For enquiries and appointments, please contact us at:

**Allergy Centre**

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**Service Hours**
Mon, Tue, Thu & Fri: 9:00 am – 6:00 pm
Wed & Sat: 9:00 am – 1:00 pm
(Except in the second and fourth week of each month, the Centre will close all day Wednesdays but open all day Saturdays)
Closed on Sundays and Public Holidays

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What is Allergy?

Allergies occur when the body’s immune system inappropriately reacts against very small amounts of proteins (allergens), which can be in pollens, food or other substances. It is estimated that at least one in six people in the population has an allergy. In this situation 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, for example mast cells and basophils, there is a release of very powerful chemicals, such as histamine. These substances cause symptoms, such as a runny nose, asthma, hives and in extreme cases life-threatening anaphylaxis. These symptoms usually occur within minutes after contacting the allergen. Sometimes the provoking allergen is clear from the history of the reaction, for example development of hives a few minutes after eating seafood. Allergies can often (but not always) be further confirmed by tests, such as skin prick test, blood test and challenge test. In some cases substances, such as food, cause a reaction on every occasion they are consumed but there is no evidence of an IgE to the substance; this is termed intolerance rather than a true allergy but 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, 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

The Hong Kong Sanatorium & Hospital Allergy Centre offers a comprehensive range of assessment tools to investigate allergic conditions. Our specially trained team conducts all necessary tests and interprets the results for our patients.

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

A small amount of allergen is injected into the skin with a syringe and needle in the intradermal skin test. This form of testing is more sensitive than SPT but can produce more frequent adverse reactions.

Blood Test

RAST (radioallergosorbent test) is a blood test used to detect specific IgE antibodies to suspected or known allergens.

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**
A food challenge test is performed when history, skin prick test and blood test show ambiguous results or if intolerance rather than allergy is suspected. It may also be performed to see whether a patient has outgrown a food allergy. A food challenge involves eating incremental amounts of the suspected food allergen, often under supervision to see whether there is any reaction.

**Mannitol Challenge**
To assess the lung’s irritability, a mannitol test may be performed as hyperirritability of the airways is a characteristic of asthma. The test is also useful in documenting improvements in asthma after treatment. The test is conducted by inhaling increasing doses of powdered mannitol under supervision and measuring spirometry or peak flow after each dose to assess response.

**Treatment for Allergy**
The Allergy Centre provides treatments for both allergy sufferers and patients with intolerances. After diagnosis, our allergist will provide an individualized management plan for each patient and this may include medical treatment with drugs, advice on environmental control including food avoidance, immunotherapy and anti-IgE treatment.

**Nutrition Consultation**
After diagnosis of a food allergy or intolerance, you will be referred to our dietitians for a consultation to discuss food avoidance. At the same time, our dietitian will assess your nutritional needs and prescribe a diet to meet your daily requirements.

**Immunotherapy**
Immunotherapy (IT) is a potentially curative treatment for allergic disease caused by grass and tree pollens, animal epithelium, house dust mites and bees or wasp venom. IT involves the administration of increasing doses of the provoking allergen either by the sublingual or subcutaneous route to desensitize the patient. IT is a long-established treatment which is used widely all over the world with proven benefits.

**Anti-IgE Treatment**
Omalizumab (Xolair) is a humanized monoclonal antibody which binds IgE in the circulation. The IgE is then cleared from the body, thereby preventing it from binding to cells to cause an allergic reaction. Omalizumab (Xolair) is administered by subcutaneous injection every 2 or 4 weeks depending on the baseline IgE levels and body weight.