Helping Your Patients with Allergies

The Challenge: All clinicians, at some time, deal with a patient's complaint of allergies. There are many clinical presentations of allergies with an estimated 20% of patients[1] (or 40-60 million Americans[2]) suffering from allergies of some kind that can present in many ways. One study suggests that 8% of American adults and 2% of children have overt food allergies. This can result in serious reactions with 40% of these children experiencing life-threatening emergencies.[3] Additionally, there are times where a patient assumes they have allergies when they have another problem that may have been undiagnosed.

Certain allergies, to latex for example, can cause contact dermatitis symptoms locally, but less obvious can also cause food allergies to bananas, avocadoes, kiwi, and chestnuts[4] resulting in peri-oral reactions when eating these foods. This is due to antigenic similarity (latex has antigens similar to those of certain foods, creating an immunological cross-reaction), and is an example of the obvious effects of a contact dermatitis as well as the more subtle mucosal symptoms seen with cross-reactions. These types of cross-reactions can be difficult to identify.

The focus of this advisory is to provide useful information in the identification of allergies, as these can often be overlooked and under-treated.

Common allergic symptoms:

Affected System	Symptoms
Nose, sinuses	Swelling of the mucosa, sneezing, discharge, itching
Eyes	Redness, itching, burning, watery eyes; can include lids
Airways	Sneezing, coughing, bronchoconstriction, wheezing, dyspnea, laryngeal edema, anaphylaxis
Ears	Feeling of fullness, possibly pain, impaired hearing and increased cerumen
Skin	Eczematous rashes, urticaria, itching, swelling
Gastrointestinal tract	Abdominal pain, bloating, diarrhea, maldigestion
Head	Headache
Nervous system	Anxiety, palpitations, tachycardia
Mouth	Glossitis, burning, irritation
Musculoskeletal	Muscle aches

Obstacles: Identification of allergic reactions is sometimes obvious as when a patient presents with seasonal sneezing, itchy eyes or coughing. Chronic stress can aggravate allergic conditions due to T helper 2 (TH2) - predominant response[5] driven by suppression of interleukin 12. A wide variety of foods can cause overt allergic responses with 90% of allergic responses caused by cow's milk products, soy, wheat, peanuts, eggs, tree nuts, fish and shellfish.[6] Additionally, there are food reactions that are less likely to cause anaphylaxis that can contribute to digestive, skin, and respiratory symptoms that are less easily defined by skin testing and can be missed as causative.

Often physical symptoms that are due to allergic reactions are vague, time-delayed, and it can be extremely difficult to identify the cause. Childhood allergies can appear to be "outgrown" only to return later in life with the patient being unaware that these substances are causing problems again.

There are numerous ways to identify the cause of allergic symptoms and all have their inherent problems. Skin testing (prick test, patch testing, and intradermal testing) works well for environmental allergen identification but is less reliable when it comes to food testing. The test itself is uncomfortable and has the risk of causing an anaphylactic reaction during the process in highly sensitive individuals.

Blood IgG and IgE testing is commonly used as an alternative to skin testing, but has the disadvantage of requiring the patient to have eaten the offending foods within the past week for optimal results.

There are other tests that are not as well accepted by conventional medicine, such as electro-acupuncture according to Voll or EAV testing. However, there are many providers who are using this test successfully for both food and environmental allergens. Muscle testing can be useful, but can be difficult to reproduce at times. Choosing a testing method will depend on the patient's preference and the physician's own experience with the different options.

The Evidence: The prevalence of allergies in the United States appears to be rising. They are common causes of significant disability which, especially in children, can be life-threatening.[1] The most common life threatening food allergen in both children and adults is crustaceans.[8] About 10% of people report allergies to penicillin, but studies have shown that 90% turn out to not be allergic.[9] It may be that there are less serious reactions that are occurring with this drug that do not show up on skin testing, or once the patients believes they react they don't get tested.

The Hygiene Hypothesis suggests that insufficient stimulation of the TH1 arm of the immune system leads to an overactive TH2 arm, which in turn leads to allergic diseases. Current thinking is that exposure to allergens at a young age keeps the immune system balanced and busy. The excessive use of antibiotics, and the use of antibacterial and anti-viral cleaning products is used to explain the increase in allergies since industrialization and the higher incidence in developed countries .[10] This hypothesis is supported by epidemiological data.

Here's How You Can Help: It is important to ask patients about their own history of diagnosed allergies, including childhood allergies that have, "gone away". Ask about family history of allergies as heredity is the most common risk factor for the development of allergic tendencies.[7]

A review of systems including digestive, skin, urinary, respiratory and head pain are important in determining systemic effects of allergies, especially those due to foods.

Identification of the causative agents should be an initial goal in the treatment of allergic reactions. Providers should choose testing methods that appear to work with their patients knowing that all testing methods have their drawbacks.

An anti-inflammatory diet or potential allergen avoidance diets can be used as a trial for patients, with systematic reintroduction of foods if the antigen cannot easily be identified. These are labor intensive, but have the advantage of being very effective for disciplined patients to identify their reactions themselves.

Treating allergies as an important part of whole person health care is necessary, and treating these symptoms in as holistic a manner as possible is an effective approach. Patients are often aware of side effects of antihistamines, decongestants and corticosteroids, and are often eager to try alternative care that has fewer side effects and addresses the causes of the allergic response.

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