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Correct treatment for tongue-tie in infants

OPINIONS

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Tongue-tie in infants can cause difficulties with breastfeeding. New evidence-based guidelines for healthcare professionals will make it easier to obtain help.

Healthcare professionals in Norway have long called for guidelines on the management of tongue-tie (ankyloglossia) in infants. If tongue-tie gives rise to difficulties with breastfeeding, breastfeeding counselling is to be offered first. If this does not lead to improvement a frenotomy may be considered. There is a sufficient evidence base to support this primary recommendation, which is also consistent with the recommendations of UpToDate and other international guidelines.

Tongue-tie in infants may cause difficulties with breastfeeding, and in some cases lead to failure to thrive in the infant and painful breastfeeding for the mother (1). The guidelines of the Norwegian Society of Pediatricians include a concise description of how to diagnose and treat tongue-tie in neonates (2). A national interdisciplinary working group has now prepared a more detailed guide for healthcare professionals (3).

Evidence-based breastfeeding support

Almost all mothers in Norway begin to breastfeed, but only 39 % of infants are exclusively breast fed by the age of four months (4). Mothers report difficulty with breastfeeding as being the reason why they no longer exclusively breastfeed or why they stop breastfeeding earlier than they would like (4). Tongue-tie is one of many possible causes of difficulties with breastfeeding.

Breastfeeding problems can affect the growth and well-being of the child and the physical and mental health of the mother. Enabling mothers to breastfeed in line with health authority recommendations contributes to better health for both mother and child (5). It is therefore of great importance that healthcare professionals are able to provide good breastfeeding counselling and to investigate the causes of difficulties with breastfeeding, including diagnosing and treating tongue-tie. The aim of these new guidelines is to contribute to the evidence-based diagnosis and treatment of symptomatic tongue-tie.

Prevalence and treatment

The lingual frenulum is a midline structure that connects the underside of the tongue to the floor of the mouth and consists of connective tissue fascia and mucosa (6). Tongue-tie is a congenital malformation that, according to a Cochrane review, occurs in around 4–11 % of neonates (7). The literature suggests that approximately 25–60 % of infants with tongue-tie experience breastfeeding difficulties (1). In 2019, 2.8 % of infants born in Norway were diagnosed with tongue-tie, and 2.2 % were treated by frenotomy of the lingual frenulum (8). Increasing knowledge and awareness of the condition may be one reason why the reported prevalence has increased in Norway in recent years.

Treatment may be indicated in 2.2 % of neonates based on the overall prevalence of tongue-tie and the number of infants in whom the tongue-tie is symptomatic.

Breastfeeding difficulties

Ultrasound studies show that the tongue ordinarily has a very active role in the transfer of milk from breast to infant, with peristaltic movements of the tongue pressing breast tissue up against the hard palate and contributing to the formation of a vacuum (9). Movements of the tongue and the formation of the vacuum are the main mechanism for the transfer of milk.

> ***«If tongue-tie gives rise to difficulties with breastfeeding, breastfeeding counselling is to be offered first»***

If tongue-tie restricts the mobility and functioning of the tongue, the result can be problems with sucking and swallowing. The infant achieves a poor latch with less breast tissue in the mouth, which can lead to sore nipples and reduced emptying of the breast. These are known risk factors for the development of mastitis. The need for frequent breastfeeding, with each feed taking a long time, is common in cases of symptomatic tongue-tie in infants. The severity of the symptoms varies because each mother-child pair is unique, with different anatomy and physiology. For some mothers, the problems become so severe that they are forced to give up breastfeeding earlier than they would like (10, 11).

First intervention: breastfeeding guidance

Several of the symptoms of tongue-tie are non-specific, and the diagnosis and treatment of tongue-tie are controversial (8, 12). Good breastfeeding counselling is important to ensure that more common causes of difficulty with breastfeeding are addressed first. However, if counselling does not improve the situation, infants with tongue-tie and impaired tongue function must be examined and treated by healthcare professionals with specialist knowledge of the issue (13).

Symptomatic tongue-tie can be treated with a simple procedure in which the lingual frenulum is cut, a frenotomy. There is little risk of complications when the procedure is performed by qualified healthcare professionals (13). The procedure is considered to cause little pain (14, 15). The new Norwegian guidelines include recommendations for the provision of pain prophylaxis and relief (3).

Sufficient evidence

Infants should only receive treatment for tongue-tie when an indication for treatment is present (13). There is currently a lack of high-quality studies of treatment efficacy (7). However, clinical reference works such as UpToDate (13), and the overall body of research comprising small randomised studies, follow-up studies and case reports, shows that the frenetomy of a tongue-tie on the basis of an appropriate indication is associated with improved breastfeeding (7, 13, 16). This is also the experience of practitioners and patients (mothers), and this must be taken into account when preparing guidelines for evidence-based practice.

> ***«The frenotomy of a tongue-tie on the basis of an appropriate indication is associated with improved breastfeeding»***

In common with all other medical treatments for infants, it is the parents' consent that applies. In our experience mothers have often struggled for some time with breastfeeding prior to being referred, and are at risk of giving up on breastfeeding prematurely. They may have been treated for wound infections, had recurrent mastitis, or the child may have suffered from failure to thrive. These are complicated issues that do not resolve spontaneously. Follow-up with breastfeeding counselling and support should be offered irrespective of whether a frenotomy is performed or the tongue tie is treated conservatively, with the aim of enabling all mothers who wish to breastfeed to do so successfully.

The new Norwegian guidelines for the diagnosis and treatment of tongue-tie in infants have been prepared by a nationwide working group, consisting of neonatologists, paediatricians, otorhinolaryngologists, a dentist, a speech therapist, midwives, school nurse practitioners, general practitioners and doctors specialising in community medicine, as part of an initiative from the Norwegian National Advisory Unit on Breastfeeding. The guidelines can be read and downloaded from the Advisory Unit website (3).

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