

Allergy Test Request

This is a brief guide for Primary Care Physicians who are requesting specific IgE tests (formerly known as RAST tests). Further reading is signposted in the references.

Evaluation of patients with suspected Type 1 Hypersensitivity (immediate allergic reactions) relies on a detailed, allergy focused clinical history. The diagnosis can be supported by tests such as specific IgE tests, skin prick tests, intradermal skin tests and challenge tests (oral provocation tests). Skin tests and challenge tests (provocation tests) should only be performed within a hospital setting under the supervision of an appropriate Specialist due to the risk of inducing anaphylaxis.

Specific IgE tests are useful in the diagnosis of allergy but interpretation can be difficult due to false positive and false negative results. A negative specific IgE test does not necessarily exclude an immediate allergy (e.g. in the case of some food allergies, certain drug allergies) while positive specific IgE tests may not be clinically relevant (e.g. slightly elevated results in a patient with atopic eczema). **Specific IgE tests should not be used as screening tests.** Offering a diagnosis of allergy to a patient solely based on the results of their specific IgE tests can often be inaccurate. At worst it can lead to harm to patients through unnecessary dietary restriction.

The clinical utility of these tests relies on having a high pre-test probability (**high clinical index of suspicion of allergy**) to make the results of testing more clinically meaningful. An allergy (IgE – mediated reaction) to a particular food or 'exposure' may be suspected if:

1. There are clinical symptoms/ signs classically associated with Type 1 hypersensitivity reactions (**urticaria, skin itch, angioedema, vomiting, abdominal pain, anaphylaxis**)
2. There are ocularrhinal symptoms present (nasal itching, sneezing, rhinorrhoea or congestion [with or without conjunctivitis]), particularly if an aeroallergen allergy is suspected (e.g. hayfever).
3. Symptoms occur **rapidly** (classically within 20-30 minutes, and up to 2 hours in most cases) following exposure to the suspected allergen and last for a few hours only (provided the exposure is removed).
4. Symptoms generally respond to anti-histamines, adrenaline (+/- steroids)
5. Airway involvement (difficulty in breathing/choking) and circulatory compromise (feeling faint / loss of consciousness) indicate **anaphylaxis, which is a medical emergency** (see Anaphylaxis guidelines)

Symptoms such as gastro-oesophageal reflux, atopic eczema and migraine are not associated with Type 1 hypersensitivity/ IgE mediated allergy (nor are severe reactions such as erythema multiforme, Stevens Johnson Syndrome) – **specific IgE testing in these settings is not indicated.**

Some other clinical considerations in evaluating patients:

1. Patients who present with symptoms suggestive of Type 1 hypersensitivity reactions may benefit by keeping a symptoms and exposures diary, to see if there are any patterns/ triggers to their symptoms.
2. Patients with symptoms of angioedema should **not be prescribed ACE-inhibitors**, and if they are on one of these medications, then it should be stopped and substituted with an alternative class of medication.
3. If urticaria/ angioedema symptoms occur 'randomly' without any specific allergic triggers, then consider a diagnosis of Spontaneous urticaria / angioedema (please see reference for BSACI guidelines)
4. C1 inhibitor deficiency/ Hereditary Angioedema is a rare cause of angioedema, and its clinical presentation may differ from that of allergic or spontaneous angioedema (please see RefHelp guidelines on Complement testing; and BSACI guideline for more information)
5. **References**

6. Walsh J, O'Flynn N. Diagnosis and assessment of food allergy in children and young people in primary care and community settings: NICE guideline. Br J Gen Pract 2011; 61(588) 473-475
7. Powell, RJ, Leech SC, Till S, Huber PA, Nasser SM, Clark AT. BSACI guideline for the management of chronic urticaria and angioedema. Clin Exp Allergy; 45: 547-565
8. Emergency treatment of anaphylactic reactions: Guidelines for healthcare providers <https://www.resus.org.uk/anaphylaxis/emergency-treatment-of-anaphylactic-reactions/> (accessed 14.3.18)