



# REFLUX DISEASE

A RESOURCE GUIDE

## Reflux Disease

### Reflux disease in general.

- Reflux disease in the pediatric population, commonly referred to as gastroesophageal reflux disease (GERD), occurs when stomach contents flow back into the esophagus, causing symptoms such as heartburn, regurgitation, and discomfort. In infants and children, it can lead to feeding difficulties, poor weight gain, and respiratory issues.

### What are potential causes of reflux disease in pediatrics?

- **Immature Lower Esophageal Sphincter:** In infants, the muscle that controls the opening between the esophagus and stomach may be underdeveloped.
- **Obesity:** Excess weight can increase abdominal pressure and exacerbate reflux.
- **Dietary Factors:** Certain foods and beverages can trigger reflux symptoms.
- **Hiatal Hernia:** A condition where part of the stomach pushes through the diaphragm into the chest cavity.
- **Neurological Conditions:** Conditions like cerebral palsy can affect the muscles involved in swallowing and digestion.
- **Genetic Predisposition:** Family history of GERD can increase the likelihood of developing the condition.

### What are some signs and symptoms that can present with reflux disease in pediatrics?

- Frequent vomiting or regurgitation
- Persistent coughing or wheezing
- Refusal to eat or difficulty eating
- Crying and irritability, particularly after feeding
- Poor weight gain or growth
- Heartburn or chest pain
- Hoarseness or sore throat
- Trouble swallowing
- Respiratory issues, such as asthma or pneumonia

### How can reflux disease be diagnosed in pediatrics?

- **Medical History and Physical Examination:** Assessing symptoms and physical signs.
- **Esophageal pH Monitoring:** Measuring acid levels in the esophagus over 24 hours.
- **Upper Endoscopy:** A procedure that uses a flexible tube with a camera to view the esophagus, stomach, and duodenum.
- **Barium Swallow:** X-ray imaging after the child drinks a barium-containing liquid to highlight abnormalities in the digestive tract.
- **Impedance Monitoring:** Measuring non-acid reflux episodes by detecting changes in electrical resistance in the esophagus.

### What questions in history can be explored?

- When did the symptoms first appear, and how have they progressed?
- How often does the child experience reflux symptoms?
- Are there specific triggers, such as certain foods or activities?
- Does the child have any difficulty eating or swallowing?
- Has there been any impact on the child's growth and weight gain?
- Are there any associated respiratory symptoms, such as coughing or wheezing?
- What treatments or interventions have been tried, and what were their outcomes?

### What investigations should be done?

- Esophageal pH Monitoring:** To measure acid levels in the esophagus.
- Upper Endoscopy:** To visualize the esophagus, stomach, and duodenum and obtain biopsy samples.
- Barium Swallow X-ray:** To detect structural abnormalities.
- Impedance Monitoring:** To measure both acid and non-acid reflux.
- Gastric Emptying Study:** To evaluate how quickly food leaves the stomach.

### What therapies or treatments can support the patient and/or family?

- Lifestyle and Dietary Changes:** Adjusting feeding practices, avoiding trigger foods, and promoting upright positioning after meals.
- Medications:** Antacids, H2 blockers, or proton pump inhibitors to reduce stomach acid production.
- Surgical Interventions:** Procedures like fundoplication for severe cases that do not respond to medical management.
- Nutritional Support:** Working with a dietitian to ensure the child receives adequate nutrition.
- Behavioral Interventions:** Techniques to manage feeding difficulties and reduce stress related to eating.
- Regular Monitoring:** Ongoing assessment to adjust treatment plans as needed and monitor the child's growth and development.

## Resources

### HealthLinkBC

- Explains gastroesophageal reflux in babies and children, including risk factors and ways to alleviate symptoms.

### KidsHealth

- Provides information on gastroesophageal reflux, its causes, symptoms, and management strategies.

### MovieGI

- Educational videos about gastroesophageal reflux disease and other gastrointestinal conditions, tailored for patients and caregivers.

### WebMD

- Details the symptoms, diagnosis, and treatment options for GERD in infants and children.

## Health Practitioner Resources

### UpToDate

- In-depth patient information on GERD in children and adolescents, including treatment options and lifestyle modifications.