



## Co-management Guide

Pediatric  
Gastroenterology

Gastroesophageal Reflux

<b>Guidelines Referenced</b>	Joint Recommendations of the North American Society of Pediatric Gastroenterology, Hepatology, and Nutrition and the European Society of Pediatric Gastroenterology, Hepatology, and Nutrition:  <a href="https://www.naspghan.org/files/Pediatric_Gastroesophageal_Reflux_Clinical.33.pdf">https://www.naspghan.org/files/Pediatric_Gastroesophageal_Reflux_Clinical.33.pdf</a>
<b>Background</b>	<p>Gastroesophageal reflux is a common phenomenon in the pediatric population, however symptoms vary significantly among different age groups and patient populations. It may also be clinically difficult to differentiate between gastroesophageal reflux (GER) and gastroesophageal reflux disease (GERD) in pediatric patients. Certain patient populations that tend to experience symptoms of GER and/or GERD at higher rates than the general pediatric population are infants, as well as patients with chronic neurologic or pulmonary disease.</p> <p>Gastroesophageal reflux (GER): Passage of gastric contents into the esophagus, with or without regurgitation and/or vomiting.</p> <p>Gastroesophageal reflux disease (GERD): GER that becomes pathological when it leads to troublesome symptoms and/or complications.</p>



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### Initial Evaluation

#### Infants (0-12 months):

- Age at symptom onset
- Symptoms: FTT, discomfort/irritability with feeds, feeding refusal, back arching, neck posturing
- Volume and length of each feed
- Frequency of feeds/time between feeds
- Type of feed: formula (type), breastfeeding/EBM, additives, allergen avoidance
- Pattern of regurgitation/vomiting
- Environmental influences
- Growth trajectory
- Prior interventions or medications

#### Children (1-18 years):

- Age of symptom onset
- Description of symptoms (heartburn/chest pain, regurgitation/vomiting, sensation of reflux, chronic cough/hoarseness)
- Timing of symptoms
- Dietary history

#### Red Flags (suggestive of other etiology):

- GI:
  - Persistent/forceful vomiting, bilious emesis, hematemesis, nocturnal/AM emesis
  - Chronic diarrhea/hematochezia
  - Abdominal distension
- Neurological:
  - Abnormal head circumference, bulging fontanelle
  - Seizures
  - Micro- or macrocephaly
- General (infants):
  - Weight loss/FTT, fever, excessive irritability, lethargy



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<b>Initial Management</b>	<p>Infants:</p> <ul style="list-style-type: none"> <li>● Feeding:             <ul style="list-style-type: none"> <li>○ Avoid overfeeding</li> <li>○ Thicken feeds</li> <li>○ Reflux precautions</li> </ul> </li> <li>● If no improvement, trial extensively hydrolyzed or amino based acid formula.</li> <li>● In breastfed infants, trial maternal dairy elimination.</li> <li>● If unsuccessful can consider 4-8 week trial of acid suppression.</li> </ul> <p>Children:</p> <ul style="list-style-type: none"> <li>● Lifestyle and dietary counseling.</li> <li>● If not improved, trial acid suppression for 4-8 weeks, then attempt wean.</li> </ul>	
<b>When to Refer</b>	<p>Infants/Children:</p> <ul style="list-style-type: none"> <li>● No improvement on 4-8 week trial of acid suppression</li> <li>● Unable to wean acid suppression without symptoms recurring</li> <li>● Failure to thrive</li> <li>● Dysphagia</li> </ul>	
<b>Pre-Visit Work Up</b>	<p>Documentation of history, attempted interventions, medications trialed. Please include any imaging or labs performed in the referral.</p>	
<b>Co-management Strategy (as appropriate)</b>	<p><b>Specialist scope of care</b></p> <ul style="list-style-type: none"> <li>● Evaluation and management of patients who meet criteria for referral. This may include additional medication management, imaging studies, and/or endoscopy.</li> </ul>	<p><b>Primary care scope of care</b></p> <ul style="list-style-type: none"> <li>● Initial evaluation</li> <li>● Monitoring of patients who do not meet the above criteria.</li> <li>● Referrals as indicated to appropriate specialties for patients with red flag signs/symptoms.</li> </ul>
<b>Return to Primary Care Endpoint</b>	<ul style="list-style-type: none"> <li>● Patients with gastroesophageal reflux disease who undergo evaluation and treatment, and subsequently have resolution of symptoms.</li> <li>● Patients who decline recommended intervention(s).</li> </ul>	