Behavioral Feeding Strategies to Address Oral Aversion in Children with End Stage Renal Disease

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Objectives

- Describe oral aversion and its characteristics.
- Identify risk factors for oral aversion and populations at risk.
- Identify behavioral/feeding strategies that can prevent or ameliorate oral aversion in pediatric populations, specifically children with end stage renal disease.

Pediatric Feeding and Swallowing Disorders

- Feeding disorder is a term used to describe the behavior of those who have difficulty consuming adequate nutrition by mouth.
- Feeding disorders are often complex and result from a combination of factors.
- The presentation of feeding problems range from a failure to thrive diagnosis, to swallowing dysfunction, to problematic mealtime behaviors interfering with the child's integration into family or social activities.

Who Is At Risk For A Feeding Disorder

- Feeding disorders are common in the pediatric population with prevalence estimates ranging from 25% to 35% in developmentally normal children.
- Severe feeding problems are more prevalent (40%-70%) in children with developmental disabilities and chronic medical conditions with etiologies including neurodevelopmental disorders, disorders of appetite regulation, metabolic diseases, sensory defects, conditioned dysphagia, and anatomic abnormalities (Byars, et. al).
- Many feeding disorders develop as a result of an organic condition but are maintained over time by behavioral factors.

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Oral Aversion

- Oral aversion is a term used to describe children who are resistant to eating by mouth.
- Oral aversion can occur in any stage in life. Commonly children who demonstrate signs of oral aversion in infancy tend to continue to demonstrate these signs into childhood.

Oral Aversion in Infants

- Oral aversion in infancy can present as arching off the bottle/breast, turning head away from bottle/breast, falling asleep quickly during a feed, and disorganization while feeding.
- Why does this occur?
  - Starting feeding while baby is on too much oxygen support
  - Aspiration concerns
  - Not watching baby cues and forcing bottle/breast
  - Poor coordination of suck, swallow, and breathing
  - GI discomfort/constipation
  - Oral structural concerns (tongue tie, micgronathia, cleft palate/lip)
  - Neurological concerns/low tone
  - Medical complexities

Oral Aversion in Early Childhood

- Oral aversion in early childhood can present as picky eating, poor volume intake, increased meal time behaviors, food refusal.
- Why does this occur?
  - Poor oral motor skills
  - Decreased structure around meals and snacks leading to grazing
  - Sensory concerns (tactilely defensive, poor self regulation)
  - Diagnoses of Autism, Developmental Delay, genetic or neurological disorders, acute medical conditions

Oral Aversion in Late Childhood

- Oral aversion into late childhood can present as limited diet, poor variety, food rigidity, avoidance of social eating.
- Why does this occur?
  - Poor appetite
  - Food jagging
  - Decreased oral motor skills
  - Acute or ongoing medical concerns
  - Anxious behaviors around food

Oral Aversion in Children on Dialysis

- Oral aversion in children on dialysis can present as poor volume intake impacting growth, decreased appetite, refusal of specific type of foods.
- According to several studies the most common factor affecting dietary intake was a loss of interest in food and or cooking from medications, fluid retention, loss in appetite, decreased energy to want to chew harder to chew foods limiting nutrition.
- Due to the above factors enteral feeding is preferred when oral aversion is present.

Enteral Feeding

- Aggressive feeding for children with oral aversion can exaggerate feeding refusal.
- When limited oral intake is affecting growth, hydration, weight gain, and overall nutritional status it is important to discuss with the entire medical team and family about placing a feeding tube.

Strategies for Prevention

- We know that an aggressive feeding approach can lead to further food refusal and increased anxiousness around feeding.
- Using an interdisciplinary approach to determine causes of oral aversion is integral in determining the appropriate treatment plan.
- Seeking a referral for a feeding evaluation is an important piece in treating oral aversion.

Interdisciplinary Team Members

- Feeding therapist (Occupational or Speech Therapist): Determine structural abnormalities, concerns for aspiration, delayed oral motor skills, postural/seating concerns, sensory differences
  - Feeding therapist can help determine if the child has the skills and endurance to eat enough food by mouth to maintain adequate nutrition
- Psychologist: Assess psychological, behavioral, and environmental factors that may be preventing a child from eating
- Nutritionist: Assess labs and diet to maintain adequate levels of nutrition
- Medical Team: Determine/rule out causes of feeding disorders that stim from within the body

Feeding Therapy Approach

- A feeding therapist may take the following approaches depending upon results from an evaluation
  - Working on advancing oral motor skills for improved variety of foods
  - Improving strength/endurance for greater volume intake
  - Improve positioning for ease and safety of swallow
  - Working on accepting different textures orally

How Can You Help?

- Recognize signs of oral aversion
- Consult appropriate medical providers to build interdisciplinary team
- Refrain from forcing children to eat when refusing
- Provide structure to meals and snacks
- Continue to educate family on nutritional status and options for adequate nutrition

Psychology Perspective

- Feeding is one of the most fundamental tasks of parenting.
- Our society discusses, evaluates, and judges parents frequently about how they feed their children.
  - Media
  - Extended family/grandparents
  - Friends/other parents
  - Often directed at mothers
- Feeding is also a time for infant/parent bonding, and for older children it is an important social routine.
- Thus, a lot of complicated emotions are wrapped up in feeding.

Psychology Perspective

Acknowledge this for parents: it's hard, it's emotional, it's not what they expected.

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Psychology Involvement

- Most feeding problems have multiple etiologies.
  - Medical
  - Developmental
  - Social
  - Environmental

Infants/Toddlers vs. Older Kids

Infants/Toddlers

- Calm, matter-of-fact approach
- Expect slow progress
- Aim for consistency, daily practice, lots of “small” opportunities
- Keep follow up with OT, follow recommendations

Older Kids

- Child development (autonomy) increases complexity
- Behavioral parenting interventions often become more relevant

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Behavioral Treatment

- Common treatment goals:
  - Decreasing undesired behaviors at meals
  - Decreasing parent stress at meals
  - Increasing pleasant parent-child interactions at meals
  - Increasing oral intake or variety of oral intake
  - Advancing texture
  - Increasing meal structure and routine

Feeding Environment

- Consistent, predictable place for feeding/eating
- Secure seating for younger children
- Reduce or eliminate distractions at mealtime (no screens, no toys)
- Food ready when child comes to table
- Family mealtime to promote modeling
- Child is served what everyone else is served

Feeding Schedule

- Children who eat on a fixed schedule tend to eat more calories
  - Versus those who “graze” between meals
- Mealtimes shouldn’t be too long or too short
- Children learn that food is only presented at certain times, and caregiver decides what is served
- Refusing meals or eating too little increases hunger cues
- Working on an interdisciplinary team allows:
  - Medical needs/OK to fast?
  - Does medical condition affect hunger?
  - Development of oral motor skills?
  - Parent buy in

Behavioral Parent Training

- Teach how behaviors (wanted and unwanted) develop and are reinforced
- Help parents assess antecedents and consequences and how they affect behavior
- Identify treatment goals and target behaviors
- Select interventions to increase or decrease behaviors

Target Behaviors

- Taking bites
- Chewing food
- Swallowing food
- Trying new food/increasing variety
  - Can start with different brands, small variations
- Touching or smelling food
- Advancing foods with different textures
- Increasing calories
- Reducing undesired behaviors (e.g., fussing, throwing food, “cheeking” food)

Parent Training - During Meals

- Paying attention to desired behaviors
  - What are the target behaviors? Those should get lots of attention.
- Ignore undesired mealtime behaviors
- Time out during mealtime (without escape)
- “First this, then that”
- Solid food before liquids, oral intake before tube feeding
- Avoid questions; command or praise
- Calm, matter-of-fact, positive approach

Parent Training - Ending Meals

- Release child when mealtime is over
  - 15-20 minutes for kids under 5
  - 20-30 minutes for kids 5+
- Try to “time it” so meal ends on a positive note
  - Instruct child to take a bite or sip of preferred food so meal ends with praise
  - End meal a bit early if child performs target behavior; leaving the table (escape) reinforces the target behavior

Summary

- Feeding problems are common in both typically developing children and those with chronic medical conditions.
- Oral aversion is a common problem for children with ESRD.
- An interdisciplinary team approach is key to preventing or treating oral aversion.
- Behavioral strategies target the feeding environment, feeding schedule, structure of mealtimes, and parent behaviors that promote desired mealtime behaviors.

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