Infant Program at Barrow Cleft and Craniofacial Center
Pre-surgical and Feeding Management of Infants with Cleft Lip/Palate

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Learner Outcomes

• Identify the medical team members needed for optimal management of infants with cleft lip/palate
• List 3 types of cleft-adapted bottles that may be successful feeding options for infants with cleft lip/palate
• Outline basic services provided through team care in a program designed for infants with cleft lip/palate
Prenatal Team Visit

- Discuss interdisciplinary team approach
- Medical Home
- Review feeding concerns and bottle options
- Explore parents emotional state
- Review expected cleft status, surgical timeline
- Review pre-surgical adjunctive treatments needed
- Provide folder of educational information
- Provide “Bear Bag” and introduce parent liaison concept
Feeding an Infant with a Cleft
Feeding Concerns

- Feeding difficulties in these infants are due to impaired suckling and swallowing functions (Duarte, Ramos, & Cardoso, 2015).
- Children born with cleft lip and palate generally present low birth-weight and feeding problems, which hinder their weight gain over the first several months of life and cause delays in surgery (Riski, 2007).


Feeding Concerns

• Infants with cleft lip and/or palate are at risk for feeding difficulties, failure to thrive, and poor weight gain.

• One center found 31% of infants born with cleft lip and/or palate fell in the failure to thrive category (5th percentile or lower).
  • When infants were followed by a team for feeding, the failure to thrive rate decreased to 5% after 6 months.

Common Misconceptions

- Children with a cleft are NOT more likely to aspirate because of their cleft (unless other conditions are present).

- Most infants with a cleft feed well with a cleft-adapted bottle and do not require the use of a tube.

- Multiple bottles and techniques should be trialed before placing a feeding tube.
Breastfeeding/Bottle Feeding

- An opening in a infant’s palate makes it impossible for an infant with a cleft palate to breastfeed.
- In some rare cases, a child with a cleft lip ONLY may be successful with breastfeeding
- All other infants will require the use of a cleft-adapted bottle
- A child with a cleft may be put to breast AFTER being fed with a cleft adapted bottle for attachment and nurturing purposes
- Mothers are encouraged to pump and use breastmilk in an adapted bottle.
Breastfeeding/Bottle Feeding

• In the hospital, infants may seem successful with breastfeeding, however, the amount of calories/effort required is not equal to their total intake.

• When breastfeeding infants with a cleft return for follow up, many are significantly below birth weight.

• Re-education is needed and often is not accepted by family.

• Inconsistent messages among providers complicate care.
Common Feeder Directed Bottles

Mead Johnson Cleft Palate Nurser
• Nipple is placed in infant’s mouth
• Feeder squeezes bottom of the bottle as infant sucks and stops squeezing when infant pauses to breathe (think of squeezing a soft glue bottle) to assist the infant in expressing milk

Medela Special Needs Feeder (Haberman)
• 3 lines on bottle to control flow rate
• Line on bottle is placed upwards
• Feeder squeezes nipple as infant sucks and stops squeezing when infant pauses to breathe
Common Infant Directed Bottles

Dr. Brown Specialty Feeding System

- MUST HAVE blue valve to be cleft adapted
- No need to squeeze assist
- Nipple sizes preemie to 4
- With valve in place is used like a regular bottle
- When infant presses on nipple with gums or tongue, milk is expressed

Pigeon Nipple

- Place notch in bottle upwards
- Bottom of the nipple is soft and top of the nipple is hard
- When infant presses on the bottom of the nipple, milk is expressed
Feeding Goals

• A successful feeding should take under 30 minutes from start to finish
• Calories in/out
• Infants should be gaining 15g-30g per day
Recommendations

• Position the baby at a semi-upright position (45 to 90 degree angle)

• Burp the baby halfway through the feeding and again at the end

• Sit the baby upright 30 minutes after feeding is completed

• Nasal regurgitation is common. There is no need to suction the milk out, as it is often cleared by swallowing

• A baby should continue to use a cleft adapted bottle after repairs as directed by the plastic surgeon and team speech pathologist
Team Psychologist

• Prenatal turmoil
• Anger, sadness, guilt, fear
• Birth
• Feeding
• Inadequacy
• Surgery fears—the changing face
Plastic Surgery Initial Consult

Initial Evaluation
Document cleft status
Nasal deformity
Evaluate molding needs
Discuss lip and nasal repair
Nasolabial Molding (NLM)

Goals of Treatment Include:

• Narrowing the cleft width
• Uprighting the columella
• Creating transition from columella to nostril
• Reshaping nasal cartilage
Bilateral Cleft Lip and Palate

Goals of Treatment

Repositioning of premaxilla
Tissue expansion-columella
Creating transition from columella to nostril
Reshaping nasal cartilage.
Treatment

Establish successful feeding
Do NOT tape on Day 1
Consistent tension--OO
Introduce vertical force
Reshape nasal cartilage
Create/equalize columella
Possible post-op support
Coordinated Team Care

• Team care is the best care for infants with craniofacial conditions
• The Infant Program at Barrow Cleft and Craniofacial Center coordinates feeding and pre-surgical appointments for family convenience
• Specific times each week are set aside for the program
  • This dedicated time provides an opportunity for families to meet other families who have children with similar conditions
• Infant program allows for communication among team providers for improved quality of care
Thank you!

• Further questions please contact:
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