

VACTERL Association and Feeding


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Hope lives here.

VACTERL and Feeding

- What are some of the feeding issues specific to VACTERL?
- What is a feeding team and how can it help your child?

VACTERL and Feeding

- V - Vertebral anomalies (~70%)
- A - Anal atresia (~55%)
- C - Cardiovascular anomalies (~75%)
- T - Tracheoesophageal fistula (~70%)
- E - Esophageal atresia (~70%)
- R - Renal (Kidney) anomalies (~50%)
- L - Limb anomalies (~70%)
- S - Single umbilical artery (~35%)

VACTERL and Feeding

- V - Vertebral anomalies
 - Does not generally impact feeding
 - Tethered cord can lead to constipation
- A - Anal atresia
 - Constipation after repair of imperforate anus
 - Nobody wants to eat if their abdomen is full of stool

VACTERL and Feeding

- C - Cardiovascular anomalies
 - Feeding is exercise for infants
 - Some cardiac anomalies can lead to fatigue during feeding
 - Cardiac surgery can result in damage to the nerve (recurrent laryngeal) that controls the vocal folds
 - This can lead to increased risk for aspiration
 - Prolonged intubation after cardiac surgery can lead to oral aversion

VACTERL and Feeding

- T - Tracheoesophageal fistula
- E - Esophageal atresia
 - Post-operative tracheal stenosis
 - Difficulty breathing can lead to difficulty feeding
 - Esophageal strictures
 - Can lead to difficulty swallowing, discomfort with feeding
 - Abnormal esophageal motility
 - Abnormal development and innervation
 - Can lead to difficulty swallowing, discomfort with feeding, and GE reflux

VACTERL and Feeding

- T - Tracheoesophageal fistula
- E - Esophageal atresia
 - Gastroesophageal reflux (heartburn)
 - Refluxing of stomach materials into the esophagus can cause discomfort from the stomach acid
 - Children who have reflux +/- vomiting may learn that eating leads to pain
 - Reflux in any child can lead to a feeding aversion

VACTERL and Feeding

- T - Tracheoesophageal fistula
- E - Esophageal atresia
 - Gastroesophageal reflux (heartburn)
 - Refuse to eat because they would rather have the pain of hunger than the pain from reflux
 - Learn they are more comfortable with small, frequent feedings
 - Prefer to drink instead of eat to wash down the acid
 - Have inconsistent oral acceptance
 - Feed better when sleepy
 - Have difficulty progressing textures

VACTERL and Feeding

- R - Renal (Kidney) anomalies
 - Most do not impact feeding
- L - Limb anomalies
 - Difficulty self-feeding
 - Trouble with positioning for feeding
- Slow growth
 - May start intrauterine, especially if there is a single umbilical artery
 - Nutritional support

VACTERL and Feeding

- What is a Feeding Team, and how can one help you and your child?

Team Members

- Medical – Physicians and Nurse Practitioners
- Medical Assistant
- Nutritionists
- Speech and Language Pathologists
- Occupational Therapists
- Behavioral Health – Pediatric Psychologists
- Social Worker
- Clinical Feeding Specialists
- Manager
- Administrative assistants

What does a Feeding Team do?

■ Medical

- Complete history and physical looking for medical factors contributing to feeding disorders
 - GI Disorders
 - GE reflux
 - Constipation
 - Food allergies
 - Eosinophilic Esophagitis
 - Neurologic, Genetic, Metabolic disorders
 - Autistic spectrum

What does a Feeding Team do?

- Dietitian

- Full dietary history
- Evaluate growth parameters
- Suggest micro and macro nutrient supplements
 - Nutritious beverages
 - Calorie boosting
 - Vitamins/minerals
 - Supplemental tube feeds

What does a Feeding Team do?

- Speech Pathology
 - Co-presenter, Susan McCormack, M.A., CCC-S
- Occupational Therapy
 - Fine motor/Self-feeding
 - Positioning
 - Sensory processing

What does a Feeding Team do?

- Behavioral health (psychology)
 - Mealtime structure
 - Refusal behaviors
 - Intensive Day Hospital Feeding Program

Day Hospital Feeding Program

- Medical/nutritional issues (i.e. reflux, eosinophilic esophagitis, failure to thrive) must be under control before patient is admitted
- 6 patient capacity
- Typically 4 week admission
 - Monday – Friday, 8:30 am – 4:30 pm
- 3 meals per day by Feeding Therapists using Applied Behavior Analysis (ABA)
 - Desired behaviors rewarded
 - Undesired behaviors ignored
- Parents watch through one-way mirror, meals recorded on DVDs
- Parents are trained during second part of admission
- All patients followed by Nutrition and Medical
- All families assessed at admission by Social Work
- Patients may receive OT and/or ST depending on their needs
- Patients seen for follow-up two weeks after discharge, then monthly
- If doing well, ABA protocol gradually phased out

Contact information

- To do an intake: 215-590-7500
 - General questions:
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 - Website
 - www.chop.edu, type “feeding” in the search box, then click on the second option
- <http://www.chop.edu/consumer/jsp/division/generic.jsp?id=70529>