Eosinophilic Esophagitis

Eosinophilic esophagitis (EoE) is a chronic immune-mediated condition of the esophagus with eosinophilic inflammation

CLINICAL PRESENTATION

Younger Children	Older Children + Adolescents
▪ Feeding difficulties or aversion ▪ Vomiting ▪ Abdominal pain ▪ Failure to thrive	▪ Dysphagia and/or adaptations (e.g. drinking fluids to help swallow, longer meals) ▪ Food impaction ▪ Chest pain or reflux symptoms

Risk Factors & Epidemiology:

- More common in males (M:F ~3:1)
- Associated with atopy (asthma, allergic rhinitis, IgE-mediated food allergy, eczema), family history of EoE, esophageal atresia

PATHOPHYSIOLOGY

Food and/or environmental antigens

↓

Esophageal eosinophilic inflammation

↓

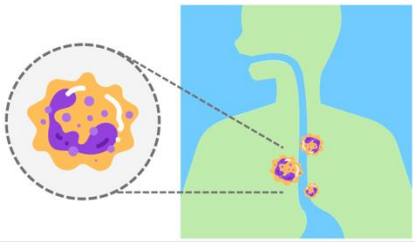
Chronic inflammation

↓

Remodeling (rings, strictures)

↓

Esophageal dysfunction



DIAGNOSIS

Core Diagnostic Criteria:

- ☐ Symptoms of esophageal dysfunction
- ☐ Esophageal eosinophilia (EE) ≥15 Eos/HPF in at least 2 segments
- ☐ EE not explained by another cause: GERD, Crohn disease, achalasia, drug hypersensitivity, etc.

Biopsy Requirements:

- ≥ 2 biopsies from ≥ 2 esophageal segments (e.g. distal, mid, proximal)
- Required regardless of endoscopic appearance

Endoscopy:

May show EREFS findings

- **E**dema
- **R**ings
- **E**xudates/plaques
- **F**urrowing
- **S**trictures

May also appear normal

MANAGEMENT

First-Line:

- Proton pump inhibitor
- Swallowed topical steroids (e.g. fluticasone, budesonide)
- Empiric dietary elimination (not directed by IgE-allergy testing):
  - ↳ 1-food (dairy), or 2-food (dairy and wheat) often started for mild disease
  - ↳ 6-food (dairy, wheat, egg, soy, seafood, nuts) similar efficacy as swallowed steroids but more challenging
  - ↳ Use dietitian guidance to reduce nutritional deficiencies and feeding disorders

Advanced Management:

Dupilumab (anti-IL-4/13 biologic)

Consider for:

- Refractory disease
- Intolerance of first-line options

Endoscopic dilation

Adjunct for medically-refractory esophageal strictures

Follow-Up:

- Repeat endoscopy and biopsy 6 - 12 weeks after starting or adjusting treatment to assess response
- Ongoing follow-up based on symptoms and disease severity (not necessarily correlating with histology)

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