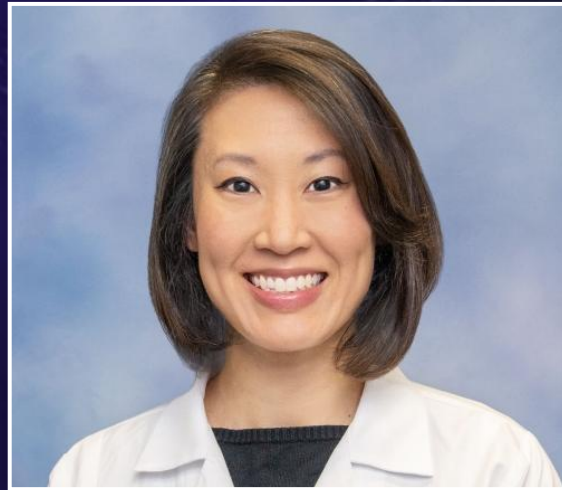


Beyond Flare Control: Advancing Toward Long-Term Remission in EoE

EoE Diagnosis and Long-Term Management:

A ROLE PLAY CASE STUDY



Joy W. Chang, MD, MS

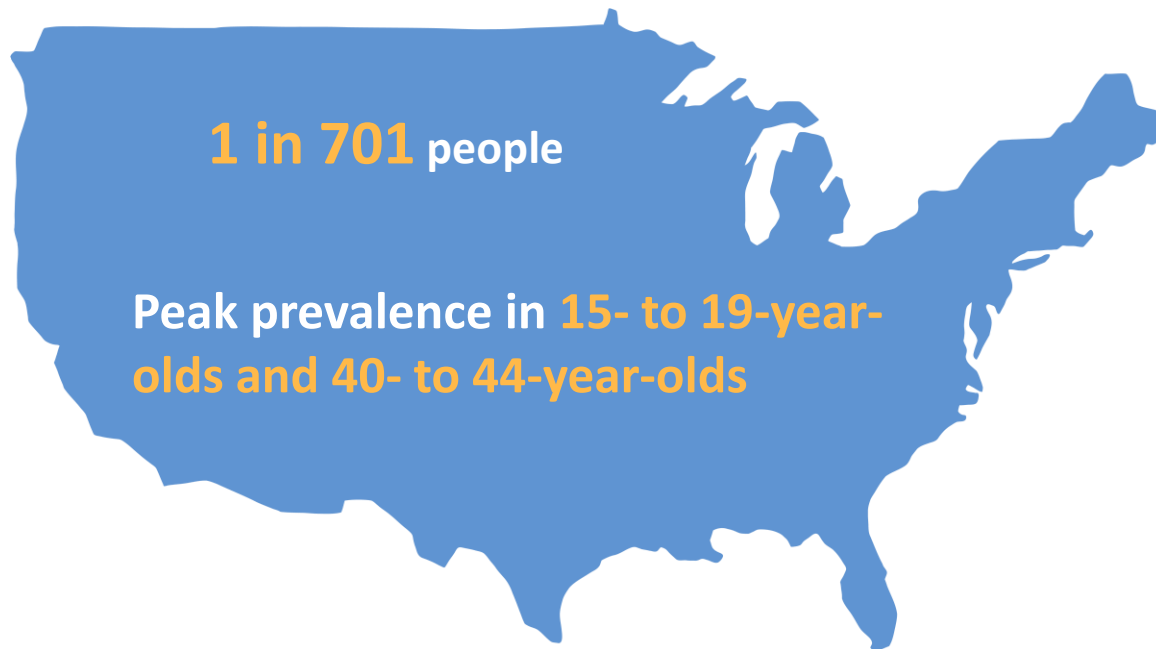
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Disease Burden of EoE

Prevalence rate in the US has **increased 5-fold** since 2009¹



Mean diagnostic delay (DD) of **6.6 years** (SD 7.8 years)²



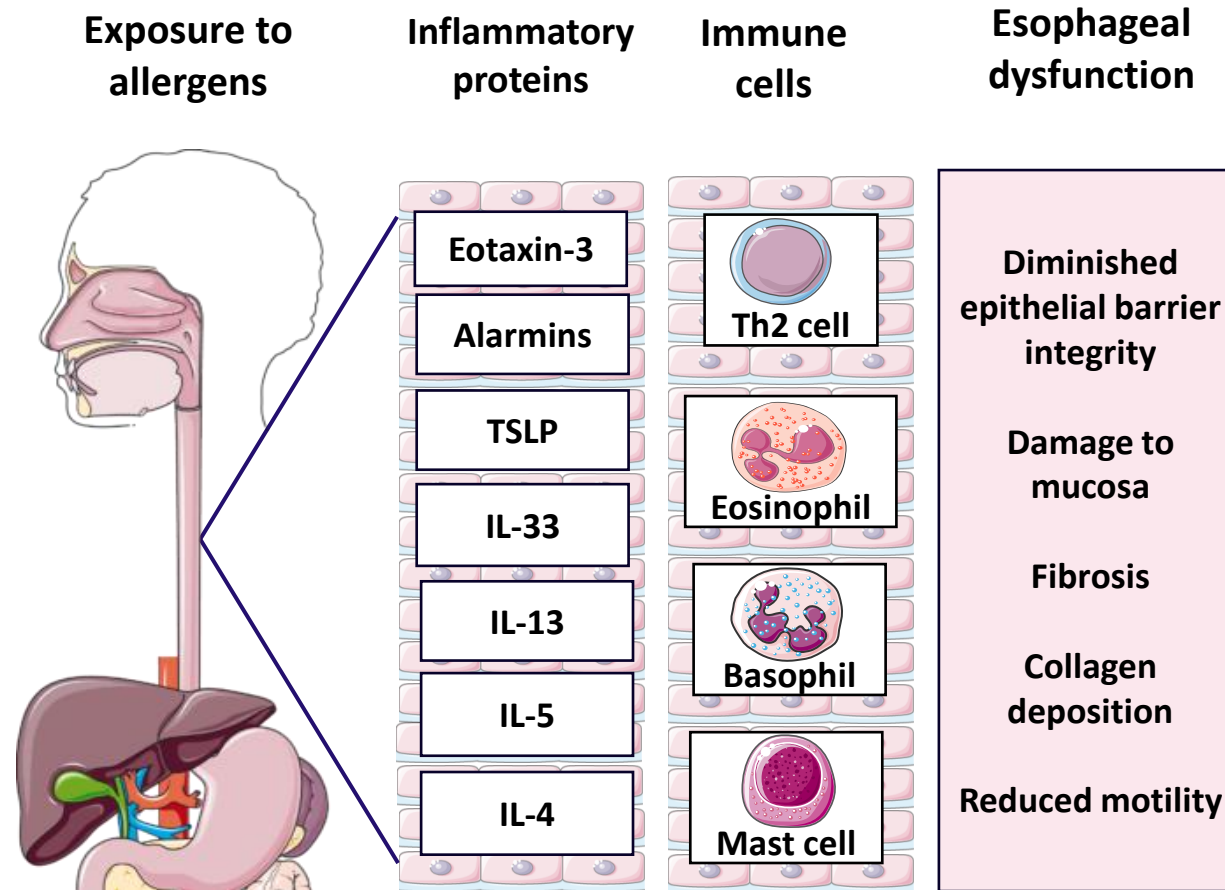
Risk of strictures increases by 9% per additional year of DD, and patients with strictures **are twice as likely to experience food impaction events**²

Abbreviations: EoE, eosinophilic esophagitis; SD, standard deviation.

1. Thel HL, et al. *Clin Gastroenterol Hepatol*. 2025;23:272-280.e8. 2. Warners MJ, et al. *Am J Gastroenterol*. 2018;113:836-844.

Image from: Vecteezy.com (https://www.vecteezy.com/free-png/usa-map) Usa Map PNGs by Vecteezy)

EoE—A Chronic Type 2 Inflammatory Disease^{1,2}

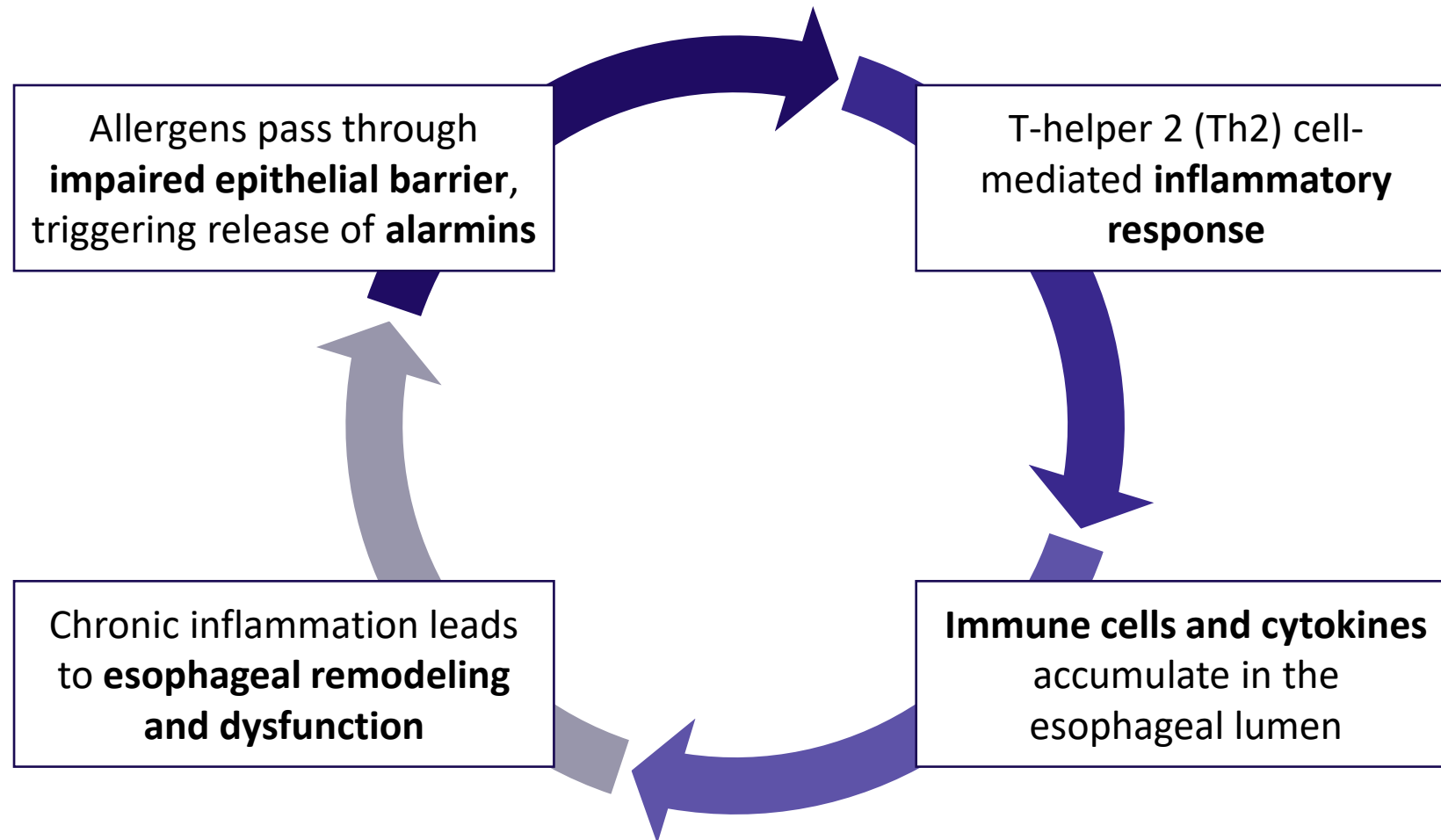


Abbreviations: EoE, eosinophilic esophagitis; IL, interleukin; Th2, T-helper 2; TSLP, thymic stromal lymphopoietin.

1. Hirano I, Furuta GT. *Gastroenterology*. 2020;158:840-851. 2. Muir A, Falk GW. *JAMA*. 2021;326:1310-1318.

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EoE—A Chronic Type 2 Inflammatory Disease^{1,2}



Abbreviation: EoE, eosinophilic esophagitis.

1. Hirano I, Furuta GT. *Gastroenterology*. 2020;158:840-851. 2. Muir A, Falk GW. *JAMA*. 2021;326:1310-1318.

Clinical Presentation

Age-Dependent Symptoms¹⁻⁴

Infants/Toddlers

Vomiting

Feeding intolerance

Choking with meals

Food refusal

Failure to progress to solid foods

Eating slowly

Sleep disturbance

Slow growth

Failure to thrive

Children

Abdominal pain^{*}

Vomiting/regurgitation^{*}

Heartburn,^{*} throat and chest pain

Food impactions[†]

Dysphagia[†]

Choking/gagging

Poor appetite

Nausea

Sleep disturbance

Adults (Young and Old)

Dysphagia[†]

Food impactions[†]

Food avoidance

Regurgitation

Intractable heartburn

Chest pain

Retrosternal pain

^{*}Typical symptoms in pediatric patients. [†]Common symptoms in adolescent and adult patients.

1. Carr S, et al. *Allergy Asthma Clin Immunol*. 2019;15:22. 2. Warners MJ, et al. *Am J Gastroenterol*. 2018;113:836-844 3. Dellon ES, et al. *Am J Gastroenterol*. 2025;120:31-59. 4. American Academy of Pediatrics. Diagnosis of eosinophilic esophagitis. Accessed 9/27/25 at: <https://www.aap.org/en/patient-care/eosinophilic-esophagitis/diagnosis-of-eosinophilic-esophagitis/>

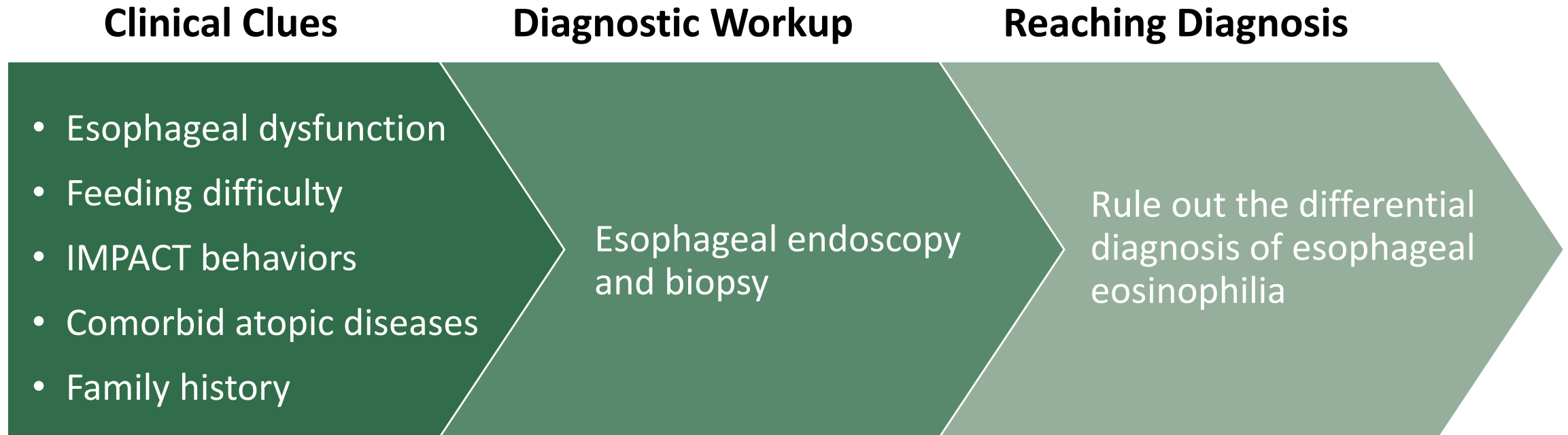
IMPACT Behaviors

	I	mbibe fluids Drinking a lot of fluids to help with swallowing food
	M	odify foods Cutting food into smaller pieces or pureeing foods
	P	rolong mealtimes Eating slowly and being the “last one at the table”
	A	void hard texture foods Removing meats, crusty breads, and foods with sticky consistencies from the diet
	C	hew excessively Achieving a mush-like consistency to allow easier swallowing
	T	urn away tablets/pills A subtle sign of EoE and may be the only indication of swallowing dysfunction

Abbreviation: EoE, eosinophilic esophagitis.

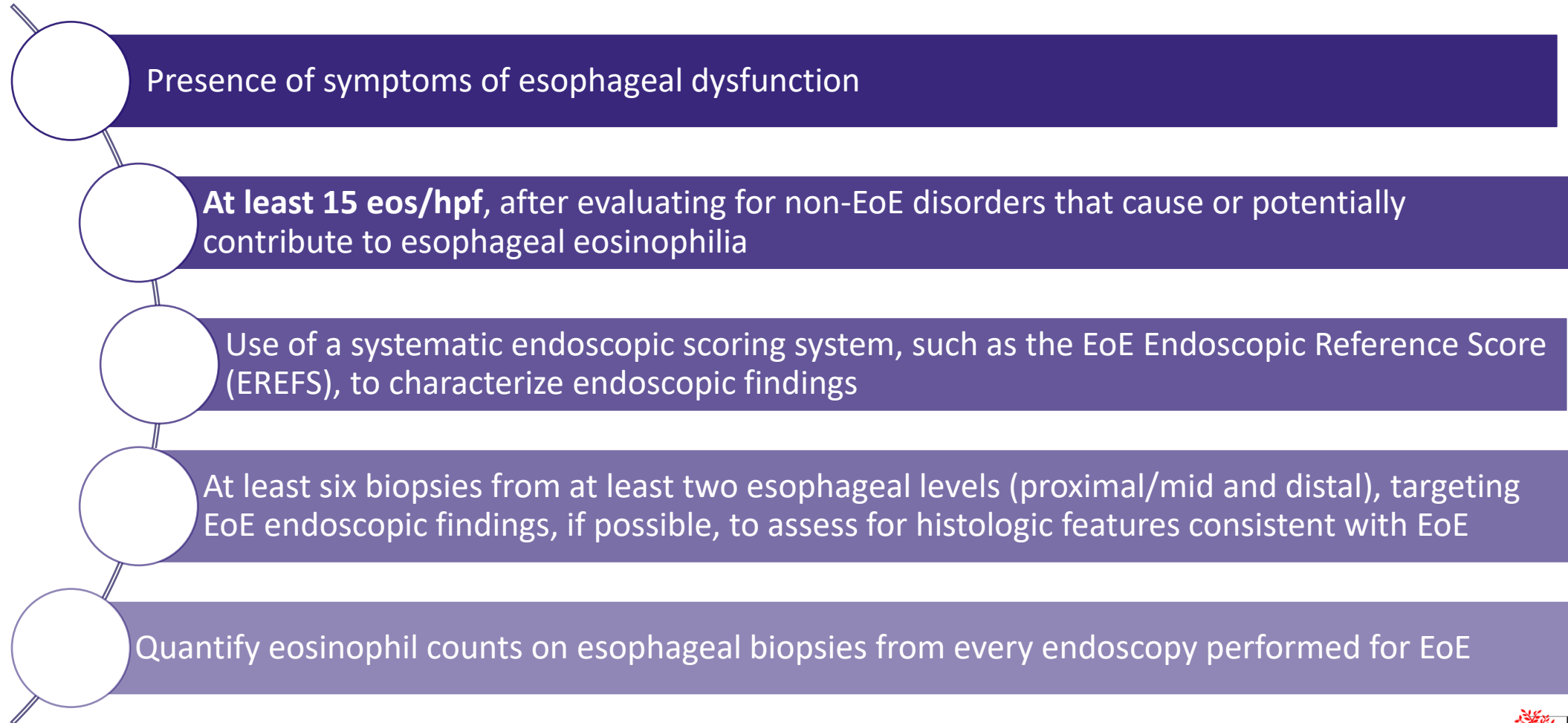
Adapted with permission from Dellon ES, et al. *Am J Gastroenterol*. 2025;120:31-59.

ACG Diagnostic Algorithm



Establishing the Diagnosis

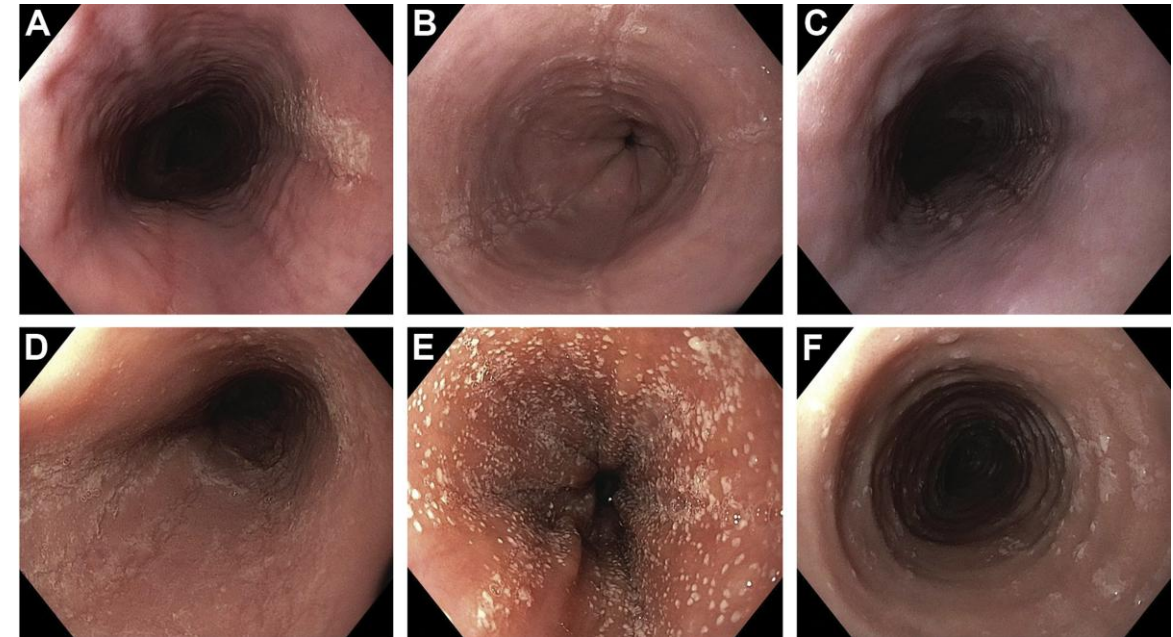
2025 ACG Clinical Guidelines for Diagnosing EoE



EoE Endoscopic Reference Score (EREFS)^{1,2}

<u>E</u> dema	1: Present (decreased vascularity)
<u>R</u> ings	1: Mild (ridges) 2: Moderate (does not impede scope passage) 3: Severe (standard scope does not pass)
<u>E</u> xudates	1: ≤10% of surface area 2: >10% of surface area
<u>F</u> urrows	1: Mild 2: Severe (with appreciable depth)
<u>S</u> trictures	1: Present; also estimate diameter in mm

Localized



Diffuse

Normal-appearing esophagus doesn't rule out EoE

Abbreviation: EoE, eosinophilic esophagitis.

1. Dellon ES, et al. *Am J Gastroenterol*. 2025;120:31-59. 2. Aceves SS, et al. *Gastrointest Endosc*. 2022;96:576-592.e1. 3. Dellon ES, et al. *Gastroenterology*. 2022;163:59-76.

Table adapted with permission from Dellon ES, et al. *Am J Gastroenterol*. 2025;120:31-59; image with permission from Dellon ES, et al. *Gastroenterology*. 2022;163:59-76.

EoE Histology Scoring System (EoE-HSS)

Assessment

Features are assessed for both severity (grade) and extent (stage) of pathological changes¹

Eosinophilic inflammation

Basal zone hyperplasia

Eosinophil abscess

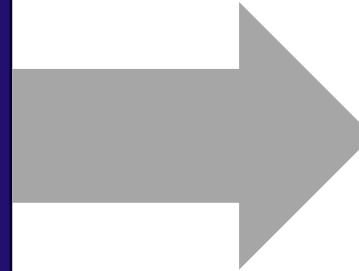
Eosinophil surface layering

Dilated intracellular spaces

Surface epithelial alteration

Dyskeratotic epithelial cells

Lamina propria fibrosis



Clinical Outcomes

- Outperforms PEC in differentiating:
 - Treated from untreated patients
 - Active EoE from EoE in remission²
 - EoE from GERD²
- Detects pathology despite a decrease in eosinophil counts, suggestive of post-treatment disease activity

Abbreviations: EoE, eosinophilic esophagitis; GERD, gastroesophageal reflux disease; PEC, peak eosinophil counts.

1. Collins MH, et al. *Dis Esophagus*. 2017;30:1-8. 2. Lin B, et al. *Gastroenterology Res*. 2021;14:220-226.

Index of Severity for EoE (I-SEE)

- Simplified, standardized scoring system¹
- Takes into account three domains¹:
 - Symptoms and complications
 - Inflammatory features
 - Fibrostenotic features

} Broken down into endoscopic and histologic features
- Each domain comprises related components, assigned a point value¹
- Total score¹:
 - Mild (1 to 6 points)
 - Moderate (7 to 14 points)
 - Severe (≥15 points)
- Has been shown to be predictive of treatment response²
- Patients with severe disease may benefit from a more aggressive treatment approach²

Treatment

ACG-Recommended Anti-Inflammatory Therapies

Dietary Therapy

ELEMENTAL DIET

Elemental formula

EMPIRIC FOOD ELIMINATION DIET (FED)*

- 1FED – Dairy
- 2FED – Dairy and wheat
- 4FED – Dairy, wheat, eggs, and soy
- 6FED – Dairy, wheat, eggs, soy, nuts, and seafood

Pharmacologic Therapy

PROTON PUMP INHIBITORS (PPIs)[†]

- Omeprazole or equivalent

SWALLOWED TOPICAL STEROIDS

- Fluticasone propionate
- Budesonide

BIOLOGICS

- Dupilumab[‡] (monoclonal antibody against IL-4 receptor alpha)

*Consider starting with less restrictive diet. [†]Important to explain to patients the rationale of using PPIs to improve adherence. [‡]Patients non-responsive or intolerant to PPIs should receive dupilumab and use early for patients with moderate to severe asthma or eczema.

Abbreviations: ACG, American College of Gastroenterology.; IL, interleukin.

Dellon ES, et al. *Am J Gastroenterol*. 2025;120:31-59.

Shared Decision Making

Shared decision making (SDM) is a two-way communication approach in which patients and clinicians collaborate to make an informed treatment decision. SDM requires three components:

Clear, accurate, and unbiased scientific evidence about viable options—including no medical intervention—and the advantages and disadvantages of each option

Clinician expertise in communicating and adapting the information for individual patients

Patient values, goals, preferences, and concerns, which may include treatment burdens

NQP Shared Decision-Making Action Team

Abbreviations: EoE, eosinophilic esophagitis; NQP, National Quality Partners

1. National Quality Forum. Accessed 5/10/2025 at: <https://digitalassets.jointcommission.org/api/public/content/b3587bfdb554411e8e4f0a021ed33fd5?v=f5b2c962> 2.

Dellon ES, et al. *Am J Gastroenterol*. 2025;120:31-59



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Shared Decision Making

Shared decision making (SDM) is a two-way communication approach in which patients and clinicians collaborate to make an informed treatment decision. SDM requires three components:

 **Key Insight:** Treatment selection should be based on EoE characteristics and individual patient preferences elicited using a shared decision-making approach

Clear
inte

ding no

Clinician expertise in communicating and adapting the information for individual patients; and

Patient values, goals, preferences, and concerns, which may include treatment burdens

Abbreviations: EoE, eosinophilic esophagitis; NQP, National Quality Partners

1. National Quality Forum. Accessed 5/10/2025 at: <https://digitalassets.jointcommission.org/api/public/content/b3587bfdb554411e8e4f0a021ed33fd5?v=f5b2c962> 2. Dellon ES, et al. *Am J Gastroenterol*. 2025;120:31-59.

Treatment Considerations for EoE

Efficacy

Adverse Effects

Monitoring

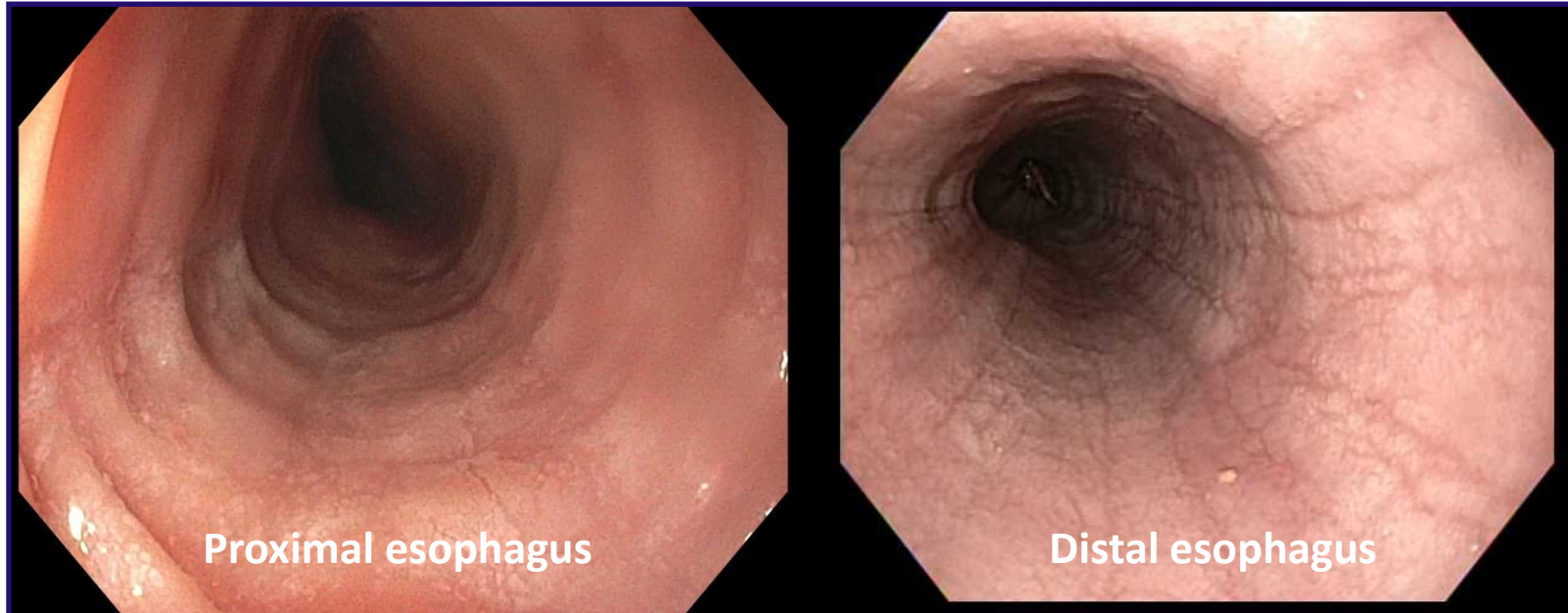
Lifestyle

Price

Abbreviation: EoE, eosinophilic esophagitis.

Aceves SS, et al. *Ann Allergy Asthma Immunol.* 2023;130:371-378.

Our Patient's Endoscopy Results

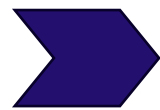


Endoscopy results

- EREFS score 4
 - Edema
 - Moderate rings
 - Mild furrows

Histology results

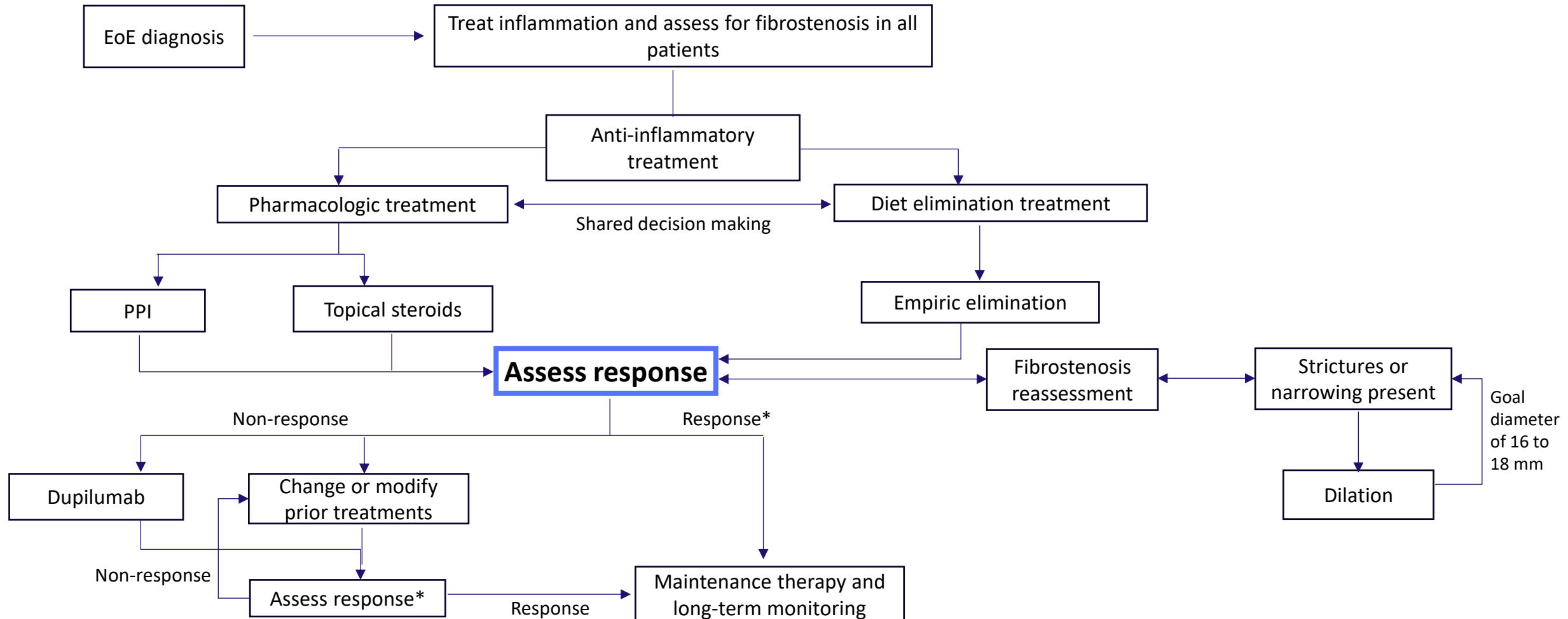
- 236 eos/hpf



Patient's endoscopy and biopsy results confirm a diagnosis of EoE

Assessing Treatment Response and Long-Term Monitoring

ACG—EoE Treatment and Management Algorithm



*Assessed with symptomatic, endoscopic, and histologic features.

Abbreviations: ACG, American College of Gastroenterology; EoE, eosinophilic esophagitis; PPI, proton pump inhibitor.

Adapted with permission from Dellon ES, et al. *Am J Gastroenterol.* 2025;120:31-59.

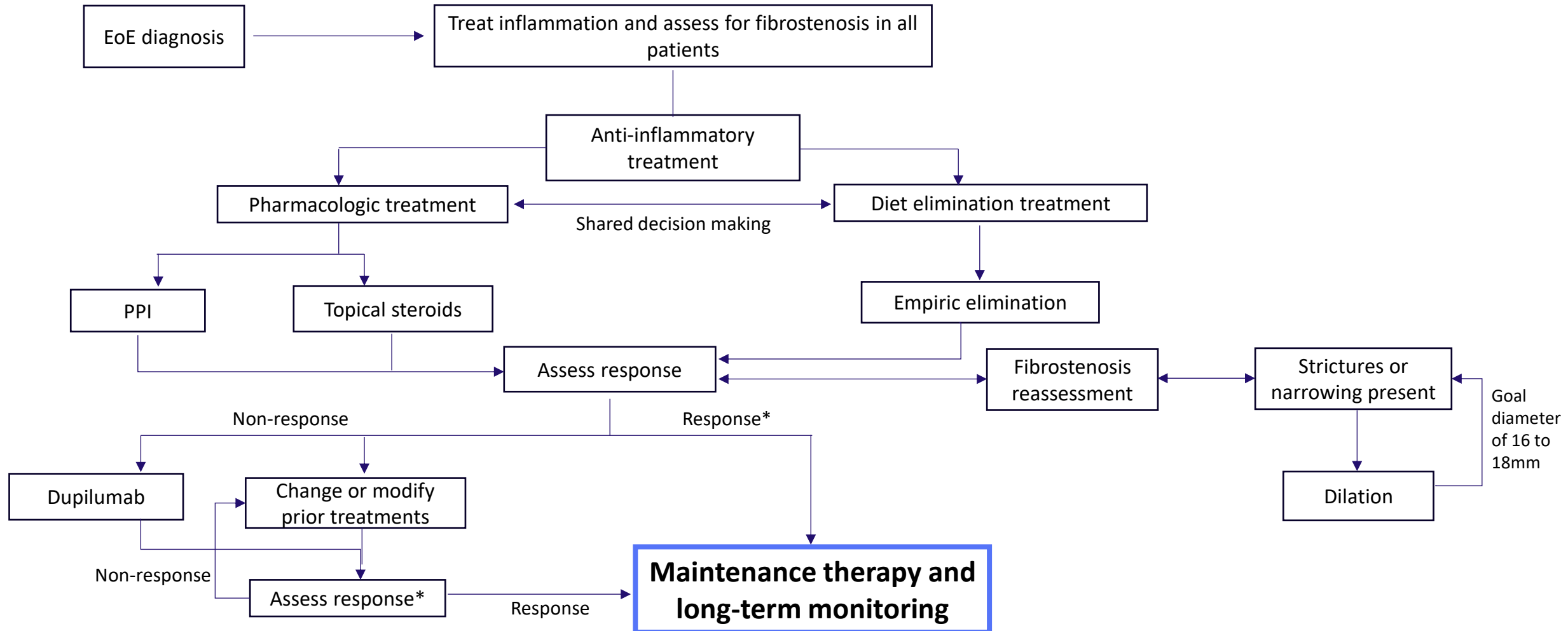
ACG Recommendations for Evaluating Treatment Response

Symptoms	Endoscopic Evaluation	Histologic Evaluation
Assess EoE symptoms (including dysphagia) and IMPACT behavior	Use EREFS to compare pre- and post-treatment findings Proposed threshold: EREFS ≤ 2	Biopsies should be performed at every endoscopy Reasonable goal: <15 eos/hpf
When to assess following initiation or major change in treatment		
New therapy (PPIs, STC, or FED)	8 to 12 weeks	
Dupilumab	12 to 24 weeks	

ACG Recommendations for Evaluating Treatment Response

Symptoms	Key Insights	Evaluation
Assess EoE symptoms (including dysphagia, food avoidance, and IMPACT behavior)	Key Insight: Combined assessment of symptomatic, endoscopic, and histologic features is important	Endoscopy should be performed for diagnosis and evaluation of response.
	Key Insight: Symptoms can improve without improvement in the disease markers, or disease markers can improve without symptom relief	Endoscopy: <15 eos/hpf
New therapy (PPI, STC, or dupilumab)	Key Insight: Continuation of effective therapy is strongly recommended to prevent relapse	
Dupilumab		

ACG—EoE Treatment and Management Algorithm



*Assessed with symptomatic, endoscopic, and histologic features.

Abbreviations: ACG, American College of Gastroenterology; EoE, eosinophilic esophagitis; PPI, proton pump inhibitor.

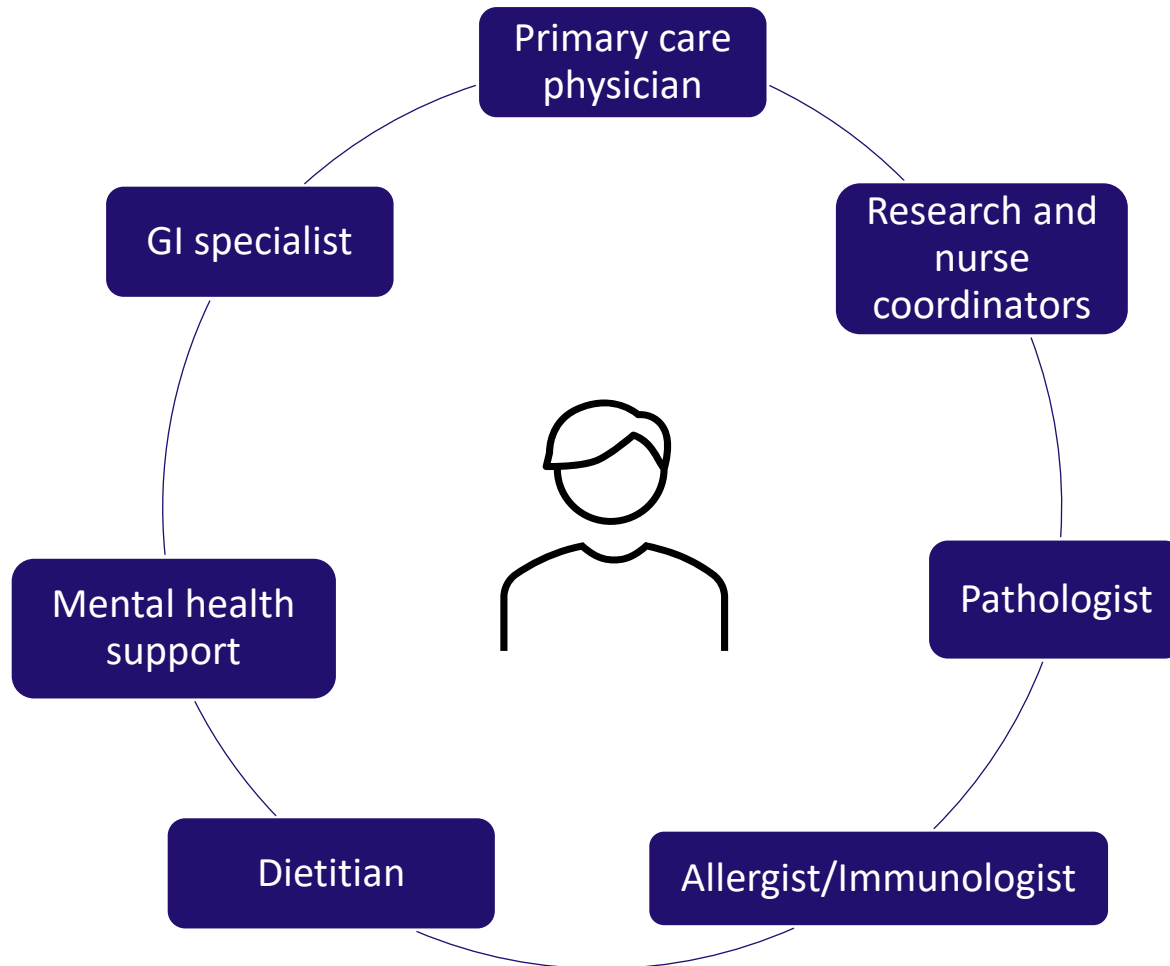
Adapted with permission from Dellon ES, et al. *Am J Gastroenterol.* 2025;120:31-59.

Maintenance and Long-Term Monitoring

Suggested Follow-up

- Symptom assessment
- Monitoring of medication side effects
- Gauge adherence or dietary avoidances
- Consideration of treatment modification (established/suspected stricture, probability of intervention)
- Clarification of histologic activity
- Repeat endoscopy on an individual basis

Team-Based Care in EoE^{1,2}



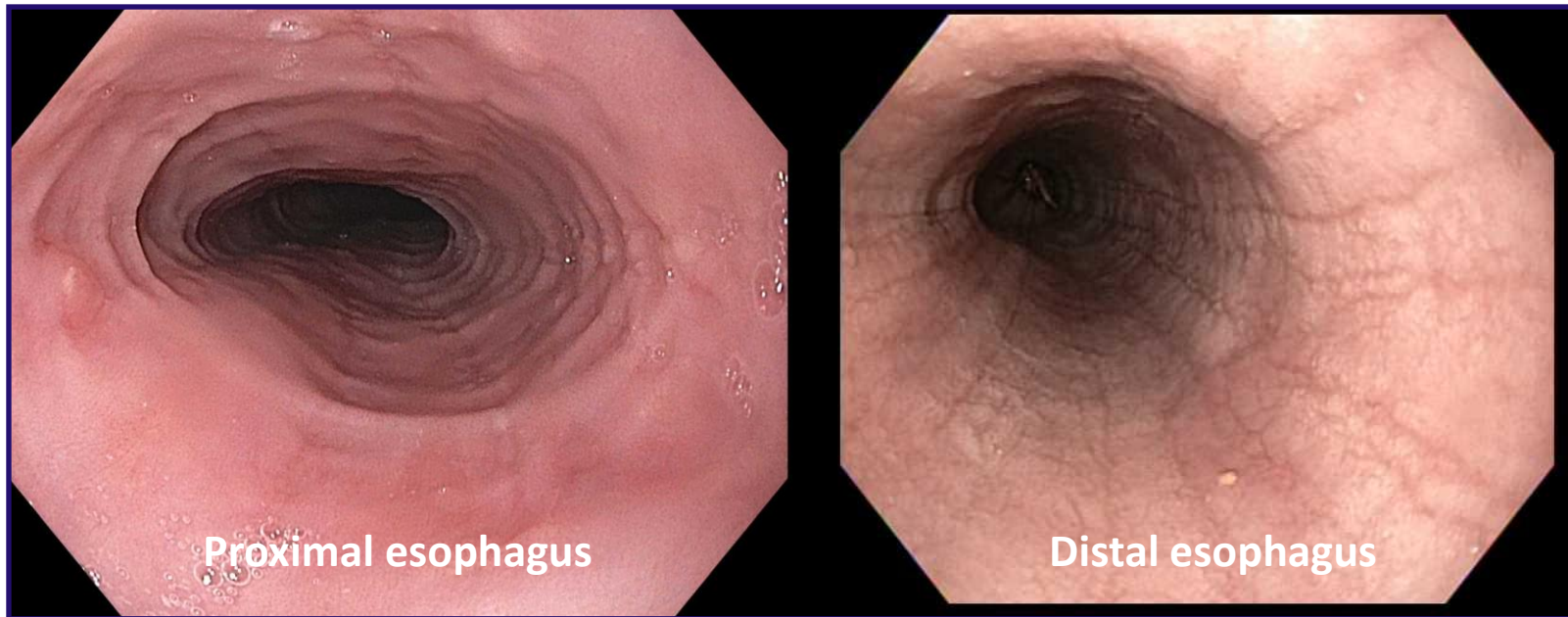
Goals for the team

- Minimize diagnostic delay
- Ensure effective therapy with minimal side effects
- Monitor patient well-being
- Prevent malnutrition
- Manage atopic comorbidities

Abbreviation: EoE, eosinophilic esophagitis.

1. Chehade M, et al. *J Allergy Clin Immunol*. 2023;152:1382-1393. 2. Sauer BG, et al. *Clin Gastroenterol Hepatol*. 2021;19:2226-2229.

Our Patient's Follow-Up Endoscopy

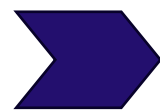


Endoscopy results

- EREFS score: 4
 - Edema
 - Moderate rings
 - Mild furrows

Histology results

- 118 eos/hpf



**Follow-up endoscopy with
biopsies shows active disease**

Key Takeaways

Key Takeaways

- EoE is a common cause of dysphagia and food impaction, but symptoms can be minimized and described in diverse ways
- Recognition and early diagnosis are critical to managing EoE
- First-line therapy for EoE can include proton pump inhibitors, topical corticosteroids, dietary therapy, or dupilumab
- Consider patient preferences and values in choosing treatment
- Symptoms alone can be unreliable to guide treatment, so monitoring response and follow-up is important to manage this chronic disease
- EoE is a chronic disease that quickly recurs without treatment, so maintenance therapy and monitoring response are important

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