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PROCEEDINGS

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EFFICACY OF AN ESSENTIAL FATTY ACID SUPPLEMENT TO REDUCE CLINICAL SIGNS OF ATOPIC DERMATITIS IN DOGS AND TO CHANGE SERUM FATTY ACID LEVELS: A DOUBLE-BLINDDED PLACEBO-CONTROLLED CROSS-OVER STUDY

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A cross-over study was conducted to evaluate essential fatty acid (EFA) supplementation with Megaderm (Omegaderm, Virbac) oral emulsion in canine atopic dermatitis (CAD). Twenty-three dogs diagnosed with CAD according to revised Willemsen criteria were included in the study; other skin diseases were excluded and previous infections were treated. Ten dogs were randomly allocated to the following treatment sequence: Megaderm (200 mg kg⁻¹ EFAs once daily, n-6:n-3 ratio of 5:1) for 8 weeks, a 4-week wash-out period, then placebo (olive oil) for 8 weeks. Thirteen other dogs received the sequence reversed. A final evaluation was conducted 4 weeks after the second treatment period. All dogs were concomitantly bathed once every other week with a 3% chlorhexidine shampoo. Erythema, excoriation and lichenification were graded at 12 different dermal sites, according to an extent-severity scale, to calculate an aggregate lesional index (LICAD). Pruritus was similarly evaluated on six body areas according to a frequency-intensity scale, to calculate an aggregate pruritus index (PICAD). Dietary supplementation with EFAs significantly reduced the PICAD (40%) as compared to placebo (14.7%) over an 8-week period (repeated-measures ANOVA, P<0.05, SAS). LICAD was significantly reduced at week 8 by both EFAs (55.2%) and placebo (28.8%). Following Megaderm supplementation, the percentage of 18:2n6, 18:3n3, 20:5n3, 22:5n3 and 22:6n3 serum fatty acids increased versus placebo, while the percentage of 18:1n9, 20:3n6, 22:4n6 decreased. The EFA supplement proved effective in decreasing clinical signs and impacted the composition of serum fatty acids in a clinical setting with atopic dogs fed their usual basal diets.

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