



Eosinophilic Asthma

What is Eosinophilic Asthma?

Eosinophilic Asthma is a type of severe asthma. It's marked by high levels of white blood cells. These cells, called **eosinophils**, are a natural part of our body's immune system. They fight infections and attack bacteria. However, in people with eosinophilic asthma, these white blood cells cause inflammation and swelling in the airways and respiratory system.



Symptoms

- ❖ Wheezing
- ❖ Coughing
- ❖ Shortness of breath/difficulty breathing
- ❖ Chest tightness
- ❖ Lung function abnormalities (airflow obstruction)
- ❖ Chronic rhinosinusitis with nasal polyps
- ❖ Inflamed nasal mucous membrane

Diagnosis

If you've been diagnosed with asthma but don't seem to respond well to treatment, your doctor may suspect you have a less common subtype of asthma.

In the case of EA, the easiest step is to check your levels of eosinophils. For this, your doctor will collect blood and send it to a lab. High levels of eosinophils can affirm your doctor's suspected diagnosis.



Treatment

Complications

Eosinophilic asthma can impact your quality of life if you don't treat a flare-up swiftly and consistently. Over time, the inflammation and swelling in the airways can cause tissue scarring and damage. That can make symptoms worse, and treatments may become less effective. Some common side effects of this condition include:

- Chronic sinus infections
- Inner ear infections
- Nasal polyps
- (AERD) – aspirin-exacerbated respiratory disease

Treatment

Corticosteroids: Inhaled corticosteroids are often the first line of treatment for eosinophilic asthma. They work by reducing airway inflammation that contributes to constriction, which enables you to breathe easier.

You may also need some pill versions of corticosteroids for eosinophilic asthma by mouth if your symptoms are more severe.

Leukotriene Modifiers: These oral medications are often prescribed for people who have both asthma and allergies. They work by reducing leukotrienes in the body, which contribute to inflammation.

Biologics: These medications are delivered via an injection, typically by your doctor. They reduce inflammation by targeting inflammatory molecules, cells, and antibodies.

Rescue Inhalers: Also called a quick-relief inhaler, these medications work by alleviating symptoms of flare-ups and opening your airways to help prevent an asthma attack.

Anticholinergics: Anticholinergics relax airway muscles and help you breathe easier.