Feeding Difficulties in Infants and Young Children: Tailor Interventions to Match Child Behaviours

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Miami Summit, June 2009 – Feeding difficulties in infants and young children are highly prevalent and pediatricians need to pay close attention to parental complaints in order to identify and categorize the chief problem and tailor interventions accordingly. This report presents an expert categorization of feeding difficulties and appropriate consequent treatments. Parental education and reassurance is often sufficient to resolve many feeding issues; however, providing a nutritionally balanced supplement may help correct malnutrition and ease parental anxiety.

Feeding difficulties in infants and young children are among the most prevalent complaints encountered in the average pediatric practice today. Estimates of their prevalence vary but in physically normal children, 50% to 60% of surveyed parents report feeding difficulties with their young children, while 25% to 35% meet criteria for specific difficulties such as food refusal and selective eating. The consequences of an untreated feeding difficulty can include failure to thrive, nutritional deficiencies, impaired parent/child interactions and chronic aversion with socially stigmatizing mealtime behaviour. As well, a feeding difficulty can be a sign of an underlying organic disorder such as eosinophilic esophagitis. It is therefore important to identify the type of feeding difficulty present.

Categorization of Feeding Difficulties

In pediatrics, a variety of terms are used to categorize different feeding difficulties, with a resulting lack of common understanding. To that end, an attempt to apply a single categorical description has been made by a diverse group of experts and presented at a meeting in Miami, Florida by Dr. Benny Kerzner, Professor of Pediatrics, The George Washington University, Washington, DC; Thomas Linscheid, PhD, Clinical Associate Professor of Pediatrics, Ohio State University School of Medicine, Columbus; pediatric gastroenterologist Dr. Russell J. Merritt, Children’s Hospital Los Angeles, California; and Dr. Irene Chatoor, Children’s National Medical Center and Professor of Psychiatry, George Washington University.

Patients were placed into one of the following seven categories, each with differing features and treatments:

1. Infants with poor appetite because of organic causes.
2. Those with poor appetite due to parental misperception.
3. Those with poor appetite who are otherwise vigorous.
4. Poor appetite in an apathetic or withdrawn child.
5. Children who display highly selective food behaviours.
6. Infants with colic that interferes with feeding.
7. Infants or children who fear feeding.

Interventional Strategies

Situating a child’s feeding behaviour into one of the proposed seven categories helps determine interventional strategies.

1. Children may have poor appetite or refuse food because of an underlying organic cause and it is critical to systematically exclude organic causes of poor appetite. If an organic cause is suspected, then the appropriate investigations must be carried out to determine the diagnosis and guide treatment. Signs that would make one suspect underlying organic causes include but are not limited to dysphagia; recurrent chest symptoms or pathology; failure to thrive; feeding interrupted by pain, regurgitation or chronic vomiting; diarrhea or blood in stool; neurodevelopmental anomalies; atopy and eczema; chronic cardiorespiratory disease; or signs of neglect.

2. For children with poor appetite due to parental misperception, parents need to be educated about what they can realistically expect in terms of their child’s growth and nutritional needs for their age. They also need to understand basic feeding principles and apply them consistently during feedings. Reassurance is often all that is needed to improve the situation. If not, and parental anxiety remains high, then a balanced nutritional supplement may be considered in order to allay parental fears and reduce the likelihood that they will use force or coercion to get their child to eat.
3. Children with poor appetite who are otherwise vigorous are often more interested in playing than in feeding, are alert, active and inquisitive but rarely show signs of hunger or interest in feeding, and are felt by some experts to have “infantile anorexia.” Typically, this behavior occurs during transition from spoon to self-feeding between 6 months and 3 years of age.

As discussed by Drs. Linscheid and Chatoor, treatment of poor appetite in a child who is fundamentally vigorous should promote the child’s appetite by increasing hunger and satisfaction from eating. Principles here include no grazing between meals, only water; three meals a day plus an afternoon snack; no distractions during feeding; discrete mealtimes not longer than 30 minutes; and the use of timeout to discourage disruptive feeding behaviors. If growth is faltering, practitioners may recommend parents feed the child high-calorie foods or use a 30 kilocalories-per-ounce nutritionally balanced supplement, optimally given after the dinner meal to least impact on appetite.

4. Poor appetite in a child who is withdrawn and depressed may be a sign of neglect. If practitioners observe no signs of smiling, babbling or eye contact between the infant and caregiver during examination, the child could be at risk for substantial weight loss and malnutrition and may require inpatient admission to improve the feeding environment. Consider socioeconomic circumstances, psychoneurosis in the mother and neurological problems in the child.

5. Children who consistently refuse specific foods because of taste, texture, smell or appearance, or who become visibly anxious if asked to eat foods to which they are averse, often have additional sensory difficulties. They are upset by loud noises or they dislike the sensation of sand or grass under their feet. Highly selective food intake or what Dr. Chatoor calls “sensory food aversion” goes beyond normal resistance to the introduction of new foods and, depending on the foods refused, may result in deficits of some essential dietary nutrients. In these circumstances, parents should be taught to tempt the child with food, not foist it upon them. Parents should themselves consume new foods without offering the food to the child, although they can try leaving the food within the child’s reach as toddlers are often more willing to try new foods if they feel in control. Reassuring the parent can be helpful. Again, the diet may be supplemented with a nutritionally balanced product to redress the risk of micronutrient deficiencies.

6. In infants under the age of 3 months, colic—defined as inconsolable crying not responsive to usual interventions and with no obvious pathology—can be problematic because infants may fail to calm down enough to feed successfully. If the crying disrupts feeding, mothers often try to feed infants more frequently, fearing the infant is crying because they are hungry. Strategies to improve infants with colic include feeding in a quiet room with dim lights and white noise, giving the infant a warm bath to break the crying cycle, swaddling the infant to comfort them or possibly using kangaroo-style skin-to-skin nursing. Mothers with colicky infants need to get adequate rest and support and fathers need to get involved in the feeding and caring of the infant. At the same time, infants may cry because of pain and discomfort from feeding and practitioners need to differentiate possible triggers for crying including food sensitivity, constipation or gastroesophageal reflux.

7. Fear of feeding is rare, but if a child cries at the sight of food or the bottle or resists feeding by crying, arching or refusing to open their mouths, they may have what Dr. Chatoor refers to as “post-traumatic feeding disorder,” possibly the result of a frightening feeding experience such as choking. Parental education is again key here. If a child fears the bottle, parents can offer a sippy cup or spoon instead. Parents should also try to feed the child when they are half asleep and relaxed rather than when wide awake and stressed at the sight of food. Once they have succeeded, they will begin to realize that they can feed their child successfully.

**Practical Tips**

Anthropomorphic measurements clearly help distinguish infants and children who are failing to thrive because of poor appetite. It is also important for practitioners to assess parental anxiety. If parents perceive that their child is not feeding well, they may feel pressured to resort to coercive feeding practices which can be detrimental and can exacerbate feeding disorders. Acknowledgement of parental anxiety and providing reassurance, information and a plan of action are helpful in this regard. However, the specific approach taken depends upon the category of feeding difficulty.

**Summary**

Feeding difficulties are very common in young children and they have the potential to compromise nutrition, growth and cognitive development. Pediatricians therefore need to pay close attention to parental complaints about feeding difficulties to determine the category of feeding difficulty and tailor their interventions accordingly. This particular attempt to categorize feeding difficulties in infants and children may serve as a guide in this regard.