

HKSH Lee Tak Hong Allergy Centre

Hong Kong Sanatorium & Hospital

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Service Hours

Mon, Tue, Thu & Fri: 9:00 am - 6:00 pm

Wed: Closed all day

Sat: 9:00 am - 1:00 pm

(except in the second and fourth week of each month, the Centre will open all day Saturdays)

Closed on Sundays and Public Holidays

Consultation by Appointment



Allergy Service



For enquiries and appointments,
please contact us

One-stop Investigation with State-of-the-Art Facilities

HKSH Lee Tak Hong Allergy Centre supports comprehensive assessments for wide-ranging allergic conditions. Supported by Specialists in Allergy and Immunology, registered dietitians and nurses trained in allergy management, our team can conduct all necessary tests and provide result interpretations for individual patients.

What is Allergy?

Allergies occur when the body's immune system inappropriately reacts against very small amounts of proteins (allergens), e.g. pollens, food or other substances. It is estimated that at least one in six people in the population has an allergy. In case of allergy, the body reacts by producing an antibody (IgE) against the allergen. When the allergen and IgE meet on the surface of certain types of cells, such as mast cells and basophils, very powerful chemicals, such as histamine, are released. These substances can cause symptoms such as a runny nose, asthma, hives, and in extreme cases life-threatening anaphylaxis, usually within minutes after contact with the allergen. Sometimes the provoking allergen is clear from the history of the reaction, for example hives develop within a few minutes to two hours after eating seafood. Allergies can often, but not always, be further confirmed by tests, such as a skin prick test, blood test and challenge test. In some cases, substances such as foods can cause a reaction after every occasion and show no evidence of an IgE to the substance. This is termed intolerance rather than a true allergy, and still needs to be diagnosed and treated.



Common Symptoms of Allergy

- Runny nose
- Watery eyes
- Itchy eyes, nose, ears, mouth or palate
- Hives
- Rashes
- Swelling of tongue and lips
- Vomiting
- Abdominal pain and diarrhoea
- Wheezing
- Anaphylaxis (shortness of breath and drop of blood pressure)

Common Allergens

- Food such as milk, egg, fish, peanut and nut
- Animal allergens – proteins from animals which are found in their skin, saliva and hair
- Tree, grass and weed pollens
- Moulds (indoor and outdoor)
- House dust mites
- Cockroach
- Venoms such as bee and wasp
- Drugs such as penicillin, anaesthetics and aspirin
- Natural rubber latex
- Occupational agents, such as flour causing bakers' asthma

Diagnosis of Allergy

Wide-ranging assessment tools are adopted for investigation of different allergic conditions, including food diaries and diagnostic diets, skin tests, blood tests, lung function tests and challenge tests. Proper tests are conducted to confirm the presence and causes of allergies.

Skin Prick Test

A skin prick test (SPT) is performed by placing a drop of an allergen solution on the skin and then gently pricking the skin with a sterile lancet to introduce the allergen into the top layer of the skin. A similar procedure is done with salt water as a negative control. Compared to the salt water control if the skin reacts to the allergen with an itchy raised surface area (wheal) and a surrounding redness (flare) after 15 minutes, it suggests that the person is allergic to that substance. It is good practice to also perform a test with the chemical histamine as a positive control in the same session; everyone reacts to this chemical and a positive result is indicative that the person has not been taking antihistamines recently. Antihistamines if taken will prevent any allergic reaction from occurring and give rise to a false negative result in the test.



Intradermal Skin Test

Intradermal skin tests are often used in the diagnosis of drug allergies. A small amount of allergen is injected into the skin. This form of testing is more sensitive than SPT for diagnosis and associate with more frequent adverse reactions. Therefore, patients will be monitored closely after testing.

Blood Test

Various blood tests are used in the process of allergic conditions diagnosis. Most commonly, blood tests are ordered to detect specific IgE antibodies to suspected or known allergens. Blood tests may be ordered to assess your tolerance to certain food allergens, especially during treatment time.

Lung Function Tests

Spirometry

Spirometry is the most commonly used lung function test and it will show up any obstruction to airflow, such as in asthma. Occasionally more detailed lung function tests are required.

Reversibility Test

Reversibility test is done in some cases where asthma may be suspected and to differentiate asthma from other conditions. For this test, the patient will be asked to perform spirometry before and after being given a drug (bronchodilator) to open up the airways. As asthma has a reversible element to the airways obstruction, significant improvement in airflow after using a bronchodilator drug suggests a diagnosis of asthma.

Peak Flow

A peak flow meter is a small device that measures the fastest rate of air that you can blow out of the lungs. Like spirometry, it can detect airways narrowing. It is more convenient than spirometry and is commonly used to help diagnose asthma. Many people with asthma will use a peak flow meter to monitor their asthma status.

Challenge Tests

Drug Challenge

The primary aim is to exclude or confirm allergy to a drug. Drug challenge involves introducing gradually increasing amounts of suspected drug by oral, inhaled or other routes. It carries a risk of severe allergic reactions, therefore must be carried out in an appropriate setting by competent staff and only if clinically indicated.

Food Challenge

Oral food challenge is the gold-standard for diagnosis of food allergy and intolerances. It is performed to either to diagnose or to rule out food allergy, especially when history, skin prick test and blood test show ambiguous results or if intolerance rather than allergy is suspected. A food challenge involves eating incremental amounts of the suspected food allergen, often under supervision to see whether there is any reaction.



Hydrogen Breath Test

A hydrogen breath test is a diagnostic procedure used to measure levels of hydrogen gas in breath after the consumption of a specific sugar solution. If you are not able to properly digest the sugar solution, the bacteria in their intestines will produce excess hydrogen gas, which will be detected in their breath. This test is often used to diagnose conditions such as lactose intolerance, fructose intolerance and small intestinal bacterial overgrowth (SIBO).

Treatment for Allergy

The Centre provides treatments for both allergy sufferers and patients with intolerances. Upon diagnosis, our allergist will provide an individualised management plan for each patient and this may include medical treatment with drugs, advice on environmental control including food control, immunotherapy and biologics treatment.



Allergen Avoidance

It means minimising or refraining from contact with allergens or allergen-containing substances in one's daily life. Our nurses can give you more information on aeroallergen avoidance such as house dust mite management. Allergic rhinitis and asthma can be mitigated if the triggering allergens are identified and avoided, reducing reliance on medication. In cases of food allergy or intolerance, our dietitians educate you on dietary management with food label readings, to find hidden sources of allergens and to avoid cross contamination. By avoiding the food allergen, allergic reaction risks can be greatly reduced.

Immunotherapy / Desensitisation

Immunotherapy (IT) or desensitisation is a potentially curative treatment for allergic diseases. The Centre has pioneered in offering immunotherapies for different allergic conditions. IT involves the administration of increasing doses of the provoking allergen either by the sublingual or subcutaneous route for aeroallergen such as house dust mites, cats and dogs.

Sublingual and oral immunotherapy are also applicable for patients suffering from food allergies for symptom relief. It involves the intake of a measured dose of food allergens under close monitoring to desensitise the patient. The dose of intake will increase gradually subject to the tolerance level during the treatment course. The Centre offers one-stop desensitisation service for patients suffering from common food allergies such as milk, egg, peanut, cashew and wheat.



Biologics

Biologics as a type of medication are made from living organisms and are used to treat a variety of conditions, including allergies. Omalizumab and dupilumab are two commonly used biologic medications as advance allergy treatment.

Omalizumab is a monoclonal antibody that works by binding to IgE, which plays a key role in allergic reactions. Omalizumab prevents it from triggering the release of histamine and other chemicals that cause allergic symptoms such as itching, swelling, and difficulty in breathing. Omalizumab is typically used to treat allergic asthma and chronic idiopathic urticaria (hives), and it may be used as combined therapy during oral immunotherapy for foods.

Dupilumab is a monoclonal antibody that targets a different pathway in the immune system involved in allergic reactions. Specifically, it blocks the action of two proteins called interleukin-4 (IL-4) and interleukin-13 (IL-13), which are involved in the inflammation and itching associated with allergic conditions such as atopic dermatitis (eczema) and allergic asthma.

Biologics usually require injections every two to four weeks for a period of time. These advance treatments are typically reserved for patients who have not responded to or cannot tolerate other types of allergy medications, such as antihistamines and corticosteroids. Besides omalizumab and dupilumab, there are a pipeline of biologics for different allergic conditions; our allergist will discuss the medical approach most appropriate for your individual needs.

Allergy Dietitians

As registered dietitians specialising in food allergies and intolerances, our allergy dietitians work closely with your allergists to guide you through different diagnostic and treatment diets and single out the exact allergens for proper avoidance. They also ensure that patients receive adequate nutrition despite the restricted diets, especially children and those with multiple food allergies.

You don't need to avoid the culprit food allergens for life if you show signs of outgrowing the allergy or undergo food immunotherapy. Our dietitians can help reintroduce previous allergens into your diets once you outgrow your food allergies.

For food intolerances, such as lactose intolerance or histamine intolerance, our dietitians can identify specific food triggers of your symptoms. You are required to eliminate the culprit foods for two to six weeks with guided reintroduction to help rebuild your tolerances.

Our dietitians also design and plan the forms, doses and escalation schedule for food oral immunotherapy, and ensure that the desensitisation foods are safely incorporated into your diets.



Allergy Kitchen

Food challenge tests can pinpoint the allergen and/or preparation methods that give rise to allergic reactions. Not common in similar centres all over the world, our dedicated allergy kitchen ensures high accuracy in food challenge tests by preventing cross-contamination between different food substances during preparation. It is also specially equipped for other food allergy investigations and treatments.

