

GENERAL ALLERGY INFORMATION

The term “allergy” is frequently misused to refer to any abnormal reaction. In fact, it truly means that the person is making a specific immune response to a foreign substance. These substances can be pollens, mold spores, dust mites, other insects, animal dander, drugs and foods. They can enter the body through the mouth, nose and lung, or even injected like a medicine. Allergic people are sensitive to various substances, which are called allergens. Allergens will affect people who are sensitive to them.

Allergy symptoms usually affect the nose, the eyes, the mouth, the ears, the airways, and the skin, the gastrointestinal tract and blood vessels. When the nose is involved a patient may have a runny nose, congestion, sneezing fits, itchy nose and drainage. The eyes become red, watery and itchy. Fluid may persist in the ears and present as chronic serous media. Swelling of the upper airway (larynx) or wheezing (as in asthma) may occur. The skin may be involved with eczema, hives or swelling (angioedema). When the gastrointestinal system is involved there may be nausea, vomiting, abdominal pain or diarrhea.

The most serious allergic reaction is anaphylactic shock. When this occurs all of the blood vessels open widely, the patient loses blood pressure and there may be serious consequences. Most allergic people develop only one set of symptoms but other symptoms may develop. Children frequently can have allergic rhinitis and few may go on to develop asthma. Allergy can also start with atopic dermatitis in the infant and progress to asthma and allergic rhinitis later.

The tendency to develop allergies is inherited. About 10-20 percent of children will have no family history (parents or siblings affected). The “chances” of being allergic increases when one parent is allergic and increases significantly more when both parents are allergic. The tendency to develop allergy is inherited, but not the specific allergens. An allergy may persist for a long time.

The specific allergen that a person becomes sensitive to depends upon exposure. Exposure, the amount of exposure, and length of time of exposure are necessary to develop allergy. It would be very unusual to be allergic to something on the first exposure. The usual story is that the person has had frequent courses of antibiotics, a bee sting, or exposure to a food then suddenly develops a problem. New sensitivities can develop over time. Infants may develop food allergy during the first few years then develop mite and animal allergy if there is exposure, and finally pollen allergy after the second or third birthday. For pollens it may take two or three years of the short seasons of exposure to become sensitized. Just as people are prone to develop allergies, certain substances are great allergens or sensitizers. Some examples of great sensitizers include ragweed, tree pollen, dust mites, cat dander, and grass pollen. Some examples of unusual or poor sensitizers are pine pollen and cottonwood tree seed.

There are a number of ways to treat allergic disorders:

1. **Avoidance** – the most important treatment and most effective. Place a barrier between the allergic person and their allergen. This mode of treatment is so important that the use of medicine or allergy shots may be totally ineffective if the “trigger” or allergen is still present.
2. **Symptom control with medication.**

3. **Allergy shots** – an attempt to increase the patients’ resistance to allergens by stimulating the immune system by injecting amounts of allergen at regular intervals. Keep in mind that allergies are not “cured,” but kept under control through avoidance, medication, and immunotherapy.

ENVIRONMENTAL CONTROL

This is the first and most important allergy treatment. It must, however, be carried out in a practical and cost-effective manner. Allergen avoidance and environmental control may involve:

1. Removal of an offending animal
2. Dust mite avoidance with mite-proof covers over the mattress, box spring and pillows. Listed below are noteworthy *ALLERGY PRODUCT WEBSITES*:
 - www.allergycontrolproducts.com
 - www.missionallergy.com
 - www.nationalallergysupply.com
3. Air conditioning for pollen sensitive people
4. Avoidance of a particular food or drug

Do the best you can. The amount of relief from allergy may be in direct proportion to the thoroughness of allergen removal.

MEDICATION

In many situations symptom relief may require medicine. The decision regarding the use of a medicine depends upon a careful evaluation of the patient’s medical history and the patient’s situation as well as weighing the risks, benefits, effectiveness and the cost of each medication. The success of medication use requires full cooperation of the patient and an understanding of the home situation by the physician. Both the doctor and the patient/parent need to work together on a plan that works; a regimen that the patient can do and has faith in. If a program seems too complicated, talk to the doctor and agree on a new do-able plan. When both patient and physician work together on an allergy care plan, it is called “adherence”.

ALLERGY INJECTIONS

The third form of allergy treatment involves allergy injections or shots. Remember that avoidance is best, however, if a person is allergic to pollen (trees, grasses and weeds), it may be impossible to avoid these. Pollens are spread by the wind and can travel for up to 50 miles. The removal of pollen sources (trees and weeds) around the home may not significantly decrease pollen exposure. In this situation, allergy injections may be considered. Sometimes, despite excellent environmental control, symptoms persist. Injection therapy may help in these situations.

Injection therapy starts weekly and the doses are gradually increased in strength and amount to a tolerated maintenance dose. This may take a number of months. If you are at maintenance after a year and there is no change in symptoms, a reassessment is needed. Allergy shots do not help for food allergy. Avoidance is used in the case of food allergy. Allergy shots should be considered in the allergic patient (assuming environmental control) when medications are missed, medications don't work, or there are too many side effects from medication use.

Allergy Drops

The purpose of sublingual immunotherapy (SLIT / allergy drops) is to decrease your sensitivity to allergy-causing substances, so that exposure to the offending allergen (pollen, mold, dust mites, animal danders, etc.) will result in fewer and less severe symptoms. This does not mean that sublingual immunotherapy is a substitute for avoidance of known allergens or for the use of allergy medications, but rather is a supplement to those treatment measures.

Sublingual immunotherapy is usually begun at very low doses. This dosage is gradually increased on a regular basis until a therapeutic dose (called the "Maintenance Dose") is reached. SLIT should be given once a day while the vaccine dose is being increased (Build-up Phase). This frequency reduces the chance of a reaction and permits the Maintenance Dose to be reached within a reasonable amount of time (about 30 days). After the Maintenance Dose is determined, SLIT is continued on a daily basis, at a stable dose (usually 5 drops from each maintenance vial). The specifics of your dosing regimen will be outlined by your Northside ENT physician at the start of your treatment.

COMMON ALLERGIC DISEASES

1. **Rhinitis** - a runny nose, sneezing fits, itchy nose, congestion, itchy roof of the mouth often accompanied by red, watery and itchy eyes, and can be accompanied by chronic serous otitis media. Patient may also have complications of sinusitis, cough, altered taste and sense of smell.
2. **Conjunctivitis** - red, watery itchy eyes. This can occur alone or with Allergic Rhinitis.
3. **Asthma** - Cough, wheeze, rapid respirations, retractions, chest pain, exercise intolerance, and can often present as recurrent pneumonia.
4. **Hives** - Urticaria; a very itchy rash raised above the level of the skin, tending to come and go in crops.
5. **Angioedema** - swelling of the deeper tissue of the skin.