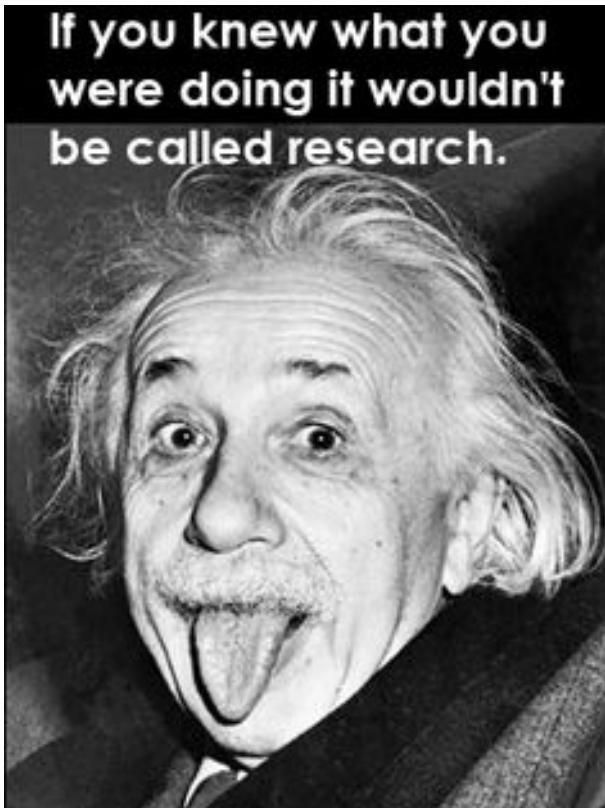


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## THE EVIDENCE SUPPORTS TREATING TONGUE TIE FOR BREASTFEEDING PROBLEMS

by Bobby Ghaheri



This post aims to address the common argument that there is no published evidence supporting the treatment of tongue tie when breastfeeding is problematic. It's directed at the doctors, lactation consultants, speech pathologists, and family members of mother/baby dyads who, for whatever reason, think that the release of a tongue tie is completely unwarranted. Often, the adamant negative response mothers get is so strong that they are scared to pursue treatment. This is especially true when the negativity comes from a doctor or lactation consultant, who mom may feel are "experts" in the field and whose opinion carries weight.

Unlike other medical conditions with a perceived significant societal impact, studies looking at TT and breastfeeding don't include large numbers of babies. You will not find a multi-center, double blind, randomized controlled trial (RCT) that looks at the efficacy of the procedure. But that does not discount the available body of literature, and we will examine the best studies to demonstrate the safety, efficacy and importance of tongue tie release when breastfeeding isn't going well. Keeping in mind that the majority of the studies were likely only treating anterior tongue tie (ignoring [the posterior tie that is always behind the anterior ties](#)), it's impressive to see how much these moms and babies benefit. Additionally, there are currently no studies that show that frenotomy does **NOT** help breastfeeding symptoms - they universally show improvement, regardless of study design.

**Steehler and colleagues (2012)** retrospectively collected data on 367 babies seen in a 5 year period of time who had breastfeeding problems related to tongue tie. 302 of them underwent a procedure but only 91 agreed to participate in the study. 80% of those participating felt that the procedure helped their baby breastfeed. 83% of the babies were able to initiate or resume breastfeeding. This study is limited by its retrospective nature and the very young mean age of the babies (18 days old), which makes extrapolation of the results to older children difficult. That being said, the study demonstrates a high level of satisfaction and safety. This study does look at posterior tongue tie, making it one of the only ones to demonstrate that even those babies can be safely treated in the office.

**Berry, Griffiths, and Westcott** analyzed 57 babies who were referred for tongue tie who were having problems breastfeeding. The groups were divided into a treatment and non-treatment group to create a double blind, randomized study. The babies were taken away, treated (or not treated) and then returned to mom. Pre and post-treatment evaluations were performed and those in the non-treatment group were treated after the data were collected. 78% of the treatment group noted improvement; interestingly, 47% of the non-treatment group also reported improvement, showing the bias involved. 1 day after the procedure, the cumulative improvement was 90%. At 3 months, 92% reported continued improvement. The double-blind RCT design of this study is admirable, but it truly only blinds the results for the improvement noted on the day of the procedure. In reality, the vast

majority of babies treated don't improve immediately, especially in the setting of posterior TT. This study does not look at posterior TT, nor does it truly control for bias beyond the day of the procedure.

**In 2011, Buryk and colleagues** published in *Pediatrics* a randomized trial studying the same topic. They looked at 58 babies who were randomized to a treatment arm vs a sham treatment arm. The babies in the sham treatment arm were offered treatment at or before 2 weeks following the initial visit. Whereas the Berry study's sham group was offered treatment that day, this study allowed for babies to wait well beyond what I feel is reasonable. Despite that ethical problem, however, the study shows improvement in the frenotomy group when compared to control, using objective measures to grade the latch and the presence of nipple pain.

**Hogan and colleagues (2005)** looked at the association between TT and breastfeeding problems in a different way. They identified 201 babies with TT and determined that only 88 of them were having breastfeeding problems. This study emphasizes my contention that not all babies who have tongue tie need treatment. Those that are asymptomatic should be followed rather than empirically treated. Of the 88 in the study having problems, 57 were included in the study. 28 babies were included in the treatment group, and 96% had improvement in breastfeeding. The 29 controls were subsequently offered treatment after intensive non-surgical treatment was offered, and 28 of the 29 requested frenotomy. 96% of those babies also showed improvement in breastfeeding.

Arguably the most important study that furthered our understanding of breastfeeding mechanics came from **Dr Geddes and colleagues in 2008**. Recently, Dr. Elad's paper emerged to further characterize how babies actually nurse. Geddes' paper looked at 24 babies and analyzed their breastfeeding using ultrasound, identifying appropriate nipple position, what happens to the nipple pre- and post-frenotomy, and most importantly, what the babies' tongues do when they nurse. It redefined our understanding of this motion, changing it from a previous theory where we thought babies stripped the breast to nurse to the current understanding of [the generation of a vacuum in the mouth that draws the milk out via negative pressure](#). If doctors and lactation consultants fail to understand the implications of this paper, they will categorically fail to understand why frenotomy is helpful in the setting of tongue tie. This paper showed how objective latch scoring, maternal pain scores, milk intake and milk-transfer rate almost universally improved in babies who underwent frenotomy.

**Earlier this year (2014), Dr Ochi**, a pediatric ENT in San Diego, conducted a small study showing improvement in 20 babies who underwent frenotomy for breastfeeding problems. He also showed the importance of using a breastfeeding quality of life survey to measure maternal satisfaction following the procedure.

Finally, the best examination of the improvement babies can experience following frenotomy comes from **Dr. O'Callahan in his 2013 study**. He looked at 300 babies who underwent frenotomy (along with lip tie revision in 37% of those babies) for breastfeeding issues. More than 1/2 of them responded to survey follow-up, making it a large patient sample studying this topic. For moms reporting nipple pain, 64% reported improvement within 1 week. Unfortunately, long term follow-up wasn't done, so the remaining moms and babies couldn't be studied further. Importantly, no moms experienced worsening pain. About 1/2 of the moms reporting latching difficulties reported improvement at the 1 week follow-up. The likely explanation for why more babies didn't improve in both arenas is that follow-up beyond 1 week wasn't performed, and it is well-understood that a subset of babies (especially older children) need a longer period of time to relearn appropriate sucking patterns. I feel that the most important part of this paper is the fact that only 16% of babies who presented with breastfeeding problems had an anterior TT (class 1 or 2). 84% had a posterior TT (class 3 or 4), which we already know is the type of TT that is most often missed or misunderstood by doctors and lactation consultants. If only babies with an obvious anterior TT are the ones that doctors are willing to treat, **they would be missing 5 out of 6 potential babies who would benefit from treatment.**



As time goes on, more data will emerge. But in my opinion, there is already a sufficient body of evidence to demonstrate that frenotomy is a very safe and effective treatment for babies with ankyloglossia who are having difficulty with breastfeeding. If we demand large RCT's for every disease process, we would never make any progress. In this sense, we must walk before we can run, and in this instance, I feel that we're jogging in the right direction.

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