

# Practice Guidelines

## Eosinophilic Esophagitis: Management Guidelines from the AGA and JTF

### Key Points for Practice

- Food elimination based on allergy testing resolves esophageal inflammation in one-half of patients.
- Medication options for eosinophilic esophagitis include topical steroids delivered via an asthma inhaler and then swallowed and proton pump inhibitors.
- Dysphagia with eosinophilic esophagitis is often secondary to esophageal strictures, which can be treated with endoscopic dilation.

From the *AFP* Editors

**Eosinophilic esophagitis** is an inflammatory condition triggered by food antigens in sensitive patients. Initially characterized in the early 1990s, eosinophilic esophagitis is now recognized as a major cause of dysphagia. The evidence base of eosinophilic esophagitis is limited to short-term studies, and symptoms and endoscopic features comprising the diagnosis vary in the literature. Affected patients often have atopic diseases including asthma, allergic rhinitis, and eczema. Eosinophilic esophagitis is definitively diagnosed by eosinophilia visible in esophageal biopsies of symptomatic patients without other reasons for eosinophilia. The American Gastroenterological Association (AGA) and the Joint Task Force on Allergy-Immunology Practice Parameters (JTF) published guidelines for treatment of eosinophilic esophagitis.

### Endoscopic Monitoring

Because eosinophilic esophagitis is diagnosed by biopsy, studies often define successful treatment as resolution of inflammation by reducing eosinophils to below 15 per high-power field. Symptom relief may not correspond to changes in

biopsy results, and there is debate about whether endoscopy should be repeated or if treatment should be guided by symptoms. Long-term studies are needed to evaluate whether improvement in biopsy results affects patient outcomes.

### Dietary Changes

Dietary changes can be effective in resolving inflammation in eosinophilic esophagitis, although studies are limited by lack of control groups and short durations.

An elemental diet, consisting of amino acid-based formulas, resolves inflammation in more than 90% of children, with less benefit in adults. However, most patients will not maintain an elemental diet because of taste, nutritional concerns, and implementation barriers, including the potential need for a gastrostomy tube. In children, elemental diets interfere with oral motor skill development and can lead to social isolation.

An empiric six-food elimination diet resolves inflammation in two-thirds of patients. Elimination diets with less restriction or food reintroduction are slightly less effective. Eliminating foods based on allergy testing results is simple and resolves inflammation in one-half of patients.

### Medications

The primary treatments for eosinophilic esophagitis include proton pump inhibitors and topical steroids. Proton pump inhibitor use resolves inflammation in only one-third of patients, but this is more than double the response to placebo. Topical steroids are more effective than proton pump inhibitors, resolving inflammation in two-thirds of patients, more than four times the placebo response. In the studies reviewed, topical

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**This series** is coordinated by Michael J. Arnold, MD, contributing editor.

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steroids were delivered via asthma steroid inhaler and swallowed after spraying; tablet and liquid formulations were also used. Most studies of topical steroid treatment either excluded patients with known gastroesophageal reflux disease or required previous poor response to proton pump inhibitor therapy. Studies have not shown increased adverse effects with topical steroids over placebo, although local fungal and viral infections and adrenal suppression have been reported. Oral steroid treatment demonstrates the same benefit as topical steroids, but with significant adverse effects in 40% of patients.

Other therapies have been proposed for eosinophilic esophagitis but have no evidence of benefit, including anti-interleukin-5, anti-interleukin-13, anti-interleukin-4 receptor-alpha, anti-immunoglobulin E, anti-tumor necrosis factor therapies (e.g., infliximab [Remicade]), and montelukast (Singulair) and cromolyn sodium.

### Treatment of Dysphagia

Dysphagia in eosinophilic esophagitis is primarily caused by strictures secondary to inflammation. Endoscopic dilation leads to symptom improvement in 87% of patients. Most studies lacked control groups to measure the placebo response. Major complications in endoscopic dilation for eosinophilic esophagitis are similar to those performed for benign esophageal strictures, with perforation in 0.4% of patients and significant hemorrhage in 0.1%.

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**Systematic literature search described?** Yes

**Guideline developed by participants without relevant financial ties to industry?** No

**Recommendations based on patient-oriented outcomes?** No

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**Editor's Note:** Eosinophilic esophagitis is now more commonly noted as source of upper gastrointestinal symptoms. A 2018 *AFP* editorial (<https://www.aafp.org/afp/2018/0515/p628.html>) pointed out that eosinophilic esophagitis is increasingly recognized as a mimic of gastroesophageal reflux disease that fails to respond to an appropriate trial of proton pump inhibitors. A 2021 *AFP* article on dysphagia (<https://www.aafp.org/afp/2021/0115/p97.html>) highlighted eosinophilic esophagitis as a common underlying etiology. This guideline demonstrates the limited evidence for treatment while emphasizing the few effective interventions.—Michael J. Arnold, MD, Contributing Editor ■