Choosing Wisely on the use of specific IgE to screen for food allergy in the context of eczema

Dr Shuayb Elkhalifa, Salford Royal NHS Foundation Trust, Manchester

Specific IgE levels for foods are frequently raised in patients with eczema and are commonly falsely positive or clinically irrelevant. Without a history suggestive of immediate allergy, positive results should be treated with caution.

Benefits
Eczema affects approximately 20% of preschool children, with two-thirds developing symptoms in the first year of life. Patients may attempt dietary exclusions in order to reduce eczema severity and seek allergy testing to ‘screen’ for food allergy and to guide such dietary exclusions.

A recent Cochrane review of dietary exclusions for children and adults with eczema did not identify any evidence to support the benefit of dietary exclusion in patients with no clinical history suggestive of immediate food allergies.

Appropriate diagnosis and treatment of IgE mediated immediate allergy is both cost effective and essential for optimal patient care.

Risks
Patients generally regard IgE tests as diagnostic for allergy, however specific IgE levels are frequently raised in patients with eczema and are commonly false positive or clinically irrelevant. Screening for food allergies by measuring specific IgE alone is therefore inappropriate: misdiagnosis may lead to unnecessary dietary restrictions, nutritional deficiencies and a reduced quality of life.

Evidence has also been published demonstrating that the removal of milk and/or egg from the diet of individuals with positive specific IgE tests to those foods, but previously tolerated them, has resulted in the occurrence of severe allergic reactions including anaphylaxis on re-exposure.

In addition, blood tests for food allergies can cost hundreds of pounds, and unnecessary referrals to specialist allergy services can add to the total cost.

Alternatives
Detailed clinical history is the key in diagnosing patients with immediate IgE mediated allergies. There is no one diagnostic test for allergies in patients with eczema. The results of IgE tests, skin prick testing in combination with a relevant clinical history provide more accurate assessment of the patients’ allergy status.

Clinical assessment should include evaluation of eczema severity so that an appropriate eczema management plan can be agreed with the patient.
Nothing
Not seeking medical assessment of symptoms suggestive of food allergy puts the patient at risk of serious allergic reactions in the future.

There is no evidence to support empirical dietary exclusions in patients with eczema without a history of immediate food allergy. For those patients who believe that certain foods may exacerbate their eczema, these concerns should be explored with a health professional experienced in eczema and allergy and any exclusion diets undertaken under the guidance of a specialist dietitian.

8. American Academy of Allergy, Asthma & Immunology, Choosing Wisely Recommendation, 2014. Don’t perform food IgE testing without a history consistent with potential IgE-mediated food allergy.
9. American Academy of Allergy, Asthma & Immunology, Choosing Wisely Recommendation, 2016. Allergy Tests
11. Drosdak, Alyssa D; Spears, Kaitlyn; Erwin, Elizabeth A; Mikhail, Irene. Serum IgE Results Differ According to Indication for Peanut Allergy Testing. Journal of Allergy and Clinical Immunology, suppl. S; St. Louis Vol. 137, Iss. 2, (Feb 2016): AB141. DOI:10.1016/j.jaci.2015.12.595

