CONDITION

Eosinophilic esophagitis

Eosinophilic esophagitis is long-term inflammation that can narrow the swallowing tube and make food difficult to swallow.

WHAT IT IS
Chronic immune-related inflammation of the esophagus

BODY SYSTEM
Digestive system

MAIN SYMPTOMS
Trouble swallowing, food sticking, chest discomfort, feeding problems

WHAT CAUSES IT
Immune reaction, often triggered by foods

HOW IT IS DIAGNOSED
Upper endoscopy with esophageal biopsies

MAIN TREATMENT
Acid suppression, swallowed steroids, diet therapy, or dilation

CAN IT BE CURED?
No - treatment controls inflammation, but it often returns

IS IT AN EMERGENCY?
Sometimes - food stuck and inability to swallow saliva

LONG-TERM OUTLOOK
Usually manageable, with ongoing treatment and monitoring

Overview

Eosinophilic esophagitis, often shortened to EoE, is a long-term condition affecting the esophagus. The esophagus is the muscular tube that carries food from your mouth to your stomach.

In EoE, the immune system causes inflammation in the lining of the esophagus. Large numbers of eosinophils collect there. Eosinophils are white blood cells involved in immune reactions, including allergies.

Over time, inflammation can make the esophagus stiff or narrow. This may cause difficulty swallowing or make food become stuck. Children may instead have feeding problems, vomiting, stomach pain, or poor growth.

EoE can often be controlled with treatment. However, it usually returns if effective treatment is stopped. Symptoms alone do not always show whether inflammation has healed, so follow-up may include another endoscopy and biopsies.

Symptoms

Symptoms can differ by age and may develop gradually.

In teenagers and adults, common symptoms include:

Some people adapt without realizing it. You may eat slowly, take small bites, chew for a long time, drink often during meals, avoid dry foods, or choose softer foods. These habits can hide the extent of swallowing difficulty.

Infants and younger children may refuse food, take a long time to eat, gag, vomit, or appear uncomfortable during meals. They may have stomach pain or difficulty gaining weight. Older children may describe heartburn, chest pain, or food sticking.

Symptoms can come and go. Their severity may not match the amount of inflammation. Someone may feel better while inflammation remains active, especially after avoiding foods that are difficult to swallow.

- Difficulty swallowing solid food
- A feeling that food is moving slowly or sticking
- Food becoming completely lodged in the esophagus
- Chest discomfort that is not caused by heart disease
- Heartburn or regurgitation that does not fully improve with usual treatment

Causes and risk factors

EoE is caused by an abnormal immune response in the esophagus. Food proteins are common triggers. Environmental allergens, such as pollen, may also influence symptoms or inflammation in some people.

EoE is not the same as an immediate food allergy. A food can contribute to EoE without causing hives, swelling, wheezing, or a rapid allergic reaction. Standard skin-prick or blood allergy tests cannot reliably identify which foods are driving EoE.

The condition appears to result from a combination of immune activity, genetic susceptibility, and environmental exposures. It can occur in families, but it is not passed down in a simple,

predictable way.

EoE is more common in people who have other allergic conditions, including eczema, asthma, hay fever, or immediate food allergies. Having one of these conditions does not mean that you will develop EoE.

EoE is not contagious. It is not caused by something getting stuck or by eating too quickly, although those situations may reveal an existing narrowing.

Diagnosis

Symptoms cannot confirm EoE by themselves. Diagnosis requires an upper endoscopy and biopsies from the esophagus.

During an upper endoscopy, a clinician passes a thin, flexible camera through the mouth while you are sedated or under anesthesia. This allows the esophagus, stomach, and first part of the small intestine to be examined.

EoE may cause rings, narrow areas, grooves, swelling, or small white spots in the esophagus. However, the lining can also look normal. For this reason, several tiny tissue samples, called biopsies, are taken from different parts of the esophagus.

A laboratory examines the samples under a microscope. Diagnosis usually requires symptoms of esophageal problems and at least 15 eosinophils in a high-power microscope field. Other possible reasons for eosinophils in the esophagus must also be considered.

These can include acid reflux, certain infections, medication reactions, inflammatory bowel conditions, and other uncommon immune or connective-tissue conditions.

A response to a proton pump inhibitor like omeprazole or lansoprazole , or PPI, does not rule out EoE. PPIs reduce stomach acid but can also reduce inflammation in some people with EoE. A PPI trial is therefore considered a treatment option rather than a required test before diagnosis.

Treatment and management

Treatment aims to reduce inflammation, improve swallowing, and prevent narrowing or food impaction. The main approaches are medication, diet therapy, and esophageal dilation. More than one may be needed.

PPIs are often used first. These medicines reduce acid production and can also reduce eosinophilic inflammation. They do not work for everyone.

Swallowed corticosteroids like prednisone or hydrocortisone act directly on the esophagus. These are different from the long courses of steroid tablets sometimes used for other conditions. A liquid preparation or medication from an inhaler is swallowed rather than breathed into the lungs. Possible effects include yeast infection in the mouth or esophagus. Your treatment team can explain how to use the medicine correctly.

Diet therapy removes likely food triggers and then adds foods back in a planned way. Approaches range from removing one or two common triggers to removing several food groups. Milk is a frequent trigger, but the responsible foods differ between people.

A restrictive diet should be supervised by a clinician and, when possible, a dietitian familiar with EoE. This helps protect nutrition, growth, and quality of life. Endoscopy with biopsies is usually needed to learn whether removing or reintroducing a food has changed the inflammation. Symptoms and allergy tests cannot reliably provide that answer.

Dupilumab is a biologic medicine that blocks parts of the immune pathway involved in EoE. It may be considered for eligible adults and children, particularly when other treatment has not worked well or when related allergic conditions affect treatment choices.

Dilation gently stretches a narrowed esophagus during endoscopy. It can improve swallowing but does not treat the underlying inflammation, so anti-inflammatory treatment is usually still needed. Temporary chest discomfort is common afterward. Serious injury, such as a tear through the esophageal wall, is uncommon.

Because EoE is usually long term, effective treatment is often continued as maintenance therapy. Follow-up endoscopy and biopsies may be recommended after starting or changing treatment. This checks whether the tissue has healed, not just whether swallowing feels easier.

Complications

Repeated inflammation can lead to scar tissue and remodeling, meaning lasting changes in the structure of the esophagus. Rings or strictures may form. A stricture is an abnormally narrow area.

Narrowing increases the chance of food impaction, when food becomes firmly lodged and cannot pass into the stomach. Some impactions require urgent removal during endoscopy.

Children with significant feeding difficulties may have poor nutrition or slower growth. Avoiding many foods without professional support can also cause nutritional deficiencies.

A full-thickness tear of the esophagus, called a perforation, is rare. It can happen during a severe food impaction or, uncommonly, during an endoscopic procedure.

EoE is not known to cause esophageal cancer. However, leaving inflammation untreated may increase swallowing problems and narrowing over time.

Prevention

There is no proven way to prevent EoE from developing. It involves immune and genetic factors that cannot be fully controlled.

Once EoE is present, consistent treatment can help prevent repeated inflammation, narrowing, and food impactions. Do not remove major food groups simply to prevent future problems unless this is part of a planned treatment approach.

If you have immediate food allergies, continue following the allergy safety plan given to you. Avoiding a food for an immediate allergy and avoiding it as an EoE trigger are related but separate decisions.

Living with it and what to expect

EoE usually lasts for years and often throughout life. Treatment can bring the inflammation under control, but it commonly returns when treatment ends. The best long-term approach differs according to age, symptoms, biopsy results, narrowing, nutrition, and personal preferences.

Many people continue their usual work, school, exercise, and social activities. Meals may require more planning, especially during a food-elimination diet. Support from a dietitian can make it easier to maintain balanced meals and handle eating at school, restaurants, or social events.

Swallowing may improve within weeks or months of effective treatment. If scar-related narrowing is already present, medication or diet may reduce inflammation without fully opening the esophagus. Dilation may then be needed.

Children's symptoms can change as they grow. Feeding refusal or vomiting may later become difficulty swallowing. Monitoring growth and eating behavior is therefore important even when a child cannot clearly describe what feels wrong.

Keep track of food-sticking episodes and any ways you have changed your eating. Needing extra liquids, cutting food very small, or avoiding meat and bread may signal ongoing narrowing.

Routine follow-up may include discussion of symptoms, nutrition, medication effects, and

whether another endoscopy is needed. Do not stop maintenance treatment only because symptoms have improved without discussing the plan with your care team.

When to get medical help

Arrange a routine medical appointment if you have ongoing difficulty swallowing, repeated heartburn that does not settle with treatment, unexplained feeding problems, or a repeated feeling that food moves slowly. Children should also be assessed for prolonged meals, food refusal, vomiting, or poor growth.

Contact your EoE care team promptly if swallowing is getting worse, food is sticking more often, or treatment is difficult to follow. These changes may mean that inflammation or narrowing needs reassessment.

Seek emergency care if food is stuck and you cannot swallow liquids or your own saliva. Do not try to force it down with more food or large amounts of drink, and do not make yourself vomit.

Call emergency services for severe chest pain, difficulty breathing, fainting, vomiting blood, or signs of a serious allergic reaction such as tongue swelling, widespread hives, or wheezing. These symptoms are not routine EoE symptoms and need urgent assessment.

Common questions

Is eosinophilic esophagitis an allergy?

It is an immune-related condition often linked to foods and other allergic conditions. However, it is not usually an immediate allergic reaction. A trigger may inflame the esophagus over time without causing hives or breathing problems.

Can eosinophilic esophagitis go away?

EoE can enter remission, meaning symptoms and tissue inflammation improve with treatment. It is usually a long-term condition, and inflammation often returns after effective treatment is stopped.

What foods trigger EoE?

Milk, wheat, egg, soy, peanuts or tree nuts, and fish or shellfish are among the foods commonly considered during elimination diets. Any individual food may or may not be a trigger. Endoscopy and biopsies are generally needed to confirm the effect of food removal and reintroduction.

Can an allergy test tell me which foods to avoid?

Not reliably. Skin-prick and blood tests can help assess immediate food allergies, but they do not accurately identify most EoE triggers. Removing foods based only on these tests may lead to unnecessary restriction.

Is EoE the same as acid reflux?

No. Acid reflux occurs when stomach contents move back into the esophagus. EoE is immune-related inflammation. They can cause similar symptoms, can occur together, and may both improve with a PPI.

Can I eat normally after treatment?

Many people can eat a broad diet once inflammation and narrowing are controlled. Some need to avoid confirmed triggers, and some continue to modify food texture. Reintroducing eliminated foods should follow the monitoring plan agreed with your care team.

Sources

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- US Food and Drug Administration: Dupixent prescribing information