

Tips to Remember: Rhinitis

Do you have a runny or stuffy nose that doesn't seem to go away? If so, you may have rhinitis, which is an inflammation of the mucous membranes of the nose.

Rhinitis is one of the most common allergic conditions in the United States, affecting about 40 million people. It often coexists with other allergic disorders, such as asthma. It is important to treat rhinitis because it can contribute to other conditions such as sleep disorders, fatigue and learning problems.

There are two general types of rhinitis:

Allergic rhinitis is caused by substances called *allergens*. Allergens are often common, usually harmless substances that can cause an allergic reaction in some people.

Causes

- When allergic rhinitis is caused by common outdoor allergens, such as airborne tree, grass and weed pollens or mold, it is called *seasonal allergic rhinitis*, or "hay fever."
- Allergic rhinitis is also triggered by common indoor allergens, such as animal dander (dried skin flakes and saliva), indoor mold or droppings from cockroaches or dust mites. This is called *perennial allergic rhinitis*.

Symptoms

- Sneezing
- Congestion
- Runny nose
- Itchiness in the nose, roof of the mouth, throat, eyes and ears

Diagnosis

If you have symptoms of allergic rhinitis, an allergist/immunologist can help determine which specific allergens are triggering your reaction. He or she will take a thorough health history, and then test you to determine if you have allergies. Skin tests or Blood (RAST) tests are the most common methods for determining your allergic triggers.

Treatment

Once your allergic triggers are determined, your physician or nurse will work with you to develop a plan to avoid the allergens that trigger your symptoms. For example, if you are allergic to dust mites or indoor mold, you will want to take steps to reduce these allergens in your house as much as possible. Your physician might prescribe medication to decrease your allergic rhinitis symptoms.

Oral and Nasal Antihistamines block histamine, one of the most important mediators of the allergic response. The release of histamine leads to many allergy symptoms, including itching of the eyes and nose, runny nose and sneezing.

Nasal inhaled corticosteroids reduce and control the impact of all or most of the mediators that can cause inflammation in the nose. It improves the nasal symptoms of allergic rhinitis, including itching, runny nose and congestion.

Decongestants are important in the care of allergic rhinitis because congestion is, for the majority of patients with allergic rhinitis, the most troublesome symptom.

Leukotriene modifiers block the action of leukotrienes, a mediator of allergy symptoms and of inflammation. They block both the early response to allergic triggers (itching and sneezing) as well as the delayed response to allergic triggers (congestion).

Allergen immunotherapy, also known as "allergy shots," may be considered if your symptoms persist. This treatment involves receiving injections periodically—as determined by your allergist/immunologist—over a period of three to five years. This helps your immune system to become more and more resistant to specific allergens, and lessens the need for future medications.

Non-allergic rhinitis usually afflicts adults and causes year-round symptoms, especially nasal congestion or "stuffiness" and headaches. These kinds of reactions differ from allergic rhinitis because they do not produce a reaction in an individual's immune systems. Generally, this is called *irritant rhinitis*, and is triggered by strong smells, pollution, particulate matter in the air, smoke or other irritants.

If the rhinitis also has a runny nose, it is referred to as *vasomotor rhinitis*. Although medication cannot completely relieve symptoms, your doctor might prescribe decongestants or a steroid nose spray to reduce symptoms. Interestingly, regular exercise can also be helpful. Symptoms of non-allergic rhinitis may also occur as a result of pregnancy, thyroid disorders or as a side effect of certain medications. When the symptoms are traced to a deficiency of thyroid hormone, thyroid medication can help.

Infectious rhinitis is usually caused by a virus. Symptoms include discolored nasal secretions and a low grade fever can be present.

Eosinophilic non-allergic rhinitis, is named after the blood cell - the eosinophil - which distinguishes it from the other forms of non-allergic rhinitis. This type of rhinitis behaves like allergic rhinitis in that it causes frequent, recurrent bouts of sneezing and a runny nose. This disorder, which may seem to appear from out of the blue, can be provoked by changes in the environment such as air pressure variations or weather shifts. Allergy skin tests are negative with this type of rhinitis, and growths in the nose, called nasal polyps, are a common complication. Medications such as antihistamines, decongestants and topical cromolyn may be beneficial, but topical nasal corticosteroids provide the best relief for many patients.

Rhinitis medicamentosa occurs when non-prescription topical decongestants (over-the-counter nose sprays) are used in excess, often for more than three consecutive days. This form of rhinitis causes severe nasal congestion and is best treated by stopping use of the offending nasal spray. This often leads to temporary severe congestion, which can be helped by topical or oral corticosteroids.

Neutrophilic rhinosinusitis is usually triggered by a sinus or related infection. It may also be associated with viral infections such as a cold or flu. This form of rhinitis causes symptoms such as post-nasal drip and sinus pain, which may be treated with decongestants and nasal saline solution. Antibiotics are prescribed when the sinuses are infected, but not for simple colds.

Structural rhinitis is caused by structural abnormalities in the nasal septum. These abnormalities can be the result of an injury, such as a broken nose, or something that the person was born with, such as small or crooked nasal passages. Structural rhinitis may produce year-round congestion that usually affects one side of the nose more than the other. Surgery can aid in correcting this abnormality.

Symptoms of rhinitis can also be caused by nasal polyps - growths on the mucus membrane of the nose that can cause congestion and loss of sense of smell. They provoke symptoms year-round and usually begin between the ages of 20 and 40. Nasal polyps may be associated with aspirin sensitivity and asthma, and may cause recurrent sinusitis. Decongestants or corticosteroid nasal sprays or pills may provide temporary relief. Nasal polyps can be surgically removed, but they have a tendency to recur. By learning about the causes and symptoms of various forms of rhinitis, you will be better able to identify your symptoms and triggers. Your allergist/immunologist can assist by making an accurate diagnosis and developing an effective treatment plan for you.

Your allergist/immunologist can provide you with more information on allergic and non-allergic rhinitis.

Tips to Remember are created by the Public Education Committee of the American Academy of Allergy, Asthma and Immunology. This brochure was updated in 2003.

The content of this brochure is for informational purposes only. It is not intended to replace evaluation by a physician. If you have questions or medical concerns, please contact your allergist/immunologist.