

# Tongue Tie: Is it Related to Gastrointestinal Problems?

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## Introduction:

Ankyloglossia (Tongue tie) is a congenital abnormality in which the lingual frenulum is short; this inhibits extension of the tongue (Klockars 2007). Restriction in tongue movement can make breast feeding difficult for the mother and the infant, resulting in; slow weight gain for the infant and painful feeding for the mother (Messner et al 2000)

Active sucking of milk from the breast is determined by the formation of an effective vacuum and latch which is achieved through movement of the tongue (Geddes et al 2008). The peristaltic movement of the tongue enables efficient suction and an adequate seal. (Smith et al 1985) The unsatisfactory latch and seal can cause ingestion of excessive amounts of air (Kotlow et al 2011). This results in prolonged and frequent breastfeeding with poor milk transfer, inability to maintain an effective latch, colic, and Gastroesophageal Reflux Disease; the infants will have episodes of reflux which can be accompanied by pain and discomfort.

They often will also have poor growth and failure to thrive (Kotlow et al 2011). Unfortunately instead of treating the cause; which may be to release the tongue tie, the infants live with this issue or are prescribed with medications to alleviate the symptoms, such as ranitidine, gaviscon and domperidone, which are not licenced for neonates.

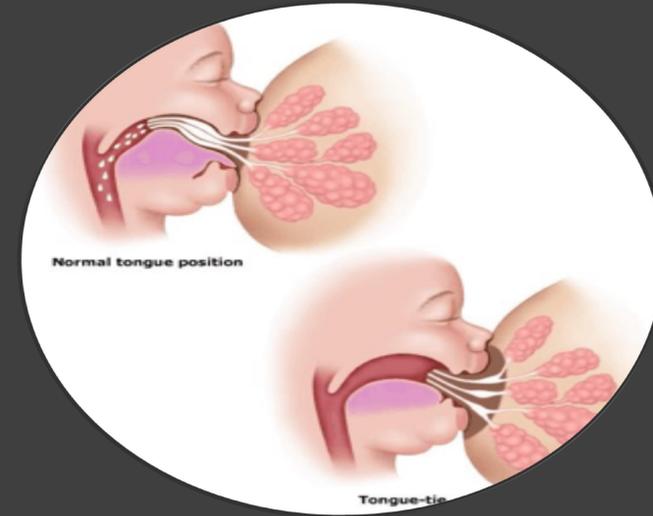
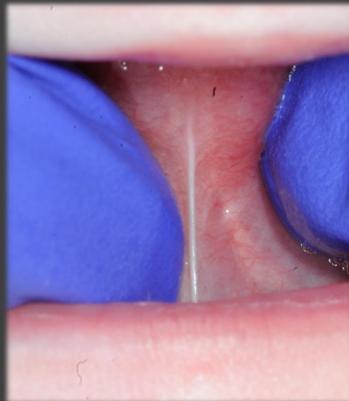


Image :

The normal tongue anatomy allows the tongue to protrude past the gums and form an appropriate seal, compared to breast feeding during tongue tie in which the tongue is inhibited from forming a seal allowing the ingestion of excessive air

<http://drsiunmurphy.com/services/tongue-tie/>

Images illustrate a frenulectomy carried out on an anterior tongue tie



Applying pressure on both sides of the frenulum allows the tie to become apparent in the distinct cling foil appearance

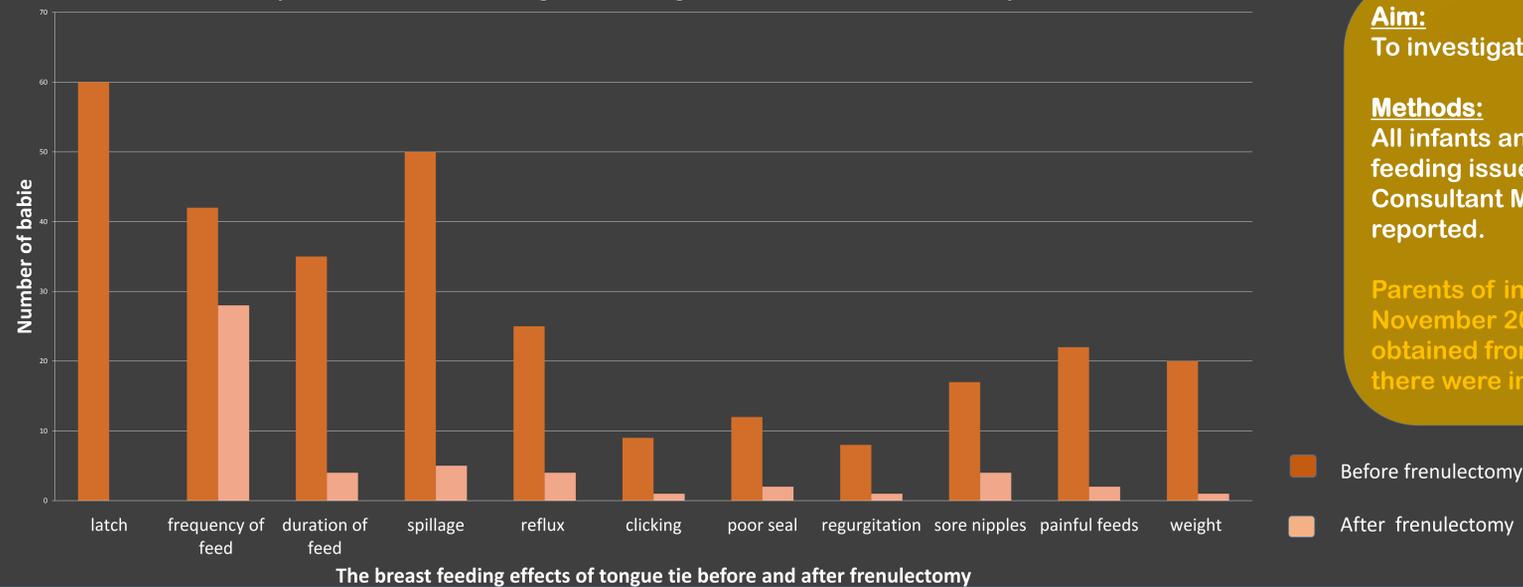


The tie is released with a single incision to its full depth



The released tongue gains full range of movement immediately

Graph to show the breast feeding effects of tongue tie before and after frenulectomy



## Results and Discussion :

- 32 out of 67 (47%) babies with tongue tie had gastrointestinal symptoms including regurgitation and reflux
- 7 patients with gastrointestinal symptoms were receiving medication for this (ranitidine or gaviscon)

Following the release of the tongue tie, gastrointestinal symptoms improved . 25 infants presented with symptoms of reflux, which reduced to 4 infants after the frenulectomy was carried out and out of the 8 babies that experienced regurgitation, 7 were relieved of this.

These results suggest that tongue tie is related to gastrointestinal problems, and that these symptoms can subside following release constituting the use of medication unnecessary.

**Conclusion:** The release of tongue tie causes significant improvements in feeding and an immediate improvement in gastrointestinal symptoms such as reflux and regurgitation. Mothers explained that immediately after the tongue tie was released the infant was able to form an efficient latch and seal.

It is important that health visitors and midwives make the appropriate referral when infants are exhibiting problems with feeding, especially within the first few weeks of the infant being born, the success of the frenulectomy is dependant on the age of the infant, being more successful the younger the infant is.

Overall effective diagnosis and treatment will lead to a positive impact on the interaction between mother and baby, and the quality of life for both in the baby's first months.

## Aim:

To investigate the relationship between tongue tie and gastrointestinal problems

## Methods:

All infants and neonates referred to Southend Hospital Oral & Maxillofacial Unit for feeding issues were assessed for posterior and anterior tongue tie by oral Surgery Consultant Mr Ganesan. The tongue tie was released if there were functional issues reported.

Parents of infants who had their tongue tie released between the April 2016 and November 2016 were contacted two weeks after the release date. A response was obtained from the parents of 67 babies. The telephone questionnaire assessed if there were improvements in; feeding, reflux and regurgitation

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