

# Activities to Support Infant Oral Function

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Scope of Practice and Clinical Competencies:

The IBCLC has the duty to ...

- Perform comprehensive maternal, child and feeding assessments related to breastfeeding and human lactation.
- Assess oral anatomy, neurological responses and reflexes of the infant.
- Develop and implement an individualized feeding plan in consultation with the client.
- Work collaboratively with the health care team to provide coordinated services to clients and families

Objectives

- Based on oral assessment findings, the clinician will be able to identify specific areas of infant oral function that may benefit from supportive exercises and activities.
- Describe exercises and techniques that support function of the lips, jaw, cheeks, tongue, and sucking patterns.
- Create a personalized neonatal oral exercise care plan.

Post Frenectomy Support Stages

- Follow up
  - 2-5 days post
  - Weekly 4-6+ weeks if needed
- Collaboration with provider(s)
  - Similar messaging
  - Wound management
    - Evidence (expert opinion), study design, ethics, opinions
- Functional support
  - Oral function, feedings

Critically thinking: oral exercises

- Evidence
- Oral assessment findings and applied care
  - Basic support techniques
  - Clinical skills
  - Contraindications
- Parent's goals
  - Care plan development with parent(s)
- Tracking progress and when to refer

Oral exercise evidence

- Most evidence based on premature babies (29-34wk) or neurologically impaired infants
  - Oral motor work improved: time to complete oral feeds, feed volume, discharge time, neuromotor development scores at 3, 6mos, breast/chest feeding at 1, 3 mos post NICU.
- Oral motor work improved:
  - time to complete oral feeds
  - feed volume

- discharge time
- neuromotor development scores at 3, 6mos
- breast/chest feeding at 1, 3 mos post NICU
- Bovey, 1999; Ghomi, 2019; Greene; 2016; Lessen, 2011; Lessen Knoll, 2019; Li, 2019; Tian, 2015

#### Assessment Guided Care

- Pre and post frenectomy assessment findings
- Lactation and feeding support
  - Can baby improve with basic latch, positioning, feeding support?
  - What has been tried?
  - What is working/not working?
- Orofacial areas in need of support
  - Focus on areas of most dysfunction
  - Start simply
  - Less can be more

#### Clinical Skills: Oral Exercises

- First do no harm, "primum non nocere"
- Know your scope
- Continuing education, mentorships
- Start with what you know
- Track outcomes
- Build on foundational knowledge

#### Contraindications: Oral Exercises

- "Seemingly innocuous stimuli can even be damaging" (Gorga, 1994)
- Contraindications
  - Neurological impairment
  - Medical fragility
  - Severe feeding, swallowing disorders
  - Significant oral aversion, stress
- Sensory input can modulate motor patterns, which comes with benefits and risks

#### What work does baby need?

- Parental goals
- Current issues
- How are feeds now?
- What have they tried?
- What is working, not working?

#### Mutual Care Plan Development

- Care plan suggestions
- What would parent like to try
- What is sustainable
- Implementation, timeline, follow up

#### Personalized Care: Oral Exercises

- Jaws

- Lips
- Cheeks
- Tongue
- Suck Training
- Overall

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

- Oral somatosensory awareness
- Therapeutic presence
- Short and long-term impacts
- Healthy, neurologically intact, full-term infants
- Focus on basics, stimuli can powerful, mindfulness required

Oral Exercises: Points to Remember

- Infant state, quiet and alert, ready to engage
- Make it playful
- Work if brief, usually just 1-5 minutes
- Discontinue work if baby is agitated or not ready
- Pressure should be firm but gentle, practice, get feedback
- Caregiver input, comfort, return demo
- Reevaluate after 2-4 days, 1 week max
- If no progress after appropriate amount of time, refer

Oral exercises: Jaws

- Issue: Jaw tension, poor gape
- Exercise: Jaw massage + chin tug
  - Use finger pads to massage both sides of the jaw (from TMJ to base of mandible), when you reach the chin, pause and gently 'tug' downward. The 'tug' is simply holding gentle pressure for a few seconds and waiting for the mouth to relax open. Repeat 2-4 times if baby is enjoying the work.
- Exercise: Magnet fingers
  - Place fingers inside and outside the TMJ area, like they would be connected 'magnetically', gently massage.

Oral exercises: Jaw and Gape

- Issue: Suboptimal gape, jaw tension
- Exercise: "Beep Bop Boop Bip"
  - Use some silly sounds to associate touching chin, nose, philtrum, then chin tug.
  - This will help baby open wider and associate playful touch, especially teat/nipple near philtrum, with opening wide. Repeat 2-4 times.

Oral exercises: Floor of mouth

- Issue: Floor of mouth tension, jaw tightness
- Exercise: Floor of mouth massage
  - Use finger pad, massage floor of mouth, circular movement work well.

Oral exercises: Lips

- Issue: Suboptimal lip strength, frequent open mouth posturing due to lip tone/strength
- Exercise: Lip pulses

- Use finger pads to work around lips, giving input with a little 'push' side, middle, side of upper and lower lips. Repeat 2-4 times.
- Issue: Lip tension
- Exercise: 'Moustache, Beard'
  - Using index finger, massage over upper lip 'moustache' back and forth 2-4 then rub under lower lip back and forth 'beard' 2-4 times. Can add in some massage 'circles' to the moustache/beard exercise too.

#### Oral exercises: Cheeks

- Issue: Suboptimal cheek strength
- Exercise: Cheek pulses
  - With the pad of index finger (or pinky finger if baby is very little/premature) gently insert inside baby's cheek, gently pulse up to 10 times, repeat on other side. Good strength and response = muscle contraction after 1-3 pulses, moderate = after 3-5 pulses, poor= after 6-10 pulses or no response.
- Issue: Cheek tension
- Exercise: Cheek stretch
  - Using thumb and index finger to form 'magnet' fingers, gently grasp cheek near TMJ are and slide to corner of lips.

#### Oral exercises: Tongue

- Issue: Suboptimal lingual lateralization
- Exercise: Gum rub
  - With the pad of index finger, start in middle of lower gum, then trave/rub lower gum to back molar area. Repeat on both sides 2-4 times.
- Issue: Suboptimal lingual strength
- Exercise: Side of tongue pushes
  - With the pad of index finger, push against side of tongue, baby should try to 'push back'. Repeat 2-4 times each side.
- Issue: Suboptimal lingual cupping and extension
- Exercise: Tug of war
  - Introduce finger to infant's mouth. Elicit some lingual extension playfully. Encourage suckling on finger. With the pad of finger tuned up toward palate, have infant suck and then start to tug to encourage cupping, extension and maintenance of both. You can try to turn finger over for some stoking forward of the tongue periodically. Repeat for 2-4 times or to infant's tolerance/enjoyment.
- Issue: Suboptimal extension and variability of movement
- Exercise: Toy engagement.
  - Using toys that encourage lingual movement and extension can be a playful activity, usually best suite for 8+weeks old and up. Help baby grasp toy, help them bring up to their mouth and explore.

#### Oral exercises: Overall

- Issue: Overall development, healthy sensory input, nervous system regulation
- Exercise: Baby and facial massage
  - Parents can learn, do from home
  - Connective activity, promotes bonding
  - Promotes healthy physical development
  - Regulates nervous system
  - Supports healthy digestion

Promote Healthy Caregiver/Baby Attachment and Co-regulation

- LC role: Provide families with soothing strategies, tools
- Baby needs adult to co-regulate with, connection, safety
- Mindful response to stress = increased resiliency
- Activities to try:
  - TummyTime! Method™
  - Sing, hum, chant
  - Go outside
  - Movement
  - Infant massage
  - Professional bodywork

#### Therapeutic Tummy Time

- Issue: Overall development, healthy sensory input, nervous system regulation, strengthening activity
- Exercise: Therapeutic tummy time
  - Parents can learn, do from home
  - Connective activity, promotes bonding
  - Promotes healthy physical development
  - Regulates nervous system
  - Supports healthy digestion

#### Oral exercises: Suck Training

- Issue: Suboptimal sucking patterns, fatigue with feeds, poor seal
- Benefit of non-nutritive and nutritive suck
- Meet baby where they are at, start slow
- Add in challenges, gauge response

#### Non-Nutritive: Suck Training

- Let baby invite finger in (pad side up)
- Let baby initiate sucking
- Add in movement if baby allows
  - Tug o war
  - Rotate finger to pad side down, gentle pressure
  - Explore finger pressure to palate or pushing on tongue
  - What is response?

#### Nutritive: Suck Training

- Use at chest or with finger
- Tools: finger feeder, feeding tube or syringe
- Be safe with tool
  - Sharp?
  - Flow ok?
- Immature: 3-5 sucks then pause
- Transitional: 5-7 sucks per burst, then pause
- Mature: 10+ sucks per burst prior to pause

#### Creating a personalized oral exercises plan

- Identify specific areas of oral function that need support
- Start with what you know, less is often more

- Plan in collaboration with the caregivers, in line with their goals
- Discuss frequency, timing, what progress will look like, follow up
- Identify when and who to refer to

LC Role: Ensure proper growth, sustainable feeding care plan

- Provide guidance, support
- Monitor growth, supply
- Re-eval goals, plan, progress
- Empower parents , balance expectations
- “One better feed per day”
- Ensure care plan is sustainable and evolving
- Provide community resources, referrals

Summary

- Assessment and parent collaboration guides care plan
- Chart and document appropriately
- Know your skill set, scope and when to refer
- Hone your therapeutic presence
- Identify areas of uncertainty, continue to learn

Rule of Tens: How will the care I provide affect this baby in the next 10 mins, next 10 hours, next 10 days, next 10 weeks, next 10 months, next 10 years....

Thank You!

Be a skilled clinician...not a feeding technician!

Assess beyond the frenulum

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