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A Look at the Updated ACG Eosinophilic Esophagitis Clinical Guidelines

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This summary reviews Dellon E, Muir A, Katzka D, et al. ACG Clinical Guideline: Diagnosis and Management of Eosinophilic Esophagitis. Am J Gastroenterol 2025;120(1):31-59.

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STRUCTURED ABSTRACT

Questions: What is the appropriate diagnostic evaluation of eosinophilic esophagitis (EoE)? What are the pharmacologic and non-pharmacologic therapies for disease management? How do we assess treatment response and ongoing disease monitoring, as well as pediatric-specific considerations for disease management?

Design: The Patient Intervention Comparison and Outcomes (PICO) format was used to develop key questions of clinical relevance to be addressed in the guideline. A health services librarian performed literature searches of PubMed (MEDLINE), EMBASE, and the Cochrane Library. GRADE methodology was used to assess benefits and risks of therapies. For clinically relevant topics that were not amenable to formal evidence-based recommendations, key concepts based on expert consensus were presented.

Patients: Adults and children with EoE.

Recommendations:

Diagnostic testing: symptoms of esophageal dysfunction and at least 15 eosinophils per high-power field (eos/hpf) on esophageal biopsy, exclusion of alternate causes of esophageal eosinophilia, use of EoE Endoscopic Reference Score (EREFS) to assess endoscopic findings, and histologic evaluation with quantified eosinophil count from 6 targeted biopsies from 2 esophageal levels.

Management: a) shared decision making to select first line dietary (empiric food elimination diet (FED) starting with 1-FED or 2-FED) or pharmacologic (PPI or topical steroids [Budesonide, Fluticasone]) therapy, Dupilumab for PPI non-responsive and step-up therapy; b) dilation therapy in addition to antiinflammatory treatment as needed; c) Monitor response to therapy, continue maintenance dietary or pharmacologic treatment.

Pediatrics: Esophagram in pediatric patients with dysphagia, adjunct therapy with feeding therapist/dietician to help manage feeding dysfunction.

Outcome: Accurate diagnosis, patient-specific management, and optimal disease monitoring of EoE in adult and pediatric populations.

Data Analysis: The GRADE process was used to formulate the quality of evidence and the strength of recommendation for each question, based on study design, efficacy, and risks vs. benefits. When the evidence was not appropriate for the GRADE process, an expert consensus approach was used to formulate key concepts statement. The GRADE process uses 2 types of guideline recommendations:

Strong Recommendation: Physicians or providers should recommend this intervention for most patients. A strong recommendation is usually accompanied by High or Moderate Level of Evidence from well-designed randomized controlled trials (RCTs) or RCTs with mild methodologic limitations.

Conditional Recommendation/Suggestion: Many physicians or providers might suggest this therapy or diagnostic test, while other physicians or providers would not suggest this intervention in similar patients. Conditional recommendations/ suggestions are usually accompanied by Low quality or Very Low quality of evidence from studies without a comparator arm or placebo for comparison.

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Summary: Selected guidelines and strength of recommendation are listed in **Table 1**.

In the Key Concepts section, the guideline authors suggest eliciting a careful history of symptoms of esophageal dysfunction including dietary avoidance and modification behaviors, as well as atopic and family history of EoE. Initial diagnostic endoscopy should be performed off PPI, dietary restrictions, and medications including intranasal or inhaled steroids for rhinitis/sinusitis/asthma as these can all result in a false negative exam. When possible, it is recommended to obtain additional histologic information other that eosinophil count such as basal cell hyperplasia, dilated intercellular spaces and lamina propria fibrosis, even in the absence of eosinophilia. Physicians should also consider assessing baseline disease severity with I-SEE.

For treatment (**Figure 1**), high dose PPI therapy is advised along with counseling for rational for PPI use in EoE. For topical steroids, either budesonide (oral suspension or orodispersible tablet) or fluticasone can be used, and best administered after meals or before bedtime with nothing by mouth 30-60 minutes after. For children a slurry or suspension is preferred over an inhaler device for ease of use. If dietary therapy is chosen, consider starting with a least restrictive diet such as 1-FED or 2-FED in collaboration with a dietitian or nutritionist. Response to dietary therapy should be assessed with endoscopy and biopsy rather than symptoms alone. Dupilumab is an option for patients who are treatment-resistant to initial therapies, and also those with multiple atopic conditions. Dilation therapy is also available and can be used concomitantly with anti-inflammatory treatment.

After treatment initiation, the disease should be monitored not just by symptoms alone as symptoms do not reliably correlate with endoscopic/histologic findings. Histologic response of <15 eos/hpf can be considered as successful and patients should be maintained on the initial therapy after histologic remission is achieved due to the chronicity of the disease. While clinically significant adrenal insufficiency is unlikely with chronic topical steroids, physicians can choose to monitor for this condition in certain patients. In pediatric patients, growth, development, and nutritional parameters are additional treatment goals.

Statement	Quality of Evidence	Strength of Recommendation
Diagnosis		
1. EoE should be diagnosed based on symptoms of esophageal dysfunction and at least 15 eos/hpf on biopsy, after ruling out other causes of esophageal eosinophilia.	Low	Strong
2. Use a systematic endoscopic scoring system (e.g., EoE Endoscopic Reference Score) to characterize endoscopic findings of EoE at every endoscopy.	Low	Strong
3. Obtain at least six esophageal biopsies from at least two levels (proximal, mid, and distal), targeting endoscopic findings when possible.	Low	Strong
4. Eosinophil counts should be quantified on esophageal biopsies from every endoscopy performed for EoE.	Low	Strong
Treatment		
PPIs		
5. Suggest PPIs as a treatment for EoE.	Low	Conditional
Topical Steroids		
6. Recommend swallowed topical steroids as a treatment for EoE.	Moderate	Strong
7. Suggest using either fluticasone propionate or budesonide for EoE treatment.	Low	Conditional
Dietary Elimination		
8. Suggest empiric food elimination diet as a treatment for EoE.	Low	Conditional
9. Do not suggest allergy testing to guide food elimination diets for EoE treatment.	Very Low	Conditional
Biologics		
10. Suggest dupilumab for EoE in individuals 12+ years old who are nonresponsive to PPI therapy.	Moderate	Conditional
11. Suggest dupilumab for pediatric patients (ages 1–11) who are nonresponsive to PPI therapy.	Low	Conditional
Small Molecules		
14. Suggest using cromolyn and montelukast for EoE treatment.	Low	Conditional
Esophageal Dilation		
15. Suggest endoscopic dilation as an adjunct to medical therapy for strictures in EoE.	Low	Conditional
Maintenance Therapy		
16. Suggest effective dietary or pharmacologic therapy for EoE to prevent recurrence of symptoms, histologic inflammation, and endoscopic abnormalities.	Low	Strong
Monitoring and Evaluation of Response		
17. Recommend evaluating treatment response using symptom assessment, endoscopy, and histologic outcomes.	Low	Strong
Pediatric-Specific Considerations		
18. In children with EoE and dysphagia, use esophagram to evaluate for fibrostenotic disease.	Very Low	Conditional
19. Suggest evaluation by a feeding therapist and/or dietician as an adjunctive intervention in children with EoE and feeding dysfunction.	Very Low	Conditional

Table 1. Eosinophilic Esophagitis (EoE) guideline recommendations. PPI, proton pump inhibitors.

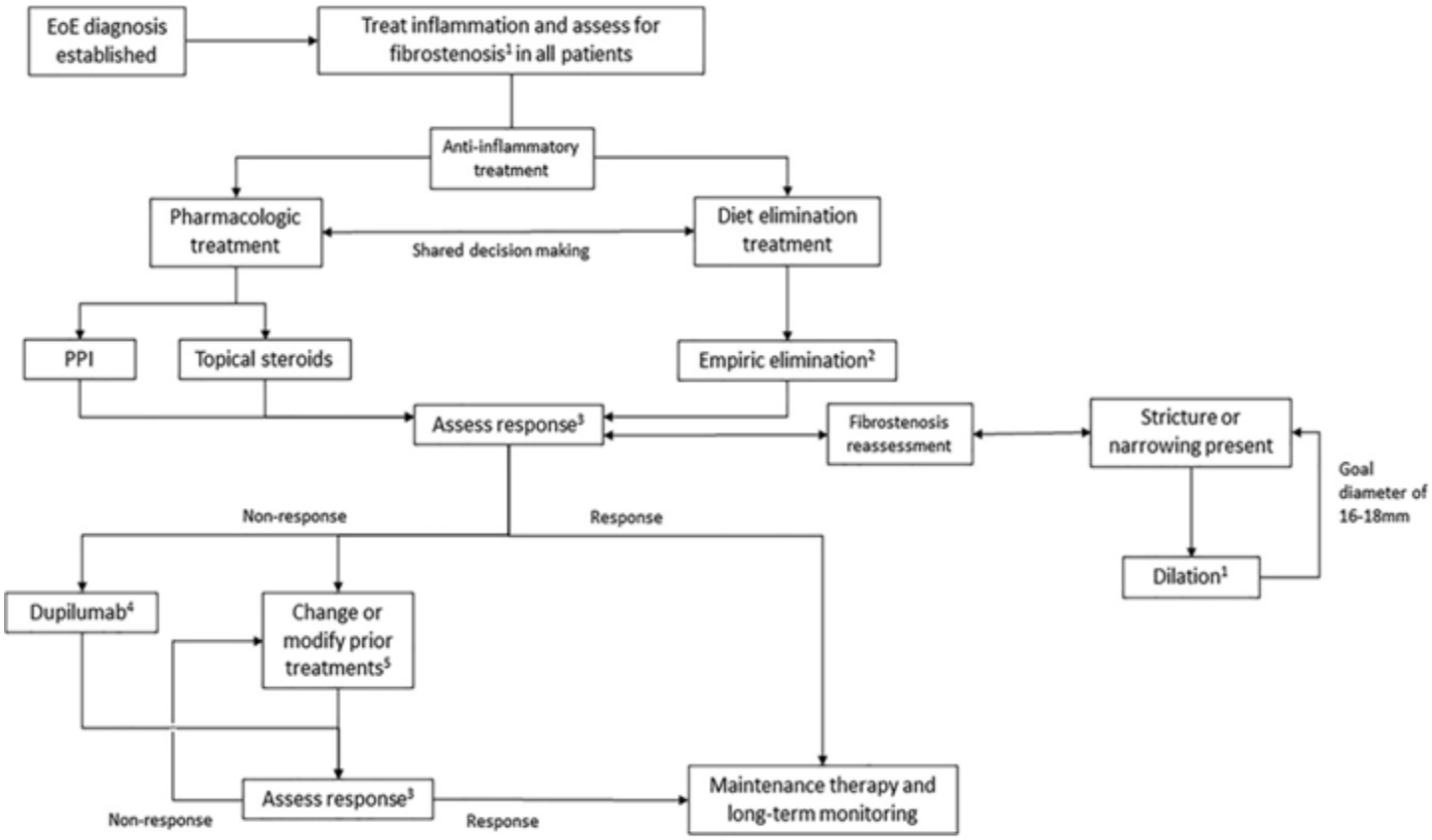

Figure 1. Management algorithm for eosinophilic esophagitis.

1. Anti-inflammatory treatment is needed in all patients even if dilation is performed. Dilation can be considered prior to concomitant anti-inflammatory treatment if a critical stricture is present.
2. Consider less restrictive diet elimination to start.
3. Response should be assessed with symptoms, endoscopic findings eith EREFS, and histologic features including quantified eosinophil count on esophageal biopsy.
4. Patients receiving dupilumab generally should be proton pump inhibitor (PPI) non-responders or intolerant to PPI; consider early use of dupliumab if moderate to severe asthma or eczema is present and after relevant subspecialist consultation.
5. Could include changing medication, dose, or formulation , moving to a more restrictive diet, or considering a clinical

COMMENTARY

Why Is This Important?

This guideline is an update to the 2013 ACG EoE Guidelines.[1] During this time there have been significant changes in disease diagnosis and management, increases in knowledge about EoE risk factors, natural history, and pathogenesis, development of validated outcome metrics, a disease severity classification system, and updated nomenclature. An important distinction from the prior version of the guidelines was the elimination of a failure of proton-pump inhibitor (PPI) trial for the diagnosis of EoE. There have also been major advances in therapeutic options including 2 topical steroid treatments, a biologic (dupilumab), and a larger body of data

for dietary therapy.

Key Study Findings

The ACG guidelines for EoE emphasize diagnosis based on symptoms of esophageal dysfunction, biopsy findings (≥15 eosinophils per high-power field), and exclusion of other causes. Endoscopic assessment using the EoE Endoscopic Reference Score (EREFS)[2] is recommended.

Treatment involves shared decision-making, with first-line options including dietary elimination (starting with less restrictive approaches) or pharmacologic therapy (PPI or topical steroids). Endoscopic dilation is advised for strictures but should be combined with anti-inflammatory treatment.

Maintenance therapy is necessary to prevent recurrence, and pediatric considerations include evaluation with esophagram in the setting of dysphagia and adjunctive feeding therapy for children with feeding dysfunction.

Caution

The Key Concepts highlighted in these guidelines are practical suggestions and not supported by extensive evidence. Thus, they serve as suggested preferable approaches for caring for patients with EoE and need to be applied in a patient-specific manner.

My Practice

My approach to caring for EoE patients is consistent with what is outlined in the updated guideline. While I typically assess for symptoms of esophageal dysfunction outlined in the IMPACT behaviors (**I**mbibe fluids, **M**odify foods, **P**rolong meal times, **A**void heard texture foods, **C**hew excessively, **T**urn away tablets/pills), this guideline lists these behaviors it in a way that is easy to incorporate into clinical practice. For the initial diagnosis, in patients who I suspect have EoE or would like to rule out EoE, I perform upper endoscopy with proximal and distal esophageal biopsies, with patients off of PPI or dietary restriction so as to minimize risk of false negatives. I typically have not had patients discontinue anti inflammatory nasal or sinus medications they are taking, but based on the suggestion in the key concepts section, I will recommend discontinuing these medications prior to initial diagnostic exam. I do document endoscopic findings using the EREFS scoring system and obtain 6 targeted biopsies from two different levels in the esophagus and place them in separate jars. Based on these guidelines, I will also attempt to grade the severity of EoE at baseline and subsequent visits using the Index of Severity for EoE (I-SEE)[3] metric.

Once the diagnosis of EoE has been established, I typically start with high dose PPI therapy as the initial management step, followed by an EGD with biopsies in about 8-12 weeks to assess for treatment response. In patients who are non-responsive to PPI therapy, I utilize a shared decision making model to determine whether to use dietary or

pharmacologic treatment. When using dietary elimination, I typically do start with the least restrictive diet either one or two food elimination (with wheat and dairy being the most common triggers) and always try to enlist ongoing support from a dietician or nutritionist as available. I do not direct food elimination therapy based on skin allergy testing given the inaccuracy of available allergy testing in the context of EoE, which is a delayed-type hypersensitivity lymphocyte-driven type 2 immunity; however, I do collaborate with colleagues specializing in allergy and immunology when caring for EoE patients through a multidisciplinary approach.

If pharmacologic therapy is chosen, then I typically start with topical steroids as the first line and employ a step-up approach. In patients with other atopic conditions in addition to EoE or those with a severe fibrostenotic phenotype, I may opt for dupilumab as the initial choice. I also take into account patient preferences, priorities, lifestyle, and predictors of adherence to help determine treatment choice with the ultimate goal of successful long term management of EoE. For patients with initial response to treatment documented by histologic remission on an endoscopy performed 8-12 weeks later or 12-24 weeks for dupilumab, I will continue maintenance therapy with repeat endoscopy about a year or so later to ensure sustained remission in the absence of symptoms that would trigger an earlier exam such as a food impaction or need for dilation therapy.

For Future Research

As noted by the authors, some key research gaps include the need for comparative effectiveness studies for first line EoE treatments and identification of predictors of treatment response to personalize therapy. Research is also needed to define phenotypes and endotypes linked to fibrostenosis, improve noninvasive disease monitoring, and methods to identify food triggers. The I-SEE framework requires studies to align disease severity with treatment strategies. Quality indicators to reduce diagnostic delays and optimize management are essential. The pipeline for EoE therapeutics is expanding, with multiple novel agents under investigation, and there is a future need for positioning of these emerging therapies in the EoE treatment algorithm.

Conflict of Interest

The author has no disclosures.

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