

#### **Asthma alert**

The following symptoms occur hours or days before audible wheezing or before an attack is fully in progress; these early symptoms vary a great deal among individuals:

Mood changes: Aggressive, overactive, grouchy, tired easily upset

Change in facial features: Dark circles under eyes, pale face, flared nostrils

Verbal complaints: Fatigue, tight chest, chest filling up, chest hurts, dry mouth

Breathing changes: Coughing, taking deep breaths, breathing through

Other changes: Listlessness, voice change, swollen face, quickening pulse

When you spot these symptoms, rest and relax, drink warm liquids and use medicines prescribed for an attack

SOURCE: www.acac.in

Often, allergic reactions trigger asthma, a condition that is spreading rapidly among children of the affluent in our metros. Find out why

by Dr Vikram Jaggi

and has brought with it the mandatory sniffles, coughs, colds, allergies and respiratory diseases of which the most common is asthma. From being a word which most of us were acquainted with only through our biology textbooks, asthma has entered our lives in a most alarming way.

The statistics speak for themselves. In Delhi, the incidence of asthma has increased 3-4 times in the last 30 years and today, one out of seven children in the national capital suffer from it.

## **ALLERGY AND ASTHMA**

To deal with the enemy, you need to know him first. But before you learn what is asthma, you first need to know what is an allergy.

An allergy is an "overreaction" of the immune system to otherwise harmless substances present in our environment. These substances are called 'allergens'. The allergic reaction could take the shape of: asthma, allergic rhinitis or skin eruptions. Asthma is a condition in which the patient has oversensitive air tubes that react to a variety of allergens, viral infections, pollution or change in temperature and become constricted. This leads to tightness in the chest, wheezing, shortness of breath and coughing.

Therefore, we can say that asthma is a condition that can be triggered by an allergy. But remember, not all asthmatics have allergies and many people with allergies do not have asthma.

#### **CAUSE AND EFFECT**

There are allergens all around us. We have pollen from weeds and trees which is why allergies and asthma attacks occur frequently during the spring. Fungal spores or moulds can also cause allergies. Next come house dust mites and food items like peanuts and milk and certain medicines. Often, cosmetics, certain hair dyes and metals like silver and nickel also cause skin allergies.

Asthma and allergies were once considered to be primarily genetic diseases. But that has changed. Envi-

ronmental factors have become far more important than genetic factors.
This could be for two reasons:

■ Too little of the right kind of immune stimulation. This is when you are paranoid about cleanliness, don't let your child play in the mud, give your child antibiotics at a very early age and do not allow him / her exposure to animals and other children.

■ Exposure to too much of the wrong bind of immune stimulation. This would include an excessively dusty home where dust mites and moulds flourish; the consumption of com-

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## SMOKE SIGNAL

Major studies in the UK and the US have concluded that parental smoking is associated with increased prevalence of asthma in children. Infants whose mothers smoke during pregnancy have a higher risk of developing asthma. plex and processed food; cigarette smoking and pollution, especially diesel fumes. Diesel fumes damage the inner lining of the air tubes and helps the allergen to be presented to the immune system in such a way that an allergic reaction takes place. Studies have found that asthma

and allergies are more common in developed than in developing / underdeveloped countries. This is because the level of hygiene in developed countries is higher than that in developing nations.

# WHAT YOU CAN DO

If one parent has an allergy, chances that the child will also have one are 20-30 per cent. If both parents have an allergy, the chances increase to 50-60 per cent. But you can take steps to reduce the risk of your child contracting asthma or an allergy.

- Avoid smoking during pregnancy and exclusively breastfeed your child for the first 4-6 months.
- Bring up your child in a clean but not sterile environment.
- Do not give your child antibiotics unnecessarily.
- Avoid processed / ready-toeat foods. Eat fresh fruits and vegetables regularly.
- Avoid exposure to dust. Remove wall-to-wall carpeting and stuffed toys and old books from your home.

#### **CLASS FACTOR**

This is also why asthma and allergies are more common in urban than in rural areas. To put it simply, a child growing up in a posh high-rise in South Mumbai or Delhi is more likely to have asthma or an allergy than a child who does not live in such a rarefied environment.

This is because in an extremely sanitised environment, you do not challenge your child's immune system sufficiently. Our immune system has to be stimulated from infancy by common viruses, worms and bugs to develop fully. In the absence of this kind of stimulation (i.e., in very hygienic conditions), the unused part of the immune system starts misbehaving and starts overreacting to produce IgE antibodies that are responsible for initiating and maintaining allergies.

(For more information on allergy and asthma log on to www.acac.in)