improvement in quality of life, this makes this therapeutic option an acceptable choice for both family and clinician alike.

Samir Amin, Paediatric Neurology, Frenchay Hospital, Bristol, UK; AminS@doctors.org.uk
Karen Hebert, Paediatric Neurology, Frenchay Hospital, Bristol, UK
Competing interests: None.
Provenance and peer review: Commissioned; externally peer reviewed.

doi:10.1136/adc.2009.163402

REFERENCES

QUESTION 2

SHOULD AN INFANT WHO IS BREASTFEEDING POORLY AND HAS A TONGUE TIE UNDERGO A TONGUE TIE DIVISION?

A specialist registrar in a district general hospital receives a call from a health visitor who has seen a 2-week-old baby who is struggling to breastfeed adequately and who has a marked tongue tie. The parents are extremely anxious and after searching the internet are now requesting a tongue division as they are certain that this is the cause of the problem. The health visitor can also recall many success stories after this procedure and is concerned that without it the mother will abandon breastfeeding altogether. She asks you to refer the baby to the ENT specialists with a view to division.

STRUCTURED CLINICAL QUESTION

In babies with poor breastfeeding and a tongue tie [patient], does division of the tongue tie [intervention] compared to breastfeeding advice alone [comparison] improve feeding [outcome]?

SEARCH STRATEGY AND OUTCOME

Secondary sources

Cochrane and BestBETS: no relevant results.

NICE guidelines: one interventional procedure guideline.

Primary sources


Number of hits: twenty one, of which six were relevant. See table 2.

Results were limited to humans, English language and all infants (birth to 23 months).

COMMENTARY

The effect of tongue tie on breastfeeding has been the subject of much controversy for many years and doctors have traditionally been the most sceptical about its effect.1

In one study 90% of paediatricians and 70% of the ENT specialists surveyed felt that tongue tie rarely caused feeding difficulties compared to only 1% of lactation consultants. Geddes et al used ultrasound to study the efficacy of milk removal and suck before and after tongue tie division in 24 babies. They found that milk intake, milk transfer rate and the degree of latch improved in all babies after the procedure, apparently secondary to a lessening in compression of the nipple by the tongue after the division.2 Despite this, there has been only one randomised control trial (RCT) comparing the effect of division with breastfeeding support alone. In this UK trial, each arm contained less than 30 babies and both groups were managed by lactation consultants, with the non-division patients being informed at the onset that they could have the procedure if they did not have a favourable outcome. There were therefore problems with bias, and subsequently impressive results were published: there was a 96% improvement in feeding in the division group compared to a 3% improvement in those only having feeding support.3 In addition to the RCT, Griffiths’ prospective cohort study supported the use of division as a treatment for poor breastfeeding for those with a tongue tie.4 This and other case series and case reports which all suggest that division does have a role in resolving feeding difficulties,5–9 are in the most part gleaned from non-structured interviews with mothers, in many cases by lactation consultants who are often very much in favour of the procedure.

The effect division has on weight gain is a more objective marker of feeding success and is something that has been studied very little. One must remember that breastfeeding is multifactorial and a psychological effect cannot be ignored. Furthermore, little has been done to unpick exactly what the cause of breastfeeding problems is when the diagnosis of tongue tie has been made. The whole issue is complicated when considering that many studies have attempted to measure the degree of tongue tie, a notoriously difficult endeavour, and that once graded, the degree of impairment appears not to correlate with breastfeeding problems.10 With all this considered, one cannot ignore the plethora of documented experience that supports this procedure, so much so that NICE have produced an interventional procedure guideline that acknowledges that the little evidence there is does seem to suggest that this procedure can improve breastfeeding while having no major safety concerns. As a result it suggests that the evidence is enough to support the use of the procedure provided that normal arrangements are in place for consent, audit and clinical governance.11 If mothers overwhelmingly tell us that it works, then why should we argue?

Vanessa Algar, Pontefract General Infirmary, Pontefract, Yorkshire, UK; valgar@doctors.net.uk
Competing interests: None.
Provenance and peer review: Not commissioned; externally peer reviewed

doi:10.1136/adc.2009.163428

REFERENCES
Table 2  Should an infant who is breastfeeding poorly and has a tongue tie undergo a tongue tie division?

<table>
<thead>
<tr>
<th>Citation</th>
<th>Study group</th>
<th>Study type (level of evidence)</th>
<th>Outcome</th>
<th>Key results</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hogan et al, 2005</td>
<td>1866; 88 with tongue tie and breastfeeding problems. 57 randomised: 28 had a division, 28 received intensive feeding support.</td>
<td>Randomised control trial (level 1b)</td>
<td>Subjective feeding improvement gleaned from a non-structured interview</td>
<td>27/28 (96%) of the division group improved, all within 48 h; 1/29 (3%) of the feeding support group improved. Those who did not improve had a division and 27/28 (77%) improved, all immediately.</td>
<td>Bias introduced as all non-division group were told that they could have a division if they did not improve. Follow-up was not independent.</td>
</tr>
<tr>
<td>Griffiths, 2004</td>
<td>519 were followed after a division. 215 were followed up for &lt;3 months.</td>
<td>Prospective uncontrolled cohort study (level 2b)</td>
<td>Structured interview of feeding and length of breastfeeding at 1 day and 3 months after division</td>
<td>174/215 (80%) had improved feeding. 124/215 (57%) had improved feeding immediately.</td>
<td>All had intensive breastfeeding support prior to division. No growth data included. Diagnosis, division and follow-up all carried out by lactation consultants.</td>
</tr>
<tr>
<td>Amir et al, 2005</td>
<td>46 babies had tongue tie and breastfeeding problems. 35 had tongue tie severity scores that were high enough to recommend a division.</td>
<td>Uncontrolled case series (level 4)</td>
<td>Structured telephone interview at least 3 months after the division</td>
<td>Breastfeeding improved in 29/35 (83%) after the division.</td>
<td>Only those with the most severe degree of tongue tie were offered a division and followed up. 18 (51%) reported better attachment to the breast, 20 (57%) had improved sucking and 9 (28%) reported less pain.</td>
</tr>
<tr>
<td>Ballard et al, 2002</td>
<td>3036; 123 with tongue tie. 35 had poor feeding and impaired lingual function and underwent division.</td>
<td>Uncontrolled case series (level 4)</td>
<td>Unstructured interview 3 days after the procedure and at routine outpatient appointment</td>
<td>35/35 (100%) reported improved latch at 3 days. At routine outpatient follow-up (unspecified timing), 31/35 (89%) mothers said they were breastfeeding more comfortably and were “delighted” with the outcome. 3/35 (8.5%) stopped breastfeeding.</td>
<td>Growth data alluded to as 5/6 (83%) of those with preceding failure to thrive breastfed and achieved a normal rate of growth within 3–5 days after the procedure. Little information about growth data. There was no consistency throughout case series.</td>
</tr>
<tr>
<td>Masaitis and Kaempf, 1996</td>
<td>1250 babies studied. 36 of these had breastfeeding problems and a tongue tie and their parents agreed to a division.</td>
<td>Case report (level 4)</td>
<td>Continuation of breastfeeding, growth</td>
<td>36/36 (100%) had normal feeding after division. 34/36 (96%) had appropriate growth at 3 months, inappropriate growth at 5 months.</td>
<td>No data provided about growth preceding the procedure.</td>
</tr>
<tr>
<td>Fleiss et al, 1990</td>
<td>3 babies with tongue tie and breastfeeding problems. 2 had a division.</td>
<td>Case report (level 4)</td>
<td>Interview, non-structured</td>
<td>1/2 (50%) had improved sucking. 1 (50%) developed a lisp as a child.</td>
<td>Small numbers and informal follow-up</td>
</tr>
<tr>
<td>Marmet et al, 1990</td>
<td>13 with tongue tie and breastfeeding problems; 7 had a division.</td>
<td>Case report (level 4)</td>
<td>Interview, non-structured</td>
<td>5/7 (71%) had improved latch. 1/7 (14%) showed no improvement.</td>
<td>Subjective measurement of success but it did correlate with those who had catch-up weight gain after the procedure.</td>
</tr>
</tbody>
</table>


2. Ovid - MEDLINE/EMBASE – advanced search criteria: otitis media, children, ear wax and/or cerumen. Seventeen results were found. The titles and abstracts were reviewed and one relevant study was found (this was the same as the study found in the PubMed search). A further search for case reports was unsuccessful. Ovid: MEDLINE/EMBASE database – search terms: otitis media, ear wax and/or cerumen, children and case report.

2. Searches were carried out in November 2008. See table 3.

COMMENTARY

Conventional wisdom has taught, in paediatrics, that the presence of wax excludes the finding of otitis media. Examination of the literature suggests that this is, in fact, a myth.

Otitis media is a common paediatric condition which is often difficult to diagnose. Diagnostic features of otitis media include symptoms and findings on