PlusPearls
GUIDELINES AND TOPICS OF INTEREST FOR TODAY'S PHYSICIAN SPRING 2009

ALLERGY/IMMUNOLOGY

Background

"Allergy" implies the body produces allergic antibody (IgE) to proteins found in nature also known as allergens. *Allergic rhinitis* is the manifestation of the sensitized body's response to exposure to the allergens. Allergic rhinitis affects up to 20% of adults, and the incidence is increasing. Recent data suggest that up to 40% of children develop allergic rhinitis. About 80% of asthmatics have some form of allergic rhinitis. In some studies, controlling allergic rhinitis can have a profound impact on asthma control. Treatment of allergic rhinitis requires an aggressive approach including education, avoidance, medication, and in some cases, immunotherapy (allergy shots).

Allergens

Allergic rhinitis causes can be divided into seasonal outdoor allergens and perennial indoor allergens. Approximately 20% of allergic rhinitis is seasonal, 40% is perennial, and 40% is both seasonal and perennial. Figure 1 depicts the indoor and outdoor allergen seasons. Year-round indoor allergens include dust mites, pets, indoor mold, feather (pillow, mattress, pet birds), cockroach and mice. Perfume, cigarette smoke, weather changes and ozone cause similar symptoms compared to allergen exposure, but because they don't cause IgE production they are called nonallergic irritants.

Diagnosis

Rhinitis symptoms include sneezing, itching, runny nose, postnasal drip and nasal congestion. Not all patients have all symptoms, and some patients have different symptoms at different times of the year. For example, sneeze and itch may be prevalent during the summer pollen seasons, with congestion and post nasal drip the only symptoms during the winter. Many patients also have itchy, red, watery eyes. Although symptoms may suggest allergic rhinitis, the only way to confirm the diagnosis of allergic rhinitis is to demonstrate the presence of IgE either by skin or blood testing. Skin testing performed by an allergist is the most reliable form of allergy testing. It is important to correlate the allergy test results with the history to determine the clinical relevance of positive results. Some patients have rhinitis symptoms but no evidence of IgE by skin or blood tests and are termed nonallergic rhinitis (formerly vasomotor rhinitis).

Continued on Reverse

When should I refer to an allergist?

Allergists work with primary care providers to formulate the best and safest treatment plan for allergic rhinitis patients.

An allergy consultation should be obtained when a rhinitis treatment plan is not controlling symptoms, when a patient is getting more than 1–2 sinus infections per year, when there is a need to document what a patient is allergic to, when there are comorbid conditions especially asthma, and when a patient wishes to consider immunotherapy.

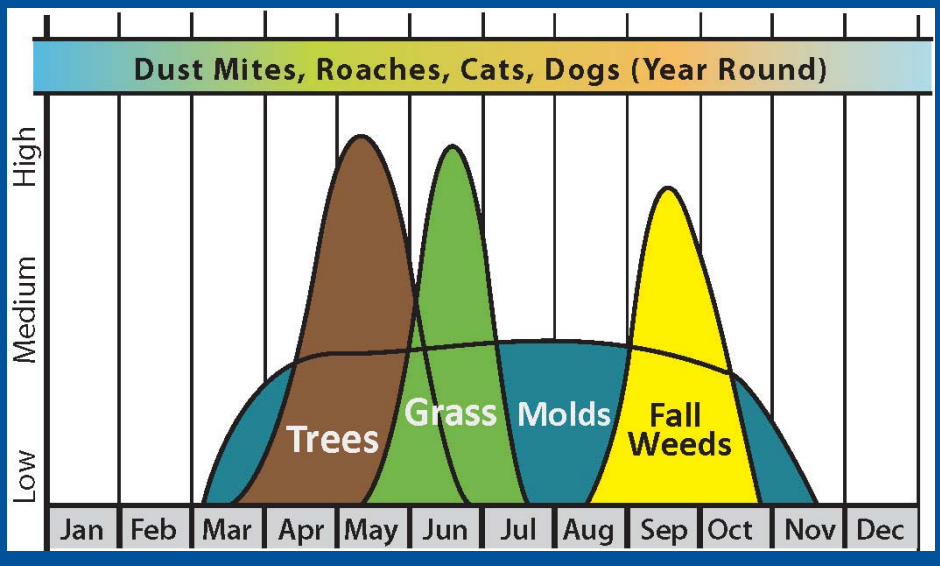


Figure 1: Seasonal and Perennial Distribution of Common Allergens

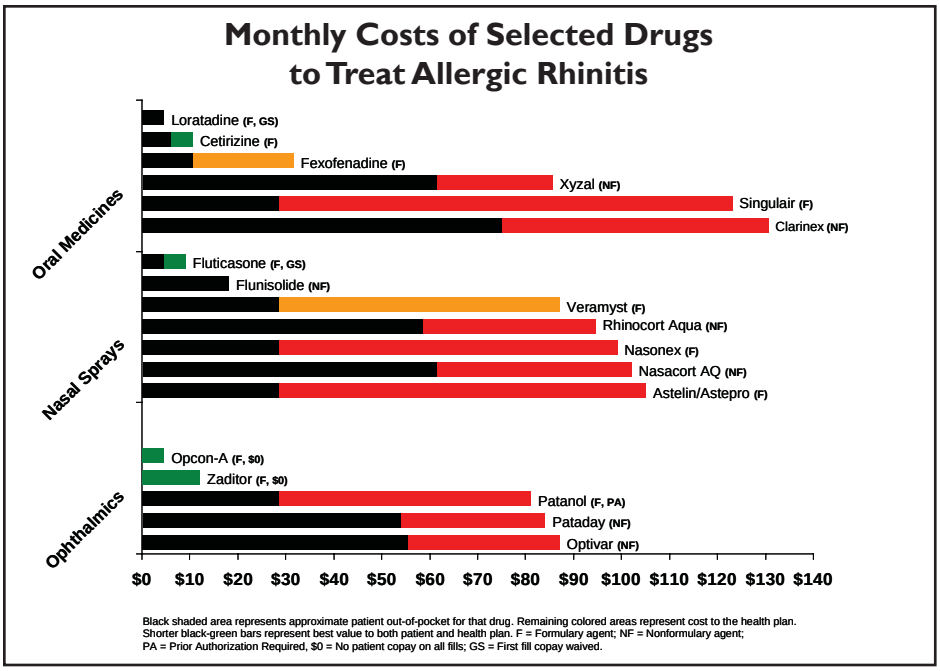
Allergy/Immunology - continued from front

Complications of Allergic Rhinitis

☑ Sinus pressure headaches
☑ Sinus infections
☑ Impaired quality of sleep (including snoring)
☑ Nasal congestion can worsen sleep apnea
☑ Decreased school or work performance
☑ Worsened asthma control (40% of patients can also have asthma)

Treatment

Treatment of allergic rhinitis involves a comprehensive plan of education, avoidance, medication and sometimes immunotherapy (allergy shots). Appropriate education and avoidance of known triggers are based on the allergy tests results.



Oral Medicines

- Treat sneeze, itch, runny nose and post nasal drip.
- Are not effective for congestion, prevention of sinus infections or sinus pressure headaches.
- Nasal antihistamines can help congestion but to a lesser extent compared to nasal steroids—often considered add-on therapy.

Nasal steroid sprays

- Remain the most effective medication for allergic rhinitis.
- Treat nasal congestion, sneeze, itch, runny nose and post nasal drip.
- Maximal effect takes 1–2 weeks when used daily.

Ophthalmics

- Highly effective for eye symptoms only.
- Considered add-on when oral antihistamines are not working for eye symptoms.

The Diagnosis and Management of Rhinitis: An Updated Practice Parameter. *The Journal of Allergy and Clinical Immunology,* Volume 122, Issue 2, Supplement (August 2008).

Is allergy skin testing necessary?

Allergy skin tests help document for the patient what is causing their symptoms and what they are not allergic to. Skin tests determine which avoidance measures would be helpful.

When a patient sees the hive at the skin test site, this confirms to the patient that the allergy exists. For example, a positive skin test to a pet proves the pet is causing allergy symptoms. An allergist also uses the skin test results to determine the immunotherapy treatment regimen.

Immunotherapy (allergy shots)

Under the guidance of an experienced allergist, immunotherapy can be a very effective treatment option. Eighty percent (80%) of patients with allergic rhinitis respond positively to allergy shots.

Allergy shots may take up to a year to see benefit. There is a small but definite risk of reactions to these injections. Allergy shots involve a significant time commitment of 3–5 years.

Immunotherapy treats the cause of allergies (decreases production of IgE), decreases the need for medication, can prevent development of new allergies, treats allergic asthma and conjunctivitis (as well as allergic rhinitis), and may decrease the chance of developing allergic asthma in children.