

Allergies to **wasp and bee stings** have threatened human life since antiquity.

Nowadays science has enabled allergy sufferers to live in harmony with these tiny “winged terrorists,” otherwise so useful in our Planet Earth’s lifecycle.

The Solution:

HYMENOPTERA VENOM DESENSITIZATION

What are Hymenoptera?

Know about them...

Hymenoptera are insects whose sting represents a real danger to humans. Allergy to their various venoms can cause a severe systematic reaction in about 3% of adults and 0.8% of children in the general population, and can reach 40% in those with more exposure such as beekeepers or forestry workers.

These insects, whose sting can be fatal for certain “sensitized” people, include three species: Apidae (domestic bees), Vespidae (wasps and hornets), and Formicidae (fire ants). The first two species, Apidae and Vespidae, are common in all our regions while

Formicidae is especially rampant in South-eastern North America, threatening tourists and especially golfers.

... and control them

For some people, a first contact with these venoms can cause their immune system to react excessively, thus producing specific immunoglobulin (IgE) for this venom. In these “sensitized” individuals, re-exposure to this same venom will trigger a response that can lead to anaphylaxis.

Immunotherapy is the only effective method known to counter this threat, with a success rate of 98%. It is therefore important, in the event of serious reaction to a sting, to consult your doctor who will refer you to an allergy specialist. They in turn, after completing a detailed questionnaire and clinical tests, will be able to provide a diagnosis and identify the insect(s) responsible. They can then propose proper treatment to desensitize you and thus improve your quality of life.

IMMUNOTHERAPY

Hymenoptera venom immunotherapy involves introducing venoms by subcutaneous injections (under the skin) into the organism to which it is sensitized, in increasing doses, in order to build a tolerance to wasp or bee stings. These injections must occur under medical supervision and followed by a 30-minute observation period in the doctor’s office.

The desensitization protocol consists of two successive phases:

1- The Progression Phase

It is intended to **gradually** reach a dose that will serve as the maintenance regimen:

Beginning with a very weak dose of the appropriate venom, the amount of allergen is gradually increased until it reaches the maximum dose required for maintenance. A specialist in this field must perform this progression in an immuno-allergy clinic.

The specialist will follow very specific criteria to determine the duration of this phase, which can occur in two ways:

Gradual Progression: A maintenance dose is reached in 8 weeks.

Accelerated “Ultra Rush” Progression: A maintenance dose is reached in a single day, with premedication and under constant doctor and medical staff supervision.

2- The Maintenance Phase

Any systemic reactions observed, such as hives, coughs, nasal congestion, difficulty breathing, etc., require immediate medical attention. They occur within 30 minutes after the injection and must be treated by the doctor. This potential risk alone justifies the reason for the monitoring period in the doctor's office.

Swelling reactions to at treatment injection site may continue for several hours and persist up to several days. They are inflammatory and not dangerous, but can be very uncomfortable. Applying ice, taking antihistamines or antileukotrienes might relieve this discomfort.

Treatment Kit Storage and Transportation

The treatment kit must always be kept refrigerated (2° to 8°C), and transported in a small cooler without direct contact with the ice pack. It should never be frozen or overheated, so do not leave it in a vehicle in the summer or winter.

Taking Other Medications

Your allergist is the only person qualified to authorize you to take certain antihistamines, or those with antihistamine effects, as well as certain other medications, such as beta-blockers, that could hinder an urgent intervention in the event of a systemic reaction. Your pharmacist can look up the list of medications that have been prescribed to you, but many others, such as “flu busters” (syrups), anti-nausea, and H2 blockers/antacids are freely available, and if you are taking them, you must inform the pharmacist. **You must follow their recommendations to the letter.**

Steps to Take When You Begin Hymenoptera Venom Immunotherapy

Make the necessary appoints for the appropriate progression phase (Gradual or Accelerated) as determined by your doctor at the immune-allergy clinic.

Get your treatment kits in order to have them on the day of your appointment.

Ensure that a medical clinic or the family doctor will be able to continue the injections during the maintenance phase.

When you have your kits, be sure to follow the storage and transportation instructions.

It will take place at your family doctor's office. The maintenance dose will be progressively spaced out once every two weeks, once every three weeks and then once

every four weeks for a year. After this period, the treatment will be administered once every five weeks, then every six weeks until desensitization is complete, for a total duration of three to five years.

After one year of immunotherapy, you will meet your allergist for a medical check-up.

After three years of immunotherapy, new allergy tests will be done, whose results will determine whether treatment continues or not.

Reaction to Treatment

Immediate local reactions such as redness, swelling, itching or warmth are generally common and will soon disappear. They must be measured 30 minutes after each injection and noted on the tracking sheet.

Contact the nurse at the immune-allergy clinic:

Space reserved to identify the clinic

- To make an appointment for the beginning or continuation of treatments, or check-ups.
- To renew a prescription.
- In case of systemic reaction to treatment.
- In case of systemic reaction to an insect sting.
- If there is a delay in the vaccination schedule.

Restrictive Warning

Please note that this guide provides recommendations consistent with the scientific information available at the time of its publication on (month/year). These recommendations do not in any way replace the opinion of a clinician. If you have any questions, please contact the team of health professionals that will provide you with any information you need. If you misuse the content of this document in any way, Allergo Inc. cannot be held liable for any damages whatsoever in this regard.