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FAQ - Allergy overview

➔ Atopic dermatitis: Which clinical signs can be found and how to diagnose it?

Diagnosis of allergy is always **clinical**, is based on the data obtained from the **anamnesis** (including age, breed, seasonality) and the **clinical examination**.

Allergy tests are necessary to identify the allergens to which the animal is sensitive and is required to carry out allergen-specific immunotherapy (ASIT or hyposensitization treatment).

The main allergens are dust and storage mites; grass, plant and tree pollen; fungal spores, also fleas in dogs and cats and insects in horses.

In **dogs**, atopic dermatitis is the second most common non-infectious disease. It appears commonly between six months and three years of age, but can develop at any age and manifests itself with pruritus and associated characteristic cutaneous clinical signs (primary pruritus, sine materia).

The clinical picture in the **cat** is more similar to that of **horses** than of dogs. It can present with clinical respiratory signs such as feline allergic bronchitis, asthma and rhinitis. However, skin lesions, as self-induced alopecia, excoriations and ulceration, miliary dermatitis and other injuries of the eosinophilic granuloma complex are the most frequent clinical signs.

➔ When is the ideal time to perform allergy tests?

In case of **seasonal** allergies, ideally, they should be carried out in or at the end of the season or shortly after the season. When seasonal clinical signs begin wait one month before carrying out allergy tests.

In the case of **perennial allergies**, which do not show seasonality, allergen tests can be carried out at any time of the year.

➔ Is it possible to send other material besides serum to carry out the allergy tests?

For determining of antibodies serum is always preferable. Allergy tests are mainly validated using serum, however it is possible to perform them from blood preserved in tubes with heparin or EDTA.

➔ How long can a blood sample be kept for allergy testing in the fridge or freezer?

Antibodies are well preserved in frozen samples for long periods, there would be no problem in performing the analysis even on samples kept for up to one year. But after this period of time the results may not correspond to the current state of sensitisation of the animal, so an updated sample would be recommended.

For samples that have been refrigerated (8-10°C) the antibody study should be carried out within four weeks from collection.

➔ Screening test: Is it necessary to do it, or can main panel tests be done directly?

It is not obligatory to perform the allergy screening test (pre-test or group test) before the main panels.

With a clear clinical picture of allergy, you can begin with the main allergy panels (Mediterranean, insects, Nordic, annual and seasonal panels). With positive results, the allergen-specific immunotherapy treatment (ASIT) can be ordered immediately, saving the cost of the screening test.

Nevertheless, in many other cases, screening may be the most cost-effective option before entering the field of allergen differentiation, for example:

- If the animal is only positive to one of the groups, the cost of the differentiation of the other tests can be saved.
- In the case of animals that have been controlled with cortisone and the withdraw times could not be respected, the screening test verifies that the identification of antibodies is possible, without making a more significant investment in the differentiation panels.
- There are animals that, although atopic, can give negatives in the allergen measurement tests. In these cases, it saves on the cost of the differentiation panels.
- In seasonal allergies, it can help determine the right time of year for differentiation.
- The pre-screening test also has the great advantage that it includes the measurement of antibodies against fleas.

➔ Positive screening test: why test for differentiation of allergens?

Why not do a standard ASIT for annual or seasonal allergens?

Each animal, like people, reacts individually to different allergens. Studies show that using a „standard“ ASIT with the most common year-round or seasonal allergens has much lower success rates (30%, placebo) than a solution tailored to each patient. Therefore, the individual differentiation of allergens should always be carried out to develop a specific single treatment for the patient.

➔ Screening tests with reaction class 1 result: Does it make sense to perform allergen differentiation or make ASIT?

If the screening test gives a reaction class 1, it is not predictable whether the subsequent differentiation will be negative or positive.

Given a compatible history and clinical picture is always advisable to carry out allergen-specific immunotherapy even with reaction class 1 results, especially when the results are correlated with the clinical and medical history.

➔ Glucocorticoids: What are the withdraw times of topical, oral and depot corticosteroids for allergen testing? Do they also need to be applied when testing for food allergens?

Glucocorticoids are anti-inflammatory drugs that, depending on the dose, can have an immunosuppressive effect.

The use of glucocorticoids in allergy management must be restricted to low anti-inflammatory doses to control inflammation and pruritus.

Nevertheless, the use of high doses, long treatments or administration by several routes (e.g., oral and topical) can reach levels of immunosuppression.

Glucocorticoids have less influence on humoral immunity than on cellular immunity, and existing antibody levels are not usually reduced, but the production of new antibodies can be reduced. In our experience, we can see negative results in allergy tests associated with glucocorticoid treatments. So, our recommendation is to follow withdrawal times before serological allergy tests. You can switch to another antipruritic treatment prior to the allergy test (e.g. lokivetmab).

Our extended withdrawal times are proposed for the worst case scenarios, every case must be individually evaluated.

Proposed withdrawal times to minimise the risk of false negative results associated with treatment

- Local/topical corticosteroids: 2-4 weeks.
- Oral corticosteroids (e.g. prednisolone): up to 8 weeks.
- Depot corticosteroids: up to 3 months.

It is possible to shorten the withdrawal time, but if the results are negative, we recommend to repeat the test after the proposed withdrawal times are completed.

Examples of treatment that don't imply a significant risk of negative results in allergy tests (but we never can guarantee that there is NO risk):

1. Use of topical hydrocortisone aceponate - withdrawal time 0
2. Five days of prednisolone at 0.5mg/kg daily
3. Prednisone/prednisolone 0.25mg/kg q48h

Each individual is different, and some animals still show high antibodies despite receiving long and high corticosteroid doses.

Some patients who receive therapy with eye drops or ear medication containing corticosteroids may have a reduced level of antibody production.

Glucocorticoid withdraw times are applicable to all allergy tests, including food allergens since they measure levels of IgE and IgG antibodies.

➔ Glucocorticoids: Is it possible to interpret a positive allergy test with previous cortisone treatment?

Does this also apply to a negative result?

A positive result, even with previous corticosteroids intake, is always interpreted as positive. If the withdraw time had been respected, higher antibody values would be obtained.

On the contrary, a negative result may be false due to the immunosuppressive effect of corticosteroids. In these cases, the result is always in doubt, and it is advisable to carry out a new test respecting the withdrawal times of drugs.

➔ **Oclacitinib: Can it alter the results of allergy tests?**

Several studies agree that Oclacitinib does not influence the results of allergy tests in the first four weeks of treatment. However we cannot find any studies relating to the possible effect of longer periods of treatments. We have seen some animals taking oclacitinib becoming completely negative in their allergy tests. If the results of the allergy test during oclacitinib treatment are negative, we recommend to repeat the test without the treatment and observe the withdrawal time.

➔ **Mites: The screening test shows positive results for mites. Does the animal have parasitic mites?**

The screening test measures IgE levels against environmental mites (dust and storage mites).

A positive mite result in the pretest has nothing to do with ectoparasites!

Warning: There is cross-reaction between *Sarcoptes scabiei* and dust mites. In the case of sarcoptic mange, positive results can be obtained for dust mites.

➔ **Mites: How can dust and storage mites be prevented?**

It is not possible to completely avoid contact with these mites, but it is possible to reduce the amount in the environment with some measures.

- **Dust mites** are found mainly in beds, upholstered furniture, and carpets. It is recommended that the animal sleeps on an antimite bed or mat, in a room without carpets and never in their owners bed. There are anti-mite sprays that can be applied at home.
- **Storage mites** are found in dry food storage, rice, cereal flakes, etc., but also in environmental dust. Wet feeding does not eliminate full contact with the mites. Conserve dry food in hermetic plastic packets.

➔ **Mites in food: Is it helpful to freeze the dry food to avoid the mites?**

Freezing food prevents mite reproduction, but if they were there, their structural proteins would be preserved, so exposure to allergens is not avoided.

The contamination of food by mites depends mainly on its packaging and its storage. The feed should always be kept in dry places and in tightly closed containers that are not permeable to mites: plastic containers with zip closures or „tupperware“.

➔ **Feeding atopic animals: Can fruits and vegetables cause food or contact allergies (cross-reactions to pollen)?**

Yes, it is possible. These phenomena are called cross-reactions (OAS = oral allergy syndrome). The individuals cannot only react to the already known allergy-causing allergen but can also show reactions to other substances that share similar protein structures (epitopes). When food and environmental allergens share similar molecular structures, cross-reactive IgE antibodies can be produced. The cross-reaction can occur between fruits or between fruits and pollens, making possible the development of food allergies associated with pollen.

In the so-called „fresh fruit syndrome“ in humans, the clinical signs of an allergy to birch pollen can be triggered by eating carrots or apples. In human medicine, such reactions are well documented, but there are scarce publications in veterinary medicine.

The oral allergy syndrome, from ingestion of fruits and vegetables, should be considered during elimination and provocation diet trials (see frequently asked questions about food allergies).

➔ **Feeding atopic animals: What is meant by the „fresh fruit syndrome“?**

The „fresh fruit syndrome“, also known as oral allergy syndrome (OAS), is described in human medicine. It is related to cross-reactions between pollens (from birch, mugwort or grasses) and fruits (apples, peaches, pears, melons) or vegetables (celery, tomato). To avoid this process, peel and cooking these foods is helpful.

2. FAQ - ASIT (Allergen specific immunotherapy, hyposensibilisation)

➡ How does ASIT work on the immune system?

ASIT modulates the immune system, modifying the Th2 type immune response into a Th1 immune response to prevent the individual's allergic reaction.

Allergic diseases are **not curable**, although they can be well controlled. 70-80% of the atopic dermatitis cases can be well managed with allergen-specific immunotherapy. Some cases show, with this treatment, clinical improvement in a few weeks, while others need more extended time, even more than ten months, to demonstrate effectiveness.

It is recommended not to interrupt treatment, even if clinical signs completely resolve, since the process could be reactivated.

Please note, it is a life long treatment!

➡ When should an ASIT be started?

- In animals over one-year-old diagnosed with atopic dermatitis.
- In seasonal allergies (pollen, insects) → after the season.
- For year-round allergies (mites) → at any time of the year.

➡ Request: How long are the results of an allergen test valid for to order the ASIT?

They can be valid for a few months, but it is best to order immediately after receiving the result of the test, or in case of seasonal symptoms ASIT should be started after the season. The sensitisation of the animal to allergens can change over time, so if the test is not recent (half a year or more), new tests should be carried out.

The goal is to provide an updated and specific treatment solution for each individual.

➡ Request: Can ASIT be ordered from serological or intradermal tests not performed in Laboklin?

Yes, it is necessary to indicate the allergens the clinician is wanting to include in the ASIT or send the results of the tests carried out.

➡ „Standardised ASIT“? - Can ASIT be performed with a standardised allergen mixture?

Each allergic animal reacts individually to different allergens. Studies report that patients that receive a „standard ASIT“ with the most frequent annual and seasonal allergens show a much lower success rate (30%) than the ones who receive their individualised allergen solution. Therefore, an allergen differentiation must always be carried out to develop the individualised allergen-specific immunotherapy treatment.

➡ ASIT preventive use: Does it make sense? For example, foals imported from Iceland to avoid Culicoides allergy?

No, if there are no clinical signs, there is no point in performing allergy tests or starting ASIT.

Positive results in allergen tests only mean possible sensitization or exposure to the allergen, which does not intend to trigger an allergic disease, nor the development of clinical signs.

The diagnosis of allergy must always be clinical. It is not based on the results of these tests alone.

➡ Gestation: In case of pregnancy, what measures should be taken?

There are no studies on this matter, so this treatment should not be recommended during pregnancy.

➡ Treatment interruption: The owner forgot the treatment application.

Is it needed to vary the dosage or application regimen?

It depends on how long the interruption has lasted, if it is for a few days, continue with the treatment. If not, contact our dermatology and allergy specialists.

➡ **Vaccinations: Can they be applied during ASIT treatment?**

Prophylactic vaccination treatments should not be applied on the same day as ASIT. They should be given between two monthly ASIT injections.

At shorter intervals, never before three days after ASIT.

3. FAQ Food allergy

➡ **Clinical sign: Which are the main clinical signs of food allergy?**

The most frequent in food allergy is the presentation of itching and skin lesions (dermatitis, otitis, pododermatitis) accompanied or not by gastrointestinal signs. But in the presence of gastrointestinal signs alone, adverse food reactions should also be included as a differential diagnosis.

Dermatological signs are generalised or localised pruritus, external otitis (mainly chronic), pododermatitis and skin rashes.

The gastrointestinal clinical signs are not frequent, but when present they are usually similar to those of chronic inflammatory bowel disease, with vomiting, diarrhoea and commonly frequent bowel movements.

Not all clinical signs have to be presented to consider the possible existence of a food allergy.

➡ **Clinical signs: A cat has pruritus and ulcerative lesions on the head and neck, can it be a food allergy?**

Yes, the principal differential diagnosis in cats with pruritus and lesions on the face and neck is a food allergy. Due to pruritus, excoriating and ulcerative lesions occur. The animal by scratching with its paws can produce deep scratch wounds.

Other lesional patterns may also be found, as alopecia due to constant licking, and lesions of the so-called eosinophilic granuloma complex. The latter includes indolent ulcers on the lips, raised plaque lesions (eosinophilic plaque) in the abdomen, or raised, linear lesions with alopecia on the posterior thighs (eosinophilic lineal granuloma). It can also present with miliary dermatitis, papular-crusted lesions that are detected by stroking or palpating the animal.

➡ **Diagnosis: How to diagnose a food allergy?**

In the same way as environmental allergy or atopic dermatitis, the diagnosis of food allergy is clinical. The diagnosis must be made after performing an elimination diet and a provocation test in an animal with compatible clinical signs and a clinical history of allergy.

A hydrolysed diet or a novel protein diet (preferably homemade) can be used for the diet trial.

Food serological tests identify proteins and carbohydrates to which the animal has been exposed or has been sensitised. The foods with negative results can be selected to design the elimination diet (exclusion diet). A novel protein diet must include a single protein and carbohydrate with a negative result.

These tests also help the owner to comply with the diet and consequently to be able to interpret the results after the diet trial.

It is important to note that these tests do not serve to diagnose the disease, but rather to identify foods to which the animal is not sensitised or has been exposed.

➡ **Diagnosis: What are the differences between IgE and IgG in food allergen tests? Are both clinically relevant? How should the results be interpreted when only one Ig is elevated?**

IgEs react very quickly and represent the immediate reaction of the immune system. They are the most representative of allergy diseases. IgGs are associated with delayed response. Both are clinically relevant, as they signal an immune reactivity. The difference between IgE or IgG-mediated reactions is clinically indistinguishable.

Any positive result for IgE or IgG should be interpreted as positive, and the animal should undergo an elimination diet containing only components that have been negative for both: negative IgE and IgG reactions.

➡ **Diagnosis: A cat/dog undergoing treatment, with clinical signs of allergy is negative on food allergen tests. What can this mean?**

If the animal is treated with corticosteroids, a new test should be performed after observing the periods of avoidance (in the case

of corticosteroids depot up to 3 months).

If the animal is currently fed an elimination diet, the results of the tests can be negative, as there is no contact at this time with the allergens that cause their allergy. Therefore, it is always recommended to carry out food allergen tests before starting a restriction diet.

➔ **Elimination diet: how many sources of protein and carbohydrates can be included?**

A single source of protein and carbohydrates should be used. After confirming the existence of a food allergy and keeping the animal on the elimination diet for at least two months, one could try adding a new allergen every 14 days, evaluating the animal's response to its inclusion.

➔ **Elimination diet: Can vegetables and fruits be provided in case of food allergy?**

During the elimination diet trial, no additional fruit or vegetables can be provided. There are vegetables rich in protein, such as beans or soybeans that contain pure protein and therefore must be considered like animal proteins (meat).

After the challenge test, vegetables can be introduced (always a single allergen every two weeks).

The significant risk is atopic animals which concomitantly present a food allergy. It is possible to find cross-reactions between pollens and fruits or vegetables (for example, between birch and apple and carrot), also known as the „oral allergy syndrome“, „fresh fruit syndrome“. The birch pollen has been described in humans related to a strong cross-reaction with fruits (especially apples) and other vegetables.

Warning: With food allergic animals, pay attention to vegetables that contain protein. With patients who concurrently suffer from atopic dermatitis, possible cross-reactions between pollens and vegetables or fruits should be considered.

➔ **Elimination diet: How long must the elimination diet be maintained to evaluate the results?**

The diet must be maintained for at least eight weeks (a longer period could also be necessary). The diet response has to be evaluated once any possible secondary factors that cause pruritus (ex: secondary infections, otitis, chronic changes in the skin with acanthosis, xerosis) are controlled.

If the diet makes the animal free of clinical signs, a provocation test should be performed. It ensures that the improvement is due to the diet and not to other factors that could have disappeared by that time. A problem is that owners that are afraid to challenge the animal with the previous food. In those cases, a challenge with a new ingredient every 14 days can be done.

➔ **Diet: Are hydrolyzed diet safe for a diet trial?**

Yes. Hydrolysed diets break down protein structures, allergens, into small peptides and amino acids not detected by the immune system. Carbohydrate sources (rice, soybeans, etc.) can also be hydrolysed. A tiny percentage of animals react to hydrolysed diets, and the rate is minimal with ultra-hydrolysed diets. Studies report that hydrolysed diets from a reliable company can be a gold standard for diet trials as novel protein homemade diets.

➔ **Diet: What alternative carbohydrate sources exist when an animal is allergic to the usual sources?**

It is advisable to look for alternative sources of carbohydrates, such as quinoa, amaranth, millet, buckwheat (the four are gluten-free), tapioca, pumpkin and sweet potato.

Attention: spelt, farro, Kamut, Khorasan, einkorn, bulgur, they are all wheat subtypes with gluten. Gluten hypersensitivity is not a common problem in animals.

➔ **Diet: Can a patient feed exclusively on reindeer and potatoes for years become allergic to this food?**

Of course, a patient can develop allergy to a diet that has been tolerated for years. It will be necessary to carry out a new elimination diet and adapt the diet again.

➔ **Diet: Despite feeding the animal a hypoallergenic diet, the clinical signs are not controlled. Can the patient be allergic to the hypoallergenic diet?**

Yes, it is possible, and it depends on what diet is used. Many foods in the market called themselves hypoallergenic, but this may be not true. What may be hypoallergenic for one animal may not be for another (e.g. animals can be allergic to salmon).

Besides, several studies report that commercial novel protein diets may contain protein not included on their labelling, possibly

the result of contamination during manufacturing.

This diet trial is recommended to be carried out with a homemade diet of a novel protein, selecting a single protein and carbohydrate source from the ones negative in food allergen tests, or with a hydrolysed commercial diet from a reliable company.

➡ **Food intolerance: Are food allergen tests helpful? How to act on suspicion?**

Food intolerance is not antibody-mediated, so it cannot be detected with the conventional serological allergen test. If suspected, the animal should go through an elimination diet.

The mechanisms of food intolerance are various: food poisoning (toxins in food), pharmacological intolerance (for example, chocolate poisoning), pseudo-allergy mechanisms (histamine-mediated: high histamine content in food), metabolic reactions (intolerance to lactose), food idiosyncrasies (similar to food allergy but not immunological, e.g. associated with additives) and disaccharide intolerance may play a role.

4. 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.

5. FAQ allergy in cats

➔ **Clinical signs: A cat has a chronic cough, but no skin lesions. Could it be an allergic disease?**

Yes, unlike dogs, respiratory signs (feline allergic bronchitis, asthma and rhinitis) in cats can be seen in allergic disease. Skin lesions are very common and manifested with different reaction patterns: miliary dermatitis, self-induced alopecia, excoriations and ulcers, lesions of the eosinophilic granuloma complex.

➔ **Flea allergy: The cat is flea positive, does it mean it has fleas?**

A positive result means that the animal is allergic to the **flea saliva**, but does not confirm a current infestation.

In flea allergic animals, the bite of a single flea is sufficient to initiate an exaggerated immune system response and the entire cascade of inflammatory reactions associated with allergy. Whether or not an infestation is present, effective flea control has to be prescribed for the animal and all those who live with it. The flea control has to be used preventively long term. It is better and easier to prevent than to treat an infestation, where the environment plays an important role.

➔ **Elimination diet in outdoor cats: How can it be carried out?**

It is not possible to carry it out in free-living cats, since it is impossible to control what they may ingest outdoors. The cat should be confined indoors and monitored during the diet trial. If it is not possible, it makes no sense to do the diet trial, and the animal should be medically treated as in the case of an environmental allergy.

6. FAQ allergy in horses

→ Urticaria: Which are the main causes of these lesions?

Wheals are the common skin lesions in urticaria. They are frequent lesions in horses and usually associated with food or insect allergy.

Exercise-induced urticaria is also described in horses (and humans).

To find the cause of urticaria is generally complicated and time-consuming.

A horse with wheals must do an elimination diet.

→ Elimination diet: How to do it?

Allergen food tests are useful to select a cereal (all cereal contains protein) for the diet trial.

Only use a single type of grain, chosen from the ones with negative results in the food allergens tests. During the diet trial, the horse has to be exclusively fed with hay or grass, and the selected cereal with no reaction in the analysis. The litter must be shavings or paper. No concentrated feed and no treats for at least two months.

It is advisable to write down in a diary any change or anomaly that is observed during the diet trial, to help later interpretation.

→ ASIT: When is the best time to start ASIT against insects?

Whenever possible, it is advisable to start treatment at the **end** of the **season**.

→ ASIT: What if a horse tests positive for more than eight allergens?

It is better to make two ASIT solutions and manage them at the same time, but not in the same syringe.

→ ASIT using two ASIT solutions: Is it possible to mix both solutions or apply them in a single syringe?

No, the solutions should not be mixed. They should be injected with different syringes into two separate sites (for example, to the left and right of the horse's neck). They can be administered at the same time. In case of an adverse reaction, the two injections can administer on different days (for example, Monday and Thursday).