



## **Infant Oral Assessment: Exploring Anatomy and Function Beyond the Frenulum**

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IBCLC certificants have the duty to provide competent services for clients and families by: Performing comprehensive maternal, child and feeding assessments related to breastfeeding and human lactation

Comprehensive assessment adds depth, credibility to documentation and care plan strategies.

It's not just a mouth, it's a baby!

- Make it a fun, connective, quick
- Assess when baby is in good state
- Oral sensations/sensory input = large part of the newborn's experience (oral somatosensory awareness)
- Overall structure and health impacts oral function. Keep big picture in mind!

Oral function starts in the womb, early in embryological development

- week 4: mouth is forming from the pharyngeal arches and transformation of the oropharyngeal membrane, tongue develops
- week 4-6: external facial features developing
- week 6-8: palate begins to develop, (complete by wk 12), frenum apoptosis
- week 12-17: rapid development, muscles move tongue in prep for more complex movements
- week 18-20: lingual movement/cupping more vigorous, mouth opening more
- week 20-25: peristalsis increases, lingual protrusion, licking of intrauterine environment noted

How might suboptimal fetal positioning and tongue movement impact feeding?

Overall facial assessment

- How does baby's face look when naturally resting?
- Any noticeable asymmetries?
- Eyes, nares, ears aligned? Clogged tear duct?
- Head tilt/turning preference?
- How is tone and strength? Increased or decreased?
  - Tone - the tension in a muscle at rest.
  - Hypotonia - not enough tension in the muscle when it is at rest
  - Hypertonia- too much tension in the muscle at rest
  - Strength what your muscles do when they aren't at rest. Force the muscle can exert against some form of resistance.

## Jaw Assessment

- Movement: smooth and rhythmic or 'chompy' and arrhythmic, deviation, clonus: Observe at rest/during feed
- Tension: Palpate TMJ area, is 'jaw massage + chin tug' smooth or 'stuck', clenching,
- Maxillary, mandibular symmetry/asymmetry: Observe with mouth open/closed

## Cheek assessment

- Cheek (buccal) pads: well developed or thin? Observe, palpate
- Buccal strength and tension - Palpate, elicit contraction (cheek pulse)

## Lip assessment

- Any clefting of the upper lip? Excessive frenum tightness? Observe, move the lip. Refer appropriately

## Palate Assessment

- Hard palate: Intact, Shape (wide/broad, narrow, bubble, channel, sutures (buckling, WNL): Observe, palpate
- Soft palate: Intact, tone: Observe, palpate, palpation, reflexive cough/gag

## Lingual Assessment

- Elevate – key to good transfer, helps shape palate: Observe (when mouth is open or gently open mouth when baby is at rest)
- Cupping and Peristalsis –helps form proper seal, aids bolus control, reduces air intake: Elicit a sucking response and/or observe during feed (click, dribble, drop/thrust?)
- Extension– helps keep tongue over gum line for latch/comfort: Stimulate lower lip
- Lateralize –helps maintain latch, moves bolus, cleaning: Rub along lower gum line
- Strength – helps stabilize during a feed, aids movement: Side of tongue pushes

## Lingual Frenulum Classification

- There are several classification systems - common one is the Coryllos, Genna, Salloum (AAP newsletter, 2004)
  - Type 1: attachment of frenulum to tongue tip
  - Type 2: 2-4 mm behind tongue tip
  - Type 3: attachment of frenulum to mid tongue
  - Type 4: attachment at the base of the tongue
  - Remember, a classification system is not an assessment technique – just a charting/communication tool.

## Maxillary Labial Frenulum Presentations: Kotlow diagnostic classifications of maxillary frenum attachments (photos used with permission of Dr. Lawrence Kotlow)

- Class 1: frenum attachment is above the free and attached gingival tissue
- Class 2: frenum inserts at the zone of the free and attached gingival tissue
- Class 3: frenum inserts at the zone between the areas of the future central incisors
- Class 4: frenum inserts at the zone extending into the anterior palatal area

## Oral Assessment Checklist: Functional Suck Assessment

- Mature suck pattern – 10+ sucks per sucking burst
- Transitional – 5-10 sucks/burst
- Immature – 3-5 sucks/burst

- Suck patterns vary according to flow, more variability at breast is expected (flow or baby struggling with normal?)
- 40+ wk GA, expect mature patterns unless there is oral dysfunction or other issues causing compensatory behaviors
- Inability to start or stop a burst pattern is a problem (perseveration, r/o neurologic issues)

#### Communication and Charting

- **Script idea:**
  - .... My exam shows that your baby has moderate lingual lateralization but struggles to maintain extension and elevation throughout the duration of a feed...
  - ...they are clamping more with their jaws and lips to hold on to the breast rather than stabilizing with their tongue and cheeks...
  - ...there is some tightness to their lingual frenulum that to be impacting mobility and functionality...
  - ... I want to provide you with enough information so you can understand your care options and make an informed choice moving forward...
- **Charting Ideas**
  - Infant - Oral assessment:
  - Lingual assessment: lateralization, extension - moderate. Elevation - poor.
  - Buccal and lingual strength - moderate. Palate WNL.
  - Maxillary labial frenulum: class IV, flexible
  - Lingual frenulum class III, restricts adequate tongue mobility/functionality - particularly elevation and stamina.
  - Jaw: Tightness and slight retrognathia noted

NOTES:

**Thank you! Please connect! #lunalactation**

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