

Eosinophilic Esophagitis (EoE)

What is Eosinophilic Esophagitis?

The esophagus is a tube which facilitates the transport of food from the mouth to the stomach. A person who suffers from EoE suffers from inflammation of the esophagus. These patients have large numbers of white blood cells, known as eosinophils, in the tissue of the esophagus, while normally there should be none. EoE is a recent diagnosis and is considered to be a chronic condition which cannot be outgrown.

Symptoms of EoE can vary with age such that, in young infants and toddlers, you may find them refusing food or not properly growing. Children who are school age can be found to have recurring abdominal pain, difficulty swallowing, or vomiting. In teenagers and adults, the symptoms typically include difficulty swallowing particularly dry or dense foods. The esophagus can narrow due to inflammation so much so that food will commonly get stuck, which is known as food impaction.

Acid reflux/heartburn can also be a culprit for EoE. Medications used to reduce stomach acid production, known as proton-pump inhibitors (PPIs), can be beneficial for treatment of proton-pump inhibitor responsive esophageal eosinophilia. This condition has the same symptoms and esophageal biopsy findings as EoE, however treatment with PPIs can help to resolve symptoms and lead to normal esophageal biopsy results.

How is EoE Diagnosed?

EoE is diagnosed through endoscopy and biopsy of the esophagus. The tissue samples are then analyzed for its eosinophil count. Through biopsy results, the visual appearance of the esophagus during endoscopy, and a detailed clinical history, a diagnosis can then be made. The most common other cause of esophageal eosinophilia, gastroesophageal reflux disease, should be excluded before making the diagnosis of EoE.

What Role do Allergies Play in EoE?

Many patients with EoE are also allergic individuals and have a history of allergic disorders including asthma, allergic rhinitis, eczema, or food allergies. If you have recently been diagnosed with EoE, you may also consider having allergy testing done. This can help in management with EoE through controlling other allergic symptoms. For instance, some patients feel their EoE is worse during certain pollen seasons. Managing these symptoms can then lead to an improvement of EoE.

Food allergies and EoE

Many patients with EoE have a complicated relationship with certain foods. Typically, food allergies cause immediate itchiness, rash, or hives. In patients with EoE, however, the reaction can be more delayed, making it difficult to pinpoint a specific food as the cause of the reaction. Conventional allergy tests, such as skin, patch, or blood testing, may not be accurate for diagnosing food allergies in EoE patients as the reactions are delayed and caused primarily by immune mechanisms, rather than the typical IgE-mediated food sensitivity. Removing the suspected food from the individual's diet can greatly improve symptoms.

Treatment of EoE

Specific trigger foods should be removed from the individual's diet, which can be beneficial in controlling symptoms of EoE. In pediatric patients with EoE, amino acid-based formulas and dietary elimination are very effective therapies. Consultation with a registered dietician is necessary to ensure adequacy of calorie, protein, and micronutrients. Elimination diets from major food allergens including dairy, eggs, wheat, soy, peanut, tree nuts, and fish/shellfish, may also be considered for treatment of EoE in adult patients. While these diets may be beneficial in treating EoE, they're extremely limiting and unrealistic for many individuals. Foods can be reintroduced one at a time with follow up endoscopies to ensure EoE remains well controlled.

No medications are currently approved by the FDA to treat EoE. Despite this, a number of medications have been shown to be beneficial in reducing the eosinophil count and managing symptoms. Corticosteroids are extremely helpful in treating EoE as they control inflammation. Swallowing small doses of corticosteroids is the most common treatment. At first, higher doses may be required to manage the inflammation. Once inflammation is controlled, the patient will be tapered to a lower dose due to potential side effects from a high dose. PPIs are also beneficial in controlling EoE as specified above. While some patients may see a decrease in the number of eosinophils and inflammation while on proton pump inhibitors, other patients may find an improvement of EoE symptoms without improving the inflammation. New treatment options are still being researched.