Allergic to life

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By Hazel Knowles (HK Edition)

A patient undergoes a skin prick test to diagnose an allergy in the specially designed negative pressure room at the Hong Kong Sanatorium & Hospital Allergy Centre. Provided to China Daily

More and more people in Hong Kong suffer from allergies that some experts attribute to the rise of modern urban lifestyles, writes Hazel Knowles.

When Hysan Wong developed a rash as a baby, his father Frank Wong Man-hai's assumed it was just a one-off health complaint which would pass in a day or so. He had no idea the rash was a symptom of allergies which would continue to plague Hysan all through childhood.

Hysan, now 15-years-old, is allergic to peanuts, egg white and house dust mite. Just a small amount of peanuts or egg white is enough to trigger vomiting, skin rashes and possibly even life-threatening anaphylactic shock: a condition in which the airways swell causing difficulty in breathing, and the body goes into shock.

His allergies make it virtually impossible for him to enjoy a meal out with his family or a slice of cake with his friends.
Wherever he goes he carries an epinephrine autoinjector — a special pen which injects an amount of epinephrine into his body in the event of life-threatening severe reaction.

“It was quite a shock to discover he was allergic to food. I couldn’t believe that people could be allergic to such ordinary foods and couldn’t believe a peanut could kill a person,” said Wong.

An estimated 8 percent of people in Hong Kong suffer allergies, such as food allergies, asthma and the skin condition, eczema. With children the statistics are even higher, with some experts claiming as many as 40 percent of children suffer from different allergies. Of these around 10 percent have asthma, 5 percent eczema, 5 percent food allergies and between 30 and 40 percent have allergic rhinitis which causes a blocked or runny nose.

According to allergy experts in Hong Kong the number of sufferers appears to be on the rise with more people, especially children, seeking help from doctors with allergies.

Allergy specialist Dr Lee Tak-hong said although Hong Kong and the mainland were still behind countries like the UK, USA and Australia in the allergy league tables, they were slowly catching up and climbing higher in the table.

“It is quite difficult to get a precise number of allergy cases for Hong Kong, but all over the world allergies are increasing and there certainly has been an increase, especially in allergic rhinitis, in Hong Kong,” said Lee, the director of the Hong Kong Sanatorium and Hospitals new Allergy Centre.

“There has been a 10 percent increase in five years and around about 40 percent of the population have rhinitis.

“I see people of all ages suffering from asthma, food allergy, and eczema, and especially young children and babies.”

Lee, who has specialized in allergies at several of the UK’s top hospitals and who has published more than 400 papers and reviews on asthma and allergies, said in some cases people suffered multiple allergies.

“About 30 percent of babies and toddlers with eczema have food allergies, and 80 percent of babies with eczema will end
up with asthma," he said.

"Asthma and allergy often go hand-in-hand, and in some cases asthmatic symptoms turn out to be attributable to food allergy after accurate diagnosis."

An allergy is an abnormal reaction of the immune system caused by exposure to allergens such as insect stings, house dust mites, mold spores, certain foods and drugs. The body wrongly identifies these as harmful threats and in turn produces an antibody called IgE which binds with mast cells present throughout the body and triggering the release of powerful chemicals such as histamine which causes the symptoms of the allergy.

According to Lee there were several theories as to why allergies were more prevalent and growing in places like Hong Kong.

“There is one theory regarding lack of sunlight and vitamin D,” said Lee. “Vitamin D has immunosuppressive role and if you don’t have enough vitamin D then your immune system does not work so well and it goes haywire.

“There is quite a lot of evidence that shows the pattern of allergies all over the world match levels of vitamin D. The lower the vitamin D in a country, the more asthma you have. Since I have returned to Hong Kong, I have measured vitamin D in my patients and found a very significant number are vitamin D deficient.”

Vitamin D is formed naturally in the skin when the body is exposed to sunlight and plays an important role in protecting the body from a whole range of diseases, including those affecting the immune system.

Lee said fear of skin cancer was believed to be partly behind the rise of vitamin D deficiency with people choosing to cover up or wear sun creams that block out the sun rather than risk skin cancer.

In Asia, the fashion for pale skin and lifestyles spent increasingly indoors have also been seen as factors in rising incidences of vitamin D deficiency with a study by the University of Hong Kong claiming around six out of 10 Hong Kong people have insufficient level of the so-called sunshine vitamin...
Hong Kong's obsession with cleanliness, especially so after the SARS outbreak of 2003, means that people are living with less contact to bacteria. This reduces the pressure placed on immune systems so it reacts abnormally to substances and foods normally harmless.

Pediatrician Dr Marco Ho Hok-kung believes Hong Kong's indoor lifestyle is a factor in the development of allergies, especially so with children. However, this has been also exacerbated by the pollution and lack of clean air.

"We spend lots of time indoors in Hong Kong. Our children have busy indoor schedules with tutorials after school and the result is they don't take enough exercise outdoors," said Ho.

Ho, an associate consultant specializing in allergies at Queen Mary Hospital's Department of Pediatrics and Adolescent Medicine, said he too was seeing an increasing number of children with allergies, although some cases may be the result of increased awareness.

The most common allergy Ho comes across on a daily basis is allergic rhinitis which, he said, affected around one in four school children.

"This could be something to do with pollution but we don't really know. It is the most common allergy in pediatric practice and is sometimes misdiagnosed or neglected," he said. "Sometimes it is treated as a common cold but if it is allowed to persist it can disturb sleep and may lead to complications such as sinusitis and may precipitate to asthma."

While scientists still debate the exact reasons for the growing rate of allergies, some things are certain. One is the economic burden allergies place on health services and also the detrimental effect they have on the quality of life of those who suffer from them.

Globally, the economic costs associated with asthma exceed those of tuberculosis and HIV/
AIDS combined, according to the World Health Organization, while developed economies spend 1 to 2 percent of their health-care budget on asthma.

Lee estimates the cost of treating an asthma patient to be around $1,000 per year which includes hospital admissions and medication.

“That is an enormous burden on the economy of any country and that is only the direct cost and doesn’t include the cost of people taking time off work. If you add all these figures up, it is a very serious problem.”

The cost is also high for those suffering from allergies. In minor cases, it may be just discomfort and irritation, while in the worst case scenario can be life-threatening condition that severely affects quality of life.

“We know children who have rhinitis do not do as well at school as those without rhinitis because they cannot concentrate,” said Lee. Frank Wong says he believes allergies have affected the self-confidence of his son Hysan.

“The effect allergies have on quality of life can be dramatic, especially among teenagers with chronic eczema. Many are hurt by classmate or family members and this has a psychological effect.”

Wong is the chairman of Allergy Hong Kong, a group set up in 2008 to provide support and advice to sufferers of allergies and their families.

It also lobbies the government and health care providers to form a more coordinated effort into allergy treatment and communicates with the Centre for Food Safety regarding better monitoring and surveillance of food labeling to help those with food allergies.

One of the problem encountered by allergy sufferers was lack of awareness, especially in schools and restaurants, and lack of allergy specialists, said Wong.

“There is no professional organization giving out advice on allergies. We have good asthma guidelines but not for food allergies, eczema, or rhinitis. We don’t have allergy departments or centers like they do in other countries and although we have food labeling in place, I doubt it is as accurate as it needs to be. The Centre for Food Safety needs to do more monitoring and surveillance.”

Both Dr Ho and Dr Lee agree with Wong when he says Hong Kong lacks a coordinated health service dedicated to diagnosing and treating allergies.

Ho believes that rather than over burdening specialists with allergy referrals, improvements should be made to improve general care and the clinical pathways of treatment, which would allow minor allergies or certain treatments to be carried out by family doctors and in community clinics to
remove the burden on specialists such as ear, nose and throat (ENT) and skin experts.

Lee said from experience he had learnt that many people found it difficult to get help for allergies in Hong Kong.

“What happens is that people who have allergies either have allergies in the nose or the chest or the skin and they usually end up seeing an ENT surgeon or a dermatologist or both because they are very few allergy specialists in Hong Kong.

Lee said too often allergies were misunderstood as purely respiratory or dermatological problems and this lack of understanding was delaying treatment and making people suffer unnecessarily.

It is for this reason he returned to the city to head the Hong Kong Sanatorium and Hospital’s new Allergy Centre, which he says has the potential to be the best of its kind in the region.