

What is Posterior tongue tie?

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Aims:

To compare posterior tongue tie with anterior tongue tie illustrating that the effects of posterior tongue tie are comparable in severity to anterior tongue tie.

Methods:

All infants and neonates referred to Southend Hospital Oral & Maxillofacial Unit for feeding issues between the months of January and October 2016 were assessed for tongue tie. These babies were assessed for posterior and anterior tongue tie by Oral Surgery Consultant Mr Ganesan .

The breast feeding/bottle feeding issues, if any were recorded. This included; prolonged feeding, excessive leakage, clicking, wind, gastrointestinal symptoms, trouble latching on and pain on feeding.

Results:

- A total of 218 babies presented with tongue tie
- 87% had anterior tongue tie and 13% had posterior tongue tie
- 93% of the babies presenting with anterior tongue tie had issues with feeding
- 100% of the babies with posterior tongue tie had issues with feeding
- 32 of the babies with tongue tie had gastrointestinal symptoms 26 with Anterior and 6 with posterior tongue tie

Discussion:

All 30 patients who with posterior tongue tie had issues with feeding, suggesting posterior tongue tie effects feeding in a similar way to anterior tongue tie::This is due to the restriction of tongue movement, inhibiting the formation of an appropriate latch or seal.

There is currently is strong evidence to suggest that anterior tongue tie can affect an individual on a long term basis , such as negatively affecting the infants periodontal disease, speech problems and social activities in later years (*Kotlow 1999*). For this reason posterior tongue tie may be disregarded by some because these issues are not documented, however the breast feeding issues such as prolonged feeding, excessive leakage and painful feeding should be **taken seriously**.



Anterior

Image illustrates an anterior tongue tie. The excessive lingual frenulum pulls against the tongue causing the classic 'heart shape' shape. <http://drsiunmurphy.com/services/tongue-tie/>



Posterior

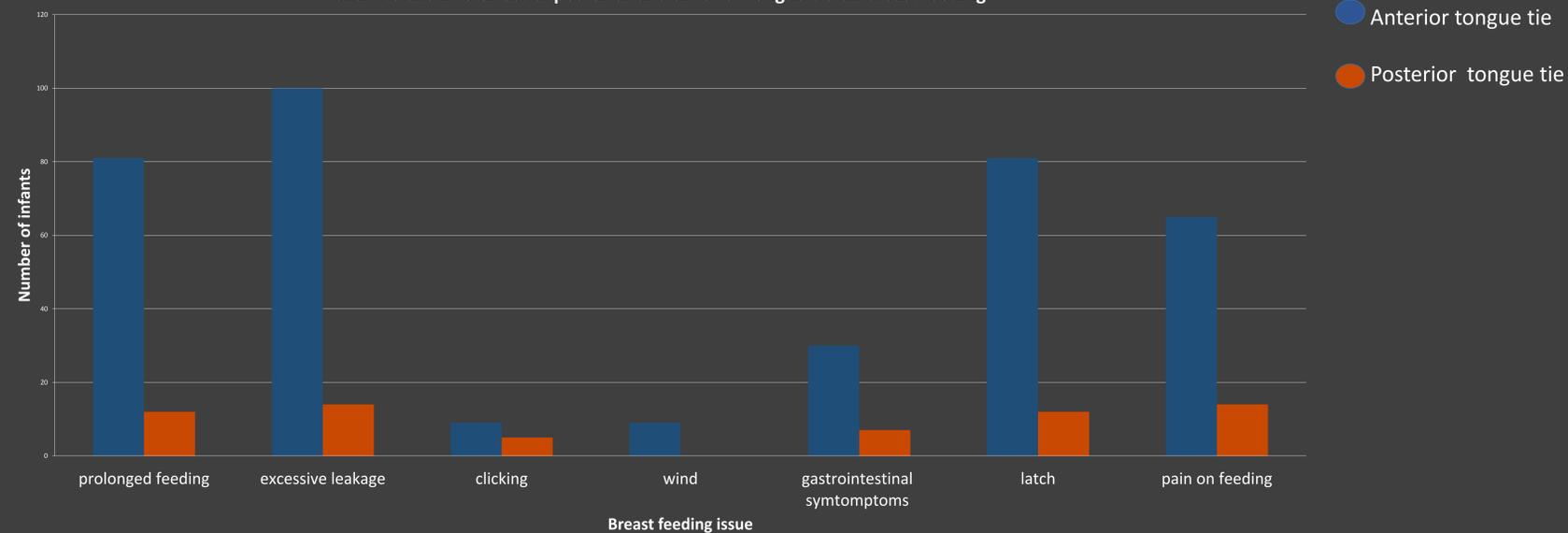
Image illustrates posterior tongue tie; here you can see the "mucosa curtain" and 'mild' attachment that may be mistaken for normal tongue anatomy.

Introduction: Tongue-tie can be divided into 'anterior' and 'posterior'. In both cases the lingual frenulum causes incomplete separation of the tongue from the floor of the mouth. In anterior tongue tie the lengthy lingual frenulum which is moderate-severe, causes the tip of the tongue to resemble a 'heart shape' (*Genna 2008*) thus enabling the clinician to diagnose. In contrast to this, in 'posterior' tongue tie the frenulum attachment is mild and can be masked by a "mucosal curtain" (*Chu and Bloom 2009*), this not so classic presentation can sometimes be mistaken for 'normal' tongue anatomy.

Although the frenulum in posterior tongue tie can be described as 'mild', it will cause restricted tongue movement; this tongue movement is imperative in forming a latch on the breast and a vacuum for milk to flow, in an effort to retrieve milk the infant will use their jaw to hold the breast in the mouth (*Segal et al 2007*). This often results in a tired frustrated infant, prolonged, painful feeding and an overall negative experience for both mother and infant

There is now an appreciation of anterior tongue tie, mainly due to causing ineffective breast feeding; however posterior tongue tie is misunderstood, misdiagnosed and mismanaged (*Ghaehri 2015*). Instead of receiving the tongue tie diagnosis; the infant may be diagnosed with gastrointestinal problems, feeding or swallowing disorders.

Chart to show to effect of posterior and anterior tongue tie on breast feeding



Conclusion:

Tongue tie can reduce the effectiveness of feeding in babies, this is due to a limitation in tongue movements; although posterior tongue tie is rare in comparison to anterior tongue tie, the symptoms are just as severe. The clinical presentation of the posterior tongue tie does not resemble the typical presentation of the anterior tongue tie, this causes it to be missed.

A thorough intra-oral examination should be carried out on all children with breast feeding issues assessing tongue tie. If a baby has feeding issues that cannot be attributed to any other reason, A referral should be made to the Oral & Maxillofacial Unit to allow specialist assessment. This will allow for the appropriate treatment to be carried out; thus improving feeding and consequently the quality of life of both mother and baby

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