Evaluation of cyclosporine-sparing effects of polyunsaturated fatty acids in the treatment of canine atopic dermatitis

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Abstract: A randomised, double-blinded, placebo-controlled multicentre trial was conducted in 36 dogs with atopic dermatitis to evaluate the cyclosporine sparing effect of polyunsaturated fatty acids. Dogs were stable on their individual cyclosporine dosage and received either a combined omega-3/omega-6 fatty acid product or placebo orally for 12 weeks. Dogs were examined monthly and the Canine Atopic Dermatitis Extent and Severity Index (CADESI-03) was determined by a dermatologist. Pruritus, quality of life, global condition and coat quality were scored by the owner. If the dog’s CADESI-03 and/or pruritus score improved by at least 25\% compared to the previous visit, the cyclosporine dosage was decreased by approximately 25\%. If the scores deteriorated by at least 25\%, the cyclosporine dosage was increased by the same percentage. The median daily cyclosporine dosage per kilogramm body weight decreased in the active group from 3.8 mg to 2.8 mg and in the placebo group from 3.7 mg to 3.4 mg from the beginning to the end of the study. The difference between the two groups was significant (P=0.009). The median pruritus score from inclusion to completion was significantly improved in the active group compared to the placebo group (P=0.04). There was no significant difference in CADESI-03 changes between both groups (P=0.38). The results of this study indicate a cyclosporine-sparing effect of omega-3/omega-6 fatty acids supplementation in dogs with atopic dermatitis.

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Conflict of interest: In the past five years, RM and ML have performed studies, lectured and acted as a consultant for a number of companies manufacturing products for canine atopic dermatitis, amongst them Novartis Animal Health. MRM was financially supported by Novartis Animal Health. CL and AR do not report a conflict of interest.

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