


Eosinophilic Esophagitis



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Practical Day of Pediatrics
2/3/2024



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Disclosures



- I have no actual or potential conflict of interest in relation to this presentation
- I will not be discussing "off-label" uses of any medications in this presentation



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OBJECTIVES

1. Recognize the common presentations of eosinophilic esophagitis (EoE) by age
2. Improve screening strategies to identify potential EoE patients
3. Develop plans for navigating potential EoE patients to diagnosis



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Nature will castigate those who don't masticate.

Horace Fletcher

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Question 1:

Which of these is NOT a typical feature of eosinophilic esophagitis (EoE)?

- A. EoE affects both children and adults.
- B. EoE is an autoimmune disorder.
- C. EoE is typically progressive in nature.
- D. EoE is considered a rare disease.

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Eosinophilic Esophagitis (EoE)

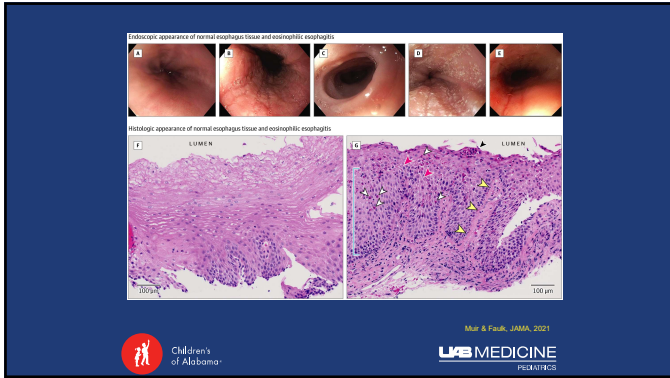
- Chronic, typically progressive
- Immune-mediated
- Limited to the esophagus
- Affects an estimated 34.4/100,000 people in Europe and North America
- Affects both children and adults
- Can cause dysphagia, food bolus impaction, and esophageal strictures

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Mur & Faak, JAMA, 2021
Dellon et al., Gastroenterology, 2018

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EoE should be diagnosed when there are:

1. Symptoms of esophageal dysfunction
2. At least 15 eosinophils per high-power field on esophageal biopsy
3. Other potential causes of esophageal eosinophilia have been ruled out

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Dellon et al., Gastroenterology, 2018

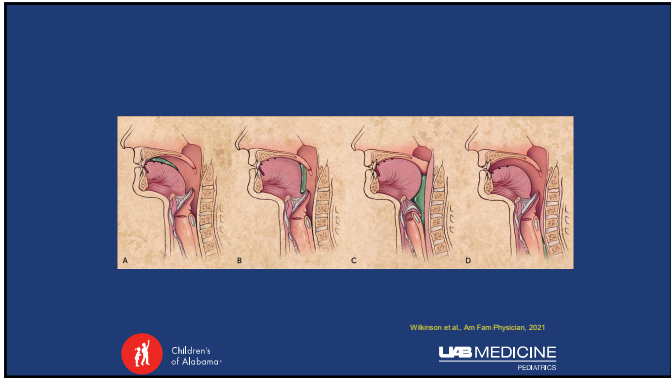
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What are symptoms of esophageal dysfunction?

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Dysphagia

Esophageal	Oropharyngeal
Throat clearing	Coughing
Food stuck	Choking
Wincing or fearful swallows	Gagging
Effortful swallows	Aspirating

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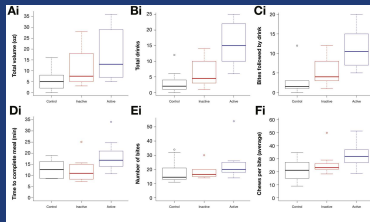
What patients and families say..

- I feel fine!
- Feel full after just a few bites
- Picky eaters
- Have to chew food well to swallow it
- Food feels like it gets stuck on the way down
- Have to drink to get food to go down
- Relative had to have their throat stretched



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Adaptive Eating Behaviors



Alexander et al. Curr Gastroenterol Hepatol. 2019



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Question 2:

Which of the following is a more typical presenting symptom in adult patients with eosinophilic esophagitis (EoE), as compared to pediatric patients?

- A. Vomiting
- B. Abdominal pain
- C. Slow eating (bradyphagia)
- D. Trouble swallowing (dysphagia)

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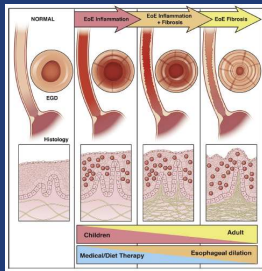
Clinical Presentation

- **Infants/Toddlers** →
 - failure to thrive, feeding difficulties
- **School-aged** →
 - vomiting, abdominal pain
- **Teenagers** →
 - dysphagia, food impaction
- **Adults** →
 - dysphagia, esophageal dilatations, chest pain, food impaction

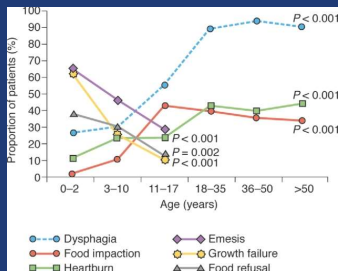


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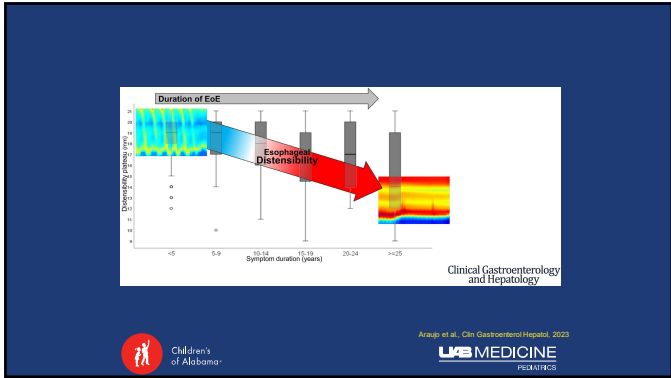
Natural History



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Compensatory Mechanisms

Liquid washes

- Sips after bites of food (water/carbonated)
- Helps clear oral/esophageal residue

Dips and sauces

- Lubricating food: oils, honey, maple syrup, and sauces (ketchup, BBQ, ranch)

How the food is prepared

- Retaining moisture in foods
- Crockpot, instant pot, slow cookers, skillet instead of grilling, braised and marinated

Adding foods for saliva and increased oral sensation

- Crunchy foods will do this (ex. croutons with lettuce, tortilla chips with ground beef, Ritz crackers instead of bread, and chips on sandwiches)

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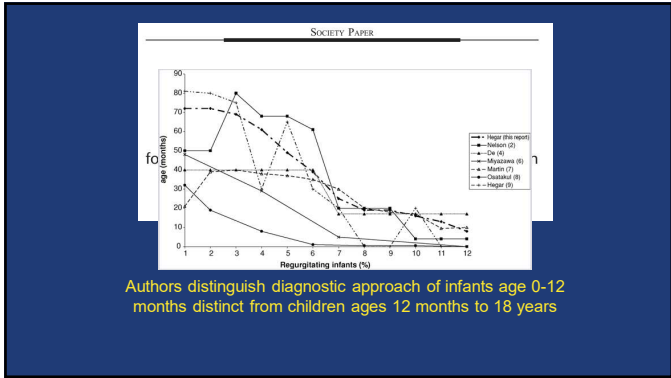
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Myth:
Vomiting is normal in children

Fact:
After 12-18 months of life, vomiting is abnormal and should be investigated

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What is causing delays in diagnosis of EoE?

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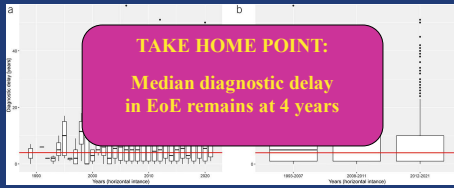
Question 3:

Since its initial description almost 30 years ago, eosinophilic esophagitis (EoE) has shown the following overall change in delayed diagnosis.

- A. No change with a median delay of 4 years.
- B. Decrease from median delay of 4 years to 2 years.
- C. Increase from median delay of 4 years to 5 years.
- D. Decrease from median delay of 10 years to 5 years.

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Diagnostic Delay in EoE



Murray et al., Am J Gastroenterol, 2022
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Question 4:

What is the relative breakdown of weight status in children with eosinophilic esophagitis at diagnosis?

- A. under 23%, normal 48%, over 16%, obese 13%
- B. under 5%, normal 63%, over 14%, obese 18%
- C. under 48%, normal 23%, over 16%, obese 13%
- D. under 14%, normal 63%, over 18%, obese 5%

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How to Shorten Delays

EoE associations

Family history

Special Populations

Referrals



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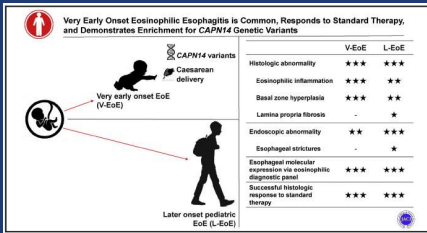
EoE Associations

- Male to Female ratio of 3:1
- Comorbid allergic disorders
 - Asthma, eczema, allergic rhinitis
 - Food allergy
- Early life exposures
 - Antibiotic use (6x RR)
 - C-section, preterm birth, formula
 - PPI in first year of life??



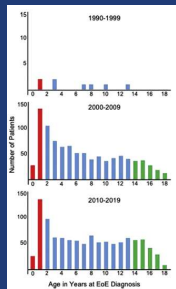
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Very Early Onset EoE?



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Very Early Onset EoE?



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Question 5:

Which of the following is NOT associated with an increased chance of eosinophilic esophagitis (EoE).

- A. Carrying a personal diagnosis of inflammatory bowel disease (IBD).
- B. Sibling with a diagnosis of EoE.
- C. Personal history of esophageal food impaction.
- D. Personal history of vaginal delivery.

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Family History

- Genetics make up 15% of risk for EoE
- Environmental factors account for 81%

- Sibling risk ratio up 50x general population
– But, still only around 2.4%

- Family members with esophageal dilations!



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Myth:

Behavioral and neurodevelopmental disorders explain feeding issues

Fact:

Behavior and neurodevelopmental disorders correlate with a higher risk of an EoE diagnosis



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Special Populations

- Esophageal food impactions
 - >60% will have EoE
 - Esophageal biopsies not always obtained
- Comorbid diagnoses
 - Inflammatory bowel disease
 - Celiac disease
 - Neurodevelopmental disorders
 - Gastroesophageal reflux disease



Lee et al. J Clin Med. 2023
Dehan et al. Gastroenterology. 2018

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My EoE 'disease script'



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You are on the front lines of decreasing the delay to diagnosis in patients with EoE



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The Alabama Center for Eosinophilic Gastrointestinal Disorders (ACED) Team


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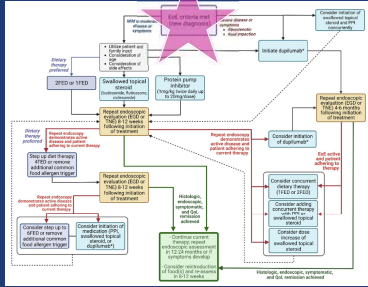

 Diana Montoya, MD


 Amy Jenkins, CRNP




 Sandeep Gupta, MD




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Shalin et al., Curr Gastroenterol Rep, 2023

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Questions??



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