Tongue-tie: Assessment and Classification

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Introduction

The treatment of tongue-tie and lip-tie continues to create controversy, despite significant and robust evidence that early intervention improves breastfeeding and oral health outcomes; even among health professionals who identify and treat tongue-tie; the assessment and classification lacks consistency.

Definitions

Tongue-tie is a **congenital** condition, where a piece of skin under the tongue (frenulum) extends from the base of the tongue to the tip or almost to the tip (75-100%) or extends to half way along the underside of the tongue (25-50%) which **limits movement** of the tongue and may result in difficulty feeding. Hogan & Westcott

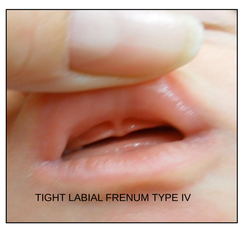
IATP DEFINITION (INTERNATIONAL AFFILIATION OF TONGUE-TIE PROFESSIONALS)

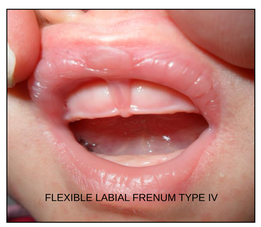
Embryological remnant of tissue in the midline between the undersurface of the tongue and the floor of the mouth that restricts normal tongue movement.

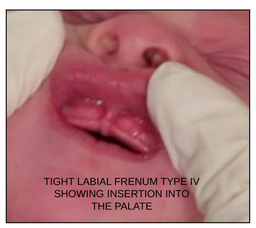
The word “frenum” is used throughout this poster instead of “frenulum”.

Maxillary Frenums

Little information about the role of the maxillary (labial) frenum exists in lactation literature. However, it does play a role in creating a seal at the breast. There is increasing interest in exploring the role this plays in breastfeeding problems. We use the photographic classification system of Dr Lawrence Kotlow as a guide for visual identification and physical examination of the function to determine if it needs to be revised.


TIGHT LABIAL FRENUM TYPE IV


FLEXIBLE LABIAL FRENUM TYPE IV


TIGHT LABIAL FRENUM TYPE IV SHOWING INSERTION INTO THE PALATE

Existing Tools

A variety of tools and methods exist for the identification and classification of tongue-tie. These tools include photographic representations (Kotlow), descriptions (Coryllos, Watson- Jenner & Salloum), percentages and physical measurements (O’Halloran) of the frenulum.

All these tools have limitations because lingual frena will present in a spectrum which will include genetic characteristics of the child such as tongue length and palate width as well as moulding or asymmetry from passing through the birth canal.

Only the Assessment Tool for Lingual Frenulum Function (ATLFF) 2012 recognises the attachment to the floor of the mouth as a significant factor. This attachment to the lower alveolar ridge has been consistent in those presenting breastfeeding problems.

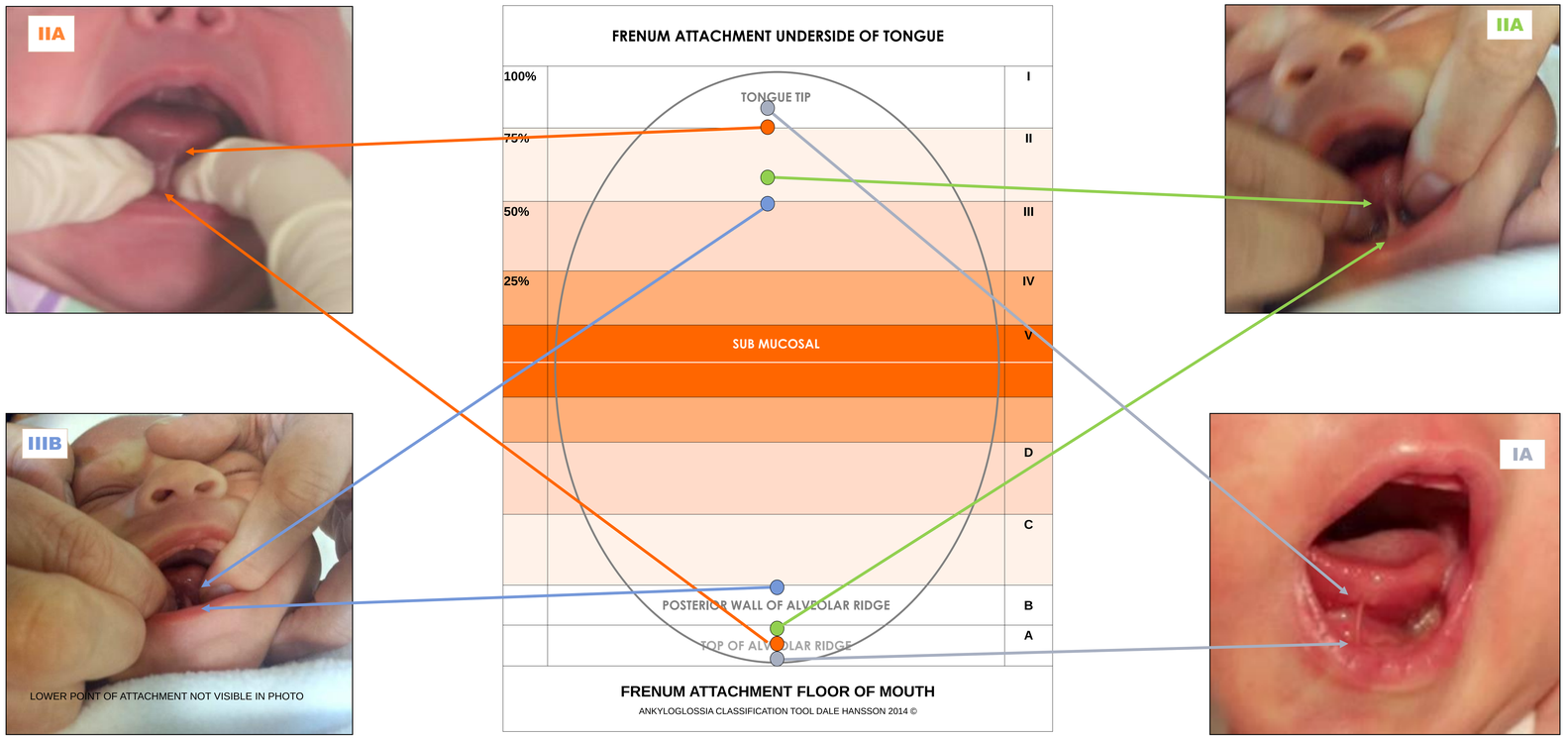
Exposing the Frenum

Place a finger on either side of the frenum and press down gently. The restriction can then be seen clearly.

Blanching will indicate it is stretched to its limit and blood supply has been affected.

Classifying the Frenum

To classify mark a dot at the point of attachment under the tongue and another where it attaches on the alveolar ridge or floor of the mouth.

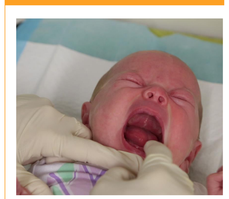


Common Characteristics

Unable to “cup”

- The tongue “bowls” in the appearance of an upside down bowl and is unable to create a central groove to draw the breast in enough to empty effectively. Note this baby has a tell tale coating of milk because his tongue does not elevate enough to use the hard palate for cleaning.

Lateralisation



- Place your finger centrally on the lower alveolar ridge, move the finger to the right or left, the tongue should follow. Restricted tongues will bunch and the front of the tongue may flatten or “square” as it attempts to pivot from the point of attachment.

Gape

- Many babies with lingual restriction are unable to achieve or maintain a wide enough gape for effective feeding. The tongue can affect the ability of the jaw to open and stay open. The corresponding jaw muscles tire easily as baby strains to maintain an open mouth.

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