Common Patient Questions and Answers on Allergy Testing and Treatment

What is an allergy?
Allergy is a condition, often inherited, in which the immune system of the affected person reacts to something that is either eaten, touched, or inhaled that doesn't affect most other people. The patient's immune system reacts to this substance as if it were an "enemy invader" (like a virus). This reaction leads to symptoms that often adversely affect the patient's work, play, rest, and overall quality of life.

Allergens cause allergies
Any substance that triggers an allergic reaction is called an allergen. Allergens "invade" the body by being inhaled, swallowed, injected, or they may be absorbed through the skin. Common allergens include pollen, dust, and mold.

How common are allergies?
Allergies are among the nation's most common and costly health problems. They affect as many as one in four people. More than 50 million Americans have allergic rhinitis. The yearly sales of antihistamines, decongestants, nasal cromolyn and nasal corticosteroids now exceed $5 billion.

What happens during an allergic reaction?
The immune system reacts to an allergen that has entered the body as if it were an "enemy invader" (like a virus). It produces special antibodies capable of recognizing this same allergen when it enters the body at another time. When the allergen again enters the body, the immune system rapidly recognizes it, causing a series of reactions. These reactions often involve cellular destruction, blood vessel dilation, and production of many inflammatory chemicals including histamine. Histamine produces some of the more common allergy symptoms, such as sneezing, scratchy throat, hives, and shortness of breath.

What are the symptoms of ear, nose and throat allergies?
People often think of allergies as only "hay fever," with sneezing, runny nose, nasal stuffiness, and itchy or watery eyes. However, allergies can also cause symptoms, such as chronic sinus problems, excess nasal and throat drainage (post nasal drip), head congestion, frequent "colds," hoarse voice, eczema (skin allergies), recurring ear infections, hearing loss, dizziness, chronic cough, and asthma. Stomach and intestinal problems, as well as excessive fatigue, can be symptoms of allergy.
Can you outgrow an allergy?
No, but it is common for allergic symptoms to change as you age. For example, a baby may develop colic, recurrent ear infections, or have eczema, but, as the baby grows older, he or she may develop different allergic symptoms, such as hay fever, fluid behind the eardrum, or asthma.

How do we make the diagnosis?
The doctor makes the initial or presumptive diagnosis of allergy through studying a patient's history and giving a physical examination. To be certain of the diagnosis and prescribe effective treatment, findings must be confirmed by tests that identify the specific offending allergens.

Testing for allergies
Like all biological systems, the immune system is very complex. Many issues relating to accurate diagnosis and effective treatment of allergies remain unresolved. The immune reactions caused by airborne (inhalant) allergens such as ragweed or grass pollen, and dust are well understood and comparatively easy to diagnose and treat. However, the immune reactions caused by other allergens, such as industrial chemicals, pollution, molds, and foods are frequently more complex and difficult to accurately diagnose and treat with standard techniques.

The following discussion of testing techniques is confined only to the better-understood and easier-to-diagnose inhalant allergies caused by dust, mold, and pollen allergens. Although a number of methods are in use today to identify specific inhalant allergens, they all fall into one of two basic types: 1) skin testing or 2) tests performed on the patient's blood. Both methods attempt to determine if the patient's immune system has manufactured abnormally large amounts of antibody to specific allergens.

Skin Testing by End Point Titration
There are several ways to test skin for allergies. No one test is perfect in every case. However, the experience of thousands of physicians, in ear, nose and throat, and many other specialties indicates that of all skin test types, one form gives superior results in the majority of patients. That test procedure is called Intradermal Dilutional Testing (IDT).

There is very little discomfort from the titration technique. A series of small injections, using very fine needles, is made in rows on the patient's arms. Only a small amount of the test substance (called the antigen) is injected. The result is a series of bumps which look like small mosquito bites. If the bumps enlarge significantly in a short period of time, it indicates the patient is likely allergic. If the patient receives allergy immunotherapy (shots), the proper dosing will be based on these test results.

What is the current treatment for allergies?
Despite the advances in allergy care during the past several decades, there are still only three basic, accepted approaches to allergy care.

1. Avoidance of the offending allergens
2. Pharmacotherapy (medications used to influence the allergic reaction)
3. Immunotherapy (allergy shots or desensitization)

Avoidance
The first, most basic treatment step once an allergen has been identified is to eliminate or avoid it if possible. Unfortunately, avoiding some allergens (such as dust, molds, and animals) is often difficult and thus allergen avoidance alone may not be effective.

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Pharmacotherapy
Medications frequently can control allergy symptoms. These may include antihistamines, decongestants, prescription nasal sprays, and other products. These medications often can control allergy symptoms, but they also can produce side effects in some people.

Immunotherapy
When allergen avoidance and medications do not successfully control allergy symptoms, the otolaryngic (ear, nose and throat) allergist can alter the body's overactive response. The allergist does this by carefully challenging the patient's immune system through regular injections of the actual allergens to which a patient is sensitive. This treatment, which is very similar to vaccination for infectious diseases, such as the flu, can be administered after allergy testing has determined what is triggering the allergic response. Over time, it may be possible to alter a person's excessive response to these environmental allergens, both improving symptoms and decreasing the need for medications and allergen avoidance for many years. Thus, immunotherapy is unique in the sense that it alters the patient's reactivity to specific allergens.

Who can treat my ear, nose and throat allergies?
Because allergies can produce such a wide range of symptoms, there are a number of doctors, both specialists and primary care physicians, who may be qualified to treat the allergic patient.

Who should treat my allergies?
An otolaryngic allergist is able to diagnose and treat disorders of the upper respiratory tract (ear, nose, throat and related head and neck regions) caused by allergic conditions. Because the otolaryngic allergist is an ear, nose, and throat (ENT) surgeon and specialist, this physician also can efficiently diagnose and treat other non-allergic diseases of the upper respiratory tract.

Half of the problems that an ENT doctor encounters are probably caused, either directly or indirectly, by allergy. Chronic nasal congestion and postnasal drip, seasonal or constant, is often allergic and may be complicated by chronic sinus and middle ear disease. Hearing loss, dizziness, headaches, weeping ear canals, and chronic sore throats may be due to allergy.

The ENT doctor who does his/her own allergy treatment is able to follow the patient's progress with specialized examinations and medical and surgical treatment, such as polyp removal, placement of middle ear ventilating tubes, straightening of the nasal septum, and treatment of sinus infections.