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## Abstract

**Objectives/Hypothesis:** To determine barriers and limitations that non-otolaryngology providers at our institution encounter with regards to obtaining credentialing and performing frenulectomies.

**Study design:** Survey study administered to family medicine and pediatric attendings at our institution regarding their experiences performing the procedure.

**Methods:** A survey consisting of 12 questions was administered anonymously via survey monkey to the pediatric and family medicine attendings at our institution. 26 pediatric attendings and 70 family medicine attendings were surveyed as to their training, perceived usefulness of the skill, interest in learning how to perform the procedure or re-training, and likelihood of performing the procedure at our institution.

**Results:** 10 out of 26 pediatric attendings responded and 41 out of 70 family medicine responded for a total of 51 out of 96, or 53% response rate. 33% had previously been trained in the procedure with 41% of the training in residency. 69% of those surveyed never perform frenulectomies due to various reasons such as credentialing issues and perceived need for procedure not seen frequently enough. 59% of respondents were interested in training or retraining to perform frenulectomies.

**Conclusions:** Frenulectomy is a common procedure performed in neonates for ankyloglossia, i.e. tongue tie, due to difficulty breastfeeding. There are a significant number of non-otolaryngology providers who would like to be trained and credentialed to perform this procedure. We should investigate instituting a more formal training and credentialing program at our institution.



Figure 1: Equipment needed for frenulectomy (Small scissors, small clamp, sugar water, gauze)

## Introduction

Ankyloglossia, from the Greek words “agklios” meaning curved and “glossa” meaning tongue, occurs in approximately 2-10% of live births<sup>(6)</sup> with multiple studies reporting incidences around 4% with a 2:1 male to female ratio<sup>(5)</sup>.

The oral tongue is attached to the floor of mouth via a fold of tissue known as a frenulum which restricts the motion of the tongue. However, when the motion is overly restricted, the result is ankyloglossia. Ankyloglossia is also known as tongue tie and considered a minor congenital anomaly.

Tongue tie is not a new phenomenon. In a 1967 article, Horton details reports of midwives from ancient times tearing frenulums with dirty finger nails to release tongues<sup>(4)</sup>.

At our institution, frenulectomies are performed predominantly by otolaryngology providers. Family medicine and pediatric medicine providers can be credentialed to perform the procedure. However, only 6 non otolaryngology providers have been credentialed over the last 5 years.

In this study, we sought to determine the barriers and limitations of non otolaryngology providers at our institution encounter with regards to obtaining credentialing and performing frenulectomies.

## Methods and Materials

A list of the family medicine and pediatric attendings at our institution was obtained. A survey consisting of 12 questions was administered anonymously via survey monkey to the pediatric and family medicine attendings at our institution. 26 pediatric attendings and 70 family medicine attendings were surveyed as to their training, perceived usefulness of the skill, interest in learning how to perform the procedure or re-training, and likelihood of performing the procedure at our institution.

## Results

10 out of 26 pediatric trained attendings responded and 41 out of 70 family medicine trained attendings responded for a total of 51 out of 96, or 53% response rate. 33% had previously been trained in the procedure with 41% of the training in residency, 12% during fellowship, 29% as attendings, and 18% listed other including medical school.

59% of previously trained attendings stated they never perform the procedure, 24% perform it less than once per month, 12% 1-2 times per month, and 1% perform the procedure 3-5 times per month. No respondents performed the procedure more than 3-5 times per month.

Of the 59% who were previously trained but never perform the procedure, various reasons were listed. The predominant reason is difficulty in obtaining credentialing at our hospital.

59% of respondents were interested in training or retraining to perform frenulectomies. Among providers not interested in training, the primary reason was they did not feel the skill would be used.

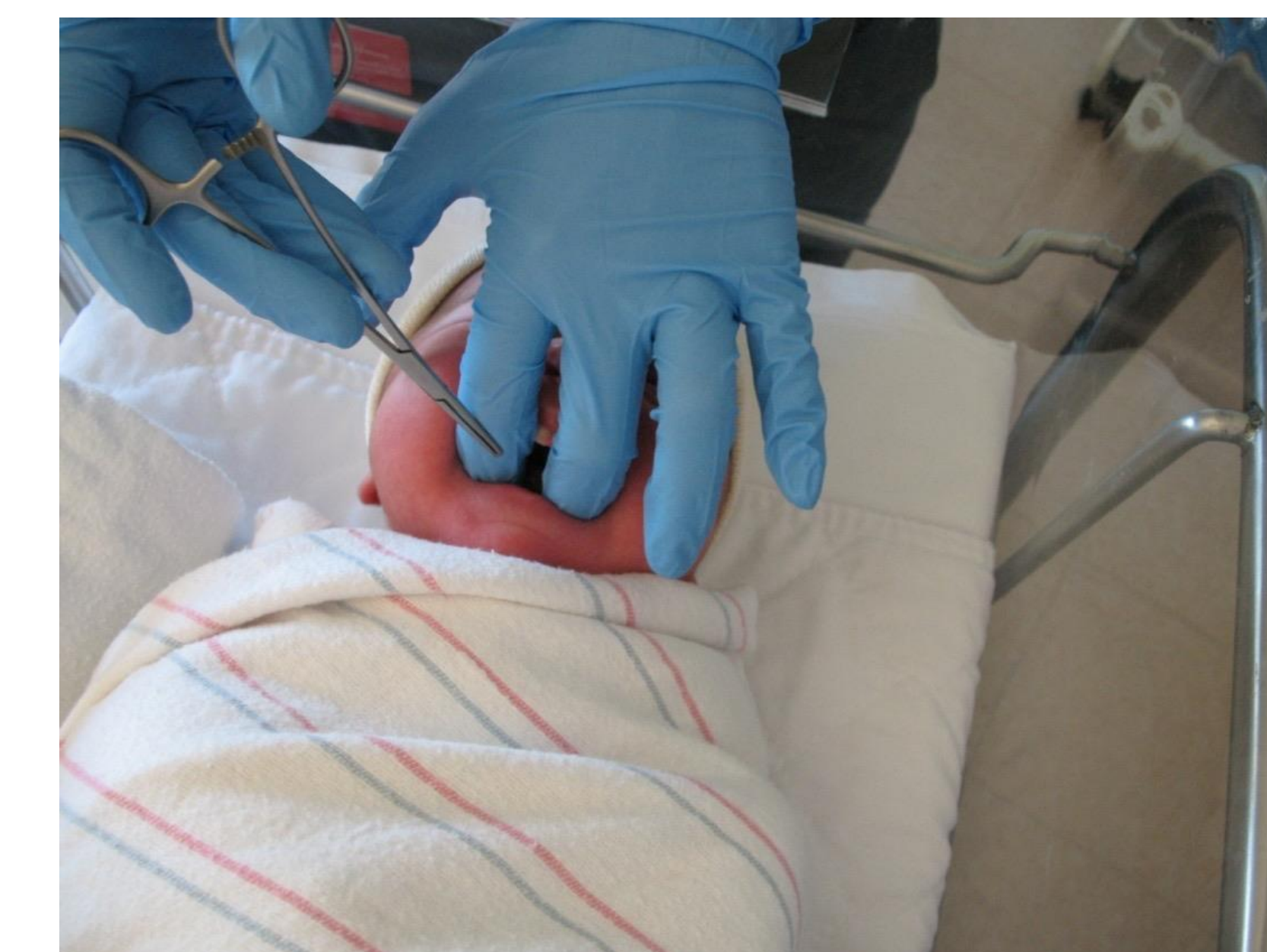


Figure 2: Performing frenulectomy on newborn in nursery

## Discussion

Frenulectomies for ankyloglossia are reported in history for hundreds of years. It is a procedure which is relatively simple and usually can be safely performed by trained otolaryngology and non-otolaryngology providers.

Our survey showed there is an interest by non otolaryngology providers to perform frenulectomies. Half of the providers surveyed who were never trained and over half of the providers who were previously trained but no longer perform frenulectomies are interested in training to perform the procedure.

Requirements which must be met prior to an otolaryngology provider performing a frenulectomy on a new born while still in house include the patient must be at least 24 hours old, mother and baby must have worked with the lactation team at least twice with determination of latching problems, along with physical exam evidence of ankyloglossia. The otolaryngology provider will then evaluate the baby and perform the procedure as needed.

Prior to obtaining credentials to perform frenulectomies at our hospital, non-otolaryngology providers must view an instructional PowerPoint presentation regarding ankyloglossia and frenulectomies and pass a quiz, observe two frenulectomies being performed, then perform two frenulectomies while being observed. However, there seems to be difficulty with obtaining the actual credentialing by non-otolaryngology providers due to difficulty having the appropriate person sign off on the observed and performed frenulectomies.

## Conclusions

Frenulectomy is a common procedure performed in neonates for ankyloglossia, i.e. tongue tie, due to difficulty breastfeeding. There are a significant number of non-otolaryngology providers who would like to be trained and credentialed to perform this procedure. Unfortunately, the credentialing process at our institution has been reported as cumbersome making it difficult for non-otolaryngology providers to obtain credentialing. Given the interest of non-otolaryngology providers previously trained and not trained to perform frenulectomies, we should investigate instituting a more formal training and credentialing program at our institution.

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