# Eosinophilic Esophagitis (EoE)

## What is Eosinophilic Esophagitis (EoE)?

Eosinophilic Esophagitis (EoE) is a chronic, progressive, immune-mediated disease that affects the esophagus.<sup>1</sup>

In patients with EoE, eosinophils – which are a type of white blood cell – build up along the lining of the esophagus, resulting in dysfunction, inflammation and tissue damage.<sup>1</sup>



## Symptoms

Signs and symptoms of EoE vary with age. When the disease is active in adolescents or adults, symptoms may include:<sup>1,2</sup>



Difficulty swallowing (dysphagia)



Upper abdominal pain

Food becoming stuck in the esophagus (impaction)



Pain with swallowing



Esophageal narrowing (stricture)



Exercise-induced chest pain



Decreased appetite



Heartburn

#### In infants or young children, the most common symptoms include:<sup>3,4</sup>

Feeding difficulties including feeding refusal/aversion

Abdominal pain

Vomiting

Nausea/ vomiting Heartburn and regurgitation

Atopic disorders (food allergy, asthma, chronic rhinitis)

Some infants and children may experience poor weight gain, known as "failure to thrive."

### Disease Burden

EoE can result in serious complications. For instance, when food becomes lodged in the esophagus, known as impaction, it can result in a medical emergency if a person is not able to swallow or vomit.<sup>1</sup>

Beyond the medical impact, the burden of EoE significantly affects quality of life from a lifestyle and psychological perspective for both patients and their care providers. Patients with EoE may experience:<sup>6-8</sup>



Currently, an estimated **34.4 people per 100,000** live with EoE globally, with a higher prevalence in men than women.<sup>4,5</sup>

### **Diagnosis & Treatment**

Due to the varying symptoms of EoE, some of which overlap with other diseases, in addition to low disease awareness, patients are often misdiagnosed with gastroesophageal reflux disease (GERD).<sup>9</sup>

**Endoscopy with a biopsy** is necessary to diagnose EoE, but physicians may order blood tests as well.<sup>1,2</sup>



While EoE is becoming more prevalent around the world, patients have few treatment options. Because EoE is a chronic disease, patients typically require ongoing treatment to help manage symptoms, including:<sup>1,2</sup>



DIETARY CHANGES • Elimination diet (removing certain foods)

MEDICINAL TREATMENTS Corticosteroids

• Proton pump inhibitors (acid blockers)

In some patients who don't respond to dietary changes or medicinal treatments, esophageal dilation may also be a potential course of action. Esophageal dilation involves endoscopic stretching of the esophageal strictures to relieve symptoms and improve the ability to swallow.<sup>1,2</sup>

Bristol Myers Squibb is committed to researching and pursuing new treatment options and innovative development approaches to help deliver transformational medicines for patients with EoE and other immune-mediated diseases.

- 1. American Academy of Allergy Asthma and Immunology. Eosinophilic Esophagitis (EoE). Available from: https://www.aaaai.org/conditions-and-treatments/related-conditions/eosinophilic-esophagitis. Last accessed 12 September 2020.
- 2. The Mayo Clinic. Eosinophilic Esophagitis. Available from: https://www.mayoclinic.org/diseases-conditions/eosinophilic-esophagitis/symptoms-causes/syc-20372197. Last accessed 12 September 2020.
- 3. Lucendo, A.J. et al. Guidelines on eosinophilic esophagitis: evidence-based statements and recommendations for diagnosis and management in children and adults. United European Gastroenterol J. 2017 5(3) 335-358
- 4. O'Shea, K.M. et al. Pathophysiology of eosinophilic esophagitis. Gastroenterology. 2018. 154 (2): 333-345
- 5. Navarro P, et al. Systematic review with meta-analysis: the growing incidence and prevalence of eosinophilic oesophagitis in children and adults in population-based studies. Aliment Pharmacol Ther. 2019 Mar 18. doi: 10.1111/apt.15231.
- 6. Taft, T.H. et al. Qualitative assessment of patient reported outcomes in adults with eosinophilic esophagitis. J Clin Gastroenterol. 2011. 45(9): 769-774
- 7. Harris, R.F. et al. Psychosocial dysfunction in children and adolescents with eosinophilic esophagitis. J Pediatr Gastroenterol Nutr. 2013 57(4): 500-505
- 8. Taft, T.H et al. Anxiety and depression in eosinophilic esophagitis: A scoping review and recommendations for future research J Asthma Allergy. 2019 12: 389–399
- 9. Kia, L., & Hirano, I. Distinguishing GERD from eosinophilic oesophagitis: Concepts and controversies. Nat Rev Gastroenterol Hepatol. 2015 Jul. doi:10.1038/nrgastro.2015.75