



បន្ទីរមណ្ឌលជាតិគាំពារមាតា និងទារក
National Maternal and Child Health Center

ទិវាសល្យសាស្ត្រ សម្ព័ន្ធ និងរោគស្រ្តី លើកទី៣

ប្រធានបទ៖ «ពង្រឹង និងបង្កើនសេវាកម្មសេវាសាធារណៈ ថែទាំ សង្គ្រោះ ប្រកបដោយគុណភាព»

MANAGEMENT OF ANKYLOGLOSSIA (Tongue-tie)



Presented by **Dr. Pat Sopheaktra**

Pediatrician and Neonatologist
Vice chief of NCU in NMCHC

ថ្ងៃទី៤-៥ ខែកញ្ញា ឆ្នាំ២០២៥
សណ្ឋាគារភ្នំពេញ

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I. Objectives

- Identify the signs and symptoms of ankyloglossia and assess the severity of the condition
- Diagnosis and management of ankyloglossia
- Interventions for ankyloglossia management, such as referral for frenectomy, tongue exercises, or speech therapy, based on individual patient needs.
- Collaborate with other healthcare professionals, including lactation consultants, speech- language pathologists, and pediatricians

II. Introduction

- Ankyloglossia or tongue-tie, is a condition that concerns multiple specialties within medicine and dentistry.
- The treatment of Tongue Tie is depend on etiology, epidemiology, and clinical findings.
- Evaluation and management strategies for patients with ankyloglossia and identifies the differential diagnoses, prognosis, and complications.

III. Definition

Tongue-Tie or Ankyloglossia is lingual frenulum as a tissue remnant located in the midline between the tongue's ventral surface and the mouth's floor.

IV. Epidemiology

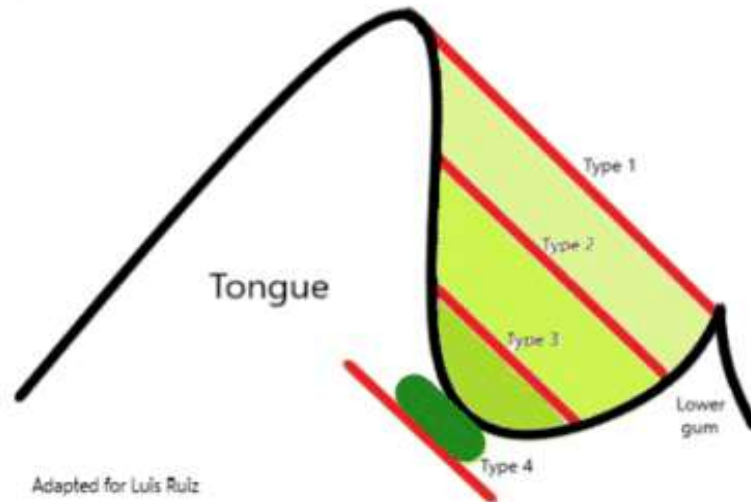
- The prevalence of tongue-tie ranges from 0.1% to 10.7% increase the years by years
- Newborns are 1.72% to 10.7%
- Children and teenagers, and adults are 0.1% to 2.08%
- Regarding sex, ankyloglossia seems more prevalent in males

V. Etiology

- The exact etiology of ankyloglossia remains unknown.
- Associations between X-linked cleft palate syndrome and in rare syndromes, including Kindler, Opitz, and Van Der Woude.
- Despite tongue-tie is mainly seen in patients with out congenital pathologies or diseases.
- Tongue-tie could be transmitted genetically.
- Newborns from mothers who consume cocaine during pregnancy.

VI. Classifications

- Type 1: Insertion of the frenulum to the tip of the tongue.
- Type 2: Insertion of the frenulum slightly (two to four mm) behind the tip of the tongue.
- Type 3: Thickened frenulum attached to the mid-tongue and the middle of the floor of the mouth, usually tighter and less elastic.
- Type 4: Thick, shiny and very inelastic submucosal frenulum that restricts movement at the base of the tongue



Type 1



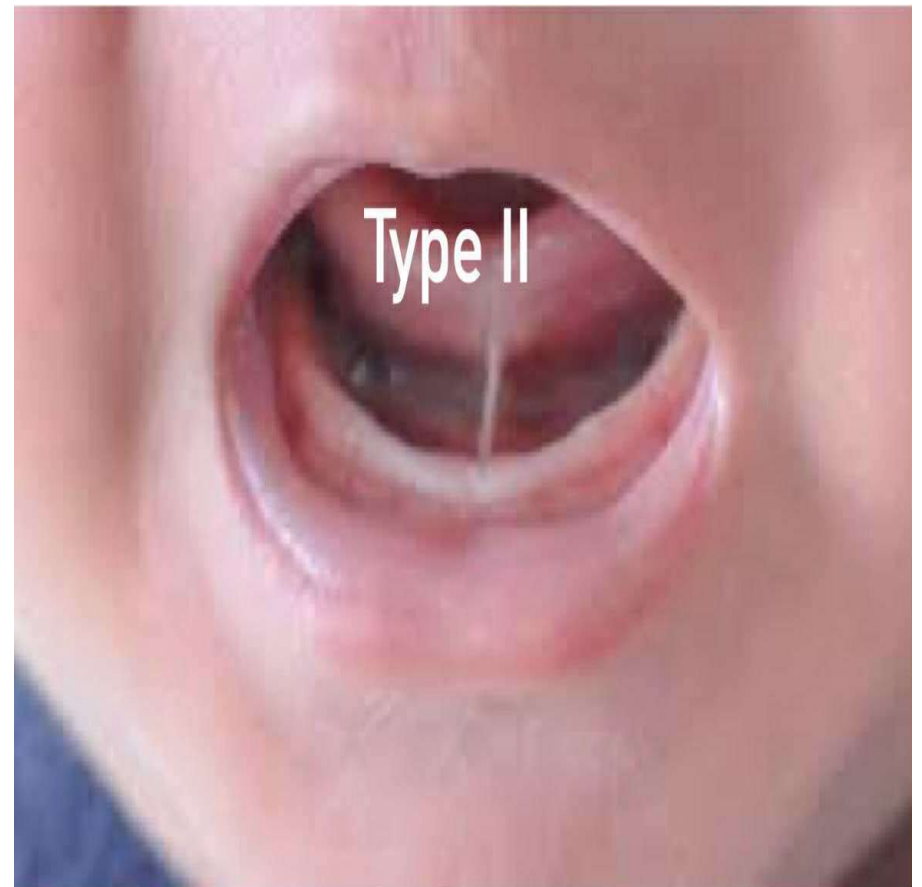
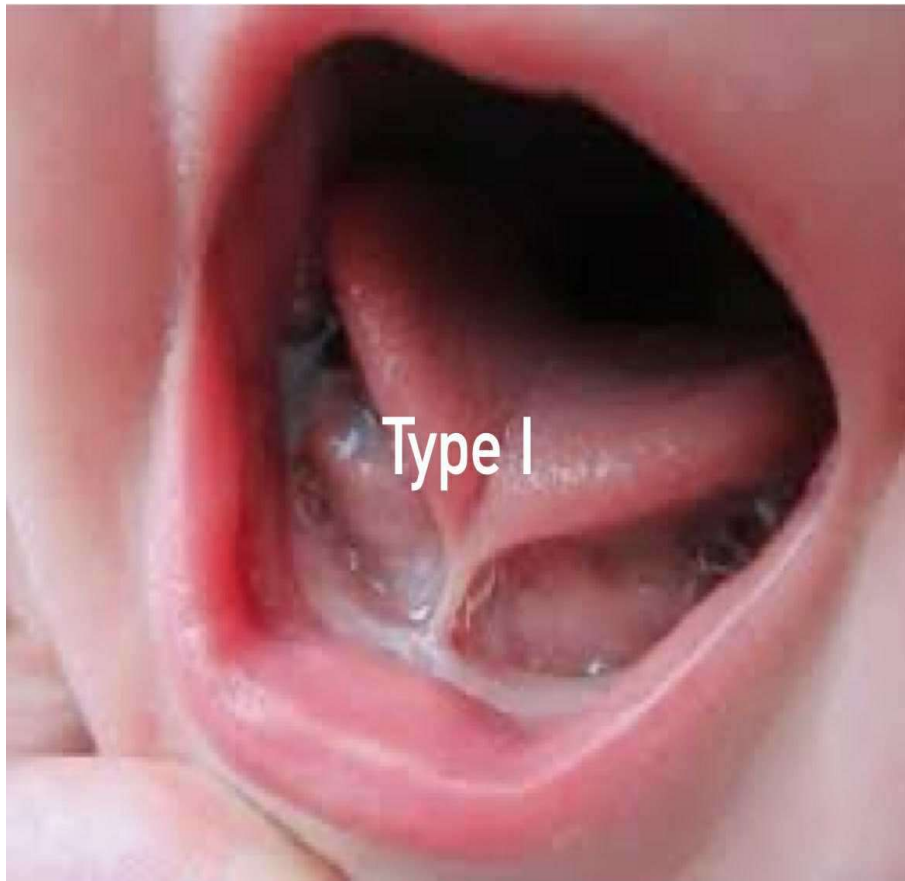
Type 2

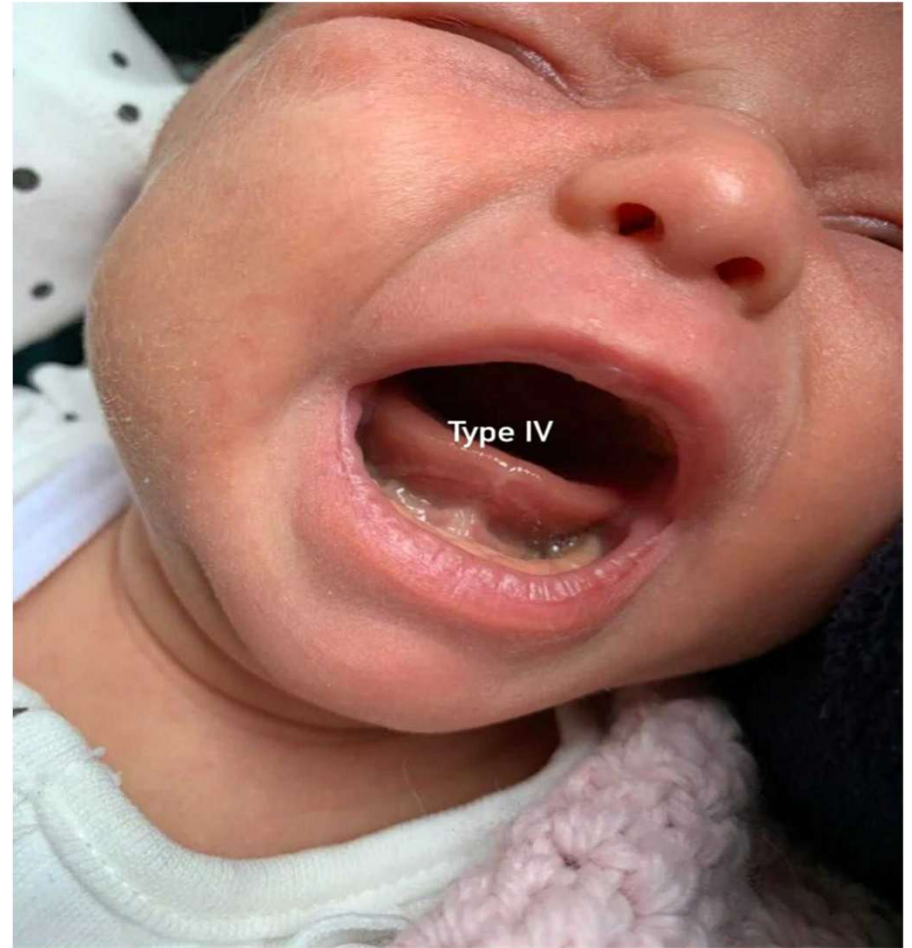
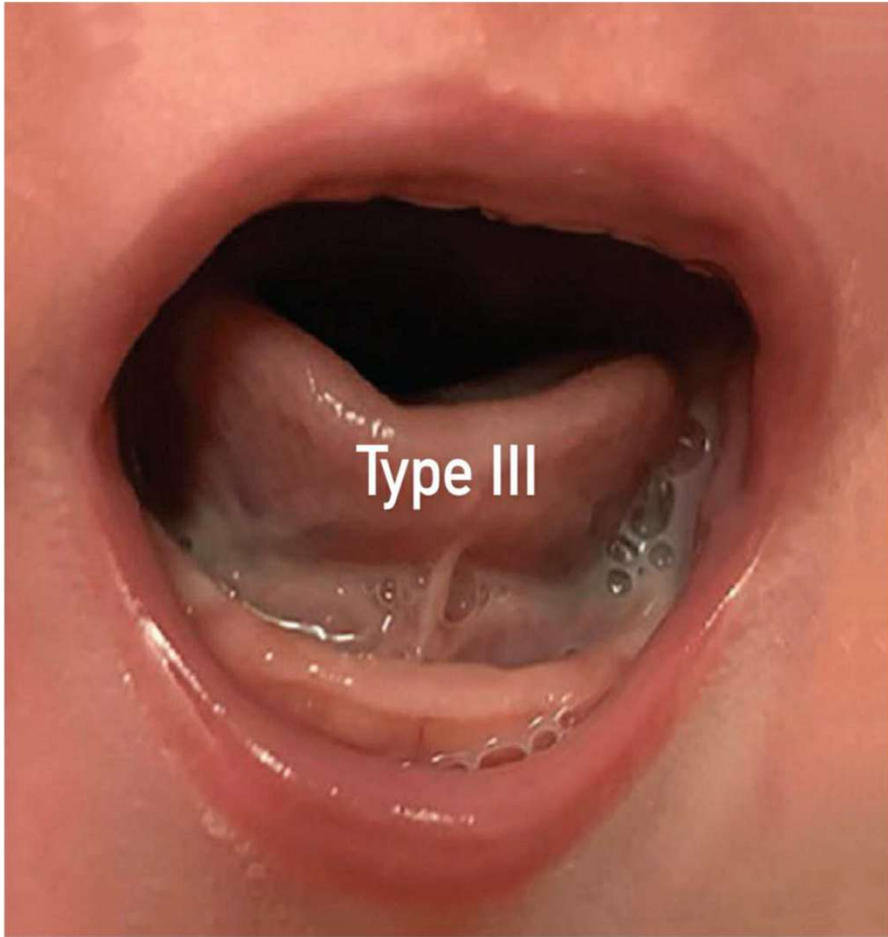


Type 3



Type 4





Tongue-tie Symptoms:

- Difficulty Latching
- Poor weight gain
- Gassy
- Lip Blisters
- Choking on milk
- Excessive drooling
- Bubble or cathedral palate
- Prefers bottle-feeding

Frustration at the breast

heart-shape tongue

Clicking noise while sucking

Reflux

Colic

Hypertonic- tight muscles

VII. Differential Diagnosis

Breastfeeding difficulties can be caused by many other factors besides

1. Craniofacial pathologies: Retrognathia and Cleft palate
2. Nasal obstruction: Piriform aperture stenosis and Choanal atresia
3. Airway obstruction: Bilateral vocal fold paralysis and laryngomalacia
4. Laryngopharyngeal reflux

VIII. Treatment / Management

- That breastfeeding difficulty in infants with ankyloglossia can be improved by frenectomy
- Caregivers must also be informed of conservative treatment options, including observation, lactation, and speech pathology consultation.
- Frenectomy : newborns or infants diagnosed with ankyloglossia experiencing breastfeeding difficulties after other conservative treatments have failed
- Contraindications : neuromuscular disorder, hypotonia, retrognathia, and micrognathia, as a lingual frenectomy may aggravate glossoptosis, obstruct the airways, and complicate swallowing.

IX. Technical Frenectomy

- Frenectomy involves holding the tongue up to tighten the frenulum, then cutting through the fascia-like tissue along a line parallel and close to the tongue.
- The cut is made in a single motion in less than a second.
- The infant is restrained by swaddling or in a Papoose board, with an assistant holding the child's head for better support.
- Frenectomy without analgesia

- Some physicians choose to give sucrose before the procedure to minimize and help with the pain.
- Placing topical anesthesia is not beneficial, and local anesthesia is contraindicated in infants.
- Risks and complications of frenectomy are rare : bleeding, airway obstruction, damage to surrounding structures, scarring, and oral aversion.

X. CONSEQUENCES OF UNTREATED TONGUE TIE

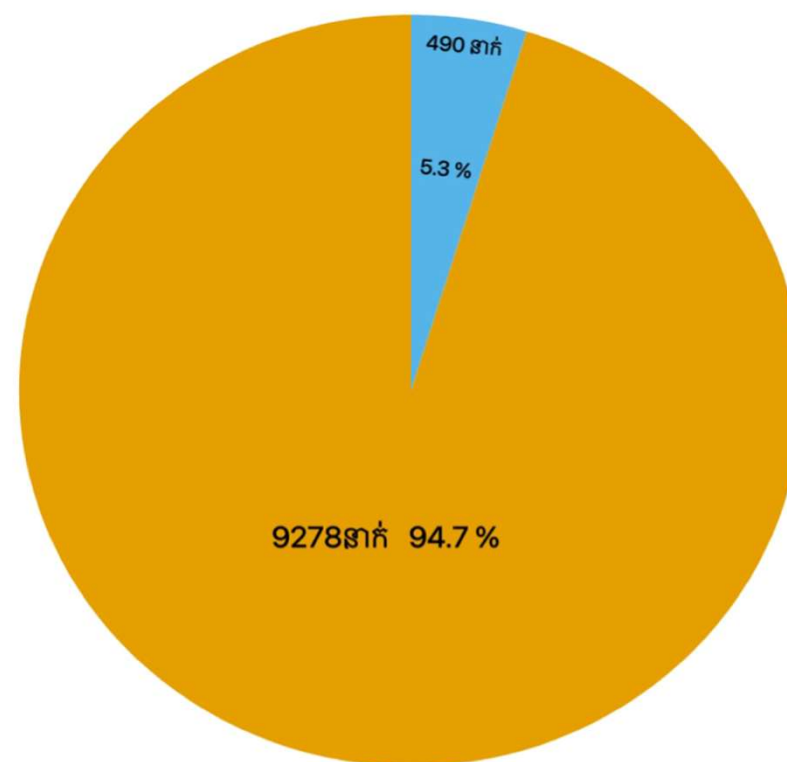
FOR INFANTS/MOTHERS

- ✓ Impact on milk supply
- ✓ Severe pain with latch or inability to latch
- ✓ Failure of baby to thrive
- ✓ Sleep deprivation
- ✓ Nipple pain, damage, bleeding or blanching
- ✓ Mastitis, nipple thrash, blocked ducts
- ✓ Difficulty sucking a bottle or pacifier
- ✓ Reflux, colic, gas, bloating
- ✓ Termination of breastfeeding
- ✓ Problems with introducing solids
- ✓ Poor bonding between baby and mother
- ✓ Depression or a sense of failure

XI. Results of Frenectomy in NMCHC in 2024 and 6 Months 2025

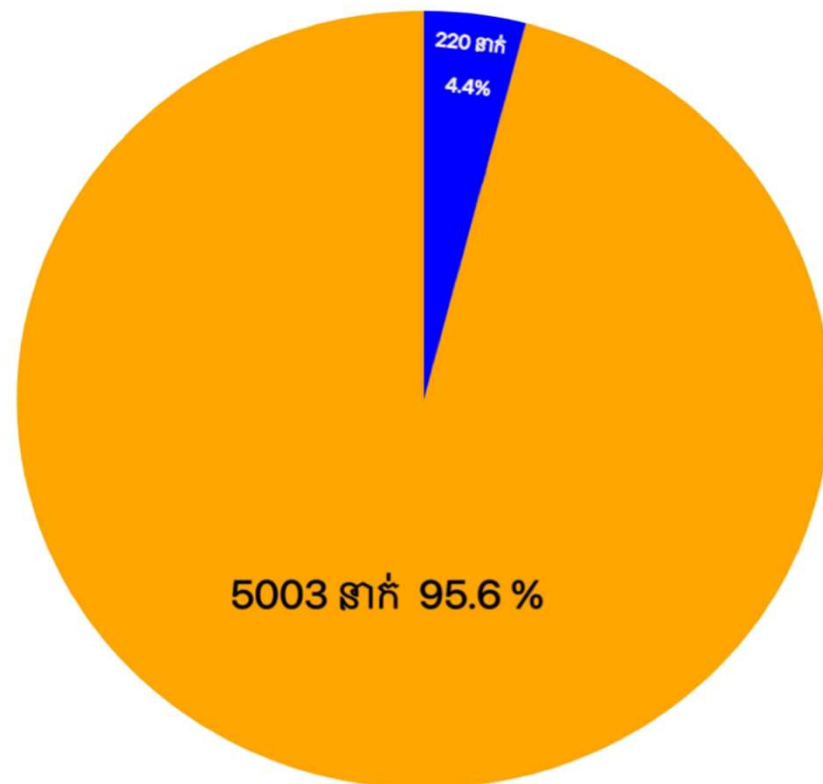
Results of Frenectomy in NMCHC

- Total newborn was born in NMCHC 2024 = 9768



Results of Frenectomy in NMCHC

- Total newborn was born in NMCHC 6 Month in 2025 = 5223



Results of Frenectomy in 2024

Total

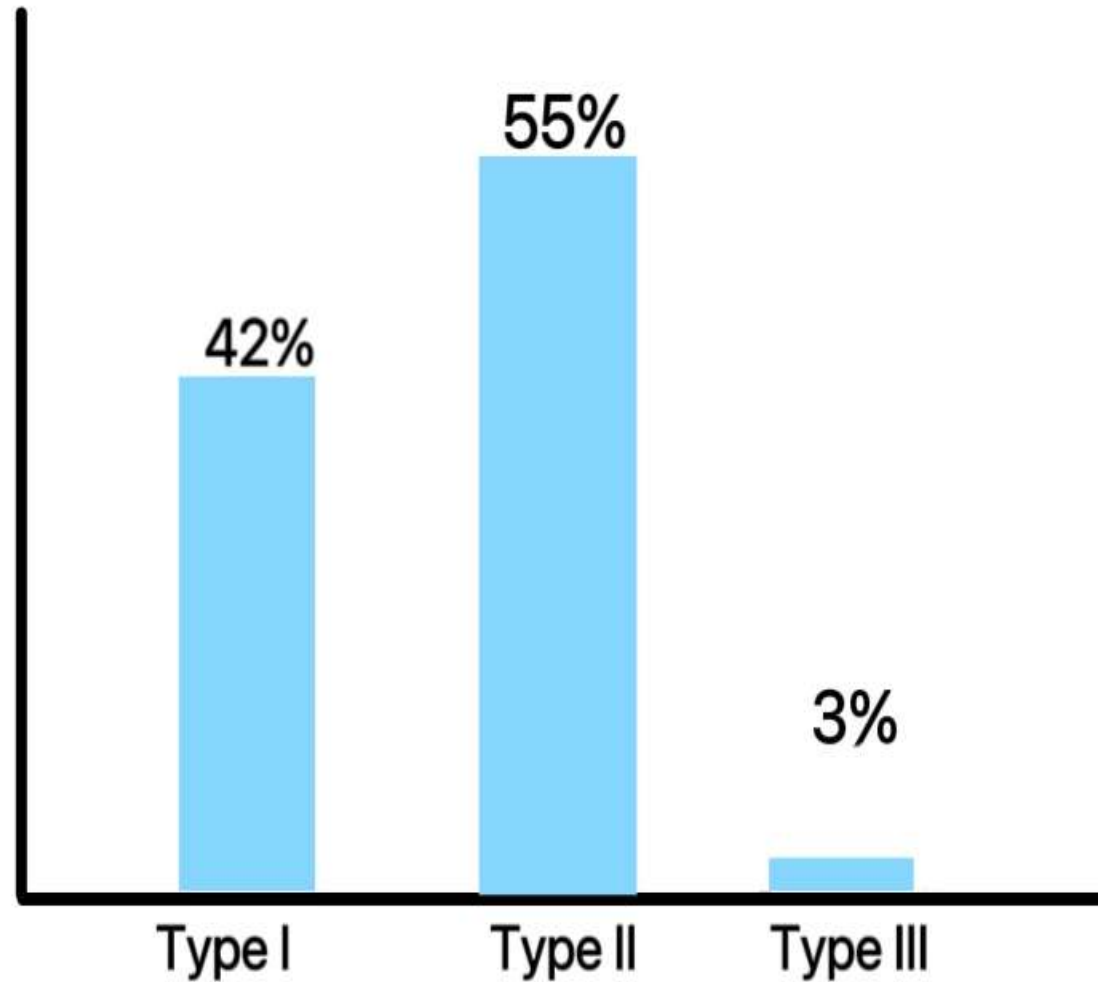
+ Type I: 205 cases

+ Type II : 260 cases

+Type III: 25 cases

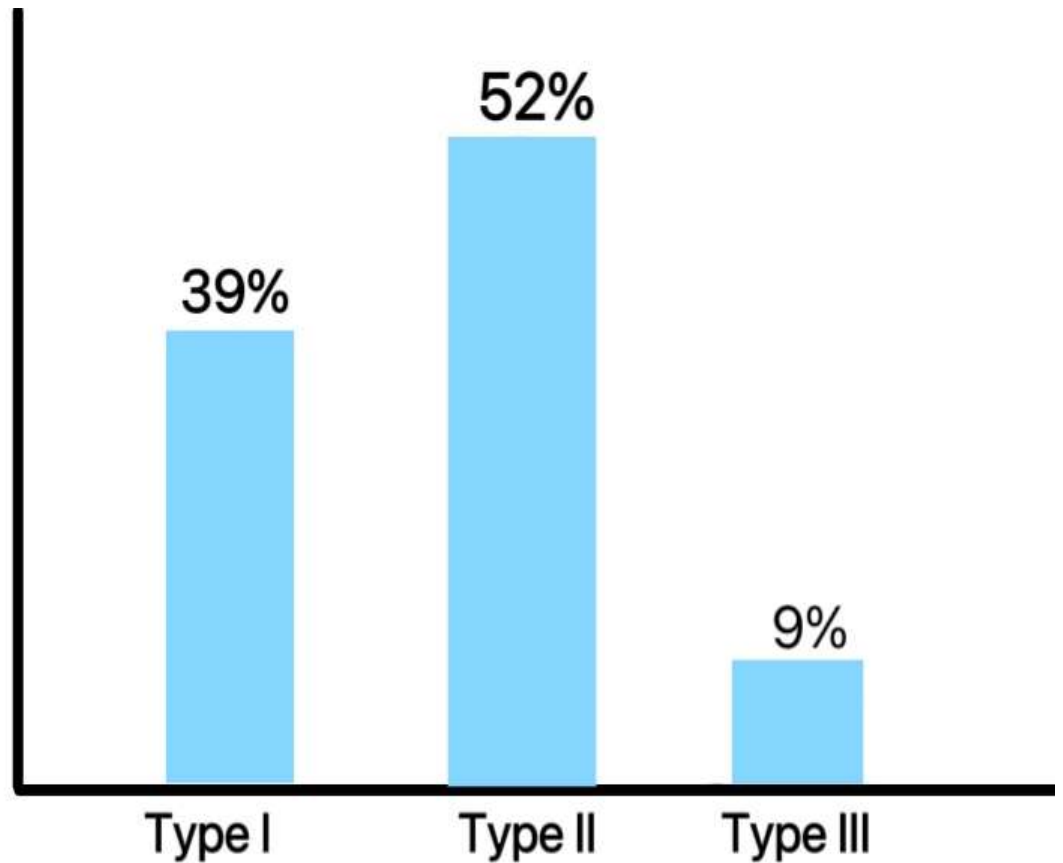
jan-june : 213 case

July-Dec : 277 case



Results of Frenectomy form Jan-June in 2025

- + Type I. :85 case
- + Type II :115 case
- + Type III : 20 cases



★ Conclusion

- Conservation management of Tongue-tie maybe sufficient. for Type III, and type IV .
- Frenectomy is done for Type I and II.
- Intervention beyond breastfeeding problems, parental education. and Reassurance.
- Release of Tongue-tie is the minor procedure
- No complication post frenectomy in NMCHC
- No anesthesia, No hospitalization, No antibiotic and no analgesic post procedure.



XII. References

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Thank YOU