



ALLERGY INFORMATION

PREVENTATIVE MEASURES

Allergic rhinitis is an inflammatory response of the nasal passages to pollens that happens through an IgE mechanism. Visually, IgE molecules are like two telephone poles strung on a mast cell. These molecules release chemicals – including histamine, bradykinins and leukotrienes – when they connect to a pollen particle, which causes allergic symptoms

However, allergic rhinitis of the upper airways and a smoking history can be confounding variables. Nitric oxide can be produced by both the upper airway and lower airway and therefore can not distinguish upper airway inflammation from lower airway inflammation. Smokers must quit four to eight weeks before being measured or the smoking will lead to higher levels above twenty.

Vasomotor rhinitis is synonymous with non-allergic rhinitis. The patient does not make antibodies against pollen as a cause of the nasal inflammation. Instead changes in temperature, humidity, odors or a broken or surgically repaired nasal septum may predispose to nasal stuffiness.

Pollens tend to pollinate between the hours of 6 a.m. and 10 a.m. Any medication must be directed towards those hours. In the spring in the northeast tree pollens usually arrive in March and last until mid-May. Grass pollens are most prominent from mid-May until mid-July; ragweed pollen, in September. Mold pollen occurs throughout the year. Dust mites also occur throughout the year when humidity exceeds forty percent.

Prolonged exposure to indoor pets such as cats or dogs can lead to symptoms that last all year round. Pets usually leave excessive dander in the bedroom. Patients sleep in the bedroom for eight hours a night and are exposed to pet dander at one hundred times the amount of exposure to pollens which only last for six weeks. Also, New York City apartments tend to be one-third the size of normal houses, giving dander less places to hide.

Cats secrete dander that is five microns in diameter and they can go five generations or very deep into the lungs. Dog dander is twenty microns in diameter and doesn't go as deep into the lungs. Cat dander can stay airborne for five hours, as opposed to twenty minutes for dog dander and dust mites. Therefore there are more patients allergic to cats than dogs.

A patient may experience a severe nasal drip during September or March, which will often get attributed to allergies by the sufferer. However these are the times of the year when changes of temperature and rain are most prevalent in the atmosphere. The only way to distinguish the difference between allergic and non-allergic rhinitis is with allergy skin testing for immediate diagnosis, or an ImmunoCAP blood test for results in 4-5 days. The patients typically do well with a combination of a nasal steroid and a nasal antihistamine spray.

Environmental controls can be done to decrease the pet and dust mite exposure. Use of dust mite covers on the bedding, and taking the carpet up in the bedroom, can decrease the presence of dust

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mites. Dust mite covers must be washed above 140 degrees to be effective. Use of Allerpet and air filters can significantly decrease pet dander in the bedroom. However, an air filter is ineffective against dust mites, as they are larger than cat dander and usually settle on surfaces, without staying airborne long enough to be filtered by a machine.

Air conditioning is the best treatment for filtering early morning pollination. Complications of nasal allergies can include acute or chronic sinusitis, acute sinusitis and bronchial asthma. These diseases are indications for immunotherapy which can prevent the development of these conditions.