

All Tied Up – the effects of ankyloglossia on breastfeeding

Donna Geddes DMU, PGrad Dip (Sci), PhD
Chemistry and Biochemistry, The University of Western Australia

Ankyloglossia (tongue-tie) is typically characterised by the presence of a sublingual frenulum that changes the appearance and/or function of the infant's tongue. The frenulum is usually short, inelastic or the attachment to the under surface of the tongue is too distal. The incidence of tongue-tie is relatively common with a range of 0.02 to 10.7% reported in the literature. Reports of feeding difficulties in these infants are increasing with published figures estimating that between 25 and 44% of infants are affected. Breastfed infants may experience difficulties such as maintaining attachment to the breast, inefficient milk transfer and poor growth. Maternal difficulties can also include nipple pain, decreased milk supply and frequent feeding. The treatment of tongue-tie still remains controversial despite mounting evidence of the benefits of frenotomy for infants experiencing breastfeeding difficulties. The lack of a universal definition, difficulties with diagnosis coupled with the fact that more than half of infants with tongue-tie do not experience feeding problems impedes confident diagnosis and treatment. Ultrasound studies suggest that the mechanism of poor feeding in tongue-tied infants is due to restriction of tongue movement such that it may cause pain and/or trauma of the nipple, poor milk removal and unsustainable attachment to the breast. Frenotomy appears to restore sucking movements more analogous to breastfeeding infants without tongue-tie¹.

Frenotomy is a relatively simple, low risk procedure and a recent double-blind randomised controlled study of the immediate effect of tongue-tie division confirmed that frenotomy improved feeding in infants experiencing difficulty and that this was sustained². The optimal age for division is still not clear however it would be expected that successful breastfeeding should be established by approximately 3 weeks post-partum. Delaying division may increase the risk of low milk supply, decreased maternal breastfeeding confidence, and strengthen entrainment of atypical tongue movements possibly decreasing the potential benefits of frenotomy. Further research in this area is certainly warranted.

1. Geddes DT, Langton DB, Gollow I, Jacobs LA, Hartmann PE, Simmer K. Frenulotomy for breastfeeding infants with ankyloglossia: effect on milk removal and sucking mechanism as imaged by ultrasound. *Pediatrics* 2008; 122:e188-94.
2. Berry J, Griffiths M, Westcott C. A double-blind, randomized, controlled trial of tongue-tie division and its immediate effect on breastfeeding. *Breastfeeding medicine* 2012; 7:189-93.