

# WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.453

Volume 14, Issue 8, 921-924.

Case Study

ISSN 2277-7105

# A MANAGEMENT OF ANKYLOGLOSSIA (TONGUE TIE): A CASE REPORT

Ullas G. P.<sup>1</sup>\*, Gopikrishna B. J.<sup>2</sup> and Sahanasheela K. R.<sup>3</sup>

<sup>1</sup>Post Graduate Scholar, Department of Shalya Tantra.

<sup>2</sup>Profesor & HOD, Department of Shalya Tantra.

<sup>3</sup>Assistant Profesor, Department of Shalya Tantra.

Article Received on 26 February 2025,

Revised on 18 March 2025, Accepted on 08 April 2025

DOI: 10.20959/wjpr20258-36241



\*Corresponding Author Dr. Ullas G. P.

Post Graduate Scholar,
Department of Shalya
Tantra.

#### **ABSTRACT**

Ankyloglossia, or tongue-tie, is a congenital condition characterized by a thick, short lingual frenulum that restricts tongue movement, leading to difficulties in breastfeeding, speech articulation, and selfconfidence. Although rarely associated with congenital craniofacial disorders such as cleft lip, X-linked cleft palate, Van der Woude syndrome, syndrome, Orofacial digital Beckwith-Wiedemann syndrome, or Simpson-Golabi-Behmel syndrome, it can significantly impact oral functions. This case report presents a 2-year-old female with speech difficulties due to ankyloglossia, diagnosed after an inability to pronounce sounds like "LA" and "DA." The child underwent lingual frenulotomy under general anesthesia, resulting in improved tongue mobility and speech development, highlighting the importance of early diagnosis and surgical intervention for better

functional outcomes.

**KEYWORDS:** Ankyloglossia, Frenulotomy, Frenectomy, Lingual frenum, tongue-tie.

# **INTRODUCTION**

Ankyloglossia, commonly known as tongue-tie, is a congenital condition characterized by an abnormally short, thick, or tight lingual frenulum, which restricts the movement of the tongue. This condition can vary in severity, ranging from mild cases with minimal functional impact to severe cases that significantly hinder oral functions. Ankyloglossia is often diagnosed in infancy due to difficulties in breastfeeding, as the restricted tongue movement affects the infant's ability to latch properly. As the child grows, the condition may also contribute to

www.wjpr.net Vol 14, Issue 8, 2025. ISO 9001: 2015 Certified Journal 921

speech articulation difficulties, oral hygiene challenges, and, in some cases, social and psychological concerns due to self-consciousness. While ankyloglossia is generally an isolated anomaly, it has been reported in association with certain craniofacial syndromes such as cleft lip, X-linked cleft palate, Van der Woude syndrome, Orofacial digital syndrome, Beckwith-Wiedemann syndrome, and Simpson-Golabi-Behmel syndrome. The management of ankyloglossia depends on its severity and the functional impairments it causes. In mild cases, speech therapy and conservative approaches may be sufficient, whereas more severe cases often require surgical intervention, such as a lingual frenulotomy or frenuloplasty, to improve tongue mobility and restore normal oral functions. This article presents a rare case of ankyloglossia in a 2-year-old child, who experienced speech difficulties due to restricted tongue movement. The case highlights the importance of early diagnosis and appropriate management to enhance speech development and overall oral function.

#### **CASE REPORT**

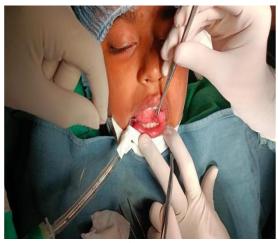
A Female patient aged 2 years R/O Hassan, Karnataka, came in OPD of Shalya Tantra department in SDM College of Ayurveda and Hospital in an apprehensive condition. Patient had the following complaints

- 1. Unable to pronounce some words like LA, DA, TA etc.
- 2. C/O Reduced appetite

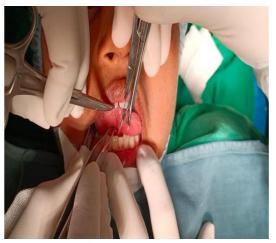
#### **METHODOLOGY**

Patient was treated with Surgery - Lingual frenulotomy under GA.

#### **OBSERVATION**



**Before surgery** 



**During surgery** 



After surgery

# Management

- Antibiotics stat dose ceftriaxone 125mg IV given
- Analgesics (SOS)

# **Orally**

- Syp Septilin 5ml BD
- Vakshuddikara Choorna 250mg -0- 250mg with Honey

# **RESULT**

Patient speech was improved, and able to pronounce words like LA, DA, etc.

#### **DISCUSSION**

Ankyloglossia is the most frequent developmental abnormality of the tongue, occurring in 0.2–20% of patients.

There are various consequences of this abnormality, ranging from a mild reduction in tongue movement to a mandibular growth deficiency.

Lingual Frenulum reduces movement tip of the tongue causes difficulty in pronounce certain words hence frenulotomy helps in releasing of the frenulum normalizes the tongue which helps in articulation of words.

In breastfed infants it can cause poor sucking at the breast, inadequate transfer of milk and make the mother's nipples painful, resulting in weight loss in the baby.

#### **CONCLUSION**

Frenulotomy is a safe, quick, and effective treatment.

- Length of tongue is increased by short frenulum.
- Can provide immediate symptom relief.
- Promote breastfeeding, and enhance infant-mother bonding experience.

#### **REFERENCE**

- 1. Patil S, Kaswan S, Rahman F, Doni B. Prevalence of tongue lesions in the Indian population. *J Clin Exp Dent*, 2013; 5: e128–32.
- 2. Harris EF, Friend GW, Tolley EA. Enhanced prevalence of ankyloglossia with maternal cocaine use. *Cleft Palate Craniofac J*, 1992; 29: 72–6.
- 3. Rai R, Rai AR, Rai R, Bhat K, Muralimanju BV. Prevalence of bifid tongue and ankyloglossia in South Indian population with an emphasis on its embryogenesis. *Int J Morphol*, 2012; 30: 182–4.
- 4. Hazelbaker A. Pasadena, Calif: Pacific Oaks College. The Assessment Tool for Lingual Frenulum Function (ATLFF): Use in a Lactation Consultant's Private Practice, 1993. [Thesis]
- 5. Kotlow LA. Ankyloglossia (tongue-tie): A diagnostic and treatment quandary. *Quintessence Int*, 1999; 30: 259–62.
- 6. Hogan M, Westcott C, Griffiths M. Randomized, controlled trial of division of tongue-tie in infants with feeding problems. *J Paediatr Child Health*, 2005; 41: 246–50.
- 7. Kotlow L. Lasers and pediatric dental care. Gen Dent, 2008; 56: 618–27.
- 8. Kantaputra PN, Paramee N, Kaewkhampa A, Hoshino A, Lees M, McEntagart M, et al. Cleft lip with cleft palate, ankyloglossia, and hypodontia are associated with TBX22 mutations. *J Dent Res*, 2011; 90: 450–5.
- 9. Morowati S, Yasini M, Ranjbar R, Peivandi AA, Ghadami M. Familial ankyloglossia (tongue-tie): a case report. *Acta Med Iran*, 2010; 48: 123–4.
- 10. Keizer DP. Dominantly hereditary ankyloglossia. *Ned Tijdschr Geneeskd*, 1952; 96: 2203–5.

www.wjpr.net Vol 14, Issue 8, 2025. ISO 9001: 2015 Certified Journal

924