

THE "INFO"-HALER

TAKE IN THE INFORMATION

An easy to understand, informative newsletter for our patients of all ages from the *Allergy & Asthma Associates of Michigan, P. C.*



MEDICATION ALLERGY

What Is It?

A true allergic reaction to medication occurs when the immune system is activated in response to a drug. The medication can be taken by mouth, injected into the body or rubbed on the skin. The symptoms from an allergic reaction vary from a mild skin rash to sudden swelling of many body parts with a life-threatening fall in blood pressure.

Most people with a drug allergy have been exposed to that drug or a similar drug before. During the earlier exposure, immune cells formed antibodies against the drug. Antibodies are proteins created by the immune system to battle foreign invaders such as bacteria and viruses. When a person is exposed to the drug again, the antibodies go into action, setting off the allergic response. The symptoms of drug allergy may happen immediately or after taking the drug for a week or more.

The reason a person develops a particular drug allergy is usually unknown, but genetics probably play a significant role.

Drug allergies can pose a significant problem, not only because of the symptoms they cause, but also because they can prevent or hinder the use of the more effective medications to treat medical conditions.

For many, medication allergies go undetected until they take a drug and have an allergic reaction.

Many people are sensitive to medications, but not all of these sensitivities are true allergic reactions. Some adverse reactions to drugs are side effects. Among the most common side effects are upset stomach, diarrhea, vomiting, fever and a skin reaction to sunlight called photosensitivity. However, drug allergies are not the same thing as side effects. Side effects do not involve the immune system, and sometimes can be avoided by lowering the dose. In order for the reaction to be an allergy, the immune system must be involved.

Symptoms

Symptoms of drug allergies vary depending on the type of immune mechanisms involved. Symptoms that appear within hours of taking the drug — called acute symptoms — usually involve a skin rash, hives or itching. However, in more severe cases, symptoms can advance rapidly to include nasal congestion, rapid pulse rate, drop in blood pressure, difficulty breathing, facial swelling, dizziness and light-headedness. This type of reaction, called anaphylaxis, represents the most serious kind of allergic reaction. Untreated, it can lead to death within minutes.

A less common type of allergic reaction is called serum sickness. This can occur days or even a week after starting a medication, even if you have never been exposed to the medication before. The symptoms of serum sickness include skin rashes, hives, fever and joint pain. In rare instances, a different type of allergic reaction can cause red blood cells to be destroyed. This is called hemolytic anemia.

If you develop sensitivity to one medication, using other medications with similar chemical structures can be risky. For example, if a person has developed hives or anaphylaxis after taking any of the penicillins, he or she should avoid taking a cephalosporin antibiotic such as cephalexin (Biocef, Keflex, Keftab).

Diagnosis

A doctor will base the diagnosis on a physical examination and your symptoms. In most cases, a doctor will suspect that your problem is a drug allergy if you have a history of allergic reactions after the use of certain medications.

Skin tests sometimes can be used to determine if someone has an allergy to a medication. Penicillin skin testing, for example, involves an injection just beneath the skin of a small amount of one part of the penicillin molecule. People with a penicillin allergy will develop a reaction at the site of injection that can be measured. However, these tests are not always reliable since only a part of the penicillin molecule is injected. This test often is used for a person who needs a penicillin-like drug to treat a serious infection.

Expected Duration

Allergic reactions to drugs are usually self-limiting and only last for a few days after the drug is discontinued. In some cases, however, a more severe reaction can occur. Rarely, an allergic skin reaction can cause marked sloughing of the skin, a condition called toxic epidermal necrolysis (TEN). Patients who experience this complication require treatment similar to burn patients. The skin may take months to heal completely. Drugs associated with TEN include sulfa-based antibiotics, allopurinol (Zyloprim), some seizure medications, and ampicillin (sold under several brand names).

Prevention

The best way to avoid a medication allergy is to avoid the medication that can cause it. However, this is not always possible. If you have a history of allergy to food, pollen, certain soaps or cosmetics and other common products, make sure your health care professional knows. You also should make sure you tell your health care professional about any drug reactions that you had in the past. Learn about all medications you are given or over-the-counter medications that you may purchase on your own. Always talk to your doctor and/or your pharmacist for recommendations about which drugs you should avoid or should take if you have a history of medication allergy. Whenever you are dealing with a health care professional who is not familiar with your medical history, be sure to tell him or her of your drug sensitivities. Keep a list in your wallet for easy reference and consider wearing a medical identification bracelet or necklace.

Treatment

Once you have a reaction to medication, the treatment depends on the severity of the reaction. If you have a measles-like skin reaction, it may be enough to stop taking the medication. Otherwise, treatment will focus on relieving symptoms. If you suspect a drug reaction, stop taking the drug and contact your health care professional, who can help to determine if the reaction is a true drug allergy and suggest an alternative medication if one is needed.

An antihistamine may be recommended to decrease itching and other histamine-related symptoms. Corticosteroid cream (such as hydrocortisone and others) may be prescribed when skin rashes do not clear up, and corticosteroid tablets — prednisone (sold under several brand names) — may be used for severe reactions.

Anaphylaxis, the most serious allergic reaction, can cause a dramatic fall in blood pressure, wheezing and breathing difficulties. The most severe cases can lead to loss of consciousness and, rarely, death. Anaphylaxis is treated with an emergency injection of epinephrine (adrenaline) and fluids given intravenously (into a vein).

Some drug allergies can be modified by treatment called drug desensitization. This uses increasing doses of the drug over time to create tolerance.

When To Call A Professional

Symptoms of an acute severe allergic reaction such as rapid pulse, labored breathing and facial swelling require an immediate visit to an emergency care facility. Other reactions should be reported promptly to your physician so that your treatment can be evaluated and you can avoid the medication that caused the reaction.

Prognosis

Most drug allergies respond readily to stopping the offending agent. Because the allergy itself cannot be cured, treatment aims at controlling symptoms.