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What is Rhinitis?

Rhinitis is not a disease; it is simply a term describing the symptoms produced by nasal irritation or inflammation. Symptoms of rhinitis include runny nose (rhinorrhea), itching (pruritus), sneezing and stuffy nose (blockage or congestion). These symptoms are the nose's natural response to inflammation and irritation.

The nose normally produces mucus, which traps substances like dust, pollen, pollution and germs such as bacteria and viruses. Mucus flows from the front of the nose to the back and is swallowed, but when mucus production is excessive, it can flow from the front (runny nose) or become noticeable from the back (postnasal drip). Nasal mucus, normally a thin, clear liquid, can become thick or colored, perhaps due to dryness or infection. When postnasal drip is excessive, thick or infected, cough is the natural response for clearing the throat. Itching and sneezing are also natural responses to irritation caused by allergic reactions, chemical exposures (like cigarette smoke), temperature changes, infections and other factors.

The nasal tissues congest and decongest periodically. In most people, nasal congestion switches back and forth from side to side of the nose in a cycle several hours long. Some people, especially those with narrow nasal passages, notice this nasal cycle more than others. Strenuous exercise or changes in head position can affect nasal congestion. Nasal congestion is also the natural response to irritation and inflammation. Severe congestion can result in facial pressure and pain, as well as dark circles under the eyes.

What causes rhinitis?

Rhinitis lasting less than six weeks is called acute rhinitis and persistent symptoms are called chronic rhinitis. Acute rhinitis is usually caused by infections or chemical irritation. Chronic rhinitis may be caused by an allergy or a variety of other factors.

The symptoms of allergic rhinitis (called "hay fever" sometimes, but not caused by hay and not associated with fever) are caused by exposure to substances (allergens) to which you have become allergic to. Common allergens are trees, grasses and weed pollens, molds, animal hair and dander and house dust mites. In general, pollen (and sometimes mold) allergy causes symptoms at certain times of the year, while mold, animal dander and dust mites cause symptoms year round. People with allergies have developed antibodies to these allergens. These antibodies circulate in the blood stream, but localize in the tissues of the nose and in the skin. This makes it possible to demonstrate presence of these antibodies by skin testing. Not everyone with symptoms of rhinitis has allergies, and not everyone with allergies has rhinitis.

What are other causes of rhinitis?

Not all symptoms in the nasal passage are caused by allergy or infection. Similar symptoms can be caused by mechanical blockage, use of certain medications, irritants, temperature changes and other physical factors.

Rhinitis can also be a feature of other diseases and medical conditions. Drug-induced nasal congestion, called "rhinitis medicamentosa" can be caused by birth control pills and other female hormone preparations, certain blood pressure medications (beta blockers and vasodilators) and prolonged use of over the counter decongestant nasal sprays.

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“Vasomotor rhinitis” is a term used to describe a group of poorly understood causes of rhinitis, with symptoms not caused by infection or allergy. Many people have recurrent nasal congestion, excess mucus production, itching and other nasal symptoms familiar to those of allergic rhinitis, but the disorder is not caused by allergy.

What triggers vasomotor rhinitis?

Irritants that can trigger vasomotor rhinitis include cigarette smoke, strong odors and fumes (perfume, hair sprays, other cosmetics, laundry detergents, cleaning solutions, pool chlorine, car exhaust and other air pollution). Spices used in cooking can cause nasal irritation, producing a condition called “gustatory rhinitis”.

Other things that can aggravate vasomotor rhinitis are alcoholic beverages (particularly beer and wine), aspirin and certain blood pressure medications, such as beta-blockers. Some people are very sensitive to abrupt changes in weather or temperature. Skiers often develop a runny nose - “skier’s nose” - but in some people any cold exposure may cause a runny nose. Others start sneezing when leaving a cold, air-conditioned room. These agents are not allergens, do not induce formation of allergic antibodies and do not produce positive skin test reactions.

Occasionally some patients have all the classical symptoms of rhinitis but no allergies can be demonstrated on skin testing. However these patients have a number of allergy cells in their nose, this is called rhinitis with eosinophilia (allergy cells). This condition responds very well to nasal steroid sprays.

As is the case with allergic rhinitis, vasomotor rhinitis often can’t be cured. Fortunately, symptoms can be kept under control by avoiding or reducing exposure to substances that cause symptoms and by taking medications when needed. Patients with vasomotor rhinitis should not smoke or permit smoking in their homes.

How is rhinitis treated?

Nasal surgery will usually cure or improve symptoms caused by mechanical blockage or chronic sinusitis not responsive to prolonged antibiotics and nasal steroid sprays. Stopping the use of offending medication will cure rhinitis medicamentosa, providing that there is no underlying disorder. When no specific cure is available, options are avoiding or decreasing exposure to irritants or allergens to the extent practical is very important. Medication such as antihistamines and steroid nasal sprays, when used in a preventive and consistent manner can be very effective. Allergy shots for patients with allergies are also a very effective treatment.