PREVAILING CLINICAL PROBLEM: FOOD ALLERGY AND INTOLERANCE- AWARENESS

M. Manasa Padma*, Pooja Agarwal, G. Vimala, D. Savitha

Department of Pharmacy, Geethanjali College of Pharmacy, Cheeryal (V), R.R Dist Telangana, India. 500301.

ABSTRACT

Food allergy is defined as the adverse immunological response due to the triggering of certain protein. This article focuses on the increasing possibilities of food allergies. It throws light on the diagnosis, treatment and systematic treatment of the allergic symptoms. Various people have experienced various kinds of food allergies. A food allergy reaction occurs when your immune system overreacts to a food or a substance in a food, identifying it as a danger and triggering a protective response. About three million people in India suffer from peanut allergy alone; if food allergies are neglected they may lead to death too.

KEYWORDS: Food Allergy, Food Intolerance, Hypersensitivity, Anaphylaxis.

INTRODUCTION

Food allergy occurs when the immune system of human body considers a protein in the food as a threat to our body. This causes hypersensitivity and thus causes allergy. Food allergy may develop even at the tiniest exposure of the food. Therefore immediate care and after crucial care is required. Food allergy was reported to be caused by various edibles such as latex based products, tobacco, egg, gluten, plant based products.

Allergies All Around the World

Food Allergies which have become a common problem all across the globe has being the next biggest target for the medical ailments.

Food allergies differ with different places, nations and continents. Regionally food allergies for UK and USA are observed for peanuts, dairy products, shell fish, egg, and gluten. In other
countries like Switzerland, people suffer a common allergy from celery. In other places people have been observed for fruit allergies such as for mangoes, peaches and in Norway and Iceland, it was observed to have allergies for cods.

**Scenario of Indian Food Allergies**

Though India shares most of its allergies from US and UK. There have been few allergies reported in India regarding wheat, peanuts, eggs, ladies finger and eggplant. In India most of them nearly three million people have reported allergies suffering due to peanuts and eggplant\(^1\). Gluten allergy is the other common food allergy that today people are facing. It is cautiously observed that people who neglect the food allergies in early stages may lead to death.

![Top 8 Allergic Foods](image)

**Food Allergies and How They Occur**

A food allergy was a prevailing problem in the western part of the world. Now its occurrence has increased in the east including the Asian continent and the Indian sub-continents falling prey to the different types of food allergies. Various researches have been carried on these multiple types of food allergies and most of these have predominantly been observed in children than in adults, due to improper food habits, poor exposure to different foods, improper breast feeding habits as well as poor immunity etc. In countries like India westernization was found to be the major factor for food allergies and approximately 25\% of them were found to have atleast one food allergy.
Food Allergies and Food Intolerance

Food allergies occur only after an abnormal immune system response which results in the making antibodies in the body to ‘fight off’ a particular food. Food allergy takes place only when there is immune response, whereas in food intolerance it occurs due to the acute or innate immune response or the lack of the certain specific enzyme. Hence, collectively these are known as non-IgE mediated food hypersensitivity, or as food intolerance.

In allergies, even small amounts of food or even tiny particles of food may trigger the response from immune system. Therefore patient cannot usually tolerate even a small amount of the offending food without suffering symptoms. Thus making the diagnosis simple and easy. Food intolerances are much more common than food allergy. The symptoms in food intolerance are not easy to diagnose because the symptoms are not immediate unlike the former and also it may show multiple and a wide range of symptoms, therefore the food intolerance is said to be tricky. Differentiating food allergies and food intolerance needs close observations and maintaining them in diary with the food taken and symptoms eliminates its occurrence possibility.

In food intolerance, some people tolerate a reasonable amount of food, but taking too much or (too often) symptoms are visible because of intolerance and unlimited amounts.

Symptoms of food intolerance are varied. They may include general symptoms such as, dark circles under the eyes, night sweats, joint pains, fatigue, gastrointestinal symptoms such as diarrhoea and vomiting, irritable bowel, bloating, skin symptoms such as rashes etc. and other severe conditions.
Symptoms of Food Allergy

The Symptoms of a food allergy can range from mild to severe. It's not that because the initial reaction showing a few problems, not all reactions will be show the same symptoms. The food that triggered mild symptoms on one occasion may cause much more severe symptoms on the time. Sometimes the reactions or symptoms with severe allergic reactions may be a life threatening anaphylaxis.

This may also cause impaired breathing, a dramatic drop in blood pressure and may affect the heart rate. Anaphylaxis can be seen within minutes of exposure to the allergen food. It may be fatal to life.

The other symptoms may include dizziness, irritation, blue skin, repeated cough, hives, wheezing, breathlessness, inflamed throat and tongue as well as circulatory collapse. Generally these reactions have been observed after post two hours of food, rarely occurs even after 20 mins after the food consumption.

Diagnosis

A food allergy may cause an allergic reaction, therefore it is always best to observe the symptoms, and the duration of the symptoms up to how long they last. A food allergy may be developed at any time of age, it may also occur at childhood; therefore it is better diagnosed with the patient family history to see if any allergies inherited. It is best to observe the type and quantity of food consumed that stimulated an allergic response, the type of symptoms experienced after consuming the food, how long the symptoms start appear appearing, and how long did they appear last.

In such cases, a blood test may less accurately help to determine the allergy, where in which the immunoglobulin E in the blood of that specific allergen (food item). Immunoglobulin E is
an antibody which is closely related to allergic reactions. The IgE binds with the food item i.e., allergen and causes the mast cells to release the histamine which causes the allergic symptoms.

In such cases, a skin prick test will be much more useful. Whereas, a liquid is applied on the arm or on the back side and a prick is made for that liquid to seep in. Results may be reported after a 20 mins of the test. Blood tests are found to be a little less exact than the skin tests. One of the most accurate tests found for food allergies is oral food challenger test. This test is done under strict medical supervision; where in a small amount of allergen is injected orally to test the allergen symptom. Later there would be more gradual increase in the allergens to check the specific allergic reactions.

**Precautions to Be Taken**

The first line treatment as well as precaution is to avoid the products or foods that cause allergy. People usually have myths that these food allergies may be permanent. Of course
may or may not in few, because it was observed in few people that these allergies which come suddenly may go as they age and in some they may not, in some people it either develops resistance because of avoiding it for a long time.\[9\]

- Consulting a dietician may be a help to avoid the allergic food, that without causing any deficiencies and going for an alternative food.
- Incorporating a habit of checking the food we are allergic to.
- When eating out, practicing a habit of checking the menu and request the chef to prepare it without the ingredient we are allergic to.
- For severe food allergic patients, it is better to ask the medical practitioner to administer epinephrine auto-injections.
- Avoiding those foods that contain “may have” “may contain” the food you are allergic to.

**CONCLUSION**

A food allergy is a prevailing and an increasing clinical problem these days. The results about these allergies whether temporary or permanent are not yet established. It is said that the existence of these allergies may differ from person to person, depending on their family history, immunity, and region. Therefore the best precaution is the best exposure to all foods, good eating habits, as well as gaining good immunity. A proper diagnosis is required on the onsite of allergic reaction. Timely observation and treatment may rule out the possibility of food allergy.
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