

Report on the First HKIA Nursing and Allied Health Symposium

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The Hong Kong Institute of Allergy and the Hong Kong Respiratory Nursing College have co-organized the 1st HKIA Allied Health Symposium on 12 January 2016. The symposium, focusing on the practical aspects of food allergy management, invited Dr. Marco Ho, Consultant, Department of Pediatrics and Adolescent Medicine, Queen Mary Hospital, Ms. June Chan, senior dietitian, Allergy Centre, Hong Kong Sanatorium & Hospital and Ms. Asenath Lee, registered nurse, Allergy Centre, Hong Kong Sanatorium & Hospital as speakers. There were a total of 215 participants at this symposium, including 30 dietitians/nutritionists, 30 pharmacists, and 155 nurses. Please find below a summary of the symposium.

Food allergy is when our immune system wrongly attacks a food causing allergic symptoms. Although any food can trigger an allergic reaction, there are eight foods that cause over 90% of food allergies around the world. They are milk, egg, wheat, soy, peanut, tree nuts (almonds, walnuts, hazelnuts, pecans, etc), fish and shellfish.

Food Allergy Tests

According to Dr. Marco Ho, food allergic reactions can be categorized into acute allergic or delayed allergic reactions. Acute allergic reactions to foods happen within minutes to hours after food ingestion, such as angioedema, itching, breathing difficulty, tightening of airways and anaphylaxis. Delayed allergic reactions to foods can happen hours to days after the contact of a food, such as itchy skin, skin rashes or eczema. Delayed allergic reactions related to milk and / or egg allergies are more common in infants and toddlers.

A good patient interview is the first and most important step to understanding a patient's allergic condition. A clinician must have this good understanding before proceeding to further testing. Clinical testing for allergies can be categorized into the followings:

Skin Prick Test

The skin prick test introduces a food allergen extract into the skin to assess whether the patient is sensitized to the allergen. This test is often used for food allergy screening, but it needs to be interpreted in light of the patient's food history.

Atopy Patch Test

The atopy test introduces an allergen on to the surface of the skin for 48 to 72 hours. It also needs to be interpreted in light of the patient's food history; this test is less used than the skin prick test for diagnosis food allergy.

RAST – Food Specific IgE Test

The RAST – Food Specific IgE Test (blood test) identifies whether a patient carries specific-IgE antibody to a food allergen. These tests can help to identify an allergen, but cannot be used alone for the diagnosis of food allergy.

While negative results from the above allergy tests have strong predicting value, positive results only indicates food sensitization, the “tendency” towards developing a food allergy. According to international guidelines, oral food challenge is the only recognized definitive method that can diagnose food allergy.

Oral Food Challenge - The Gold Standard

Oral food challenge is the gold standard for diagnosing food allergy, which must be performed under the supervision of experienced health professionals. During an oral food challenge, the patient will need to ingest a very small and measured amount of the suspected food allergen. The amount will be increased as tolerated every 10-20 minutes. The challenge will end as soon as the patient develops a reaction to the food or until the completion of the food challenge protocol.

Unlike other allergy tests, an oral food challenge can identify the food allergen and confirm a food allergic reaction at the same time. The oral food challenge not only diagnoses a food allergy, but it can also identify the amount of foods that can be tolerated by a patient. Moreover, it is used to determine the initial dosage for food desensitization. However, for patients with uncontrolled asthma, a food challenge is not recommended.

Food Allergy Dietary Treatment

The main principle of food allergy dietary treatment includes strict avoidance of the food allergen, food substitution to ensure a well-balanced diet, and nutrition education by a registered dietitian. To achieve strict food avoidance, paying attention to hidden ingredients is important. For example, besides obvious food sources such as soy milk and tofu, a person with soy allergy will also need to avoid foods like soy sauce, Chinese rotisseries, and foods that cooked in soy oil. A registered dietitian plays an important role to educate patients on food avoidance, to achieve a nutritious diet, and to properly reintroduce the allergen when the patient has outgrown from the food allergy.

Infant feeding and Risk of Eczema

Cow’s milk protein is one of the common food allergens in infancy. Breast feeding ensures a good immune system and to reduce risk of eczema in babies. The current guidelines recommend exclusive breast-feeding until the baby reaches 6 months old. At 4 to 6 months, parents can start solid foods. If exclusive breast-feeding cannot be achieved, studies have shown that feeding partially hydrolyzed whey formula (pHF) can help to reduce risk of eczema in babies with family history of allergies. However, if the baby is allergic to cow’s milk protein, extensively hydrolyzed formula (eHF) is recommended for treatment. If allergic symptoms persist after changing to eHF, amino acid formula may be considered. Soy based formula may also be considered if baby is over

6 months old and without soy allergy. Goat formula or pHF should not be used as treatment for cow's milk allergy.

Early introduction of solids lowers the risk of developing allergies

Allergy prevention is one of the topic that most interest parents according to Dr. Ho. Recent studies have shown that feeding small amounts of solids to babies starting at 4 months can reduce the risk of developing food allergies later in their lives. Even in babies with pre-existing eczema or egg allergies, early introduction of peanuts under medical supervision can reduce their risk of developing peanut allergy.

Food Desensitization

Food desensitization is a treatment for food allergy. Before the desensitization, an oral food challenge is needed to determine the starting dose for desensitisation. The patient will need to consume this dose daily and the allergen dose will be increased as tolerated by the patient until a maintenance dose is reached. As the allergen dosage gradually increases, the patient's sensitivity to the allergen gradually decreases. Food desensitization cannot cure allergy, but can often help to increase the tolerance to a food allergen and to control symptoms.

“Patients going through oral desensitization will need to consume a specific food dose daily; therefore, medical staff must educate patients about safety issues and an emergency plan”, said Ms. Asenath Lee. Foods used for oral desensitization must be stored properly to prevent food borne illnesses and patients must avoid strenuous exercise 2 hours before and after the home doses. Patients are instructed to take anti-histamines if there is a mild reaction. If there is severe reaction, patients must use epinephrine auto-injector and to call for ambulance. Ms. Lee emphasized that patients will need to practice using the epinephrine auto-injector periodically, as patient can forget how to use them.

