

ASSESSMENT OF AN “IN-VITRO” DIAGNOSIS OF IGG/IGE IN DOGS SUSPECTED TO SUFFER FOOD ALLERGY AND/OR FOOD INTOLERANCE

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Objectives of this study:

Food allergy/ intolerance is a frequent pathology associated with canine atopic dermatitis. Although elimination diets are the “golden standard” to identify those foods that may be consumed by the affected animals, this method is long and complicated, and in many cases it is very difficult to get the owner to collaborate.

During the last few years, different authors have supported that intradermal and serum tests do not have the sufficient sensibility to provide an adequate food allergy diagnosis. Other researchers, such as Dr. R. Halliwell, have defended the usefulness of combining serum tests of IgE and IgG as a valid method to prepare an elimination diet. In this study we have evaluated a serum IgG /IgE diagnosis when exposed to certain foods, and the effect of an elimination diet based on this test.

Methodology and materials:

Nineteen dogs of different breeds and ages were included in two groups: a study group (14 animals) and a control group (5 animals). The general criteria for belonging to the study group consisted on: history and compatible clinical symptoms, positive IgE serum tests when exposed to certain foods, and negative serum tests when exposed to inhalant allergens. For the dogs in the control group the criteria was the absence of dermatological symptoms.

All the animals were tested for IgE and IgG (FOOD-ELISA, Alergovet, S.L.) when exposed to the foods under study.

The animals in the study group were in turn divided into groups A and B: the ones in group A were treated with a diet in which all foods that had tested positive in IgE and IgG were eliminated. Group B followed a diet in which the only foods eliminated were those that has tested positive to IgE.

Results:

After 8-10 weeks subject to the diet, of the 7 dogs in group A, 5 (72%) improved significantly, 1 (14%) improved quite a lot and 1 (14%) had no improvement, Of the 7 dogs in group B, 3 dogs (45%) showed a significant improvement, 1 (14%) improved quite a lot and 3 (43%) showed no improvement. The 3 dogs in group B with no improvement subsequently had the

foods that has tested positive for IgG eliminated from their diet, and 2 of them showed a significant improvement. The animals in groups A and B that had experimented a significant or moderate improvement, in total 12 of the 14 (85%), underwent a provocation diet. After a few days, the 6 animals in group A and the 3 in group B suffered a relapse.

The 5 dogs in the control group did not have positive IgE or IGG values.

Conclusions:

The serum diagnosis of IgE when exposed to certain foods constitutes, on its own, a half-reliable tool for the diagnosis of food allergies. Only 4 of the 7 dogs (57%) showed an improvement with the elimination diet based on the IgE test. With the combination of IgE and IgG tests, 12 of the 14 dogs (85%) showed a very significant (10 animals) or significant (2 animals) improvement.

According to these result, we can come to the initial conclusion that these IgG/IgE tests (FOOD-ELISA, Alergovet, S.L.) may be a very useful tool in the diagnosis of food allergy/intolerance and help in the correct preparation of an elimination diet.