

Ankyloglossia "Tongue tie"

The Department of Speech Pathology



What is ankyloglossia (tongue tie)?



Tongue tie is a congenital oral anomaly

Brinkman et al, 2004

"A condition in which the tip of the tongue cannot be protruded beyond the lower incisor teeth because of a short frenulum"

Wallace, 1963

Overview

- Normal speech and feeding is able to be established despite the presence of a tongue tie
- There is insufficient evidence to support a link between tongue tie and speech impairment or feeding difficulty
- Children are able to develop normal feeding, speech and language despite the presence of a tongue tie



Controversies around tongue tie

- Attempts to define and classify tongue tie.
- No universal diagnostic classification has been adopted or validated
- Prevalence is difficult to report due to no agreed method of diagnosis or classification
 - Reported to range from 1.72% 4.8% in neonates
- No systematic reviews of literature reporting the findings to date

"No research study has conclusively established a link between presence of tongue tie and poor outcome" Brinkmann et al, 2004



Breastfeeding & tongue tie

- NHS National Institute for Clinical Evidence (NICE) in UK reviewed literature and based overview on 5 studies
 - 1 randomised control trial (RCT)
 - 3 case series
 - 1 cross over study

Refer to table 1 in NICE overview for details

There is limited evidence to support tongue tie division and no specific evidence to indicate adverse effects against the procedure

NHS, Swindon, Division of tongue-tie policy



Speech & tongue tie

- Small, uncontrolled studies have reported tongue tie may impact alveolar and tongue tip sounds
- Summary of literature, 33 research papers
 - Results ranges from TT rarely interfering with feeding, speech and generally requires no treatment to - enthusiastic support for frenotomy (often in lactation literature)

Lalakea et al, 2003

- Remains controversial which tongue ties need surgical intervention and which are best left to observation
- Lack of accepted definition and classification makes comparison
 of studies completed almost impossible
- Any reports of speech problems are subjective and difficult to categorize

Suter et al, 2009

Social / functional range of movement² & tongue tie

- Some articles discuss anecdotal reports from individuals that raise issues relating to difficulty:
 - Licking ice cream
 - Tongue kissing

Horton CE et al 1971

- This area of impact has only been reported sporadically in the literature
- If an individual experiences social impact of tongue tie and would like to consider surgical release, they may seek a surgical opinion from a Plastic Surgeon

SUMMARY

- There is a lack of evidence to link tongue tie to impact on speech and feeding
- A review of the clinical speech pathology services at RCH showed that almost all referrals for tongue tie assessment were appropriate for assessment by speech pathology community services
- If parents or children are seeking surgical opinion for tongue tie release, refer to Department of Plastic Surgery

References



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Segal LM, Stephenson R, Dawes M, Feldman P. Prevalence, diagnosis and treatment of ankyloglossia, methodological review. *Canadian Family Physician* 2007; **53**: 1027-1023

Sutter VG, Bornstein MM. Ankyloglossia: facts and myths in diagnosis and treatment. Journal of Periodontology 2009; 80(8): 1204-19 (abstract only)

Images on title page taken from:

- http://www.cssd.us/body.cfm?id=1186
- tonguetie.com.au
- entusa.com

Links



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Find a local speech pathologist Speech Pathology Australia website

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