

I don't often respond to items in the media or professional journals but a recent article published in the American journal JAMA caught my attention initially due to this misleading BBC headline '[Babies don't need tongue-tie surgery to feed](#)'. I think many of the families I have supported over the last 10 years may beg to differ.

The research paper behind the headline was written by 3 doctors and 3 speech and language pathologists in the USA. Christopher Hartnick, one of the senior authors had, prior to the study performed tongue-tie and/or lip tie release on over 95% of babies referred to him for tongue-tie release.

The healthcare system in the USA is very different to the UK and tongue-tie division in the USA is largely performed by dentists or ENT surgeons. In the UK it is less common for dentists to treat babies and many divisions are performed by midwives and nurses who usually have specialist training in infant feeding and are often International Board Certified Lactation Consultants.

So how robust is the research presented in this paper and how relevant is it to the UK?

The first thing you notice about this study is that the sample size is very small at 115 babies. The second thing is the lack of long term follow up beyond two weeks. To be fair the authors acknowledge these limitations and these are the main criticisms of almost every research paper on tongue-tie which has ever been published. Long term follow up with the randomised controlled trials, which have been conducted on the efficacy of tongue-tie division, has often been lacking due to the ethical need to offer division to the control group once the intervention group reports improvements in feeding. However, it is not clear in this study why longer term data was not collected as there is no control group. The study was purely observational.

The babies were referred to an existing clinic at The Massachusetts Eye and Ear Infirmary via lactation consultants and paediatricians for division, after being evaluated by external lactation consultants. The mothers and babies then underwent an evaluation with a speech and language pathologist (SLP) prior to seeing the surgical team. The SLPs are reported to have used various tools in this evaluation including the [Kotlow Lip Tether](#) and Tongue Tether Scores. However the Kotlow classification system for lip tie has been criticised for having poor intra- and interrater reliability ([Santa Maria, et al 2017](#)). Their evaluation involved determining if the cause of the feeding difficulty was due to tongue-tie and/or lip tie or another issue. The results and scores from the various tools used in these evaluations are not shared within the paper.

The concept of lip tie is a controversial one and I have written about this [here](#). A recent systematic review concluded that the evidence for releasing lip ties for babies with breastfeeding difficulties is poor ([Nakhash R et al, 2019](#)). Yet in this study it was identified as a cause of feeding difficulty and divisions of lip tie were performed. They also talk about incomplete seal, shallow latch, decreased flange and anterior spillage as functional issues associated with lip tie and yet these symptoms could also be explained by the presence of a tongue-tie, poor positioning and attachment, tensions in the cranium, jaw and neck from the birthing process and low muscle tone.

Once evaluated by the SLPs various strategies were implemented for 3-14 days before surgical evaluation. 'Sleep state regulation' was identified by these SLPs as a cause of babies falling asleep during feeds, nipple pain and injury and prolonged feeding. As an International Board Certified

Lactation Consultant (IBCLC) of 10 years and having worked with babies having difficulties with breastfeeding since 2003 I have never heard of this. Low supply or inefficient milk transfer (possibly due to prematurity, low muscle tone, neurological issues, cardiac compromise or tongue-tie) are the usual causes cited in the literature and in lactation education. As a Holistic Sleep Coach I am also not aware that such young babies could or would present with a sleep pathology so I am wondering if the authors could back this up with some research? Suggested interventions to rectify this problem within the paper are feet tapping and applying a wet face cloth to stimulate arousal. I personally have not found these strategies to be particularly effective in increasing milk intake. [Breast compression](#) and switch nursing are likely to be more effective.

For those babies struggling to cope with the rate of the breast milk flow laid back positioning and expressing before offering the breast were implemented. These are standard strategies for managing an overactive milk ejection reflex or fast flow. However, in situations where a tongue-tie exists, even a moderate flow can overwhelm a baby and, on the other hand, a slow flow can simply lead to frustration due to the infant's inability to use their tongue to create sufficient vacuum to draw milk from the breast. Simple conservative strategies as suggested in the study may be sufficient in the early weeks when most mothers will produce a bit more milk than baby needs and in cases where tongue function isn't compromised but it has been my experience that these are often not long term solutions for those with tongue-tie, particularly when supply down regulates at around 4-6 weeks and we then see increasingly fussy and hungry babies and slow weight gain.

In babies presenting with reflux (indicated, according to this paper, by back arching and pulling off the nipple) mothers were encouraged to continue medication. Symptoms of reflux in infants include bringing up milk during or after feeds, coughing and hiccupping when feeding, being unsettled during feeds, swallowing or gulping after burping and feeding, crying and poor weight gain according to the [NHS](#). Back arching and pulling off the breast can be related to other issues. Furthermore, reflux medication may contribute to fractures later in life as [Jack Newman, Canadian Paediatrician](#) points out and many are not licensed for use in babies so we cannot be sure what other long term effects there may be.

Three -14 days after these strategies were implemented the infants were seen for surgical evaluation where the efficacy of the strategies and the 'mother's history' was 'heavily focused on'. What aspects of the mother's history were included is not defined. A head and neck examination, functional assessment and comparison with previous findings were also carried out and then a decision made on surgical intervention. 37.4 % (43 infants) had a frenotomy. Only 85% had Hazelbaker and Kotlow assessments recorded and only 76% had Bristol Breastfeeding Assessment Tool scores recorded so not all of the sample were fully assessed. The functional scores on the HATLFF ranged from 9-14 which suggests all of the babies assessed had only mild tongue restriction or no restriction at all. Scores of 8 or less are considered an indication to divide, with scores of 9-11 being indicative of the need for surgery if the appearance score is 8 or less, [Ballard 2002](#). Those babies scoring 9-11 on function often do, in my experience, respond well to conservative management and do not always need division and those scoring 12 or more should not, according to Hazelbaker, be offered division. So, in a sample of babies with these high function scores you would expect many to do well without surgery.

So, what does this study tell us? It tells us that in a small sample of babies without significant tongue function restriction, the breastfeeding difficulties they present with will often respond to conservative breastfeeding strategies and this is not surprising. It also tells us that not all babies will need surgery. This is something that has been established in a randomised control trial by [Hogan et al, 2005](#).

The strategies to manage the feeding issues in this study were questionable and that is not surprising as SLPs are not generally specialists in lactation. The simple measures they implemented in terms of positioning and waking babies up with wet face cloths and so on may have some positive impact on babies with little to no tongue restriction as seems to have been the case in this sample. But these strategies would not be effective in cases of more severe tongue function restriction and it is surprising there were not more such cases in this sample. It suggests that some of the babies referred were not assessed adequately before referral and this is a cause for concern.

The authors were successful in reducing the numbers of referred babies having surgery which was previously high at 95% and they emphasise the need to multidisciplinary assessment which is something I am in total agreement with.

Mothers and babies deserve thorough assessment and support when it comes to the of tongue-tie. As a minimum there needs to be the involvement of healthcare professionals with advanced lactation skills (preferably IBCLC level) and training and experience in tongue-tie assessment, using evidence-based tools, prior to any surgical intervention. There also needs to be easy access to speech and language therapists, bodyworkers and paediatricians for more complex cases where tongue-tie may not be the only factor affecting feeding. We are still a long way off seeing this universally available in the UK.

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