

Reactions

Allergies are a disorder in the immune system where the body recognizes substances as foreign and starts to attack them. Allergies can cause wheezing, watery eyes, rashes, and even asthma attacks. Hay fever is known as the number one allergy. The most common allergies are type 1. Allergic responses begin with an exposure. Antigen molecules enter the bloodstream and react with IgE which is bound to mast cells that release histamine and basophils. Mast cells can also detect and respond to foreign substances. They play a role in inflammation, wound healing and tissue repair. Allergies can be genetic. For example if a person's parents are allergic to peanuts, it is more likely that they will also develop an allergen to peanuts. It is also believed that allergies can develop when the body comes in contact with something such as a bee sting while the immune system is weak. Then after the body will start to attack and recognize it as an allergen. Allergies also develop as a person ages and if the person already has allergies it is possible for them to worsen over time.

The most dangerous allergic reaction is called anaphylaxis. Anaphylaxis is the most severe systemic allergic reaction. The pathophysiology depends on the person's own body. Symptoms include being short of breath, loss of consciousness, diarrhea, swelling of the tongue, lips, and throat. The patient may also feel chest pain, have a low blood pressure and rapid pulse. When a person goes into anaphylactic shock, they need to seek medical attention immediately because it can become deadly. An Epi pen is used for patients that go into anaphylactic shock and is administered in the thigh. The Epi pen is filled with adrenaline and temporarily stops the severe allergic reaction. It relaxes smooth muscles, helps the heart pump efficiently, and helps with vasoconstriction. If the epi pen does not work within the next 5 minutes then another dose should be administered. Doses should be administered every 7 minutes. Pollen can not cause anaphylaxis, but food, drugs, or insect bites can. It is always important to use an epi pen for a person who is going into anaphylactic shock rather than administering an antihistamine such as Benadryl first.