NON-ALLERGIC RHINITIS (OR VASOMOTOR)

Non-allergic rhinitis is a chronic condition that can occur at any age but is more common in adults. The most common symptoms are nasal congestion, post-nasal drainage, and headache, although runny nose, sneezing and itching of the nose may occur in some non-allergic individuals. Many non-allergic patients have recurrent sinusitis and middle ear infections or middle ear fluid collection.

Initial evaluation requires that surgical conditions (growths in the nose, crooked nasal septum, etc.) and general medical conditions (thyroid disease, pregnancy, etc.) are not responsible for the chronic symptoms. We recommend that every patient have a family practitioner, internist, or pediatrician to follow them for their general medical care. If the history and physical examination are not positive for surgical or general medical problems, the patient most likely has the most common nasal problem of non-allergic or allergic nasal disease.

Non-allergic rhinitis is a very difficult topic to fully understand. The actual defect resulting in the symptoms commonly found is not known. We do know that the difficulty arises in the inability to correctly change the size of blood vessels and the quantity of mucus produced by mucus glands in the nose. Under normal circumstances the nose warms or cools the air entering the nose to 98 degrees F., increases the humidity to at least 80%, and filters unwanted substances resulting in relatively clean air at 98 degrees F. and 80% humidity entering the lungs regardless of current environmental conditions. These changes occur almost instantly with each breath. The non-allergic individual has lost the ability to make the necessary changes either from an ineffective blood vessel and mucus gland controlling mechanism, temperature and humidity sensing mechanism, or both. The end result is inappropriate blood vessel size and/or excess mucus production which can result in nasal congestion, post-nasal drainage, and headaches.

Many individuals with non-allergic nasal disease will have a significant amount of irritation, inflammation, and hyperreactivity in the nose contributing to the persistent, chronic nature of the disease.

Nasal allergy on the other hand usually presents with runny nose, sneezing, and itching but some patients can also have nasal congestion, post-nasal drainage, and headaches. With nasal allergy we usually see definite problems at certain seasons of the year or a correlation with exposures to dust, animal dander, mold or mildew exposures and in some patients’ extreme reactions to certain foods. Allergy symptoms also involving the eyes usually are redness, itching and watering of the eyes.

It is possible for an individual to have problems with both non-allergic rhinitis and allergic rhinitis, and this makes the problems at times more difficult to clearly diagnose and treat.

Several tests can be used to differentiate non-allergic rhinitis from allergic rhinitis. Skin testing, as one might expect, displays positivity in patients with allergic rhinitis, whereas a negative skin test will be obtained in patients with non-allergic rhinitis. In addition, the blood IgE levels and eosinophils (the allergy cell) are elevated in patients with allergic rhinitis but not in non-allergic rhinitis.

Non-allergic rhinitis often is triggered by drafts, temperature changes (especially cold air), by scented cosmetics (both men’s and women’s cosmetics), by cigarette and tobacco smoke, as well as fireplace smoke, scented or perfumed soaps. Many types of aerosol sprays, even scented deodorants can cause problems. Paint fumes, insecticides, bug sprays,
varnishes, and even the odor from new clothing, carpeting or furniture can cause problems. Kerosene, lighter fluids, oil and gas fumes can cause problems. House dust may act as an irritant, and should be avoided.

Do not overuse over-the-counter decongestant sprays or nose drops because these can cause “rebound” nasal congestion. All nasal decongestant sprays should be discontinued following 3 days of continuous use. Medications will be prescribed to help with this problem. A good part of the treatment is avoiding known problems and exposures, and working by trial and error to find medications that work best in your case. Medications that may be tried include: Astelin© nasal spray, decongestants, decongestant-antihistamine combinations, intranasal steroid sprays, and possibly an atropine-derivative nasal spray (Atrovent©).