Essential fatty acids supplementation in different-stage atopic dogs fed on a controlled diet.

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The aim of this trial was to evaluate the effects of polyunsaturated fatty acid (PUFA) supplementation in different-stages atopic dogs fed on a controlled diet. Twenty-two non-seasonal atopic dogs of different breeds and ages were included in the 2-month trial. All the patients were given an essential fatty acid (EFA) supplementation [17 mg/kg eicosapentaenoic acid (EPA) + 5 mg/kg docosahexaenoic acid (DHA) + 35 mg/kg gammalinolenic acid (GLA)], the global (diet + supplementation) omega-6 to omega-3 ratio was 5.5-1. Two groups of dogs were considered: group A 'pre-immunotherapy' (15 cases) included dogs with early stages atopy, which had not been submitted to any treatment yet; group B 'post-immunotherapy' (seven cases) included dogs with chronic atopy immunotherapy non-responsive. Clinical evaluations were performed at the beginning, on day 30 and at the end of the trial. Blood serum fatty acids profile was determined at the beginning and at the end of the study. Better clinical results were obtained in group A, a great difference was found between the two groups on pruritus score. Serum arachidonic acid (AA) was significantly lower at the end of the trial in group A while GLA was significantly higher in group B. We hypothesized that different-stages atopic dogs could have different response to EFA supplementation, maybe because of a different fatty acids metabolism. Early stages cases seem to be more responsive to EFA supplementation.

PMID: 15787996 [PubMed - indexed for MEDLINE]