

## **Asthma and immunotherapy: a potentially life changing therapy.**

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Many people think medication is the only way to treat asthma. However, there are numerous other options such as allergen avoidance and *immunotherapy*. The latter is the topic of today's article.

What is immunotherapy? When an allergen enters the body of a non-allergic person, the immune system does not perceive it as a threat and does not react. In an individual with allergic asthma, however, the allergen is labeled as a foreigner invader, causing the immune system to produce a variety of responses, such as coughing or swelling of the airways. This abnormal reaction is the cause of symptoms in allergic asthmatics.

Immunotherapy targets this abnormal reaction by repeatedly exposing the individual to an allergen until the immune response is suppressed, and the body no longer fights the allergen.

What is the process of immunotherapy? Immunotherapy requires multiple, regularly scheduled, visits to a healthcare provider. During the visits, injections of the allergen are given, hence why immunotherapy is sometimes referred to as 'allergy shots'. It is common practice to administer one to two sets of injections each week, starting with very low doses of the allergen and gradually increasing the dose. Effective levels are typically reached within three to six months, after which injections are given every month for the remainder of treatment period. The treatment duration usually lasts about 3-5 years.

Who can benefit from immunotherapy? People with allergic asthma of all ages may benefit from immunotherapy; however, it is usually not administered to children under the age of 5. To consider immunotherapy in a patient with asthma, there must be a clear relationship between a specific allergen and the symptoms. The following are the most common allergens for which immunotherapy are given: different types of pollen, animal dander (cat and dog) and dust mites.

An allergist/immunologist can assess the specific allergens involved in one's asthma.

What are the benefits from immunotherapy? Immunotherapy can reduce the severity of symptoms and reduces the need for medication, providing relief for several years. Due to the decreased use of medications, long-term healthcare costs are lower with than without this treatment in patients with allergic asthma.

Remember, immunotherapy only works in *allergic* asthmatics. Work with your allergist to find out if you have *allergic* asthma and what specific allergens are triggering your asthma.

Asthma is a complex disease, and there are four major components in fighting asthma:

1. Patient education;
2. Routine monitoring by your physician;
3. Control of environmental factors;
4. Medication.

Immunotherapy is part of component 3, and helps to control the environmental allergens.

Stay tuned, we will discuss more about this topic in upcoming issues. If you have any questions about asthma, you can email Dr. Leung at [drjohnleung@gmail.com](mailto:drjohnleung@gmail.com).

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