



ALLERGOLOGY - GENERAL

IN ADULTS AND CHILDREN

Because of the heightened prevalence of allergies, these have become a serious health issue in developed countries: 30% of the population suffer from respiratory allergies and 4% from food allergies.

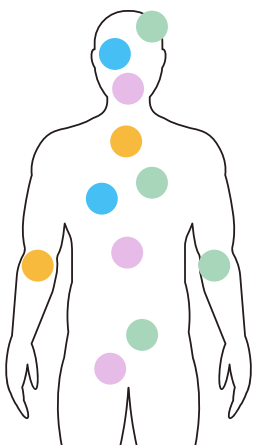
In recent years, as prick tests have become less available, the alternative has been to test for specific allergens (mixes, total extract, molecular allergens). However, these biological examinations must form part of an overall clinical approach in order to find evidence for an allergic mechanism, identify what is responsible, assess the severity and also help manage treatment (elimination from diet, cooking, medication, desensitisation etc.)

Step 1: Clinical history taking

The clinical history is crucial for guiding the diagnosis towards a suspected IgE-mediated allergy.

1 Symptomatology

The World Allergy Organisation (WAO) has established a list of the different symptoms that point towards the immunological origin of food and respiratory allergies.



Respiratory signs

- Rhino-conjunctivitis
- Asthma

Anaphylaxis

- Tachycardia
- Drop in blood pressure
- Fainting
- Angio-oedema

Cutaneous signs

- Hives
- Eczema
- Angio-oedema

General signs

- Failure to gain weight in children
- Weight loss
- Headache
- Asthenia
- Snoring
- Sleeping disorders

Gastrointestinal signs

- Oral allergy syndrome:**
- Oropharyngeal itching
 - Oral swelling
 - Nausea
 - Vomiting
 - Diarrhoea

2 Time frame

In addition to the clinical signs themselves, the time within which they appear can be an argument in favour of the presumption of an immunological reaction. A careful investigation of the **circumstances of occurrence** and **diet** where applicable can precisely guide the diagnostic tests to prescribe.

A true food allergy becomes apparent in 2 to 6 hours of ingestion.

For its part, a respiratory allergy becomes chronic and the symptoms recur during the seasons.

3 Exposure to allergen

In a food allergy, it is of importance to note the nature of the foodstuff involved (cooked or raw).

In respiratory allergies, the season plays the principal role in the identification of the allergic agent.

Step 2: Biological testing

1 Orientation test

The prescription of mixes of respiratory or food allergens related to the data from the clinical history makes it possible to test several hypotheses.

Our reports include the following:

- the composition of the mixes to help you later on to prescribe unit tests and also to guide confirmation tests
- interpretation for some syndromes (cow's milk, peanuts, grasses, eggs etc.)

Regarding suspected allergies to medicinal products or hymenoptera venom, there are no allergen mix tests.

Multiple allergen tests with a quantitative response per allergen (CLA30®) must not be used as screening tests, since they lack sensitivity and specificity for some allergens, and are trickier to use.

2 Confirmation test

In order to precisely identify the sensitisation or sensitisations and quantify reactivity, specific unit IgE tests must be prescribed.

Depending on the context (food, respiratory, venom etc.), specific native allergen (whole natural molecule) IgE tests are used and/or recombinant allergen (molecular allergen) tests. These only make it possible to test some allergenic targets in support of a diagnosis and help reach a treatment decision (cooking the foodstuff, cross-reaction between pollen/food, severity of symptoms etc.)

In practice



Prescription procedure

No minimum time required after an allergic event

No interruption of medicinal treatments before carrying out specific IgE tests

CNS coverage rules: no more than 6 specific IgE tests (mix, unit or molecular) per prescription

Details of content of mixes in the report

Interpretation by syndrome in our reports (grasses, cow's milk, peanuts etc.)

Patients' serum is stored for one month, so that you can prescribe more IgE tests without having to take a new patient sample

Unit IgG tests or mixes are not recommended while exploring allergic phenomena

In our test catalogue, you will find all the allergens available (mixes, unit and recombinant)

Bionext can collect your sample in the office every day; for more information:

☎ 27 321 285 ✉ bio@bionext.lu



Key points

The diagnosis of allergy is supported by four key points:

1. Presence of evocative symptoms compatible with allergy
2. Appropriate chronology between exposure to the allergen and the occurrence of symptoms
3. Identification of one or more allergens compatible with the symptoms observed
4. Tests with allergen mixes, then, if positive, breakdown into unit and recombinant IgE tests

