Application of Behavioral Strategies to Address Feeding Difficulties Among Children with CHARGE Syndrome

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Presenter Information
Pediatric Feeding Disorders Program. Dr. Smith currently serves on the interdisciplinary treatment team and supervises cases in the day treatment and inpatient program while also conducting direct behavioral treatment with children with feeding disorders and their families in the outpatient program. Dr. Smith completed her doctoral internship and post-doctoral fellowship at the Johns Hopkins School of Medicine/Kennedy Krieger Institute. Dr. Smith received her PhD in School Psychology from Mississippi State University and was an active member in the Bulldog CHARGE Syndrome Research Lab during her time in graduate school. Dr. Smith's current research interests involve applications of evidence-based behavioral treatments to increase oral feeding among children with complex medical histories, genetic disorders, and developmental delays. Dr. Smith has also evaluated the use of specific behavioral interventions to increase self-feeding within this population.

Presentation Abstract
This presentation will include an overview of various evidence-based behavioral strategies to address food refusal (e.g., tube dependence, liquid dependence, crying/screaming when food is presented, turning head away from or hitting the spoon of food) and food selectivity (e.g., eating only a few select foods, refusing to eat foods from all food groups, eating only certain brands/types of foods) in children with CHARGE. The presentation will also discuss three specific case examples. Data from three individuals will be presented to support the use of various behavioral strategies at decreasing tube dependence, increasing acceptance of solid food and liquid by mouth, increasing variety of food consumed, increasing self-feeding, and decreasing problem behavior during meal times. Overall, this presentation will provide attendees with an increased understanding of how feeding difficulties in children with CHARGE syndrome can be developed and addressed from a behavioral perspective as well as an understanding (based on data) that behavioral strategies do lead to positive long-term feeding-related outcomes among individuals with CHARGE syndrome. This presentation will also provide resources for locating professionals in this field.

Learning Objectives
- Attendees will learn that many feeding difficulties in children with CHARGE syndrome can be addressed from a behavioral perspective.
- Attendees will learn about the application of a few behavioral-based treatments to address food refusal and food selectivity.
Why does my child have a feeding problem? In most cases, no single factor accounts for the feeding difficulties but rather a combination of several factors usually interact to produce the more general feeding problems.
- Physiological Factors
- Biological Factors
- Skill Deficits
- Behavioral Factors

Consideration of feeding as a behavior, just like walking, sitting, cleaning up toys, putting on clothes.

Antecedent (Trigger) | Behavior | Consequence (Response to the Behavior)
--- | --- | ---
Eat this carrot | Child screams and throws carrot on floor | Attention (Reprimand) + Escape (Carrot removed)

Over time, child may learn exactly what behavior they need to engage in so that they can get out of (or escape) eating the food they don’t want to eat.
- We (as caregivers) have to change the way we set up the environment or how we present the food to the child.
- We (as caregivers) have to change the way we respond to the child’s refusal or problem behavior in meals.

Child may not have had substantial exposure to oral feeding prior to being medically “safe” to eat or drink by mouth. They may not know what they are supposed to do when you put a spoon in front of them or they may not like the feeling of the spoon or of food in their mouth, therefore, they engage in problem behavior in order to avoid.
- We (as caregivers) have to change the way we set up the environment or how we present the food to the child.
- We (as caregivers) have to change the way we respond to the child’s refusal or problem behavior in meals.
- Need exposure to learn the skills

General Strategies
- Manipulating texture of food, bite sizes, volume presented
- Providing rewards for appropriate mealtime behavior (praise, iPad time, access to preferred toys, breaks)
- Setting a maximum meal duration and sticking to it
- Gradually fading in non-preferred foods or textures into meals
- Feeding meals on a structured schedule

Resources
- Dr. Hallie Smith, 443-923-2831, SmithH@kennedykrieger.org