



Gastroesophageal Reflux

Characteristics

- Common problem in premature infants.
 - Lower esophageal sphincter hypotonia.
 - Transient relaxation of the esophageal sphincter.
 - Less frequent esophageal peristaltic activity.
 - Delayed gastric emptying.
 - Decreased gastric compliance.
 - Neurologic impairment.
- Is a physiologic event; it is important to distinguish between physiologic and pathologic GER (GERD, or GER disease) before beginning any therapeutic interventions.
- Failure to thrive is usually NOT associated with physiologic GER in premature infants.

Symptoms Of Pathologic GER

- Failure to thrive due to malnourishment.
- Frequent respiratory problems due to aspiration.
- Esophagitis with or without stricture formation.
- Growth delay, poor feeding, irritability.
- Post-prandial vomiting, gagging, coughing, arching, fussiness, feeding refusal.
- Some infants may experience aspiration, cyanosis, and vomiting.
- Sandifer syndrome: excessive hiccups, sleep disturbances, and arching.
- Uncommon symptoms: intermittent stridor, hoarse voice, acute episodes of spasmodic croup, bronchospasm, pneumonia.
- Data and research supporting a causal relationship between GER and apnea is lacking.



Diagnosis Of Pathologic GER

- History.
- Barium swallow.
- pH probe.

Treatment

- Medical or surgical therapy is indicated only for pathological GER.
- Therapies may improve symptoms, but generally reflux is not entirely eliminated.
- GER usually self-improves within 6 months of life due to maturation, sitting upright, and intake of more solid foods.
- Antireflux wedge (elevates head by 30 degrees).
- Postprandial prone positioning when awake and under supervision, or left lateral positioning.
- Thickened feeds (rice cereal, 2-3 tsp/oz).
- Concentrating milk for decreased volume of feeds.
- More frequent, smaller volume feeds.
- H2 blockers or proton pump inhibitors.
- Prokinetics.
- Nissen fundoplication is the last resort for selected severe and intractable cases, or for those with severe neurological impairment in whom aspiration is a real risk.