

Identification and Referral of Oral Motor Impairment in Infants with Poor Suck

Presented by

Debra Beckman, MS, CCC-SLP

Maryann Kotyk, RN, IBCLC

Vicky Robbins, RN, IBCLC

Oral Motor Components of the Suck

- * Positive and Negative Pressure Changes
- * Rhythmical
 - * Rate of one per second
 - * Faster or slower is not nutritive
- * Begins in utero
 - * Video of 11 week gestational age

Oral Motor Components of the Suck

- * Tongue movement
 - * Extension/retraction – forward/back
 - * More effort
 - * May break seal
 - * More air swallowing
 - * Increased nipple trauma
 - * Elevation/depression – up/down
 - * More efficient for nutritive intake
 - * Maintain lip seal
 - * Better intake with less nipple trauma

Impact of Gravity during Feeding

- * Sidelying – Ear toward the floor
 - * Requires less effort
 - * Better breathing
 - * Better head and trunk alignment
 - * Less gravity load on the jaw and tongue
 - * Overflow moves to lower cheek
 - * Increased subglottic airway protection

Impact of Gravity during Feeding

- * Supine – Nose toward the ceiling
 - * Requires more effort
 - * More effort required to round lips
 - * Breathing may be more rapid and shallow
 - * Gravity pushes the jaw and tongue down and back
 - * Overflow moves toward the pharynx and airway

Nipple Shape

- * Dynamic
- * Only if baby uses both positive and negative pressure
- * Weak babies use positive pressure
- * Two kinds of strength required for nutritive suck
 - * Static, sustained – for initial latch
 - * Dynamic, durational - for intake
- * Durational jaw movement of less than 10 seconds results in disorganized suck

Alignment of Head and Neck

- * Chin moves away from the chest – extensor tone activates, clamping occurs
- * Chin at neutral – slightly flexed, neck elongated, sucking is enhanced

How to Screen for Oral Motor Concerns

- * MOMBEST
- * Manual
- * Oral Motor
- * Breastfeeding
- * Evaluation
- * Screen
- * Tool

MOMBEST Screening Tool

- * Assess 2 components of nutritive suck
 - * Durational jaw movement
 - * Midblade tongue elevation
- * Support the baby's head
- * Count jaw movements in 10 seconds
- * Count midblade tongue elevations
- * Refer if failure occurs for either

Referral to Therapist

- * Completes the Beckman Oral Motor Assessment
- * Provides intervention and parent training as indicated

Hands On Screening Activity

- * Support head
- * Small finger placed between posterior gums for 10 seconds, repeat on left and right
- * Count number of jaw compressions in 10 seconds
- * Place finger tip at the middle of the tongue blade
- * Depress tongue and move finger back to hard palate
- * Feel for midblade tongue elevation within 1 second
- * Repeat for 3 trials

Suggested Reading

- * Beckman, D., Neal, C., Phirsichbaum, J., Stratton, L., Taylor, V., & Ratusnik, D. (2004). Range of movement and strength in oral motor therapy: A retrospective study. *Florida Journal of Communication Disorders*, 21, 7-14.
- * Biro, J., Coker, P., French, L., Lee, J., Martin, M., Mitchum, K., Nguyen, C., & Williams, K., (2010) Building the Evidence: Using the evidence to create a protocol for infants with feeding issues. *OT Practice* May 10, 2010, 9-13.
- * Clawson, E.P., Palinski, K.S., & Elliott, C.A. (2006). Outcome on intensive oral motor and behavioural interventions for feeding difficulties in three children with Goldenhar Syndrome. *Pediatric Rehabilitation*, 9(1), 65-75.
- * Fucile et al, (2002). Oral stimulation accelerates the transition from tube to oral feeding in preterm infants. *Journal of Pediatrics*, 141, 230-236.
- * Kumin, L., Von Hagel, K.C., & Bahr, D.C. (2001). An effective oral motor intervention protocol for infants and toddlers with low muscle tone. *Infant-Toddler Intervention* 11, 181-200.
- * Lessen, B.S. (2011). Effect of the Premature Infant Oral Motor Intervention on Feeding Progression and Length of Stay in Preterm Infants. *Advances in Neonatal Care* 11, 129-139.
- * Rocha, A. D., Moreira, M. E. L., Pimenta, H. P., Ramos, J. R. M , Lucena, S. L. A (2007). Randomized study of the efficacy of sensory-motor-oral stimulation and non-nutritive sucking in very low birthweight infant. *Early Human Development*, 83(6), 385-388.

Contact Information

Debra Beckman, MS, CCC-SLP
info@beckmanoralmotor.com

Beckman & Associates, Inc
620 N Wymore Rd Suite 230
Maitland, FL 32751
407-647-4740