

## Allergic Rhinitis

### Q and A:

#### 1. What is allergic rhinitis? What are the signs and symptoms?

Allergic rhinitis is an inflammation of the nose, which occurs after exposure to an allergen. Allergens, like house dust mites, cockroach, pets, pollens, are usually harmless to most people but may generate an overactive response in an allergic individual. This causes the release of chemical substances responsible for the typical signs and symptoms such as runny or stuffy nose, sneezing and itchiness of the eyes, ears, throat and nose. The nasal itching may cause repeated and constant rubbing of the nose called "allergic salute". These children may have dark circles around their eyes called allergic shiners because of the significant nasal obstruction. A non-productive cough due to mucus running down at the back of the throat may also be present.

Allergic symptoms may last as long as the patient is exposed to an allergen.

#### 2. I have asthma and allergic rhinitis, will my child develop both?

A family history of allergy is the single most important factor that predisposes a person to develop allergic disease. If one parent has allergic disease, the estimated risk of the child to develop allergies is about 40%. The child's risk grows to 70% if both parents have allergies. There is a 5-15% risk of developing allergic diseases even if there is no family history of allergy. What is inherited is the predisposition to overreact to common allergens. Hence, if your child inherits these allergic tendencies, his manifestations may or may not be the same as yours. He may develop bronchial asthma or allergic rhinitis alone or both or he may develop a completely different type of allergic disease.

However, since these 2 diseases are linked by one common airway and share the common mucosal inflammation, their symptoms are frequently overlapping. About 80% of patients with asthma have allergic rhinitis and about 40% of allergic rhinitis patients have asthma. It is recommended to check for the presence of asthma in allergic rhinitis and vice versa.

#### 3. Are there triggering factors for allergic rhinitis?

Allergic rhinitis is usually triggered by allergen inhalation, which can be found both outdoors and indoors.

Common indoor allergens include animal danders (dried skin flakes and saliva), indoor molds, droppings from house dust mites and cockroach particles. Outdoor allergens include pollens from weeds, grasses and trees.

Repeated allergen exposure primes the nasal mucosa, making it oversensitive, so that allergic rhinitis symptoms can occur even at low allergen levels and on exposure to non-specific irritants like tobacco smoke, perfumes and changes in temperature.

#### 4. What is the treatment for allergic rhinitis?

The goal of treatment for allergic rhinitis is to reduce and control the symptoms and improve the quality of life without altering the patient's ability to function.

Treatment includes :

- Avoidance of identified factors. Your allergy specialist can help you in this regard.
- The use of appropriate medications like antihistamines, antileukotrienes, decongestants and nasal steroids sprays should be under the guidance of your physician.

If there is no response to medications or symptoms worsen, a consultation with your allergy specialist may be necessary.

### **5. My son has allergic rhinitis, how can my son prevent attacks?**

To prevent attacks, it is important to identify what your son is allergic to and what he is exposed to. Once his triggers are identified, attention should be given to decreasing environmental exposures at home and in school. For example, if he is allergic to dust mite, items that collect dust, such as stuffed toys, heavy curtains and carpets should be removed from the bedroom. Pillows and mattresses should be encased in impermeable covers. Beddings should be changed regularly.

Exposure to outdoor irritants like diesel exhaust particles, and strong odors (scented fabric conditioners and perfumes) should be avoided. There should be no smoking inside and outside your home.

It is likewise essential that prescribed medications be given consistently to reduce, control and prevent allergic rhinitis symptoms.

### **6. I am pregnant with my first child and I heard that breastfeeding can prevent allergy. Is this true?**

WHO dietary guidelines recommend exclusive breast-feeding for 6 months. It is a good way to increase your child's immunity and is strongly encouraged. It should remain the choice of nutrition for newborns.

For infants at high risk of developing atopic disease, there is evidence that exclusive breastfeeding for at least 6 months compared with feeding intact cow milk protein formula decreases the cumulative incidence of atopic dermatitis and cow milk allergy in the first 2 years of life and can protect against wheezing in early life.

There is now convincing evidence that susceptibility to allergy is determined by a combination of genes and the environment. Timing of exposure affects the onset, progression and remission of an allergic disease.

### **7. My 6 y/o daughter has been diagnosed to have allergic rhinitis. Will she outgrow this or will this be a lifelong problem?**

Allergy is a lifelong condition characterized by an overactive immune system to the presence of allergens. Since there is a genetic predisposition, symptoms may arise if the patient is exposed to allergens. It is therefore important to limit or avoid exposure to allergens. Some patients have improved symptoms of allergic rhinitis with medications. But others develop chronic symptoms and continue to have nasal allergies over time requiring immunotherapy.

### **8. What are the possible complications of allergic rhinitis that I have to watch out for?**

A large percentage of patients with allergic rhinitis may have associated:

- allergic conjunctivitis or the itching, redness and swelling of the eyes
- sinusitis and middle ear problems causing headache / earache
- asthma, and in fact, they may have overlapping symptoms. Worsening of allergic rhinitis symptoms may coincide with asthma attacks, and treatment of nasal symptoms may reduce asthma symptoms
- posterior nasal drip seen in patients with allergic rhinitis may cause persistent or recurrent cough, and enlargement of adenoids and tonsils linked to snoring in children

- psychological effects like poor self-esteem due to their appearance, and anxiety because of impairment in activities of daily living due to daytime fatigue
- learning difficulties

With proper control of symptoms through allergen avoidance and medications, symptoms may be reduced and complications may be avoided.