What You Need to Know About Allergic Asthma

by KRYSTINA OSTERMEYER

Is Allergic Asthma Real?

If it seems as if you're suffering from both allergies *and* asthma, you're probably not imagining it. According to the Asthma & Allergy Foundation of America, allergic asthma is the most common form of asthma. Upwards of 26 million people in the United States suffer from asthma – 60 percent of those people have allergic asthma.

What Is Allergic Asthma?

Asthma is a chronic disease of the lungs. This disease causes inflammation – this inflammation can cause the airways to become narrow, making it difficult to breathe.

There are three components of asthma:

1. **Airway obstruction** – typically when we breathe, the muscles of the lungs and the airways are relaxed. This allows us to breathe freely. When someone has asthma, these muscles become contracted, causing shortness of breath.
2. **Inflammation** – inflammation occurs in the airways, which also contributes to breathing difficulties.
3. **Airway irritability** – people with asthma have sensitive airways. These means that encountering a trigger can cause the airways to become inflamed and constrict.

When someone has allergic asthma, coming into contact with an *allergen* triggers asthma symptoms. These allergens cause the body to produce a substance called immunoglobulin E (IgE). When IgE levels are elevated, inflammation occurs and breathing may become difficult.

What Is the Difference Between Allergic and Nonallergic Asthma?

Asthma is often termed as "allergic" or "nonallergic" asthma. However, it can also be called "intrinsic" or "extrinsic"; intrinsic asthma meaning that the asthma has no allergic triggers, while extrinsic asthma does have allergic triggers.

Extrinsic, or allergic, asthma is more common than intrinsic asthma. This type of asthma involves the immune system; an allergen, such as dust, causes the immune system to overreact. When this happens, IgE is overproduced, thus triggering asthma symptoms.

Intrinsic, or nonallergic, asthma does not involve a systemic response. It only occurs in the airways of the lungs.

Despite its differences, the symptoms of allergic and nonallergic asthma are similar. Asthma attacks can occur at any time, causing inflammation of the airways, as well as mucus production and narrowing of the airways. This airway narrowing causes:

- Coughing
- Wheezing
- Shortness of breath
- Chest tightness
- Chest pain
- Rapid breathing

Treatment of allergic and nonallergic asthma is similar, although treatment of allergic asthma may also include medications aimed at reducing allergic symptoms as well as asthma symptoms.

What Causes Allergic Asthma?

As we've already discussed, something must spur an allergic reaction in order to produce allergic asthma symptoms.

According to James T C Li, MD, Ph.D. of Mayo Clinic, "An allergic response occurs when immune system proteins (antibodies) mistakenly identify a harmless substance, such as tree pollen, as an invader. In an attempt to protect your body from the substance, antibodies bind to the allergen… For some people, this same reaction also affects the lungs and airways, leading to asthma symptoms."

What Triggers Allergic Asthma?

There are a variety of common triggers – and what triggers allergic asthma in one person may not trigger allergic asthma in another person.

Common allergic asthma triggers may include:

- **Cockroaches.** Unfortunately, it can be difficult to avoid these triggers, as they live all over the world! In fact, studies indicate that most urban homes have cockroaches. The feces, saliva, and body parts of the cockroach are believed to be most allergenic.
- **Pollen.** Pollen is a product from plants such as weeds, grasses, and trees. Fortunately, pollen peaks at certain parts of the year – but if it gets caught in homes, such as in air ducts, it can wreak havoc much longer.
- **Pets.** Many people have an allergy to animals such as dogs or cats – but what they are actually allergic to is the fur, dander, saliva, feces, or pet urine. As such, people with a pet allergy may find that their symptoms exacerbate even when there is no animal present, because they may be exposed to an animal substance.
- **Dust mites.** Dust mites feed on human skin flakes and are found on mattresses, furniture, pillows, carpets, bedding, and clothing.
- **Mold.** Mold grows anywhere there is moisture. If found outdoors, the mold may grow in piles of wet leaves, in the soil, and on wood. Indoors, a wet bathroom or basement is a breeding ground for mold. Mold can also become airborne readily because it produces tiny spores.

It is important to note that there are other triggers for asthma; sometimes, a non-allergic trigger may still cause an asthma attack, meaning that an allergic reaction is *not occurring.* Some of these triggers include:

- Exposure to smoke, such as tobacco, incense, fireworks, or fireplace
- Cold air
- Pollution
- Exercising in cold air
- Exposure to chemical odors
- Dusty rooms
- Heavy scents, such as perfumes or air fresheners

Next page: Allergic asthma symptoms, how allergic asthma is diagnosed, treatment options for allergic asthma,

and more.

What Are the Symptoms of Allergic Asthma?

Symptoms of both asthma and allergic asthma are similar – both cause difficulties with breathing. Symptoms may include:

- Coughing
- Wheezing
- Shortness of breath
- Rapid breathing
- Chest tightness

All of the above are classic asthma symptoms. However, you may also experience classic *allergy* symptoms in conjunction with allergic asthma symptoms, because your body is experiencing an allergic reaction. As such, you could also experience the following symptoms:

- Nasal symptoms, such as a runny or stuffy nose
- Sneezing
- Rashes
- Fatigue
- Headaches
- Nausea and vomiting (a symptom most common with a food allergy)

How Is Allergic Asthma Diagnosed?

If you and your doctor suspect that you are suffering from allergic asthma, diagnosis is key. You may undergo several tests, which include:

- **A skin prick test.** This test is a great way to test for allergies. A doctor or nurse applies common allergens into your skin with tiny needles. After a short duration of time, your doctor “reads” the test by appraising your skin for red bumps – red bumps indicate allergies.
- **Spirometry.** This test measures that amount of air you are able to inhale and exhale.
- **Peak flow.** This test measures the air pressure as you exhale.
- **Lung function.** This test monitors lung function after you use an inhaler. An improvement in lung function is likely indicative of asthma.

Understanding Your Allergic Asthma Treatment Options

Once a diagnosis of allergic asthma is obtained, a treatment plan can be created. Treatment likely will include treatment of *both* asthma and allergies.

Asthma is often treated with inhalers. An inhaler alone likely won’t treat allergic asthma, but it can help with breathing difficulties.

- **Inhaled corticosteroids.** These types of inhalers reduce inflammation in the airways by reducing mucus production, swelling of the bronchial tubes, and reducing airway hypersensitivity. If prescribed an inhaled corticosteroid, it is important to continue this medication even if symptoms are under control, because they can prevent symptoms from occurring.
- **Bronchodilators.** These types of inhalers relax the muscles of the airways so that the airways can remain open. There are two times of bronchodilators – rapid-acting, which are used when symptoms worsen, and long-acting, which help to maintain the airways. A long-acting bronchodilator should be used in conjunction with an inhaled corticosteroid.
- **Combination inhalers.** There are also inhalers that combine both medications. This is especially helpful

for people who require both types of medication in order to control their symptoms.

Treating allergies will typically help both allergies *and* asthma. Here are several effective ways to treat both conditions simultaneously:

- **Leukotriene modifiers.** Montelukast (Singulair) is a medication that is known to treat both asthma and allergies, this daily medication reduces immune response by reducing the chemicals that are released during an allergic reaction. In rare circumstances, Singulair can have psychological side effects, such as suicidal ideation so this side effect should be monitored.
- **Immunotherapy.** Immunotherapy is more commonly known as “allergy shots.” Allergy shots reduce symptoms by injecting tiny amounts of allergens that are known to trigger symptoms. By doing this, the immune response is gradually reduced – and asthma and allergy symptoms reduced. Allergy shots are a time commitment – this is a long-term treatment that can take three to five years to complete.
- **Anti-immunoglobulin E (IgE) therapy.** Omalizumab (Xolair) works because it “interferes with IgE in the body and helps prevent the allergic reaction that triggers asthma symptoms.” IgE is released in the body when allergens are present. This is not inherently a bad thing, but for someone with a heightened immune response, this happens too frequently.

The Bottom Line…

Allergic asthma is a specific type of asthma that occurs in response to an allergen, which is a specific substance that a person is allergic to; each person with allergic asthma is unique and has specific allergens that can spur their symptoms.

Symptoms of allergic asthma are very similar to that of “regular” asthma and can include coughing, wheezing, and shortness of breath.

To come up with a treatment plan for allergic asthma, work with your primary care physician.