

## PRESS RELEASE

### 13th International Breastfeeding and Lactation Symposium

## “Investigate, measure, think twice before cutting.” New evidence that cutting tongue ties may not help infants to breastfeed

- Worldwide tongue tie surgery rates are rising. In one Australian study, tongue tie surgery rates rose by 3,710%<sup>i</sup>. Canada recorded an 89% increase<sup>ii</sup>, the USA a 300% increase<sup>iii</sup>.
- New posterior (back) tongue tie diagnosis and surgery does not increase breastfeeding effectiveness.
- New (not yet published) study at the University of Western Australia shows that the real problem in breastfeeding is the mother’s low milk production, not the baby’s tongue tie

### Baar, Switzerland/Paris, France – 9 April 2018.

**“Older literature suggests surgical division, frenotomy, is simple solution for breastfeeding problems. When anyone says simple, run a mile. Nothing is simple.”** said Assoc Prof Donna Geddes at the 13<sup>th</sup> International Breastfeeding and Lactation Symposium in Paris, 23 March. Tongue tie diagnoses are in vogue worldwide as the reason for low milk removal and insufficient weight gain in babies, and for a mother’s pain during breastfeeding. The rates of frenotomy, cutting or laser separation of the tongue from the bottom of the mouth, are rising as fast as the diagnoses. Yet, instead of improving breastfeeding rates, the frenotomies may lead to early weaning. A new study from Australia reveals that the major cause of breastfeeding trouble often isn’t the tongue tie; it is the mother’s own low milk production.

### The “simple” surgical solution is too simple

How does a baby come to get tongue tie surgery? It starts with worried mothers visiting clinics due to breast pain from nursing. The clinicians ask mothers how much milk their babies are getting from the breast, and assess whether their babies are gaining enough weight. Is the baby latching on to the breast normally? Is the baby restless or fussy? Is the mother experiencing mastitis (breast infection), probably because the baby can’t empty the breast?

If it looks like the baby has tongue tie (a shortened frenulum – the band between the tongue and the bottom of the mouth), then a “simple” frenotomy often seems like a quick and easy solution to some or all of those symptoms, even though they may have many other causes.

“Because we can diagnose tongue tie now, we are diagnosing it flat out, and the rates of frenotomy are soaring,” says Assoc Prof Donna Geddes, Director of the Hartmann Human Lactation Research Group at the University of Western Australia (UWA). “Unfortunately,” says Geddes, “the breastfeeding rates are not improving with all these surgeries. Just the opposite, in fact. In our most recent study at UWA, at four months follow-up, many of the mothers of babies who had their tongues cut had actually stopped nursing earlier than expected.”

### Rising infant hospitalisation due to adverse surgical outcomes

Babies are not just breastfeeding less after tongue tie surgery, some are also being hospitalized for serious bleeding and infection. Some babies undergo three, four, or even five operations, because breastfeeding did not improve, or due to heavy scarring or the need for reattachment when the cut went too far. The Dental Council of New Zealand is investigating rising reports of infant hospitalisation due to adverse outcomes from frenotomies.<sup>iv</sup>

Geddes showed numerous photos of diamond-shaped grooves cut deep into the mouth muscles of many babies, the results of attempts to cut posterior tongue tie (at the back of the tongue). “You literally have to dig around to find posterior tongue tie,” says Geddes, “It is not a straightforward diagnosis.”

### No evidence-based, global definition of tongue tie

Therein lies the first cause of the rising surgical tide: In the past decade, more babies have been diagnosed and treated for posterior tongue tie, a condition with no agreed global definition and no evidence-based surgical treatment.

The original, anterior tongue tie is easy to spot: a heart-shaped tongue and/or anchoring to the bottom of the mouth. Most babies with anterior tongue tie, who are carefully cut by a paediatric surgeon, have shown normalised tongue movements during breastfeeding. The result is that the milk flows evenly and fully after surgery, and breastfeeding improves, as long as the mother has no intrinsic milk production problem.

#### **No benefits for babies, but mothers feel more confident**

Unfortunately, babies with posterior tongue tie don't enjoy the same benefits. After surgery, those babies show minimal changes in functional tongue movements, and overall no improvement in the way they remove milk from their mothers' breasts. In addition, there are rising reports of bleeding, pain and infection, with some babies refusing to drink from the breast or a bottle because of the pain. With so few beneficial indications, why are so many more being cut?

Geddes says that the studies show that, "Despite measures saying nothing improved, the mothers believed there was improvement." One major reason for this, says Geddes, is that after the surgery, the mothers experience less pain during nursing. According to Geddes, this is still subjective, and measured by questionnaires which do not differentiate between different types of breast pain. It is therefore essential to investigate all causes and solutions for the pain. In other words, popular tongue tie diagnosis and surgical intervention may have created a powerful placebo effect in mothers experiencing any kind of pain during nursing.

#### **New UWA study shows real cause for low milk removal is low milk production in the mother**

Concerned by the increasing numbers of babies having tongue tie surgery without increasing breastfeeding rates, Geddes launched a study to discover what was actually happening before and after tongue tie surgery, in both the mother and the baby. The most comprehensive tongue tie study to date measured pain in the mother through three different questionnaires, as well as milk production in the mother. It also measured pressure in the baby's mouth during breastfeeding, the baby's breathing patterns, and how the breast responded to the baby's tongue and mouth movements, via ultrasound.

"Follow-up wasn't pretty," says Geddes. "Whilst mothers reported less nursing pain after their babies had posterior tongue tie surgery, on the other hand, a single factor behind the poor breastfeeding became clear: low milk production in the mother." For the first time, Geddes compared the milk intake of the babies and milk production in the mothers, before and after tongue tie surgery. The results were nearly identical. Babies who could not get enough milk had mothers with likely intrinsically low milk production.

"Tongue tie surgery is unlikely to change milk production in the mother. If the baby cannot remove milk from the breast, the first thing that will improve milk production is early intervention using an electric pump to stimulate the breasts, and expressing milk frequently, until a normal milk supply is established." Of the few babies who were able to get more milk from the breast, their mothers already showed good milk production.

#### **The courage to re-examine popular clinical practice**

"We need to have the courage to admit we need to re-examine what we are doing," says Geddes. "A midwife recently told a young mother, two hours after birth, that her baby needed tongue tie surgery." One of our team members offered to test the mother and her baby. Those tests showed absolutely normal tongue movements, normal milk production, and normal milk removal without the mother experiencing pain. The mother took her healthy baby home, and wrote us several pages, thanking us for easing her mind through scientific evidence, and for saving her baby from unnecessary surgery."

#### **About Medela**

Founded in 1961 and headquartered in Switzerland, Medela invests in basic research in partnership with leading scientists, medical professionals and universities, to develop world-leading breastfeeding products, education, and solutions. Read more at [www.medela.com](http://www.medela.com).

#### **More Information:**

- [Assoc Prof Donna Geddes biography and scientific abstract](#)
- [March 22 symposium press conference livestream recording](#)

- [2018 Symposium highlights and images](#)
- **Available 16 April:** Speaker video interviews

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- <sup>ii</sup> [CMAJ Open.](#) 2016 Jan 26;4(1):E33-40. doi: 10.9778/cmajo.20150063. eCollection 2016 Jan-Mar. Temporal trends in ankyloglossia and frenotomy in British Columbia, Canada, 2004-2013: a population-based study. Joseph KS<sup>1</sup>, Kinniburgh B<sup>1</sup>, Metcalfe A<sup>1</sup>, Razaz N<sup>1</sup>, Sabr Y<sup>1</sup>, Lisonkova S<sup>1</sup>.
- <sup>iii</sup> [Ankyloglossia and Lingual Frenotomy: National Trends in Inpatient Diagnosis and Management in the United States, 1997-2012.](#) Walsh J, Links A, Boss E, Tunkel D.
- <sup>iv</sup> <http://www.dcnz.org.nz/resources-and-publications/publications/newsletters/view/26?article=8>