



THE CHILDREN'S CARE NETWORK

ASK AN EXPERT: ALLERGY FAQ



As part of our quality education program, TCCN featured Dr. Gerald Lee and Dr. Brian Vickery in an informative presentation on **The Benefits and Potential Harms of Food Allergen IgE Testing**. We have highlighted some of the most frequently asked Q&As.

Ask the Expert: Dr. Gerald Lee and Dr. Brian Vickery

There has been a lot of misinformation when it comes to allergies, eczema, peanut allergies, and childhood allergy testing. Dr. Lee talked about how to reduce a childhood allergy profile; early testing and the recommendation not to eliminate potential allergy-inducing foods at a young age. Introducing foods early and reducing allergy testing can also help eliminate healthcare waste and expenditures for EpiPens; skin testing; and medications.

Dr. Lee went on to add that now we have good evidence that early introduction can prevent food allergies, and we can reverse food allergy rise in the state of Georgia to give our patients high quality evidenced based info with their child's best interest at heart.

Q: Are you saying we shouldn't test for allergies?

It's not a yes or no answer because the test results can yield a false positive and can't classify your status accurately. It's not how the tests work. Doctors can get bad info that can lead us in the wrong direction. Our goal is to help parents with informed decision making when it comes to testing.

Q: Why has the number of reactions increased?

Anytime a disease gets more common it's due to increased awareness and testing, which leads to an increase in incidence. The best studies show that in fact peanut allergies and allergic diseases in general and autoimmune disease; heart disease and depression – all inflammatory diseases driven by environmental factors are increasing across the board.

Q: Has the LEAP study made an impact on that increase?

In the countries that have adopted the guidelines widely; we are starting to see changes. For example, in Australia it's very different, because they introduce foods like peanuts early. The implementation is lagging in the U.S., which is why we are doing this education. When we write new guidelines, it takes a while. There is latency and barriers to implementation. Education like this will help and the sooner we can provide more, the sooner the cases will decrease.

Q: I have seen a lot of babies whom I have diagnosed with GERD or cow's milk protein allergy or food protein-induced allergic proctocolitis. All these kids get placed on a cow's milk protein-free diet. I recommend that families re-introduce cow's milk protein at the 1 year mark. However, should I be encouraging families to trial re-introduction earlier?

Dr. Gerald Lee: There are recent reports that children with food protein-induced allergic proctocolitis (FPIAP) (also called cow's milk protein allergy and/or intolerance or non-IgE-mediated milk allergy) have approximately a two-fold higher risk of IgE mediated food allergy. (Reference: AAP.org)

Therefore, there is some momentum to consider reattempting cow's milk protein earlier than 12 months of age. The international milk allergy guidelines recommend rechallenging to milk within 4 weeks to reconfirm the diagnosis to avoid unnecessary avoidance of cow's milk. They also risk stratify infants with or without eczema on how best to reintroduce milk. I know that this level of complexity doesn't occur in the US but I am linking the reference and proposed algorithms to you for your consideration.

In my opinion, in a higher-risk child with eczema, shared decision making can be done to see if the parent is willing to reattempt the milk as a tiebreaker to confirm the cow's milk protein allergy and potentially reduce the risk of milk allergy.

See international milk allergy guidelines here: NIH.gov

Q: With a family history of anaphylaxis to shellfish in both parents, how do we approach evaluation of the child? Any thoughts on shellfish allergies and cross reactions?

Dr. Tricia Lee: Generally, there is no data to support that a family history of shellfish allergy is a significant risk factor for the child to have shellfish allergy.

The universal recommendation for infants is to introduce allergenic foods early and shellfish testing is not necessary prior to first ingestion, especially because there can be false positives. One of the reasons for false positive testing is because of cross reactivity with cockroach and dust mite allergens. However, children can be allergic to shellfish (shrimp, crab, lobster) but not scaled fish (salmon, cod, tuna) and vice versa.

Parents may be understandably nervous to do this on their own, and therefore the allergist/immunologist can offer shellfish introduction under medical supervision to alleviate anxiety if necessary.

Q: Do you use Zyrtec (cetirizine) or Benadryl (diphenhydramine) for mild reactions? AAP guidelines seem to recommend Zyrtec (equal onset, longer duration).

Dr. Gerald Lee: In our allergy/immunology clinic, we have replaced cetirizine for the treatment of histaminergic urticaria and angioedema, with a dose of 0.3mg/kg (maximum 10mg). Cetirizine has an onset of action of 20-60 minutes which is equivalent to the onset of action of diphenhydramine of 15-60 minutes. Multiple studies have also demonstrated similar efficacy in treatment of urticaria, allergic reactions, and cutaneous food allergic reactions. However, the safety profile of cetirizine is vastly superior to diphenhydramine. Diphenhydramine has been associated with sedation, motor vehicle accidents, reduced school performance, and anti-cholinergic side effects. Finally, as you have stated, cetirizine has a much longer duration of action of 24 hours.

At this time, our practice uses diphenhydramine when the oral route is not available and we have to give antihistamine IM/IV or if we are attempting to provide comfort at night for children who are itching due to eczema by using diphenhydramine for sedation.