

FAQ Allergy in dogs

➔ Clinical signs: A dog has a severe and recurrent chronic otitis, can there be an allergic basis?

Yes, chronic recurrent otitis usually has an allergic basis that can be due to both food allergy and atopic dermatitis. In all cases, it is advisable to carry out an elimination diet to confirm or rule out a food allergy.

➔ Clinical signs: Can a dog with only respiratory clinical signs have an allergic disease? In dogs is there a disease similar to feline asthma?

Allergic diseases usually manifest in the dog with pruritus and skin lesions (rashes, excoriations, secondary infections), especially in the head and extremities.

Respiratory clinical signs (rhinitis, asthma and chronic bronchitis) are infrequent in canine allergy.

There are different causes of asthma, comprising two types of mechanisms: bronchial allergic asthma and asthma of non-allergic origin. Allergic asthma can be caused by allergic reactions to insect bites, various pollens, or environmental mites (just like in people). Non-allergic asthma (the most frequent in dogs) is associated with viral, bacterial or fungal infections of the airways or as a result of stress or over-exercise. Even very hot or freezing air and air pollution (cigarette smoke) can trigger bronchial spasms and asthma.

Acute asthma attacks are derived by a bronchial spasm that causes sudden narrowing of the airways. The animal exhibits dyspnea that is evident to the owner.

➔ „Allergy tests“: Does it make sense to do them without clinical signs?

No, to do an allergen test without correlation with clinical signs makes no sense. The diagnosis of environmental allergy is clinical. The allergen tests don't predict whether an animal is or will be allergic. Animals can test positive and not be atopic, or test negative and be atopic.

The diagnosis of allergy should always be made by the veterinarian or specialist based on clinical signs and medical history.

➔ „Allergen testing“: Can the atopic condition be ruled out with negative results?

No, a negative test can be related to no direct contact with the allergen in the previous time (e.g. outside of allergy season) or treatment with corticosteroids. There are also atopic dogs with negative results in allergen tests, and this condition is called atopic like disease (in humans intrinsic atopic dermatitis).

➔ Neotrombicola automnalis: Is there a test to detect antibodies against it?

No, but the clinical diagnosis is not difficult. These mites are easily identified as **orange** dots generally located on the paws, axilla, eyelids or the ears of the animal.

➔ Demodex: Is there any serology test for Demodex?

No, demodicosis is diagnosed by direct observation of the mite on trichography, deep skin scrapings or performing a Demodex PCR. For a PCR test, the sample must be taken from a deep skin scraping.

➔ **Sarcoptes: When can Sarcoptes IgG be detected in blood?**

How many months can the antibodies remain after clearing the infestation?

The **antibody titer** (IgG) reaches a level for detection approximately four weeks after infestation. The test may be negative if the sample is obtained in the first weeks of infestation. As an alternative, a PCR of *Sarcoptes* can be performed from a superficial skin scraping.

The *Sarcoptes* antibody test cannot be used to monitor response to treatment, as antibodies remain detectable in the blood for up to 6 months or even longer after the infestation has cleared.

➔ **ASIT: Does it make sense to do ASIT if the patient is positive to only one allergen (e.g. *Dermatophagoides farinae*)?**

Yes, it is advisable to perform ASIT even if the animal is only reactive to an allergen, as long as the results correlate with a clinical diagnosis of atopic dermatitis.

Dust and storage mites are always in the environment, so it is not possible to avoid contact with them. They can also be found in dry food, but a change in diet does not prevent contact either. It is most important to keep the food in a dry place and in hermetic containers to reduce possible environmental contamination.

➔ **ASIT: What is the rate of success?**

An internal study conducted several years ago shows the following rate of success:

- Age <1 year: 38% success
- Age 1-2 years: 75% success
- Age 3-5 years: 88% success
- Age 6-8 years: 89% of success
- Age 9-10 years: 44% success

The lower rate of success in the age group of 9-10 years could be due to not enough long term treatment being undertaken.

Different levels of success with ASIT can be defined:

Level 1: The clinical signs are controlled exclusively with ASIT, and the animal needs no medical treatment.

Level 2: The animal continues needing medical treatment however the addition of ASIT:

- a) controls acute episodes that the animal suffered from before.
- b) has allowed a reduction in medication
- c) has improved the condition of the animal (for instance there is no residual pruritus)

Level 3: The disease has not become worse since the animal began ASIT

ASIT always helps to control atopic dermatitis, but it needs time to work. The response to ASIT is variable in each animal, but will have a beneficial effect if you treat for long enough.

➔ **ASIT: Does it make sense to perform allergen-specific immunotherapy treatment on a dog less than twelve months old?**

The most frequent pruritic diseases in puppies are ectoparasites (sarcoptic mange, cheyletiellosis, otoacariosis) and food allergies. The typical age of development of atopic dermatitis is between 1 and 3 years, but it can develop at any age.

A food allergy is more likely if the animal is younger than one year. Food allergy has to be ruled out before diagnosing atopic dermatitis. Diagnosis of atopic dermatitis is clinical and has to correlate with the history and clinical signs. The animal has to be evaluated for months before determining the existence of atopic dermatitis. Animals less than one-year-old are not completely immunocompetent, and it is not advisable to start treatment before that age. Another factor is that possibly not all the hypersensitivities have been developed before the year of age and in addition they have not been in touch with all environmental allergens of the year.

➔ **ASIT: Does it make sense to perform preventive immunotherapy with no clinical signs but positive reactions on allergen tests?**

No, if an animal has no history of clinical signs of allergy, there is no disease. So there is no point performing allergy tests nor immunotherapy, even if the results are positives.

The presence of positive allergy test results indicates sensitisation to the allergens, but it does not mean allergic disease.

The diagnosis of atopic dermatitis is always clinical.

The clinical signs are related to the presence or the load of the allergen in the environment. A positive allergen test without clinical signs can occur in an allergic animal if the allergen is not in the environment, due to the season or the location. It typically correlates with seasonal allergens like pollen. Interpret always the allergen tests results in the context of each clinical case.

→ ASIT: A dog receiving ASIT for years is free of clinical signs. Can the allergen test help to evaluate the efficacy of the ASIT?

There is no point in repeating the test. It is not possible with such data to conclude the efficacy of ASIT. ASIT treatment is for life, and it should not be interrupted.

→ ASIT: When would it make sense to repeat allergy tests?

It makes sense in cases of well-controlled allergic animals that begin with new clinical signs. They could have become sensitised to new allergens and carrying out a new allergen test can identify them. If it occurs, the composition of ASIT can be modified.

→ ASIT: If it is necessary to modify the composition of ASIT, how to do it?

Every case can be different.

1. Maintain the current ASIT and make an additional one with the new allergens. The treatment regimen of the previous solution (refill) would be maintained, and the new one (starter set) starts with an increasing dose.
2. Make a new ASIT including all allergens, old and new. The new treatment would be started with the starting regimen of increasing doses (starter set).

If more than eight allergens have to be included, it is always needed to make two sets: one with the previous allergens and a new one with the new ones.

→ Breeding: A breeding female is allergic, what to do?

The reproduction of allergic animals should be prevented since allergy is a genetic condition and therefore heritable.