

Friday 24 May 2024

Allergy testing update

Dear colleagues

We have noticed that there has significant increase in both the volume of IgE requests and the number of IgE allergens tested per patient. Request of up to 60 allergens are not uncommon raising concerns about potential for false positive allergy tests to cause harm in individual patients. We would like to provide some advice about the use of IgE blood tests and introduce new changes to the IgE testing process and interpretative reports.

Food allergy testing

The diagnosis of food allergies is based on the clinical history with supportive evidence from either skin prick tests or IgE blood tests if skin prick testing is not available. **I wish to stress that indiscriminate or screening tests are strongly discouraged due to limited specificity of food IgE test for allergic disease. Indiscriminate IgE blood tests can lead to nutritional deficiencies, growth disorders, unnecessary elimination of food, anxiety, reduced quality of life and in the case of elimination diet, induction of allergic disease including anaphylaxis to previously tolerated foods.**

Symptoms

Food allergy generally occur within 2 hours of ingestion can lead to itching, tingling or swelling within the mouth (usually within a few minutes) sometimes with cutaneous, gastrointestinal respiratory and cardiovascular symptoms. If systemic symptoms occur without oral symptoms, food allergy is less likely and especially so if delayed beyond two hours. Symptoms occurring up to 4-6 hours after ingestion of food can be seen in co-factor dependent food allergy syndromes (co-factors such as exercise and NSAID) and should be referred to the allergy clinic. **If symptoms are not typical but are concerning it is safest to refer to the allergy clinic. All patients with anaphylaxis, severe reactions to food should be referred to an allergy clinic according to NICE guidance. If symptoms are not typical but are concerning it is safest to refer to the allergy clinic.**

The purpose of food allergy tests is to confirm clinical diagnosis and in secondary care stratify patient at increased risk of anaphylaxis or persistent disease (children). Symptoms (urticaria, angioedema, eczema flares, and isolated gastrointestinal symptoms) that have no close temporal association to food (onset at night or early morning more than 2 hours after food has been consumed) are unlikely to be IgE mediated. The clinical history should focus on description of symptoms, timing after ingestion of food and drink consumed, (with ingredients if meal contains several potential allergens), any medication taken, treatment required for episode and a background clinical history and list of regular medication. Atypical presentations and reaction following composite meals should be referred to an Allergy clinic.

In all cases only food reported to provoke symptoms should be tested. On average individual with pollen food allergy syndrome only react to four foods, although individual sensitised to multiple pollens may report reactions to many more foods. NICE guideline *How should I assess a person with suspected food allergy* [NICE May 2023] advise against indiscriminate testing of food allergens.

Service changes

1. Specific IgE food allergen tests will be limited to 10 per patient. We strongly encourage practitioner to refer to the NWLP laboratory website for advice on the diagnosis and investigation of food allergy syndrome.
<https://www.nwlp pathology.nhs.uk>

2. Practitioners who are unsure of which allergen to request can email the Infection and immunity laboratory (imperial.infection.immunity@nhs.net) for advice on further allergen tests with the following information; description of symptoms, timing after ingestion of food and drink consumed and treatment needed for episode, whether there is a history of asthma, hayfever and eczema and a list of current medication. The laboratory can select allergen profile.
3. If further advice is needed on allergen requesting, a telephone/video appointment can be arranged with a consultant immunologist.
4. The laboratory will stop reporting cut off intervals/grades, and report the allergen specific IgE concentration using the test reference interval 0.1 -100 kUA/L as there is increasing evidence that patients with peanut and hazelnut levels between 0.1-0.35kUA/L have positive oral food challenges
5. Interpretative comment will be replaced by an electronic link to the NWLP website guidance on diagnosis and investigation of allergy syndromes and will also include a link to contact the immunology laboratory for health professionals only.

Aeroallergen testing

Common aeroallergen in the UK include grass, tree, weed pollens, house dust mite, cat and dog dander and fungal spores (Aspergillus). IgE testing is recommended for diagnosis of allergic rhinitis which affect up to 20% of UK adults. Pollen sensitisation can lead to the pollen food allergy syndrome. **The characteristic foods, rapid-onset of oral-pharyngeal symptoms means that pollen food allergy syndrome can often be diagnosed on clinical history alone. We recommend that practitioner look up our website (<https://www.nwlp pathology.nhs.uk>) for list of foods, clinical history and guidelines as to when further allergy testing is required for the pollen food allergy syndrome.**

Service change

1. The laboratory will stop reporting graded intervals and issue a report with the IgE antigen levels within our current reference interval of 0.1-100 kAU/L.
2. Interpretive reports will be replaced by electronic link for our guidelines on the diagnosis of allergic disorders and will also include an electronic link to contact the laboratory for health professionals only.

Drug allergy

The laboratory will cease to offer OPD penicillin IgE testing due to its limited sensitivity and specificity. Practitioner concerned about possibility of penicillin allergy where there are no other anti-microbial alternatives, are encouraged to use the PenFAST questionnaire which will allow them to consider to relevant clinical team for challenge tests or to allergy clinic for skin prick/intradermal tests. https://gxmd.com/calculate/calculator_752/pen-fast-penicillin-allergy-risk-tool)

Service change

Discontinuation of penicillin IgE blood test unless authorised by Consultant Allergist/Immunologist.

Peter Kelleher
Consultant Immunologist
North West London Pathology

Mary Guckian
Consultant Clinical Scientist
North West London Pathology