so every day is a powerful force for optimal oral development in babies. Why would a weekly appointment with a chiropractor, craniosacral therapist or orofacial myologist, who aims to improve function by subtle manual manipulations of the baby's skeletal and connective tissues, help a baby when he or she is being subjected to the massive daily destabilising forces of suboptimal fit and hold?

Dental clinics with special interest in infant tongue-tie seem to be growing larger and glossier by the month (as are their blogs and websites). They boast of multi-disciplinary teams, including lactation consultants and orofacial myologists or chiropractors or craniosacral therapists. GPs, so successful in Australia in preventing excessive and wasteful expenditure in our health system relative to other developed countries like the United States, are bypassed. It has to be acknowledged that by failing to educate ourselves in clinical breastfeeding support these past decades, doctors have, by and large, been left out of the loop. Commonly, the lactation consultant or midwife or child health nurse diagnoses the tongue-tie, the dentist lasers it and the parents follow-up with the craniosacral therapist.

Sometime later, they mention the frenotomy to their doctor.

TWENTY-FIVE YEARS ago, as a young doctor and mother, I watched another great movement in the medicalised management of breastfeeding problems in mothers and babies start here in my home-town of Brisbane, then spread internationally. That was the epidemic of gastro-oesophageal reflux disease (GORD), diagnosed as the cause of crying, feed and sleep problems in the first few months of life.[22] It was a juggernaut that would, I knew, inevitably burn out.

Now, the evidence that anti-secretory medications do not help these unsettled babies is so clear[23] that researchers are turning their attention to the vexed question of why doctors still routinely prescribe them.[24 25 26] But how much unnecessary suffering for families and wasteful expense for the health system has been incurred around the developed world in the meantime, when if you looked carefully at the evidence right from the start (at least through

the lens of a primary care generalist), the methodological flaws were blindingly obvious? [27] [28] [29]

I have faithfully tracked the diagnosis of infant GORD in the research literature (an odd obsession, I admit), and also the somewhat later but overlapping trend to misdiagnose lactose intolerance and over-diagnose allergy in unsettled breastfeeding babies.[30] I sometimes have the privilege of reviewing research publications on these topics for prominent international journals. I have observed how data concerning infant behaviour has been interpreted through a medicalised lens, over and over, in thousands of expensive trials and hundreds of highly credible conferences and many thousands of publications by esteemed academics and medical specialists. More painfully, I watch up close as these misdiagnoses play out in the lives of ordinary families, and do my best to help with the various underlying problems that are missed with these diagnoses.

Opinion leaders and prominent researchers repeatedly apply a medicalised lens to two kinds of breastfeeding problems: positional instability and functional lactose overload, failing to comprehend the powerful effects of our social behaviours on the physiology of both a mother and her baby.[31]

Now, as the tongue-tie epidemic tightens its grip in the English-speaking world, new diseases with a familiar ring to them are being invented to explain unsettled behaviour in babies with breastfeeding difficulties, such as 'aerophagia induced reflux' (AIR for short), induced by tongue-tie.[32] This latter diagnosis has spread like wildfire, though the physiological rationale lacks credibility.

'Haven't we learnt anything from the infant GORD epidemic?' I ask my friend incredulously. 'We transplant the human heart. We send a robot two hundred million kilometres to land on Mars. Yet we have this monumental societal blind spot concerning breastfeeding!'

She laughs. I bury my face in my hands, elbows resting on *Zio Mario's* red-checked plastic tablecloth. Our husbands, on to their second grappa, pause for a moment and shrug their shoulders.

'Sometimes I think I must be crazy, to be so out of step.'

'You're not crazy,' my friend says kindly, 'you specialise in generalism.'

As a generalist doctor, I am trained to be as interested in the mother as I am in the baby and the other parent and their sociocultural context. One lens I apply is that of evolutionary medicine, also increasingly applied to other complex primary care problems, such as diabetes and obesity. Another lens I apply is that of complexity science, a powerful way of making sense of the complex health problems we encounter every day as GPs. My other lenses are

drawn from the social sciences, including the formidable body of literature that critiques unnecessary medicalisation of the reproductive female body.

For fifteen years, in my modest contributions – talks and research publications – I've used existing studies to argue a number of facts. These facts are increasingly mainstreamed, as evidence finally makes its way into practice: that GORD is not a cause of crying in infants in the first months of life; that anti-secretory medications used in the first months of life risk side-effects such as increased risk of allergy;[33 34] that we are over-diagnosing allergy in this age group; and that the elimination diets we then apply to breastfeeding women increase the risk of allergies in their babies later on; that lactose intolerance is not a cause of crying in babies (though a functional lactose overload, easily managed with a few breastfeeding strategies, is).[35]

I'm not clairvoyant. But I do use my carefully analysed theoretical frames to critique methodologies, that is, to critique the way researchers set up and make sense of their investigations. I critique the unconscious assumptions and beliefs that other researchers apply (that is, their theoretical frames) as they ask questions and interpret their data. I apply this generalist's lens to studies across multiple disciplines.

A theoretical frame acts like a lighthouse in the night either in the absence of evidence, or as we interpret evidence. Today, the evidence-based medicine movement acknowledges that careful theoretical framing is essential if we are to avoid pouring vast amounts of money into poorly conceived studies set up according to researchers' unexamined beliefs and assumptions[36] – for example, that young babies back-arch and cry and fuss at the breast, and transfer milk inefficiently because they are in pain from oesophagitis, caused by reflux. Or more recently, that they back-arch and cry and fuss at the breast, and transfer milk inefficiently because they have a posterior tongue-tie and lip-tie, which also makes them reflux. The advocates of incisions for anything other than a classic tongue-tie continue to apply a simplistic medicalised lens to complex breastfeeding problems: they narrow their gaze down to the role of the infant tongue, lose sight of complexity, assume a structural cause for functional problems and presume that a quick-fix intervention must surely help.

Now, the internet buzzes with arcane theories about the rise of 'these new midline defects', including the conviction that tongue-tie is related to methylenetetrahydrofolate reductase (MTHFR) genetic mutations or pregnancy supplements. But if we apply the lens of evolutionary medicine, the idea that posterior tongue-tie and upper lip-tie have sprung up as widespread new congenital abnormalities in the last decade in the developed world just

doesn't make sense. *Homo sapiens* has been remarkably morphologically stable over many thousand years.

However, we do live in a society where girls rarely live alongside breastfeeding women as they grow up, where technologised birth seriously affects a woman's neurohormones and the baby's primitive feeding reflexes, and where health professionals are not adequately trained in clinical breastfeeding support.[37 38 39 40 41 42 43] What is the most likely cause of widespread breastfeeding difficulties? Is it a nutritional explanation for a remarkable, indeed completely unprecedented, phenomenon in the known history of *Homo sapiens*: a new congenital abnormality that has become widespread in the past ten years in the English-speaking world, amenable to surgical intervention?

Or is it a systemic failure to develop the research and educate clinicians in the prevention, and identification and management, of clinical breastfeeding problems?

THERE WAS A time when most doctors had no knowledge of tongue-ties. I remember a patient of mine when I was still young, before the early 1990s when I became a mother and qualified as a lactation consultant. This woman pumped her breasts for months and months to breastfeed her baby, due to irremediable nipple pain. You can only understand how hard it is to feed your baby this way, day after day, if you've tried it. I still remember that particular woman clearly, her quiet courage and determination.

It grieves me, still, that it didn't occur to me to look inside her baby's mouth.

I mention my own painful history of ignorance because it is very important to celebrate the pioneering efforts of the clinicians who have raised our awareness of tongue-tie and of oromotor and tongue function more broadly. It has been pioneering to raise awareness of the effects of classic tongue-tie; to consider tongue function in clinical breastfeeding support; and to develop a systematic approach to oromotor and tongue function assessment in breastfeeding infants. I expect these to be the three important legacies of today's tongue-tie epidemic.

I do, however, also believe that the widespread popularity of deep tissue frenectomies will be viewed, looking back, as an unfortunate and rather bizarre digression.

In 2004 a cheerful American lactation consultant discovered a cord of yellow-white tissue behind mucosal folds underneath the tongue of a baby with breastfeeding problems. I think of this as the moment the newborn *lingual frenulum* burst into contemporary consciousness. She discussed her discovery with a local ears, nose and throat surgeon, and they christened it a 'submucosal tongue-tie'. The doctor cut it. The lactation consultant began to discover a

'submucosal' tongue-tie in many of her patients with breastfeeding problems and referred them for incision. Together, they wrote a letter to the American Academy of Paediatrics about it, which is where it all started.[44]

That's how we helped mothers back then, this same lady announced rather defiantly in response to my question a few years ago, *we used to cross the baby's arms and wrists like that*. She was quite famous internationally in breastfeeding circles by this time, and I'd flown interstate for her workshop. We were watching a video of what she called a 'posterior tongue-tied baby' trying to breastfeed, suckling desperately without a pause, then pulling off the breast, panting, to take a break.

I'd noticed that this baby's little arms and wrists were crossed between his body and the mother's as he fed. No wonder he couldn't get stable! He was trying to fit into the breast in a way that seriously constrained his tongue function. The woman's nipple swung far away from the baby's nose and mouth as he pulled off – another sign of positional instability.

And this well-meaning woman was telling all these midwives and child health nurses and lactation consultants, who'd made the effort to fly in from around the country to further their education, that we were looking at a posterior tongue-tie which made healthy fit and hold impossible, which required not only deep incision, but craniosacral therapy, too.

I did try to make a point about the impact of the poor fit and hold, and also about her repeated claim of 50 per cent improvement in breastfeeding after a frenectomy for posterior tongue-tie (she was referring to an unpublished ultrasound study of thirteen pairs), but was publically ignored. The midwives, child health nurses and lactation consultants went back to their hospitals and clinics after that workshop and began to identify common frenulum variants as posterior tongue-ties if there were breastfeeding problems. Then came the first Australasian Society for Tongue and Lip Tie conference in 2014, run by enthusiastic clinicians with no research background, and the imported epidemic seriously gained momentum.

Another American lactation consultant has developed a pioneering systematic approach to examining tongue structure and function in a baby. Her assessment tool is popular, widely used by health professionals advocating deep frenectomies – and seriously flawed.[45 46 47 48] It is built on the assumption that impaired tongue function inevitably results from a structural problem of the frenulum.

This lady herself, confusingly, agrees that posterior tongue-tie doesn't require snipping (though her tool might come to that conclusion), but she does insist that babies with posterior tongue-ties require craniosacral therapy. Her educational presentations are an avalanche of detailed anatomy of nerves, intricate pink muscles, little bony holes and fine white waves of

fascia – of limited clinical relevance, in fact, but her audiences find her impressive, as if slide after slide of microscopic anatomic features with long Latin names establishes credibility.
The day I watched her present to a conference room full of midwives, child health nurses and lactation consultants, she showed, after the anatomy, a video of a mother and baby with breastfeeding problems. Again, I watched with sinking heart as the baby struggled with obvious positional instability. He lacked the anchoring contact and alignment necessary to trigger the breastfeeding reflexes, rooting to and fro in distressed frustration, little mouth hovering helplessly over the nipple.
This breastfeeding problem is due to connective tissue tightness, the lady announced, *which makes good latch impossible, as we've seen in the anatomy*, and in the video she took the baby away from the mother, laid him on his tummy on the great big examination couch, and started to probe and push that tiny body. Her moves were firm, focused, confident. She was fixing him.
Why was no one attending to the obvious underlying problem of mother-baby fit and hold?
They can't get the latch right when they've got a tongue-tie, mothers are told. I watch some of the world's best-known breastfeeding educators use photos of mother-baby pairs in their presentations that accidentally role-model disastrous fit and hold, certain to undermine breastfeeding, and no-one comments. (Show a photo of a single can of infant formula, though, with the suggestion that it might be normal for parents to use this, which it is since breastfeeding is so often ruined by poor fit and hold, and the audience would go bananas!)
It reminds me of another famous lactation consultant and educator who said to me a few years back: *the latch and positioning are usually fine – I go straight to the allergy.*

IN MY VIEW, the tongue-tie epidemic heralds an existential crisis for the field of clinical breastfeeding support, and for the relatively new discipline of lactation consultants in particular. Uncomfortable questions are raised.
Does it matter that lactation consultants aren't assessed in the skills of clinical breastfeeding support before obtaining their qualification? Does it matter if influential breastfeeding educators visiting our shores neither conduct research nor hold qualifications equivalent to those required for registration with the Australian Health Practitioner Registration Agency? Why is the continued professional development of midwives, child health nurses and lactation consultants largely dependent on private businesses, with their inevitable focus on personality pull-power rather than serious research credibility? Why are universities and governments not responding to studies that show poor training in lactation support across all

health disciplines? Why is education concerning clinical breastfeeding support largely absent from medical training?

Given all that we know now about the developmental origins of disease, about breastfeeding's life-long protective effects on the gut, immune and metabolic systems, and about the health system crisis caused by chronic disease, why is clinical breastfeeding support not an urgent funding priority?[49 50 51 52] Why is the focus post-birth, when considering the developmental origins of disease, still primarily on nutritional supplements and probiotics (and driven by industry)?

Today, paralysed people can drive robotic arms with their thoughts, bladders can be grown in the laboratory and inserted into patients, but clinical support of a breastfeeding woman and her child remains a pioneering endeavour, a problem of little interest to research funding bodies, who would much prefer to investigate the properties of a newly discovered micro-nutrient in breast milk than to investigate how to help women comfortably transfer it from their breasts into their babies.

We emphasise the benefits of human milk, which has the unfortunate effect of making women feel shockingly guilty if they use infant formula. At the same time we misdiagnose the basic signs of positional instability and fit-and-hold problems as GORD, or allergy, or now, in many cases, tongue-tie. Women are in an impossible situation: they know that breastfeeding is best for the baby, but they can't access the help they need. Instead, the baby gets a medical fix: a medication, foodstuff eliminated from the mother's diet, a painful deep incision under the tongue and lip. At no other time of life is the gap between evidence and practice so wide.

We are at the tail end of a century-long revolution in the care of mothers and babies; traditional supports have broken down and our technologised births interfere with neurohormonal synchrony between mothers and babies, including of breastfeeding. Often, repair is required, but women are defeated – let's be blunt about this – by health professionals' lack of training in clinical breastfeeding support, and by the lack of research in this field.

In Australia, the National Health and Medical Research Council directs 2 per cent of its funding to primary care research. The Medical Research Future Fund would seem poised to focus on biotechnology and chronic disease. The Primary Health Care Research, Evaluation, and Development Strategy is under threat and the Australian Primary Health Care Institute faces defunding.[53] Who prioritises funding for prevention – that is, applied, real-world,

relevant, primary care projects? Who will fund independent, evidence-based continuing education for the health professionals who care for mothers and babies in the community? Until funding is available for evidence-based education and real-world primary care research into the common problems of early life, new parents – in their desperation and vulnerability – will continue to go from health professional to health professional seeking help, and receive conflicting advice.[54] They will, in the end, be persuaded to turn to the quick fix, which is lucrative for those health professionals involved, expensive and wasteful to the health system. Wouldn't you try to find the money for deep tissue frenectomies if you were told that without them you risked your baby's healthy development?

Women deserve more. Our babies deserve more. Those devoted partners, trying to hold it all together for the new family, deserve more.

Why does this matter?

Because there are life-long health risks associated with not breastfeeding and not being breastfed.[55]

Because undiagnosed and unmanaged breastfeeding problems and the resultant weaning or unsettled behaviour put new mothers at increased risk of postnatal depression.[56] [57]

Because it is extraordinary that, in our marvellous technological age, in the age of evidence-based medicine, large numbers of health professionals actually believe, quite passionately, with gut-deep conviction despite the *absence* of credible evidence, that our babies require deep incisions under the tongue and lip in order to breastfeed properly and to develop normal speech and oral structures.

This extraordinary situation is only possible because of a systemic de-valuing of this most elemental female act: the feeding of our babies from our body. Each human being shares at least the possibility of that beginning. Younger women might feel that feminism is no longer relevant to their lives. But it's here, weeping in the night over bleeding painful breasts, half-mad with sleep deprivation, a tiny child screaming or failing to gain weight, that we learn in our breasts and our bones an institutionalised neglect of intimate female experience.

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