

Allergies and the immune system response.

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Abstract

Allergies occur when a person's immune system reacts abnormally to normally harmless chemicals. It can also happen when a person's immune system is triggered by foreign substances like pollen, bee venom, pet dander, or even particular foods. Antibodies are chemicals produced by a person's immune system. When you have allergies, your immune system produces antibodies that label a particular allergen as harmful, even if it isn't. When you come into touch with these allergens, your immune system may react by inflaming your skin, sinuses, airways, or digestive system. Each patient's level of allergy severity varies. It might be anything from a minor annoyance to a life-threatening allergic reaction. Although most allergies are incurable, there are a variety of therapies that can help alleviate the symptoms.

Keywords: Allergy, Asthma, Immune system

The Immune System and Allergies

Allergy is one of the most common chronic illnesses all over the world. Allergies are more likely in people who have a family history of allergies. Allergies include hay fever, asthma, runny nose, eczema, and food allergies. These allergies can cause a variety of symptoms, ranging from minor irritation to a potentially life-threatening emergency (anaphylaxis) [1].

Allergic reactions begin in the immunological system of a person. When a person with allergies comes into contact with a seemingly harmless object (such as dust, mould, or pollen), their immune system may overreact. Their immune system will subsequently manufacture antibodies to fight the allergen, resulting in wheezing, itching, a runny nose, itchy eyes, and other allergic reaction symptoms [2].

Is it Possible for Allergies to impair your Immune System?

During seasonal change in weather the usual threat of some seasonal allergies. Many individuals are also wondering, "Can allergens damage your immune system?" during this time of year. Allergies can impair your immune system, which is a clear solution to your question.

Although allergies do not cause you to catch a cold or the flu, your allergy therapy makes you more susceptible to other illnesses. It might be difficult to tell the difference between allergies and illness. Consider the following scenario: you're sneezing, have a runny nose, and a sore throat. You can mistake these allergy symptoms for a cold. The only way you'll understand it's more than an allergy is if you develop a fever or headache. Furthermore, a cold may only last a week or so, whereas allergies remain as long as you are exposed to the allergen [3].

However, if you have allergies and aren't receiving appropriate treatment, your immune system may be weakened, making you more susceptible to viruses and germs. As a result, your allergies may develop into a sinus, ear, or upper respiratory infection [4].

If you have asthma, viruses and bacteria may be particularly sensitive to your delicate airways. Furthermore, if the symptoms of your allergy prevent you from obtaining a decent night's sleep, your immune system will be harmed, making you more susceptible to infection. If you get sick while having asthma, you may be more likely to develop complications as a result of the illness [5].

While allergies may imply that the immune system isn't working properly, a group of researchers contends that this isn't the case. They say that allergies are markers of strong immune systems and that allergies are the body's way of getting rid of poisonous things [3].

Allergy symptoms keep harmful irritants out of the body, according to the theory. For example, if you inhale an irritating item like pollen, you may sneeze to expel it or generate more mucus.

Allergic reactions are your body's way of warning you to stay away from potentially harmful chemicals. If you frequently sneeze or cough when exposed to dust, you should avoid dusty situations.

Various studies on allergic reactions are currently being conducted [3,4]. Allergies, according to some, are more powerful defences against some pathogens.

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