

# Eosinophilic Esophagitis



## What is Eosinophilic Esophagitis?

**E**osinophilic Esophagitis, also known as EE is an important disorder of the swallowing tube (esophagus) that is different from Gastroesophageal Reflux Disease (GERD). EE is an inflammatory condition of the esophagus that is

characterized by having above normal amounts of eosinophils in the esophagus.

Eosinophils are a type of white blood cells that are an important part of the immune system. Eosinophils are found in small quantities in the blood and intestine, but are not normally found in the esophagus. Eosinophils help fight off certain types of infections such as parasites and are one of the types of cells involved in allergic reactions.

Eosinophils can cause damage when they appear in large numbers in areas other than the blood or intestine. For example, if one has seasonal allergies, eosinophils are found in nose; if one has asthma, they are found in the lung; and if one has EE, they are found in the esophagus.

EE is a relatively uncommon disorder, although there has been an increase in the frequency of EE in the pediatric population in recent years. However, EE affects people of all ages, race and gender. The exact cause of EE is unclear, but a link between allergies and EE is probable. The allergen may be food or environmental (aeroallergens). 60% of patients with EE have a personal history of allergy, i.e. allergic rhinitis, asthma or eczema and 20%-40% of patients with EE have a family history of atopy. against breast cancer.

## What are the symptoms associated with Eosinophilic Esophagitis?

The symptoms of EE may vary with age. The clinical presentation of EE may be confused with GERD especially in younger children. Infants often present with vomiting, irritability and poor weight gain. In the older child and adolescent, difficulty swallowing and food obstruction or impaction in the esophagus may be more common. Other symptoms might include reflux not responsive to standard medical therapy, nausea, vomiting, abdominal or chest pain, poor appetite, and sleeping difficulties

## How do you diagnose Eosinophilic Esophagitis?

An upper endoscopy with biopsies is necessary for diagnosis of EE. The appearance of the esophagus in EE is quite

characteristic. The esophagus appears wrinkled or furrowed and ringed and covered with whitish material or exudate. However, the esophagus may look normal. The gold standard for diagnoses of EE is examining the biopsies (small tissue samples) taken at upper endoscopy under microscope.

The cause of EE can not be determined by the biopsy alone. Once EE has been diagnosed your gastroenterologist may refer you to an allergist for allergy testing. Allergy testing includes a skin prick test (scratching a small amount of food or environmental allergen into the skin) and a RAST test (used to confirm immediate reactions to a specific food).

## Treatment of Eosinophilic Esophagitis

**The treatment is either dietary or medication or both.**

### Diet

If a specific food(s) (allergen) are detected by allergy testing, removal of the food(s) may be all that is required. The most common foods to consider include milk, egg, peanuts, soy, wheat, tree nuts, fish and shellfish. However, in many patients, especially older children and adults, no specific allergen is found. In this group of patients, an elimination diet can be considered in which all sources of protein are removed from the diet and only an amino acid (building blocks of protein) based formula is allowed. Simple sugars, salts and oils are permitted on this diet. Once the patient is symptom free, a food challenge with one new food reintroduced every 4-7 days can be considered. The food challenge helps to identify the responsible food(s), and is the basis of long-term dietary treatment. It is important to work with a nutritionist.

### Drug Treatment

Your physician may recommend use of medications. To date no medications have been approved specifically for the treatment of EE, however there is evidence that corticosteroids may be of benefit. Corticosteroids can be taken topically (swallowed from an asthma inhaler) or orally.

Topical corticosteroids: Fluticasone propionate and beclomethasone are used at various doses, twice a day, depending on age. The medication is swallowed and not inhaled. Oral and esophageal thrush (candidiasis) are the major side effects.

Systemic corticosteroids (i.e. prednisone) may be necessary. Symptoms usually improve within 1-2 weeks. Your physician will review with you the dose and tapering schedule as well as the side effects.

Patients with EE may require additional endoscopies with biopsies to assess how the esophagus is responding to treatment.

*(continued on other side)*

## Complications of Eosinophilic Esophagitis

Failure to thrive  
Esophageal strictures

For more information or to locate a pediatric gastroenterologist in your area please visit our website at:  
[www.naspghan.org](http://www.naspghan.org)

Additional helpful website: [www.apfed.org/healthcare.htm](http://www.apfed.org/healthcare.htm)

**IMPORTANT REMINDER:** *This information from the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) is intended only to provide general information and not as a definitive basis for diagnosis or treatment in any particular case. It is very important that you consult your doctor about your specific condition.*

### SPECIFIC INSTRUCTIONS:



NASPGHAN • PO Box 6 • Flourtown, PA 19031  
215-233-0808 • Fax: 215-233-3939