

Information for Parents

A Guide About Tongue-Tie

What is the function of the tongue?

The tongue has important roles during speaking and eating. The tongue changes shape, and moves into different positions and parts of the mouth to help us to speak. The tongue is vital in making sure babies can hold the breast or teat in position when feeding. In children and adults, the tongue helps with moving food around the mouth when eating, as well as cleaning food from cheeks, gums, teeth etc.

What is the frenum?

The frenum or frenulum (both words have the same meaning) is present in all people from birth. It is a membrane that attaches the underside of the tongue to the floor of the mouth, and anchors part of the tongue.

What is a tongue-tie?

A tongue-tie (also known as ankyloglossia), is a condition where a person has a short frenulum. As a result, their tongue is held tightly to the floor of the mouth and this means that person might not be able to poke out their tongue past their lips (see image 1). A tongue-tie might also mean the tip of the tongue forms a heart like shape (see image 2).



Image 1



Image 2

What impact does tongue-tie have on speech?

Tongue-ties rarely affect speech development, and children and adults with tongue-ties can often make all speech sounds and have normally developing speech. Research evidence indicates tongue-tie surgery is rarely needed to help improve a child or adult's speech, and it does not support surgery as a way of preventing a child from having future speech problems.

What are the other effects of tongue-tie?

Babies with a tongue-tie might have difficulty breast or bottle feeding. Children or adults might have difficulty eating, swallowing, clearing food residue from the lips or around their mouth as well as orthodontic problems. In severe cases, individuals may have pain under their tongue, have difficulty touching their lips with the tongue or licking their lips.

Who does a tongue-tie affect?

A tongue-tie can be seen in babies, children or adults. However, it is generally more common in babies. In general, males are more likely to present with tongue-tie compared with females (2.6:1). The cause of tongue-tie is unknown, but sometimes there might be a genetic link.

Tongue-tie is only considered a problem when it restricts normal movement and function needed for feeding, chewing, and removing food from around the teeth, or reduces the clarity of a person's speech.

What impact does tongue-tie have on infant feeding?

Many studies have investigated the effect of tongue-tie on feeding in babies. Many babies with tongue-tie do manage to feed without difficulty.

However, some babies who have a tongue-tie do experience difficulties feeding. In these cases, if a baby has feeding issues that might be the result of their tongue-tie they might have difficulty latching to the breast or teat, may not feed efficiently, may fall asleep at the breast or bottle, or the mother may experience nipple pain if breastfeeding.

The links between some of these symptoms and tongue-tie are not well understood.

Are there different types of tongue-tie?

A speech pathologist may use the terms:

Anterior: the frenulum extends from the tip of the tongue or 2-4mm behind the tip of the tongue, to the bottom of the gum line or just behind.

Posterior: the frenulum comes from the middle of the tongue to the floor of the mouth and is often quite thick and rigid.

How do you diagnose tongue-tie?

A speech pathologist is one professional who can identify tongue-tie along with doctors, lactation consultants, dentists, paediatricians, ear nose and throat specialists, and maxillo-facial surgeons.

In babies, they will look at the impact of the tongue-tie on:

- feeding, and latching onto the bottle or breast;
- the strength of their tongue when feeding;
- the baby's position when feeding; and
- how the baby uses their tongue to cup and hold the breast, bottle or a finger.

If a speech pathologist thinks a baby has breathing problems they will refer them to a paediatrician or respiratory physician for further evaluation.

In children and adults, a speech pathologist will look at the impact of the tongue-tie on

- speech development; and
- tongue movement when eating and swallowing.

What treatments are available?

Frenotomy (also known as tongue-tie release) refers to cutting of the frenulum, and is most often used for treatment of tongue tie in babies. The procedure is rapid, and can be done at bedside with or without topical anesthetic gel, resulting in brief discomfort and minimal bleeding.

No stitches are required, and babies can feed immediately afterward. A white clot may form at the site but this is part of the normal healing process and not an infection. Best results are noted for babies less than three months of age. Surgery should be conducted by a paediatrician, ear nose and throat surgeon, oral surgeon, maxillo-facial surgeon, or dental surgeon.

Frenectomy refers to complete removal of the frenulum. This procedure is usually used for children who are older than 1-2 years and adults. In young children a general anaesthetic is used. In older children and adults, a local anaesthetic may be used according to the surgeon's advice. Surgery should be conducted by an ear nose and throat surgeon, oral surgeon, maxillo-facial surgeon or dental surgeon.

Some people report that frenotomy also has other benefits such as the baby finding feeding easier and more efficient, and the mother having reduced nipple pain when feeding, but, the research does not support that strongly.

Frenuloplasty involves removal of the frenulum and surgical correction of the floor of mouth under general anaesthetic. As with frenectomy, it is used in children older than 1-2 years and adults. Stitches are required, and pain relief is needed after the operation.

The floor of mouth houses many fine nerves, arteries and veins; so surgery should be conducted by an ear nose and throat surgeon, oral surgeon, or maxillo-facial surgeon due to the complexity and reconstructive nature of this procedure.

Frenectomy and Frenuloplasty may be considered for older children and adults only if they:

- have speech or eating problems that have not benefitted from traditional therapy; and/or
- are messy eaters because they cannot use their tongues to clean inside their mouths, teeth or around their lips and have not benefitted from traditional therapy.

For babies, children and adults with breathing issues caution should be exercised. Babies with very small jaws, or certain medical conditions may have more difficulties coordinating feeding and breathing. Breathing or airway issues should be thoroughly investigated with referral to a paediatrician or respiratory specialist before tongue tie surgery is considered.

When should surgery to release a tongue-tie be performed?

Babies should initially be thoroughly assessed for feeding, latching, posture and technique by a speech pathologist and/or lactation consultant prior to considering any type of surgery.

A tongue-tie release is recommended for babies with significant tongue restriction that is associated with breastfeeding or bottle-feeding problems that have not been improved by other methods such as: changing positioning of mother/carer and baby when feeding, or helping the baby to better attach to the bottle or nipple.

Children and adults should also be assessed by a speech pathologist to see if they have difficulties with their speech, chewing, or clearing their mouth. Traditional speech pathology interventions are recommended in the first instance before considering surgery. If a child or adult has speech issues, a speech pathologist may recommend a period of therapy before tongue-tie surgery is even considered.

There is no guarantee that tongue-tie release will immediately make speech clearer or feeding/eating issues disappear.

Complications of tongue-tie release surgery

Generally, there are few complications associated with tongue-tie procedures. Whilst rare, severe bleeding may occur from cutting the lingual artery, and scar tissue may form that affects the mobility of the tongue.



What is the role of the speech pathologist in tongue-tie?

A speech pathologist has professional training in feeding, chewing, swallowing and communication.

If you take your baby to see a speech pathologist with expertise in managing feeding difficulties in babies, they will conduct a thorough infant feeding evaluation.

The speech pathologist should assess all reasons for any pain a mother may be having when breast feeding and any difficulties the baby is having when latching onto the nipple or teat, and address these first. Mothers/carers and babies should be carefully observed during the feeding process by the speech pathologist with all efforts made to improve attachment and positioning, with referrals to other health professionals as needed (e.g. lactation consultant). It is important to investigate all other reasons for feeding difficulties before surgery is considered or recommended as the preferred treatment option.

For older children and adults, the speech pathologist is able to observe and assess speech and how well the tongue is moving for speech and eating. Sometimes a speech pathologist might see a child or adult after tongue-tie surgery for a brief period of therapy to help them move their tongue to lick their lips, clear food in their mouth, or help with stretching exercises that can help reduce the formation of scar tissue.

Which other health professionals are involved in the assessment and management of tongue-tie?

A range of health professionals may be involved in identifying tongue-tie and the assessment and management of tongue-tie. These include: lactation consultants, speech pathologists, general medical practitioners, paediatricians, ear nose and throat specialists, community health nurses, orthodontists, dentists, dental hygienists, and dental therapists.

Pediatricians, ear nose and throat specialists, maxillofacial surgeons, and dentists may be involved in surgery for tongue-tie, depending on the age of the patient, and the complexity of the surgery needed.

It is recommended parents discuss the reasons why their baby or child needs surgery with their doctor/health professional. If tongue-tie surgery has been recommended, some questions you could ask include:

- What type of surgery are you doing?
- What will be the benefits of surgery?
- What will happen if you don't do the surgery?
- Are there any side effects to the surgery?
- Will an anaesthetic be required?
- Will pain relief be required after surgery?
- What is the recovery period after surgery?

Summary

Tongue-tie ("ankyloglossia") is a condition where a person has a short frenulum, or "tie", that holds the tongue tightly to the floor of the mouth and reduces the mobility, flexibility and reach of the tongue.

There will be some cases where tongue-tie release is of benefit, however, it should not be considered as the first option. Surgery should only be considered after further investigation of the impact of a tongue-tie on function i.e. does it affect feeding, chewing and speech.

The speech pathologist has a role in the evaluation of the functional impact of tongue-tie on:

- successful infant feeding; and
- determining the impact of tongue tie in children and adults on successful chewing, swallowing and the ability of the tongue to adequately clear food residue from the lips, teeth and other parts of the mouth; and
- evaluating the impact of tongue-tie in children and adults on clear and intelligible speech.

If you have further questions in relation to this document, please do not hesitate to contact Speech Pathology Australia on 1300 368 835.

More Information

See Speech Pathology Australia's other resources for the public, including:

- **What is a speech pathologist?**
- **Find a speech pathologist**
- **Seeing a speech pathologist**

Speech Pathology Australia

Level 1 / 114 William Street
Melbourne Victoria 3000
Australia

1300 368 835 (for the cost of a local telephone call outside Victoria)

+61 3 9642 4899 (Telephone)
+61 3 9642 4922 (Facsimile)

office@speechpathologyaustralia.org.au

www.speechpathologyaustralia.org.au/find



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