

WHAT IS A FRENECTOMY?

Also known as a frenulectomy, frenulotomy or frenotomy

A frenectomy is the removal of a small fold of skin and connective tissue (frenum) that prevents a body organ or muscle from moving past its normal limit.

The frenum in the midline under the tongue and floor of the mouth (lingual frenum) and those of the upper and lower lips (maxillary and mandibular labial frenum respectively) are normal parts of the body and usually require no surgical intervention.



If a frenum is too large, attaches too deeply, is too thick, too tight, or inelastic it can restrict or prevent normal function of the body part to which it is attached. When this occurs in the tongue, it is commonly known as tongue-tie or ankyloglossia and can prevent correct tongue function.

In the upper lip it can prevent adequate lifting of the lip, cause a gap to develop between the upper baby and adult front teeth, and contribute to tooth decay due to restricted access.

Research has shown that tongue and upper lip tie can affect and contribute to the following areas of development throughout life if left untreated:

Neonates and Infants

- Normal sucking patterns
- Normal swallowing
- Breastfeeding difficulties
- Nipple pain and trauma
- Bottle feeding difficulties
- Gagging / choking
- Swallowing air from being unable to create a proper lip seal when sucking
- Reflux and vomiting
- Pain and crying after feeding
- Drooling
- Difficulty eating solids
- Sleep Breathing Disorders and Sleep Apnoea. Tongue tie has been implicated in sleep disordered breathing and sleep apnoea in infants, children, and adults
- Head and facial growth disturbances. Imbalanced pressure from sucking and swallowing improperly can put abnormal pressure on growing bones, resulting in distortions in the head and jaw shape.

Children

- Ability to clean the surfaces of your mouth and teeth with your tongue after eating
- Normal eating / chewing patterns
- Speech difficulties
- Gaps in upper baby and adult teeth
- Tooth crowding and improper jaw development
- Mouth breathing habits
- Avoidance of certain foods

Adults

- Posture - Tongue tie has been shown to cause stooping in the spine that is corrected after frenectomy in children and adults.
- Head and neck tension headaches and migraine.
- Orthodontic malocclusions
- Long face syndrome

THE PROCEDURE

A lingual (tongue) frenectomy is commonly performed to treat tongue-tie or ankyloglossia and a labial (lip) frenectomy is the removal of the frenum of the upper lip. It is performed for a variety of reasons including breastfeeding problems, the prevention of upper jaw gum recession, when a large frenum causes a space to develop between the two front teeth, and to improve the fit dentures when the frenum interferes with its function.

The tongue and floor of the mouth contain vital nerves, blood vessels, and salivary ducts, so it is extremely important that the frenectomy procedure is performed by a very skilled practitioner who has extensive experience in oral surgery and knowledge of the anatomy associated with these areas. There is NO such thing as a 'simple snip' of a lingual frenum. Surgery by an inexperienced practitioner may result in scarring, excess trauma, and permanent damage to vital structures of the tongue and floor of the mouth. Poorly performed surgery can also contribute to little or no improvement in symptoms, and as a result the person may consider that the tongue tie procedure 'did not work' when in fact, it just was not completed properly.

Dr Eldridge performs the frenectomy procedure using local anaesthetic and a diode laser for the upper lip, and a scissor incision for the tongue. There is usually a small and very quick 'sting' when using local anaesthetic causing the child to cry for a few seconds only. Once the upper lip is numb however, the child is unable to feel any of the procedure so dramatically reducing their overall anxiety. Many babies however just simply do not like being held for the procedure, so it is completed in the shortest amount of time possible.

There are many benefits of using scissors vs laser on the tongue, especially for children where the use of laser can and does cause a large amount of stress which can then lead on to 'oral aversion' disorders. This occurs mainly due to the length of time it can take to complete a lingual frenectomy using laser (3 – 5min or longer), and often without local anaesthetic by some practitioners. There is also much more risk of damage to underlying vital structures such as muscle, blood vessels, nerves and salivary ducts, as the patient needs to remain absolutely still when using a laser.

A lingual frenectomy using scissors is often very fast (a matter of seconds only) and hurts less than administering a local anaesthetic. Whilst there is occasionally a little bleeding, it usually stops very quickly and is very easily managed. The additional benefits of no local anaesthetic are twofold.

1. Dr Eldridge is able to visualise much more easily all of the different layers of tissue that often need to be released in order for a lingual frenectomy to be performed thoroughly including the frenum, soft tissue, connective tissue, and fascia.

2. It allows babies to feed without interference from numbness immediately after the procedure. A feeding aversion can last for up to 3 months when local anaesthetic is used on the tongue in neonates and infants.

Both the tongue and lip have excellent blood supply and heal extremely well over a 7 – 14 day period with minimal discomfort after the procedure. No pain killers or antibiotics are usually required after frenectomy.

Parents should please remember that frenectomy procedures on the upper lip and tongue are typically extremely fast and relatively painless (apart from local anaesthetic), but it can be a very emotional experience for parents. This is especially so for children who do not like being held, and those babies who find the lights and procedure anxiety-provoking. Using best medicine practices helps us to perform the procedures quickly, efficiently and thoroughly the first time, and as a result we are able to minimise surgical risks. Most importantly we are able to minimise any stress and anxiety the baby may experience.

And as with any surgical procedure, the immediate post operative management and ongoing rehabilitation of the child in a multi-team setting is absolutely paramount to the success of life-long clinical outcomes.