Cochrane Corner

Frenotomy in newborns with tongue-tie may improve maternal nipple pain, but its effect on breastfeeding is unclear.

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Clinical question

Is frenotomy safe and effective to improve breastfeeding in newborns < 3 months of age with tongue-tie (and feeding problems)?

Context

Tongue-tie, the attachment of the lingual frenulum to the tongue-tip, is present in about 4 to 11% of newborn infants. It restricts the movement of the tongue and can lead to poor breastfeeding. Frenotomy, surgical release of the tongue-tie, may decrease this restriction and therefore improve breastfeeding and reduce maternal nipple pain.

This review searched for trials that compared frenotomy to no frenotomy or a sham procedure.

Outcomes of interest included breastfeeding, maternal nipple pain, duration and cessation of breastfeeding, infant pain, excessive bleeding and infection or ulceration at the site of the frenotomy, damage to the tongue or submandibular ducts and recurrence of tongue-tie.

Summary of the results

This Cochrane review identified 5 randomized trials (n = 302 subjects). Results for the outcome breastfeeding were inconclusive. Two studies (n=155) assessed infant breastfeeding using a validated 10-point scale, and found no difference comparing frenotomy to no frenotomy (MD* 0.1, 95%Cl† -0.6 to 0.5). In contrast, a third study (n=58) that used a validated 12-point scale noted an improvement in breastfeeding after frenotomy (MD 3.5, 95%Cl 3.1 to 4). Four studies assessed maternal nipple pain. Three of these (n=212) used a validated 10-point scale and found a reduction of maternal nipple pain after frenotomy (MD: -0.7, 95%Cl -1.4 to -0.1), while the fourth study (n=58), using a validated 50-point scale, also noted an improvement in maternal nipple pain (MD: 8.6, 95%Cl -9.4 to -7.8). No adverse events, such as excessive bleeding, infection or damage to tongue or submandibular ducts were reported.

Remarks

Our confidence in the presented results is low. The reasons for this are a limited number of studies, with low numbers of participants, and incomplete blinding of both mothers and outcome assessors. Another potential risk of bias in these studies is that the control groups were also offered frenotomy, suggesting a lack of equipoise. In addition, none of the studies looked at longer-term outcomes.

Conclusion

Frenotomy does not consistently improve breastfeeding but it may reduce maternal pain during breastfeeding of newborns with tongue-tie. No adverse events were reported. Further research with larger test groups is necessary to clarify the effects of frenotomy.

Implications for practice

In newborns with tongue-tie, frenotomy may be considered to reduce maternal nipple pain. If it also improves breastfeeding is not clear.

REFERENCES:

O'Shea JE, Foster JP, O'Donnell CP, Breathnach D, Jacobs SE, Todd DA, Davis PG. Frenotomy for tongue-tie in newborn infants. Cochrane Database Syst Rev. 2017 Mar 11;3:CD011065.

Access the full text of this review via the Cebam Digital Library for Health (www.cebam.be/nl/cdlh) cdlh or www.cebam.be/fr/cdlh)