

# What is an Allergy?

An allergy is an abnormal sensitivity to an allergen that is inhaled, eaten or touched that most other people can tolerate with no trouble. Allergies are over-reactions to substances one's immune system considers harmful.

# What are common Allergens?

There are two types of Allergens:

**Seasonal:** These are mainly outdoor allergens and include pollen from grasses, trees and weeds, and also some moulds.

Perennial: These are usually indoor allergens and cause symptoms all year round. The commonest is the house dust mite. These reside in nests such as carpets, bedding and upholstered furniture. They are triggers for perennial rhinitis and allergic asthma. Other perennial allergens include domestic pets, especially cats.

Food Allergens: There is an increasing evidence that different foods play significant roles in manifesting allergies. They can manifest as Itching, Urticaria, Swelling of mouth, Throat obstruction, Respiratory difficulty etc. The common foods are milk, egg, fish, peanuts & other nuts, wheat, Soya etc.

Drugs: Any drug can cause allergic reaction but aspirin & other anti-inflammatory drugs as well as antibiotics like penicillin,

sulfonamide account for most of the allergic reaction due to drugs.

Insects: Every year many people die from Anaphylaxis to insect (bee, wasp & fire ants venom) sting.

### Is Allergy Inherited?

If both parents have respiratory allergies then risk that their offspring develop an allergy goes up to 80%. The increased tendency of some families to develop allergen sensitization is termed a ATOPY. These are three classical kind of atopy, Atopic dermatitis (eczema), Hay fever (Seasonal allergic rhinitis) and Allergic asthma. Atopic individuals are generally prone to manufacture allergy (IgE) antibodies against allergens present in the environment (pollen, cat dander, moulds, house dust, mite.)

# Do Children outgrow allergies?

Sometimes food allergies are more likely to outgrow than inhalant allergies. Food allergy is more common in children than adults.

### **Common Allergic Manifestations:**

Asthma.

Allergic Rhinitis (Hay fever).

Atopic Eczema.

Contact dermatitis.

Urticaria.
Food Allergy.
Allergic Conjunctivitis (itchy eyes)
Wasp Venom Allergy.
Drug allergy.

### How is allergy diagnosed?

A good medical history is usually the basis for the diagnosis of any allergy. Knowledge of the family history of allergic problem is very helpful. It may take some good detective work by doing various tests to figure out exactly what the likely allergen is.

# Following tests are available to find out the possible allergens:

Skin prick test RAST

IgE

AEC (Absolute Eosinophil Count)
Skin Patch testing (For contact allergy)

Skin scratch tests (Mainly for drug allergy)

#### Skin Prick Test:

It is the oldest allergy test firstly performed in 1865 by Dr. Charles Blackely in Manchester, England. Standardized glycerinated extract of various allergens are used which are highly accurate in its results to confirm which allergen is responsible. A diluted extract of each kind of allergen is pricked into the skin of the

forearm or on the back. With a positive reaction, a small raised, reddened area with surrounding flush (called a wheal & flare) will appear at the test site. The results are measured after 15 to 20 minutes.

#### **Blood Tests:**

Diagnostic test can be done using a blood sample from the patient to detect levels of IgE antibody to particular allergens. These tests are performed when the entire body is covered with eczema or if the patient is on antihistaminic which can interfere with skin prick test results. These are also done in children where skin prick tests are not feasible.

# How are allergy treated?

The diagnosis should ideally be confirmed to determine the exact source of the allergy before commencing treatment. Once the allergens positivity is established, its clinical significance is correlated. The best way to treat allergies is to avoid exposure to allergens in the first place, but this is not a practical solution generally. Many treatments are available to relieve symptoms, ranging from Over-the-counter antihistamines to potent anti-inflammatory drugs like steroids. Immunotherapy, is an another method of treating allergies which is effective by producing blocking antibodies to counteract the allergens manifesting antibodies.

# **Immunotherapy**

What exactly is allergens specfic immunotherpy?

It is the process of administering increasing amount of allergens by subcutaneous injection for which a patient is found to be allergic. It eventually builds tolerance to these allergen substances and prevent them causing symptoms.

### How does Immunotherpy work?

The exact mechanism by which immunotherapy switches off allergies is uncertain. It was hypothesized that specific "IgE blocking" antibodies were produced during successful immunotherapy in specific IgE, was followed by an IgE fall with compensatory rise in IgE (a blocking antibody)

# Is immunotherapy a "cure"?

Immunotherapy may not be cure but can significantly lessen symptoms to different degrees to substances contained in the immunotherapy.

Studies showing the effectiveness of immunotherapy show that roughly 8 out of 10 patients benefit from immunotherapy. Generally the period to have immunotherapy injections may vary from 3 months to 1 year but in some cases it might need to be given up to 3 years for long-term benefit. Improvement in symptoms is usually observed in 6 months. Total duration may vary from 3 months to a year.

#### Conclusion

Allergy test are beneficial for skin, nasal, eyes and respiratory (bronchial asthma) allergies.

Medications provide temporary relief.

Long terms benefits are likely to be achieved by allegen specific immunotherapy.

### What to do Next...

If you feel that you have some kind of allergy problem, then make an appointment with

# DR. KAUSHAL'S CLINIC

Dr. V. N. Kaushal
MD (Medicine) Gold Medalist
Consultant Physician
25, Shahzadi Mandi, Agra-1
Contact No.: 09837008882, 0562-2225827
e-mail:drkaushalagra@gmail.com



The Complete Skin & Hair Clinic

Dr. Vibhor Kaushal

M.D. (Skin & V.D.)

Consultant Dermatologist

Near S R Hospital, Namner, Agra - 282001 Contact No.:0562-2420188, 09012118885 www.skinclinicagra.com