

Allergy prevention

Amayeza Info Centre

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Allergic diseases are particularly important in children. The incidence of allergic disease is increasing in both the developed and the developing world. Despite the various theories, the reasons for the increase in allergic diseases are likely to be multifactorial.

What is an allergy?

The immune system normally protects the body against harmful substances such as bacteria and viruses. An allergic reaction (or a hypersensitivity reaction) results when the immune system is triggered into action by agents that would normally be harmless to the body, e.g. grass and tree pollens, moulds, house dust mites, animal dander (especially cat, dog, horse), chemicals, some foods, medicines and venom from insect stings such as bees. Many disease conditions have allergy as their underlying cause e.g. allergic asthma, allergic rhinitis, allergic conjunctivitis and eczema.

What are the symptoms of allergy?

Allergic reactions range in severity from mild to severe. Symptoms can vary from mild itching, skin rash, wheezing, runny eyes and nose, to sudden difficulty in breathing, heart malfunction, anaphylactic shock and (very rarely) death.

Preventing allergies

Breast is best

It is well-known that allergic conditions occur less frequently in breast-fed babies. In addition, cow's milk is the most common cause of allergy in infants. Therefore, for all newborns, especially if there is a family history of allergy, breastfeeding is the best way to protect the baby from allergies in the first few months of life. If breastfeeding is not

possible then hypoallergenic milk formulas e.g. NAN H.A 1 and 2 may be recommended for the prevention of allergy in babies with a family history of allergy, together with the advice not to introduce other foods until at least four and preferably six months of age.

Allergen avoidance

Allergen exposure early in life may be associated with a higher risk of sensitisation than exposure later in life. The key question whether early allergen avoidance can prevent allergic disease, however, still remains. Nonetheless, allergen avoidance in an individual who is sensitised to a particular allergen is an important strategy in preventing symptoms in patients with allergic disease.

The single most effective measure in controlling the concentration of mite allergens for those with an allergy to house dust mites is to cover the mattress, pillows and duvet with covers that are impermeable to mite allergens. Bedroom carpets should be replaced with hard flooring (e.g. sealed wooden or vinyl flooring) and curtains should be replaced with blinds that can be damp-wiped. In the rest of the house, intensive vacuum cleaning with highfiltration cleaners reduces the size of the allergen reservoir.

Pet allergen levels are present in huge concentrations in homes with cats and dogs. While removal of the pet reduces airborne allergens, where the pet remains in the home, the pet should be kept out of the bedroom and preferably outdoors or in a well-ventilated area such as the kitchen. Ideally, carpets should be removed as the concentration of pet allergens can be as much as 100 times higher in carpets than on polished floors.

Treating allergies

Oral antihistamines are effective in patients with mild to moderate allergic disease, particularly in those whose main symptoms are sneezing, runny nose or eye symptoms. They are also effective if given in the initial hours of an allergic reaction to insect bites and stings. Individuals with a severe allergy to insect venom need to carry an adrenaline injection such as Epipen® Auto Injector. Intranasal cortisone sprays are effective against all nasal symptoms, including nasal blockage and are recommended for patients with moderate to severe symptoms of allergic rhinitis. Regular usage of

the nasal spray is required for maximal benefit. Patients with allergic asthma usually require therapy with inhaled corticosteroids to bring asthma symptoms under control, while patients with allergic eczema benefit from topical therapy.

References

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