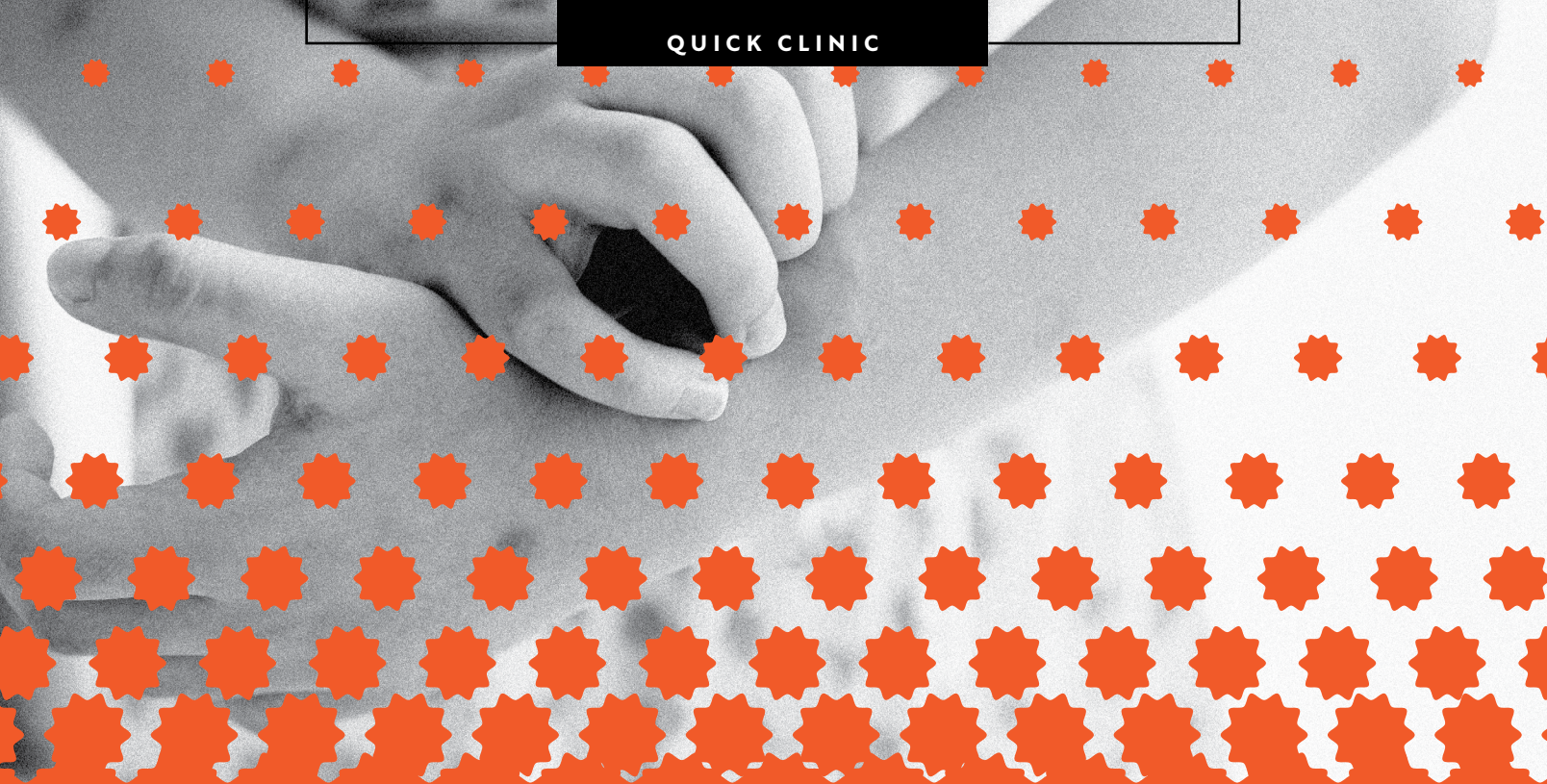




Small Patients,

BIG REACTIONS

What Medical Assistants Must Know About Pediatric Allergies

By Brian Justice

In 2024, almost 30% of children in the United States were diagnosed with at least one of three allergies: seasonal, eczema, or food. Allergies occur when the immune system mistakenly reacts to a normally harmless substance, such as pollen, pet dander, or certain foods. Exposure to that substance can trigger symptoms affecting the skin, nose, eyes, lungs, or digestive system.¹

Triggers vary, but the most common also include airborne particles, insect bites, medications, dust mites, and more. A family history of allergies or asthma can also indicate the likelihood of a child developing allergies.²

Notably, the percentage of allergies in children, especially food allergies, has risen over the last several decades.¹ One report states that such allergies increased 50% from 1997 to 2011, and another reported a 50% increase from 2007 to 2021. Among those

children, 42.3% have experienced severe reactions, with approximately 4 in 10 of them requiring emergency treatment.³

Tiny Triggers

"Allergies in general are on the rise, and a lot of it is attributed to environmental factors and some to lifestyle," says Manisha Relan, MD, an allergist and spokesperson for the American College of Allergy, Asthma, and Immunology. "There is also a strong genetic predisposition to allergies, so they are often inherited. We've also changed what we eat, especially with more processed foods."

Among children with allergies, seasonal allergies are the most common, affecting a little more than 20% of them. Eczema is next at almost 13%, followed by food allergies at 5%.¹ Common food allergens for children include milk, eggs, peanuts, wheat, soy, tree nuts, and shellfish. Allergies may also

be triggered by penicillin and other medications, fragrances, metals, or rubber that cause contact dermatitis.²

"Allergies and asthma are highly associated," says Frank Rando, CMA (AAMA), a clinical research associate at the University of Arizona Health Sciences Center. "When some kids get allergies, and depending on their severity, they can also develop an asthmatic exacerbation, a form of what's called allergic asthma, or asthmatic symptoms as a result of exposure to allergens in the environment or their diet."

"Climate change has lengthened the pollen season and caused higher pollen counts," adds Susan Laubach, MD, of Latitude Food Allergy Care in San Diego and an executive committee member and spokesperson for the American Academy of Pediatrics. "In areas with more pollution, the pollens concentrate on particles in the air and cause more severe symptoms."

A DOSE OF HOPE

Researchers are studying new ways to reduce the risk of severe reactions in children with food allergies. One of the most promising treatments is omalizumab (Xolair), a medication approved by the FDA in 2024 for adults and children age 1 and older with food allergies.

In a clinical trial, nearly 67% of children and adolescents who received omalizumab were able to tolerate the equivalent of about 2.5 peanuts without a moderate or severe allergic reaction, compared with less than 7% of those who received a placebo. Similar results were seen for milk, egg, wheat, cashews, walnuts, and hazelnuts. Although patients must still avoid foods they are allergic to, the medication can help reduce the risk of severe reactions when they accidentally consume them.⁶

Researchers also compared omalizumab with oral immunotherapy, a treatment that gradually exposes patients to small amounts of allergenic foods. In that study, 36% of participants receiving omalizumab were able to tolerate peanut protein and two other food allergens, compared with 19% of those receiving oral immunotherapy.

Researchers found that many participants receiving oral immunotherapy stopped treatment because of allergic reactions or other side effects, while no participants stopped omalizumab because of treatment-related allergic reactions. The findings suggest that both treatments can increase tolerance to food allergens, but omalizumab may be easier for some patients to tolerate.⁷

A Telling Reaction

Allergy symptoms depend on the organ system involved. Seasonal and respiratory allergies can cause nasal congestion, itching and discharge, sneezing, and coughing. Allergic conjunctivitis causes red, itchy, watery eyes. Skin symptoms include eczema, hives, and itchy welts. Asthma-related symptoms include coughing, wheezing, and shortness of breath.⁴ Food-related allergic reactions can cause hives, vomiting, difficulty breathing, or throat tightening that can even become life-threatening.¹ However, diagnosis should not be based on symptoms alone. It also requires a detailed history, physical examination, and, when appropriate, allergy testing.²

“Medical assistants should recognize symptoms such as hives, itching, swelling of the lips or face, difficulty breathing, wheezing, coughing, dizziness, and signs of anaphylaxis,” says Emily Martinez, a medical assistant with ACCESS Community Health Network in Chicago. “This experience reinforces the importance of early recognition of symptoms, clear communication among health care staff, and educating families on prevention and emergency response.”

Evaluation begins with a detailed med-

ical history, including the child’s symptoms, possible triggers, and family history of allergies or asthma, followed by a physical examination. Allergists may then use skin or blood tests, elimination diets, or medically supervised oral food challenges, depending on the suspected allergy.²

The most common allergy test is a skin-prick test, in which small amounts of suspected allergens are applied to the skin. A raised, red, itchy bump may indicate sensitivity to that substance. Other testing methods include intradermal or patch testing. Blood tests may be used when skin testing is not practical or when a child cannot stop medications that could affect the results. Elimination diets and medically supervised oral food challenges, in which a child is gradually given larger amounts of a suspected allergenic food while being closely monitored for signs of an allergic reaction, are performed in a medical setting equipped to manage allergic reactions if they occur.²

Nothing to Sneeze At

The top priority in caring for children with allergies and their families is their overall well-being. Children with allergies typically miss a week of school every year—and some

miss up to a month due to anxiety and severe reactions. Altogether, allergies and asthma cause a total of 12 million missed school days annually.⁵

“Kids are not adults,” says Rando. “Children are very sensitive to a lot of things. They’re unique organisms with very specific anatomical and physiological differences, and we need to treat them like kiddos.”

Reducing anxiety is crucial, especially since allergy testing may involve needles or multiple skin applications. “I use a calm and friendly approach, explain each step before it happens, encourage questions, and provide positive reinforcement,” says Martinez. “Distraction techniques such as conversation, toys, or deep breathing can help children feel more comfortable.”

Add to all that the emotional burden on families, and the financial stress when parents or caretakers must take time off from work.

“The most important thing,” says Dr. Laubach, “is to move away from fear-based counseling to empowering kids and families with information so they can effectively avoid their allergens, recognize symptoms, and feel confident.” ♦

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