Understanding Anaphylaxis:
A Guide to Severe, Life-Threatening Allergies

WHAT IS ANAPHYLAXIS?

Anaphylaxis (pronounced ana-fuh-lak-sis) is a serious allergic reaction that happens quickly and may cause death. Anaphylaxis can occur as a result of exposure to allergens including nuts, shellfish, dairy, eggs, insect bites, latex and medication, among other allergens. Food is the most commonly-identified anaphylaxis trigger and accounts for 30 percent of all anaphylaxis fatalities.

HOW COMMON IS ANAPHYLAXIS?

According to the 2010 American Academy of Allergy Asthma and Immunology (AAAAI) Practice Parameters, up to six million Americans may be at risk for anaphylaxis although the precise incidence of anaphylaxis is unknown and likely underreported. Numerous studies indicate that the rate of anaphylaxis has increased in recent years, particularly among those under 20.

TYPICAL SYMPTOMS

The signs and symptoms of anaphylaxis can vary from person to person and from one episode to the next. Symptoms can include:

- **Breathing:** wheezing, shortness of breath, coughing, tightness in the throat or chest, trouble swallowing, sneezing, nasal stuffiness or congestion
- **Circulation:** low pulse, dizziness, lightheadedness, chest pain, low blood pressure, shock, loss of consciousness
- **Skin:** hives, swelling, itching, redness, rash
- **Stomach Pain:** cramps, diarrhea, nausea, vomiting
- **Other:** anxiety, itchy or red eyes, watery eyes, headache, confusion, slurred speech, metallic taste in mouth

Although first time exposure to an allergen may only produce a mild reaction, repeated exposures may result in anaphylaxis.

THE DIFFERENCE BETWEEN FOOD INTOLERANCES AND FOOD-RELATED ANAPHYLAXIS

Food allergy is sometimes confused with food intolerance. A true allergy causes an immune system reaction that affects numerous organs in the body. Severe, life-threatening allergies can cause anaphylaxis immediately or within hours. Food intolerance symptoms are generally less serious and are limited to digestive problems that develop slowly. For example, people with lactose intolerance lack an enzyme that helps process the food, which can cause gas, bloating or abdominal pain.

DIAGNOSING ANAPHYLAXIS

Often times, patients and caregivers may not realize that they or their loved one is at risk of anaphylaxis until a reaction to an allergen happens. An allergist is best qualified to determine the allergen(s) that put you at risk for anaphylaxis. The allergist will conduct a thorough medical history, followed by a physical examination. Patients may be asked:

- what triggers a reaction (e.g., food, insect bite)
- the frequency of the allergy
- seasonality of the allergy
- severity of the allergy
- nature of the allergy symptoms
- the amount of time between being in contact with a trigger and the reaction

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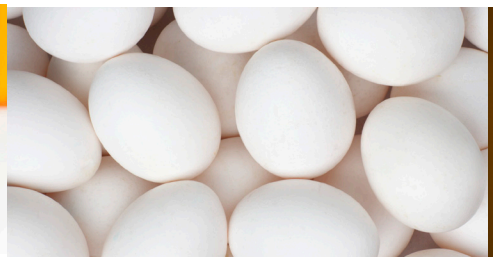

THERE ARE THREE MAIN ALLERGY TESTS:

- **Skin tests** are administered on a patient's arm or back by pricking the skin with a sterile small probe containing tiny amounts of a food allergen. The tests are considered positive if a wheal (resembling a mosquito bite bump) develops at the site.
- **A blood test** indicates whether food-specific antibodies called immunoglobulin E (IgE) are present in your body. When a person has an allergy, their immune system overreacts to the allergen by producing IgE. These antibodies travel to cells that release chemicals which cause an allergic reaction.
- **Food challenges**, which involve consuming a possible allergen in a controlled setting, may help confirm the diagnosis

While it is common for children to outgrow their egg, milk, and soy allergies, people who develop allergies as adults usually have their allergies for the remainder of their life. Children generally do not outgrow their allergy to peanuts. Periodic reevaluation may be needed to see if one is still allergic and to review how to avoid triggers and treat reactions.

AVOIDING ALLERGENS

The best prevention method of anaphylaxis is avoidance of the specific allergen(s). Some helpful tips to avoid allergens include:

- **Asking about ingredients** when eating at restaurants or when you are eating foods prepared by family or friends
- **Carefully reading food labels** and avoiding items that contain ingredients to which you are allergic
- **Educating family and friends** about you/your child's severe allergy trigger (e.g., food, insect, medication or latex) so that they can help you/your child avoid the allergen(s) which could cause anaphylaxis

TREATING ANAPHYLAXIS

When a severe, life-threatening allergic reaction occurs, epinephrine should be administered immediately and patients and caregivers should seek immediate medical attention. Patients and caregivers should always carry and know how to use an epinephrine auto-injector to treat emergency allergic reactions. Family members and close friends should be taught how to use an epinephrine auto-injector as well.

While recently-updated guidelines emphasize the importance of the life-saving role of epinephrine, surveys showed that two-thirds of patients and caregivers do not carry their epinephrine auto-injectors as recommended and 63 percent of caregivers of children at risk worry that others will not know how to use their child's epinephrine auto-injectors.

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