

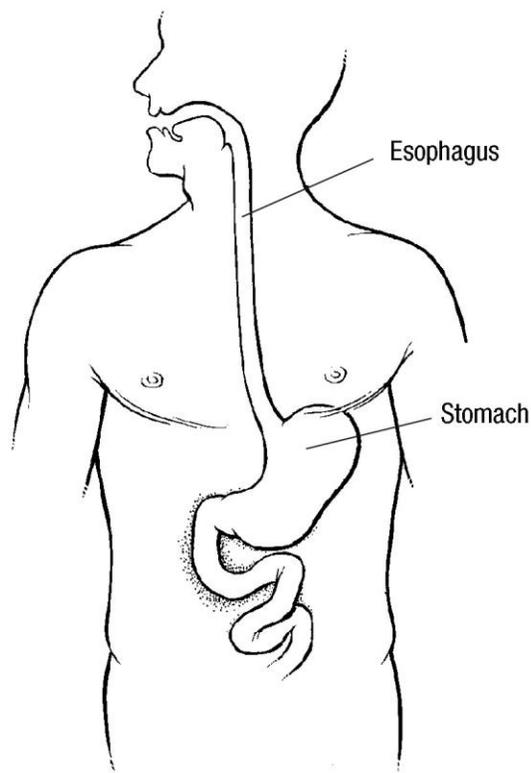
## Eosinophilic Esophagitis

### A Condition That Affects the Esophagus

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Eosinophilic esophagitis (e-ohh-zin-ahh-fill-ick e-sof-ahh-gy-tis), is an uncommon condition that affects the esophagus.

Your esophagus is the muscular tube that carries food from your mouth to your stomach. See Figure 1. When the esophagus works normally, it actively squeezes food into the stomach.



**Figure 1.** Esophagus and stomach

## **Symptoms of eosinophilic esophagitis**

Eosinophilic esophagitis has a variety of signs and symptoms.

Adults may have:

- Difficulty swallowing.
- Food that gets stuck or feels stuck in the esophagus when eating.
- Heartburn or regurgitation.
- Pain or discomfort in the upper chest.

Children may have:

- Vomiting, failure to thrive, or feeding problems as an infant or toddler.
- Ongoing abdominal pain as a school-aged child.
- Food that gets stuck or feels stuck in the esophagus when eating as an older child or teenager.

## **Cause of eosinophilic esophagitis**

Symptoms of eosinophilic esophagitis seem to be caused by eosinophils (e-ohh-zin-ahh-fills) within the walls of the esophagus. Eosinophils are a type of white blood cells. The body normally makes eosinophils in the blood to fight infection.

Eosinophils may be in areas of the gastrointestinal tract, but they are not normally in the esophagus. They cause the esophagus to become inflamed and narrowed.

The cause for the buildup of eosinophils in the esophagus is not completely understood. Research about eosinophilic esophagitis is in early stages since it is a newer diagnosed medical condition.

Eosinophils play a part in allergic disorders. It is thought an allergy or acid reflux may cause eosinophils to build up in the esophagus. A likely cause is an allergy to one or more foods.

Eosinophilic esophagitis is considered an allergic inflammatory disease. Many who have eosinophilic esophagitis also have other allergic conditions such as asthma, allergies, or eczema.

Eosinophilic esophagitis does not spread to other parts of the body.

## **Learning about diagnosing and treatment**

The rest of this material is about how eosinophilic esophagitis is diagnosed and treated. Treatments are available for both adults and children with eosinophilic esophagitis. Together you and your health care provider find out what works best for you or for your child.

As you work with your provider, ask questions you have. Getting answers to your questions helps you understand both diagnosis and treatment.

## Diagnosing Eosinophilic Esophagitis

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Your health care provider will talk with you about your symptoms and anything you do that helps them.

You also may have an upper endoscopy to look at your upper gastrointestinal tract. During an upper endoscopy, a thin, flexible tube with a camera is put in your mouth and then moved into your digestive tract. The tube is called an endoscope.

Your esophagus may look normal during the exam or it may show narrowing, irritation, or another change that is not normal.

During the upper endoscopy, your health care provider may take small samples of tissue from your esophagus. This is called a biopsy.

The tissue samples are looked at under a microscope. If a certain number of eosinophils are seen, you likely are diagnosed with eosinophilic esophagitis.

Other testing used for allergies, gastroesophageal reflux disease (GERD), and inflammatory bowel disease also may be done.

## Treatment for Eosinophilic Esophagitis

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Treatment for eosinophilic esophagitis depends on whether you are an adult or a child and on your specific condition. Your health care provider works with you to decide which treatment is best for you. Often, a combination of treatments is recommended.

Make sure you ask your health care provider any questions you have about your treatment. It is important that you understand the possible benefits, risks and side effects of treatments.

Treatments include:

- Medication. This may be an acid-blocking medication, corticosteroid, or allergy medication. A liquid medication also may be prescribed to help with healing if the walls of the esophagus are irritated or have ulcers.
- Dilating or stretching the esophagus if it is scarred or narrowed.
- Diet changes.

### Medication

Your health care provider may recommend that you take an **acid-blocking medication**, also known as a proton pump inhibitor (PPI). Acid-blocking medications are often used as a first step and are generally safe for long-term use.

Your health care provider may recommend that you use a **corticosteroid**. Corticosteroid is a steroid medication. Steroids come as a capsule, gel, liquid, or an inhaler. With each, the steroid medication is swallowed so that it goes directly to the esophagus.

Steroids help lessen the amount of eosinophils and inflammation caused by eosinophils in the esophagus. Steroids can help improve swallowing. Most people feel better when they take steroids.

Steroids prescribed for eosinophilic esophagitis are generally well tolerated. Most do not cause the typical side effects of steroid use because they go directly to the lining of your esophagus.

Your health care provider has you take a steroid for a certain amount of time. Then you may be taken off it. You may start taking a steroid again if swallowing problems return. People who have symptoms that recur soon after stopping steroid medication and those with significant scarring and narrowing of the esophagus may be recommended to use ongoing steroid treatment long term.

Your health care provider may recommend that you take **allergy medication** if you have allergies.

## **Dilating the esophagus**

If your esophagus becomes scarred and narrowed, it may need to be dilated, or stretched. This is known as esophageal dilation. It may be done during upper endoscopy. Your health care provider may recommend you take medication along with the dilation.

## **Diet changes**

Sometimes changing your diet by not eating allergic foods may bring relief. If you remove foods causing a food allergy, the eosinophils may not irritate or inflame the esophagus. This may be all the treatment you need.

Talk with your health care provider about the six food elimination diet. It may improve symptoms of eosinophilic esophagitis. The six food groups are milk, wheat, nuts, soy, eggs, and fish or shellfish.

To help find out which of these foods you are allergic to, follow the instructions your dietitian gives you. It is likely you will need to remove all six food groups from your diet for about six to eight weeks.

After you remove these foods for the specific time period, your health care provider may recommend that you have certain tests. These may include upper endoscopy and esophageal biopsy. Your test results along with improvement in your symptoms can help determine whether the elimination diet helped you.

Your health care team can talk with you about how to add these six food groups back into your diet. This allows you to find out which ones you are allergic to. You may need to have several upper endoscopies and esophageal biopsies during this process.

Other ways you can help improve eosinophilic esophagitis symptoms include the following:

- Eat your food in small bites and eat slowly.
- Chew food well.
- Drink lots of liquids while you eat.
- Make sure your teeth are in good health.
- If you have dentures, make sure they are fitted correctly.

## Follow-Up Care

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Regardless of what treatment works for you, it is important that you continue to do follow-up and regular care with a health care provider who is familiar with eosinophilic esophagitis and knows how to treat it.

If you continue to have symptoms or symptoms return after successful treatment, contact your health care provider.

## How to Use Your Corticosteroid

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Your health care provider gives you specific dose instructions for your prescribed corticosteroid. You also will be told how long to take the medication. Contact your health care provider if you have any questions about taking your medication.

**Please note:** Unless you are told otherwise:

- **For adults:** Take your steroid medication after you eat and drink. Then do not eat or drink anything for at least one hour. This helps to keep the medication from being washed away.
- **For children:** Take your steroid medication after you eat and drink. Then do not eat or drink anything for 30 minutes. This helps to keep the medication from being washed away. After 30 minutes, drink one to two fluid ounces of liquid.
- Always rinse your mouth with water after you take any steroid medication. Do not swallow the water. Spit out the water. For very small children, rinse their mouth with a wet cloth. Rinsing your mouth lessens steroid exposure in your mouth. It helps keep you from getting a yeast infection of the mouth called thrush.

The following instructions are specific to the preparation of your corticosteroid.

### Capsule

You can get your capsule steroid only from your health care provider's pharmacy. Your prescription should come with capsules and a small syringe.

To take your capsule steroid medication correctly:

1. Mix the contents of the capsule with two teaspoons of honey, chocolate syrup or pancake syrup in a small bowl.
2. Use the syringe to draw the mixture from the bowl.
3. Put the tip of the filled syringe toward the back of your mouth.
4. Depress the plunger of the syringe to squirt all of the mixture into the back of your mouth.
5. Swallow the mixture slowly so that it coats your throat well.
6. After you take the medication, rinse your mouth with water. Do not swallow the water. Spit it out.
7. Do not lie down for 15 minutes after you take the medication.

## **Gel**

You can get your gel steroid only from your health care provider's pharmacy. Your prescription should come with a bottle of gel and a small syringe. Keep the gel in the refrigerator.

To take your gel steroid medication correctly:

1. Use the syringe to draw the prescribed amount of gel from the bottle.
2. Put the tip of the filled syringe toward the back of your mouth.
3. Depress the plunger of the syringe to squirt all of the gel into the back of your mouth.
4. Swallow the gel slowly so that it coats your throat well.
5. After you take the medication, rinse your mouth with water. Do not swallow the water. Spit it out.

## **Liquid**

Liquid steroid medication comes in small tubes or ampules.

To take your liquid steroid medication correctly:

1. Squeeze only the amount of liquid steroid prescribed by your health care provider into a medicine cup.
2. To help the liquid steroid medication stick to the walls of the esophagus, it must be mixed with what your health care provider prescribes. This may be a specific amount of sucralose (Splenda™), syrup, applesauce or something similar. A specific amount of water also may need to be added.
3. Drink the mixture slowly so that it coats your throat well.
4. After you drink the medication mixture, rinse your mouth with water. Do not swallow the water. Spit it out.

## **Inhaler**

Do not use a spacer when you use your inhaler for eosinophilic esophagitis.

To take your inhaler steroid medication correctly:

1. Gently shake the inhaler back and forth to mix the medication.
2. Hold the end piece of the inhaler in your mouth.
3. Take in a deep breath and hold it.
4. Depress the inhaler into the back of your mouth.
5. Swallow the medication. Do not inhale the medication.
6. Repeat these steps for each prescribed puff.
7. After you take the medication, rinse your mouth with water. Do not swallow the water. Spit it out.

## **Be aware of possible side effects**

Side effects of using corticosteroids may include:

- Headache.
- Sore throat.
- Hoarseness.
- Yeast infection in the mouth, esophagus or respiratory tract. This usually looks like a white coating in the mouth or throat.

Long-term use of corticosteroids may result in delayed growth in children. However, no studies have shown problems with growth from steroids used to treat eosinophilic esophagitis.

Talk with your health care provider about side effects of using corticosteroids. It is important that you understand the possible benefits, risks and side effects of corticosteroid treatment.

This material is for your education and information only. This content does not replace medical advice, diagnosis or treatment. New medical research may change this information. If you have questions about a medical condition, always talk with your health care provider.

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