

Feel the Squeeze: Eosinophilic Esophagitis

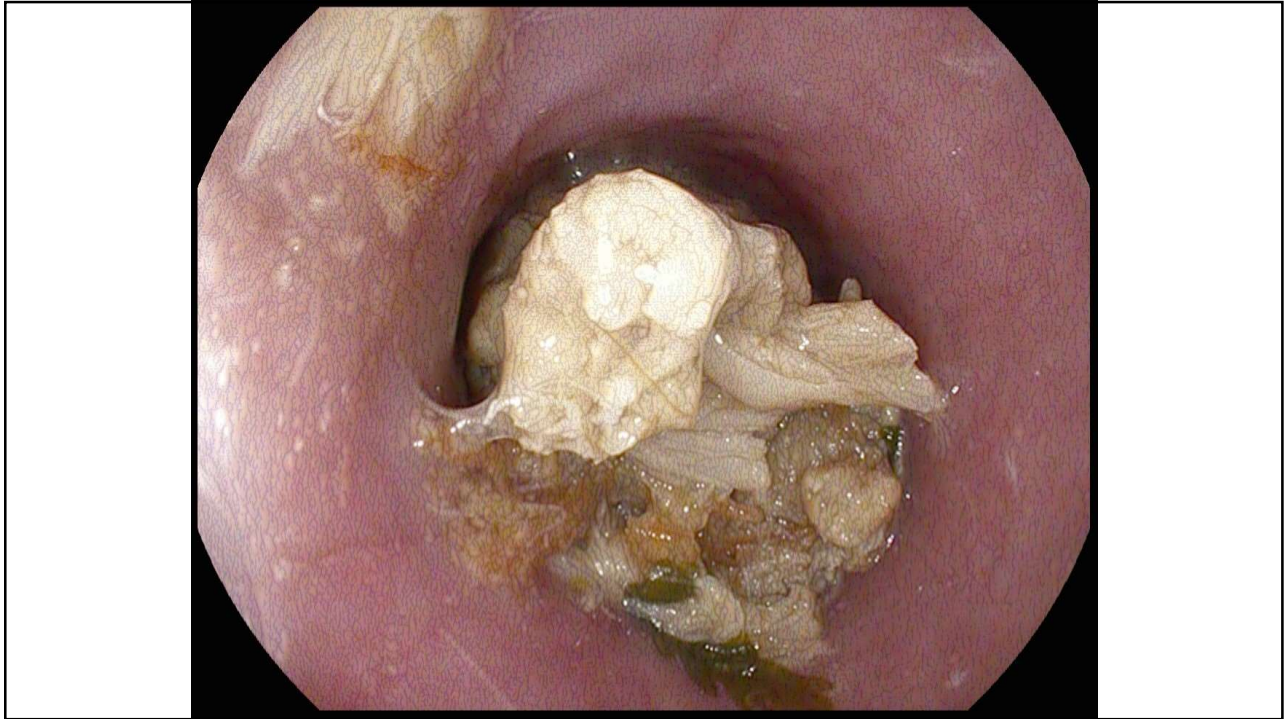
Andrew Flynn
March 10, 2025

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Case

- 32 M presents to ED with suspected food bolus impaction.
- “Several episodes” of retrosternal sticking of solids over past several years, pass with consumption of liquids.
- Now has been unable to tolerate secretions for last 6 hours since feeling impaction of pork belly.
- History of seasonal allergies.
- Otherwise healthy.
- Whaddya do?

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Case cont'd

- Food bolus disimpacted.
- Esophageal biopsies:

“The biopsy is composed of squamous mucosa with edema, elongated lamina propria papillae, basal cell hyperplasia, and increased intraepithelial eosinophils, approaching 40 eosinophils per high power field. Occasional eosinophilic microabscesses are seen. In the appropriate clinical setting, the findings are consistent with eosinophilic esophagitis.”

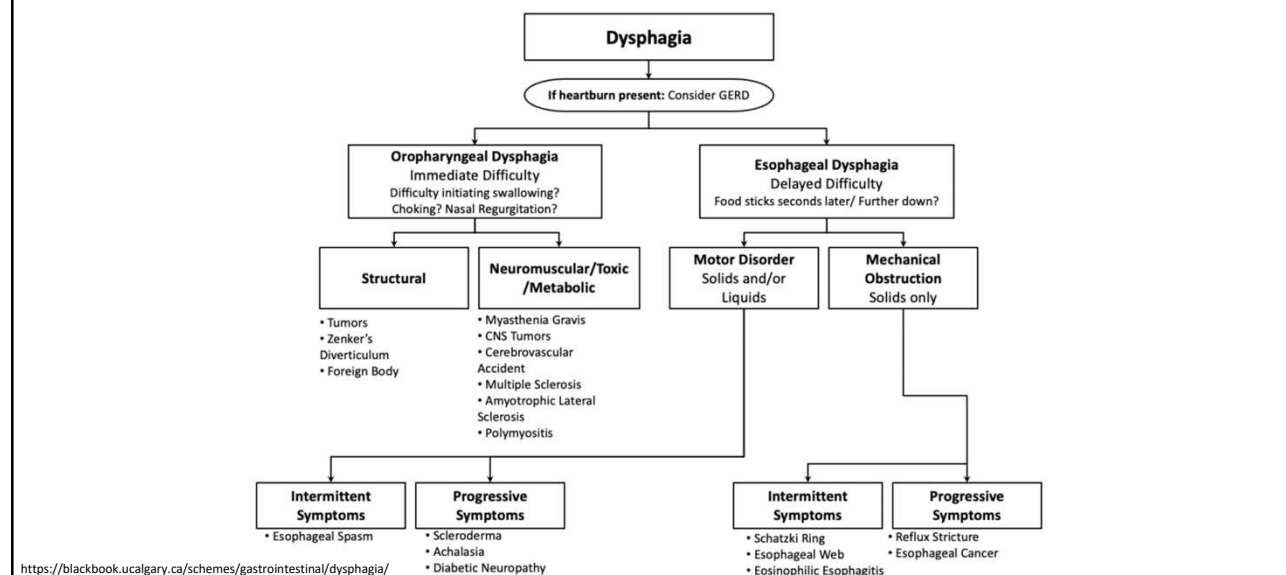
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ACG Clinical Guideline: Diagnosis and Management of Eosinophilic Esophagitis

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Clinical evaluation of dysphagia (a “red flag”)



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Esophageal dysphagia

Table 4. “IMPACT” behaviors to assess while taking a dysphagia history

Behavior	Description
Imbibe fluids	Drinking a lot of liquids to help get each bite down smoothly
Modify foods	Cutting foods into small pieces or pureeing foods
Prolong meal times	Eating slowly and being the “last one at the table”
Avoid hard texture foods	Meats, crusty breads, and foods with sticky consistencies are often removed from the diet to minimize symptoms
Chew excessively	Thorough chewing to achieve a mush-like consistency to allow easier swallowing
Turn away tablets/pills	Pill dysphagia is a subtle symptom of EoE and may be the only indication of swallowing dysfunction

EoE, eosinophilic esophagitis.
Adapted from Hirano and Furuta. *Gastroenterology*. 2020;158(4):840–51 (81).

Dellon *et al.*, 2025

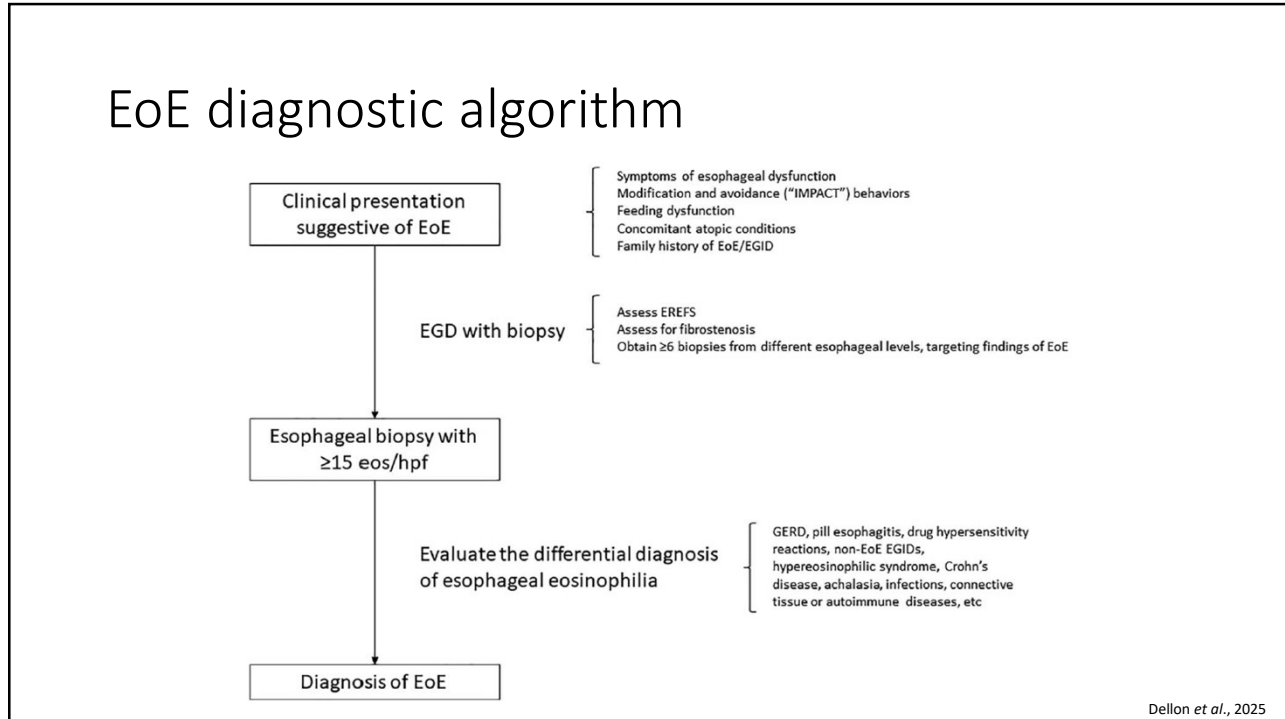
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Eosinophilic esophagitis

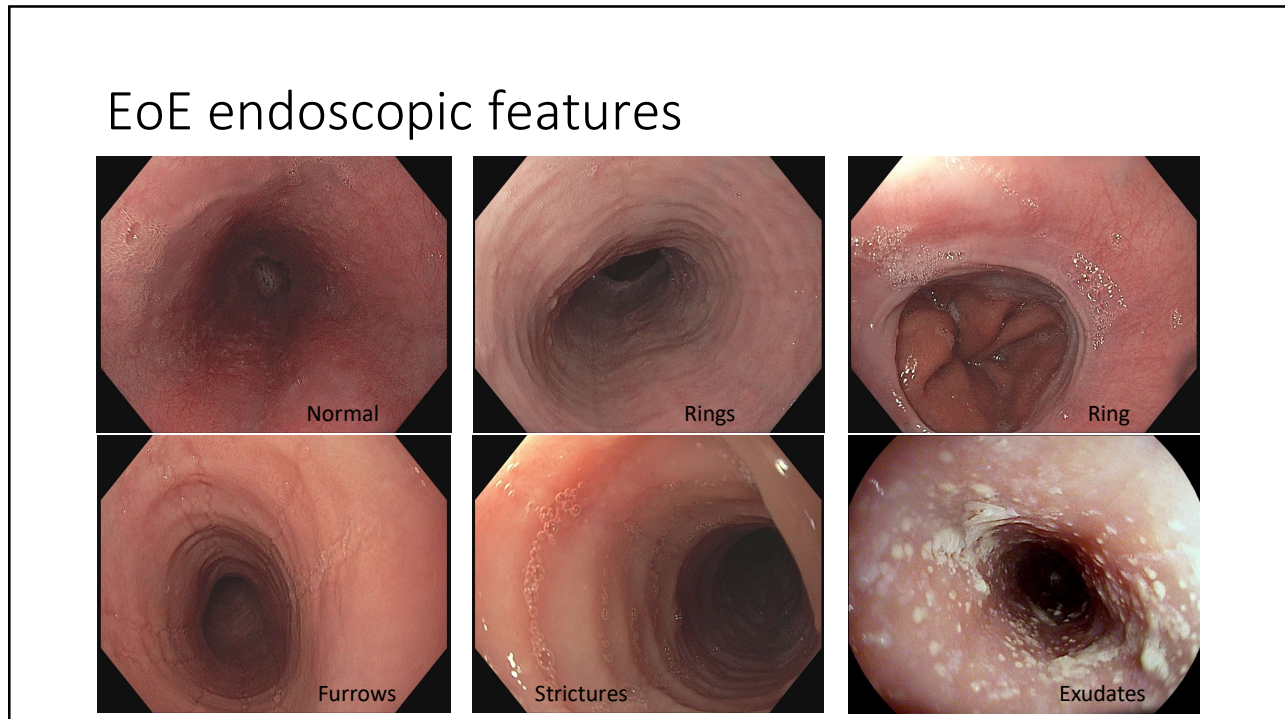
- “A chronic allergen-induced, type 2 immune-mediated disease of the esophagus characterized by symptoms of esophageal dysfunction and an eosinophilic predominant infiltrate in the esophagus.”
- Incidence and prevalence are rising.

Dellon *et al.*, 2025

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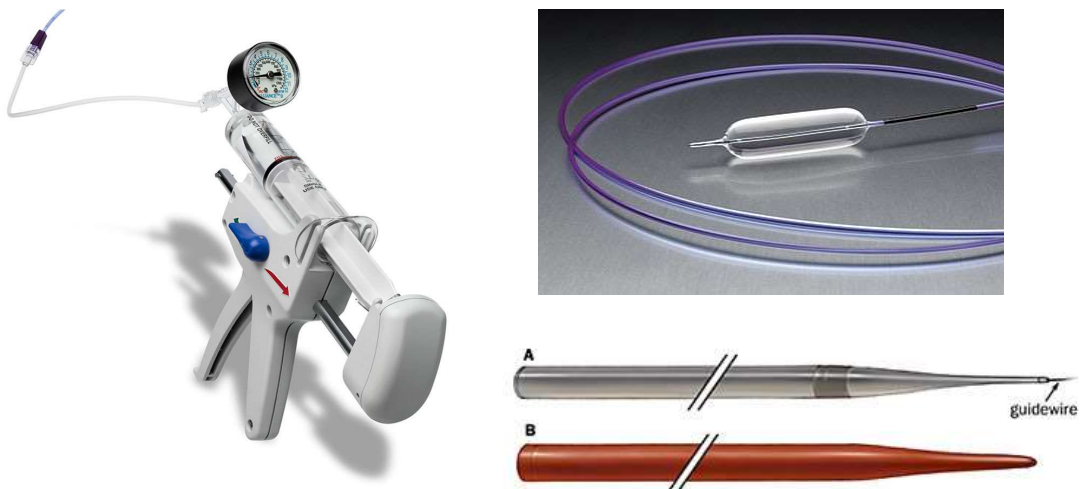
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EoE management

- Endoscopic dilation
- PPIs
- Dietary restriction
- Topical steroids
- Biologics

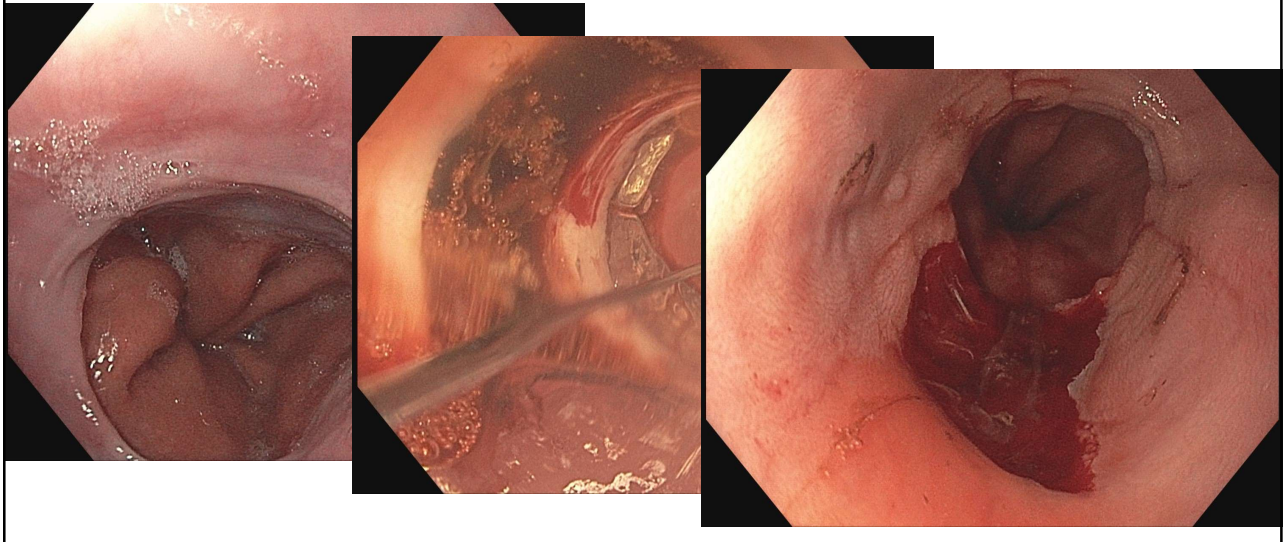
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Endoscopic dilation: Tools of the trade



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Can be sphincter clenching!



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Initial medical approach

- Treat with PPI bid
 - Decrease eotaxin-3, increase epithelial barrier function
 - Explain not used for anti-reflux symptoms
- 8 wks later → repeat EGD
 - ?PPI responsive (~40%)
 - If so, drop down to once daily
 - Assess for dilation
- Goals of therapy:
 - Improve symptoms
 - Prevent complications

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Topical steroids

- Fluticasone
 - 1760 mcg/d in divided doses
- Budesonide
 - 2-4 mg in divided doses
 - Available as orodispersible tablet

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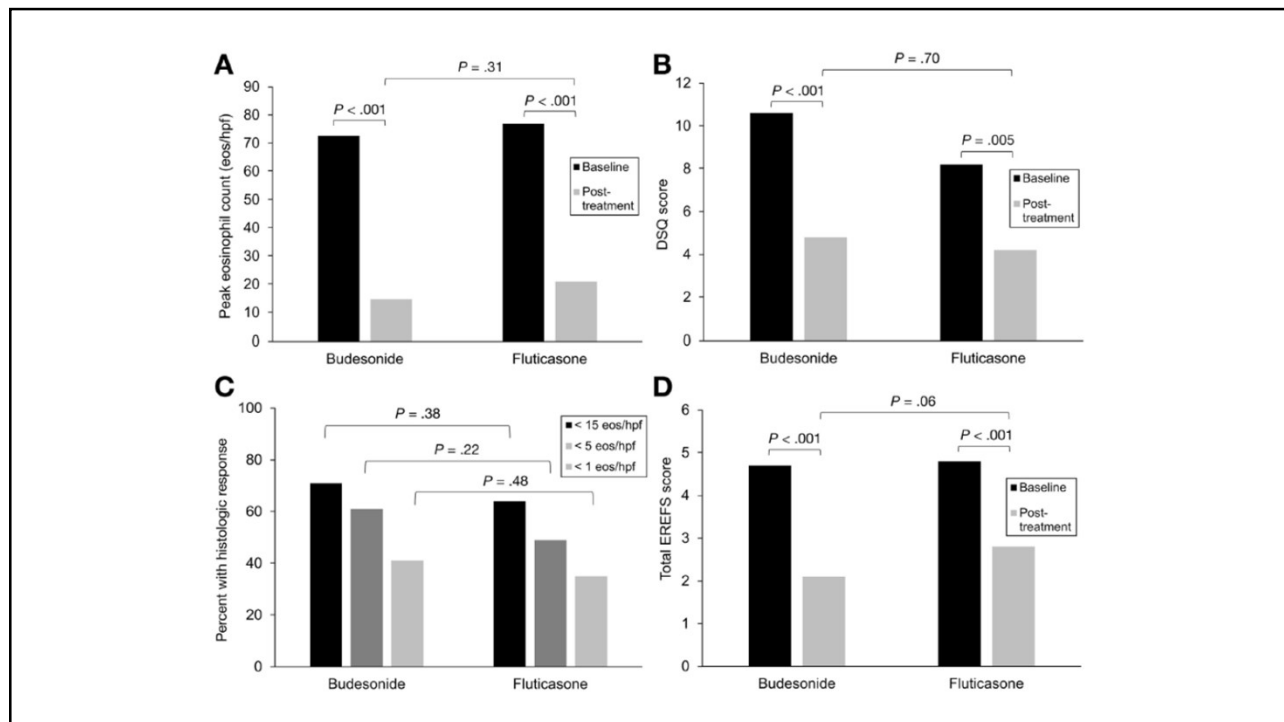
Efficacy of Budesonide vs Fluticasone for Initial Treatment of Eosinophilic Esophagitis in a Randomized Controlled Trial



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Longitudinal treatment?

- 33 of 58 patients taken off topical steroids had symptom recurrence within 1 year (median = 244 days).
- 78% of these patients had histologic recurrence.
- Most common adverse effect: candidiasis.

	BOS ^a	Placebo ^a
Absolute value, $\mu\text{g/dL}$, mean \pm SD		
Baseline visit	10.4 \pm 3.9	10.9 \pm 4.3
After 4 wks of study drug	10.1 \pm 4.3	12.0 \pm 11.1
End of treatment	9.6 \pm 4.2	11.3 \pm 4.6

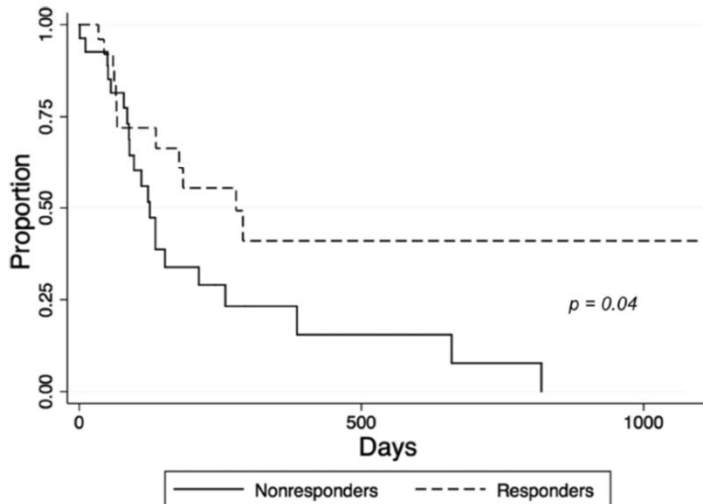
Cortisol

Dellon *et al.* (2017), Dellon *et al.* (2019)

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Control of inflammation decreases the need for subsequent esophageal dilation in patients with eosinophilic esophagitis

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- Responders to topical steroids (< 15 eos/hpf) have decreased requirement for dilation.

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Dietary elimination

Table 5. Dietary elimination therapy options

Diet	Details ^a	Efficacy range
1FED	Dairy elimination alone; also referred to as animal milk elimination ^b	35%–45%
2FED	Dairy and wheat elimination	40%–45%
4FED	Dairy, wheat, egg, and soy elimination	40%–50%
6FED	Dairy, wheat, egg, soy, nuts, and seafood elimination	40%–70%
Elemental formula	Amino acid–based hypoallergenic formula	>90% (if adherent)
Allergy test-directed	Not recommended ^c	—

Dellon *et al.*, 2025

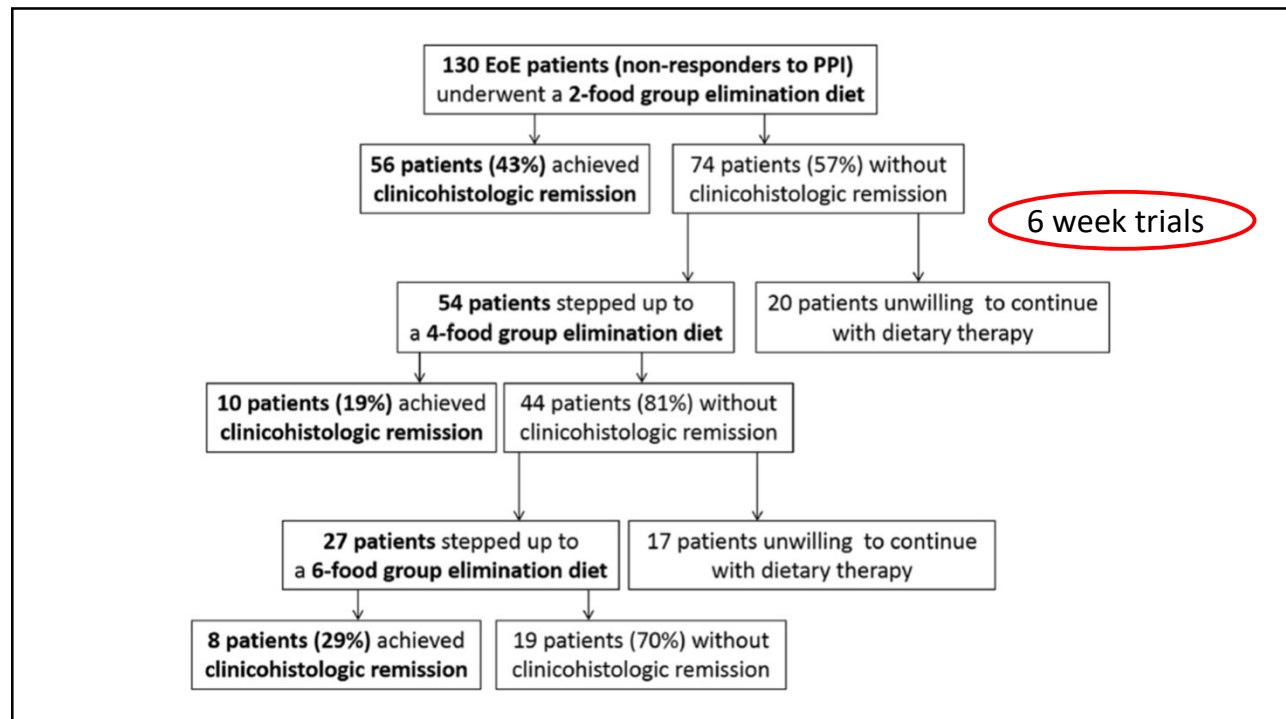
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Step-up empiric elimination diet for pediatric and adult eosinophilic esophagitis: The 2-4-6 study



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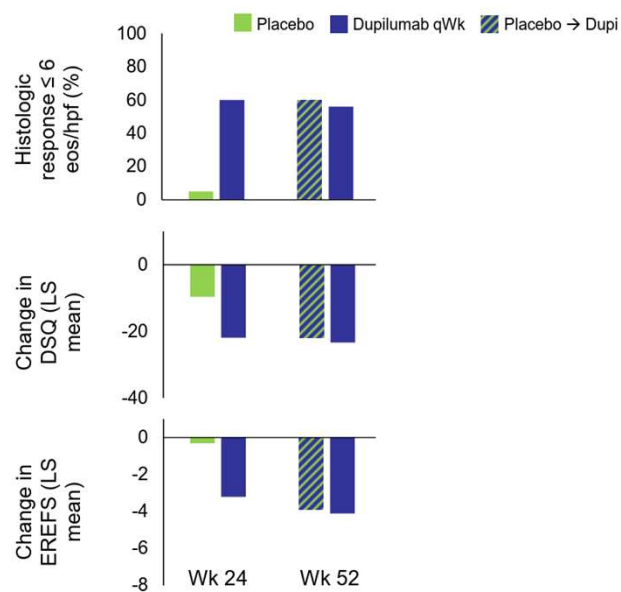
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Biologics: dupilumab

- Monoclonal antibody against IL-4 α
 - Blocks effects of IL-4 and IL-13
- 300 mg SC qwk
- Previously approved for asthma and atopic dermatitis
- No need for viral hepatitis or tuberculosis screening
- Primary side effect: discomfort at injection site

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Phase 3 data

Dellon *et al.*, 2022

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Algorithm

