



ALLERGY

Paradox of a widespread and unrecognized scourge



Allergy or type 1 hypersensitivity

Allergy is a disturbance of the immune system that corresponds to a loss of tolerance towards substances that are a priori harmless: allergens.

Our body defends itself against an external enemy, which we have breathed, drunk, eaten, touched or which has stung us, in an excessive way by producing IgE: This is the allergic reaction.



The Allergy Mechanism has two phases:

1) Sensitization: This is the first contact with the allergen

Our immune system recognizes the element as a danger and starts to produce specific antibodies against it.

It will keep "in memory" this element as an aggressor and the means to defend itself against it. This phase is asymptomatic.

2) The allergic reaction: This is the second (and subsequent) contact with the allergen

The IgE antibodies are ready to intervene and trigger a series of reactions by releasing large amounts of histamine and other inflammatory substances.

The severity and intensity of the allergic reaction depends on our genetic predisposition and exposure to the substance.

Allergy figures

The **WHO** ranks allergies as the 4th most common chronic disease in the world.
1 in 3 people born after 1980 is allergic.
In **2050**, the organization predicts that 1 in 2 people will be allergic.

For example, in France today, 25 to 30% of people are affected.
4 million people are asthmatic, 80% of whom have asthma of allergic origin.
2% of adults have a food allergy.

Different types of allergens

Pneumallergens

They penetrate by air such as:

- pollens (from flowers, trees, grasses);
- animal hair (the cat is the main culprit but not the only one);
- dust mites (50,000 species, feeding on skin and hair debris);
- molds (indoor and outdoor).

Trophallergens

They enter by ingestion, which means through food.

90% of food allergies are due to only 10 types of food, the most frequent being cow's milk, eggs and peanuts.

Do not confuse: Allergy and intolerance!



In the case of allergy, it is the antibody and the immune system that are involved.

In the case of intolerance, it is an enzymatic defect that makes a food not digested correctly.

Contact allergens

They act by direct contact with the skin, the leader being Latex.

But cosmetic products, perfumes and household products are also frequently involved.

Medicines

In principle, all medicines or their excipients can cause allergies. Antibiotics and anti-inflammatory drugs are the best known.

Venoms

From ants, bees, wasps to name a few..

Symptoms

They are numerous and varied with:

- Skin signs; pimples, hives, edema;
- ENT signs: rhinitis, cough;
- Asthma;
- Digestive signs: cramps, nausea, vomiting;
- General signs: from simple malaise to anaphylactic shock.

Risk factors

Family predisposition or atopic terrain

It is the allergic predisposition that is passed on, not the allergy itself.

Triggering factors

These are the allergens.

Aggravating factors

They are numerous:

- Air or domestic pollution;
- Smoking;
- Viral infections;
- Diet;
- Physical effort;
- Climate.

More and more allergic people

The hypotheses are varied and diverse:

- Hygiene hypothesis;
- Diets;
- Air pollution;
- Climate change;
- The modification of the indoor environment;
- The multiplication of drugs and antibiotics;
- Stress;
- Lack of vitamin D.

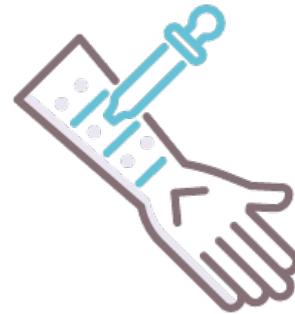
Cross-allergies

A cross-allergy occurs when a person who is allergic to one substance reacts to another because there are similar proteins in both substances even though they have nothing in common.

Diagnosis

It is based on:

- Careful questioning;
- The symptoms;
- Triggering circumstances;
- The history;
- Clinical examination;
- And blood tests and prick tests.



Treatment

It depends on the importance and certain types of allergies.

First of all, avoidance of the allergen is obviously recommended.

Then a medicinal treatment is proposed which will essentially reduce the symptoms.

Other types of treatment such as desensitization or allergen immunotherapy, food desensitization or tolerance induction have good results.

