Ankyloglossia:
To cut or not to cut

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Outline

• Background
• Breast Feeding
• Surgical Technique
• Case Examples
• Testimonials
Background

**Definition:** Tight lingual frenulum

**Incidence:** 0.5/1000

**Consequences:** Difficulty with breastfeeding, speech articulation, mechanical activities
Importance of Breast Feeding

Benefits to Infant

- Protects against infection
  - Diarrhea
  - H. flu
  - Enhances vaccine response
  - Otitis Media
  - Respiratory Infections
Otitis Media and Diarrhea

<table>
<thead>
<tr>
<th>Feeding Category (%) Breast Milk</th>
<th>Diarrhea</th>
<th>Ear Infection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast milk only (100)</td>
<td>5.4</td>
<td>6.8</td>
</tr>
<tr>
<td>High mixed (89–99)</td>
<td>4.8</td>
<td>6.6</td>
</tr>
<tr>
<td>Middle mixed (58–88)</td>
<td>6.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Low mixed (1–57)</td>
<td>8.5</td>
<td>11.1</td>
</tr>
<tr>
<td>Formula only (0)</td>
<td>11.4</td>
<td>13.2</td>
</tr>
</tbody>
</table>
Importance of Breast Feeding

Benefits to Infant

• Protects against illness
  – SIDS
  – GERD
  – MS
  – Dental Health
  – Diabetes
Increased risk ➔ 2 or more hospital visits for wheezing, lower respiratory illness
Benefits for Mothers

- Lowers Breast Cancer
- Uterine Cancer
- Ovarian Cancer
- Emotional Health
- Promotes weight loss
- Decreases Osteoporosis
Medical Expense for Wisconsin

- $4,645,250/yr Acute Otitis Media
- $437,120/yr Bronchitis
- $6,699,600/yr Gastroenteritis
- $262,440/yr Allergies
- $758,934/yr Asthma
- $578,500/yr Type I Diabetes (birth -18yrs)
- $17,070,000/yr Breast Cancer

- $30,984,432/yr TOTAL HEALTH COST SAVINGS
History

• Breathing

• Feeding

• Sleeping
Evidence

To cut or not to cut?

1. Frenotomy was performed on 35 infants and breastfeeding improved in 83% (No complications)
2. At 3 months, 29 of 35 mothers reported improved breastfeeding
3. The tightness of the frenulum doesn’t correlate with feeding difficulty

Ankyloglossia: does it matter?

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Fig 7. Tongue protrusion values for frenuloplasty patients preoperatively and at 1 week, 1 month, and 3 months postoperatively. Each line represents an individual patient.
Tongue Elevation

Fig 8. Tongue elevation values for frenuloplasty patients preoperatively and at 1 week, 1 month, and 3 months postoperatively. Each line represents an individual patient.
Functional Complaints

- None: 7%
- Speech: 50%
- Cuts: 43%
- Kiss: 36%
- Ice cream: 21%
- Lick lips: 21%
- Discomfort: 14%
- Clean teeth: 7%
- Tricks: 7%
Fig 5. Subjective gains in tongue function at 1 month postfrenuloplasty. Kissing and ability to play a wind instrument were applicable to only 3 and 2 patients, respectively.
Fig 3. Maternal nipple pain before and after the frenuloplasty. Pain levels decreased significantly after the procedure.
Surgical Technique

• Operating Room vs. Clinic
  o Secure the child
  o Open the mouth with tongue blade
  o Use fine scissors or electrocautery
  o Groove director placed under the tongue
  o Band is cut
  o Stitches are placed (optional)
Case Examples

- Frenotomy vs. Frenuloplasty
Post- Frenulectomy Care

• Pacifier with sucrose

• Breast Feeding

• Baby Tylenol

• No antibiotics
Complications

• Infection
• Bleeding
• Scarring
Mothers of infants with any degree of tongue-tie who have trouble breastfeeding despite lactation support often report immediate improvement after frenotomy.