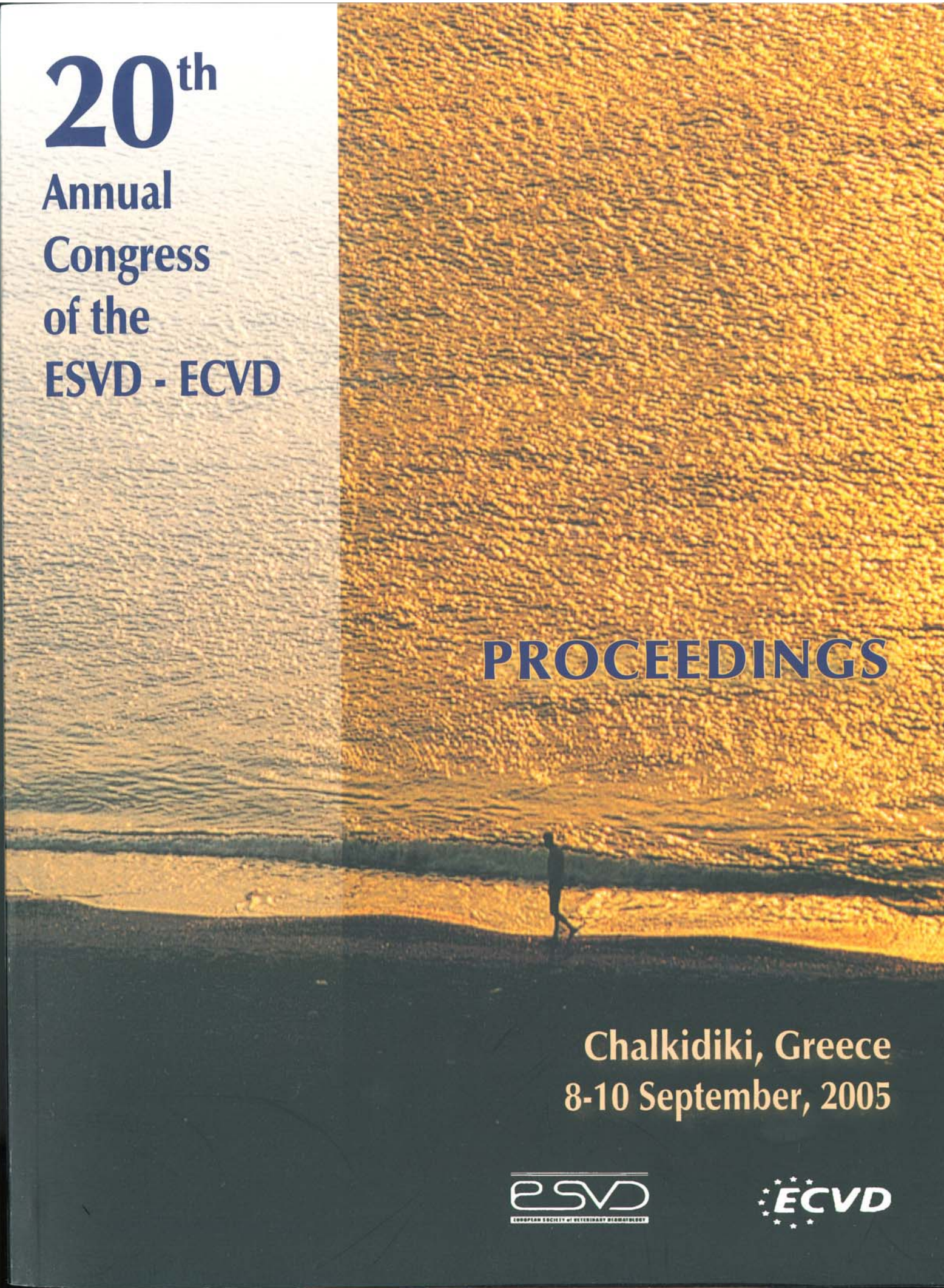
20th Annual Congress of the ESVD - ECVD



PROCEEDINGS

Chalkidiki, Greece
8-10 September, 2005

ESVD
EUROPEAN SOCIETY of VETERINARY DERMATOLOGY

ECVD

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-BLINDED PLACEBO-CONTROLLED CROSS-OVER STUDY

K. Campbell, A. Mardini, C. A. Reme[1], P. Jasmin[1], O. Elfassy[3], S. Radecki[2], F. Goodman[3]

University of Illinois College of Veterinary Medicine, Department of Medicine, Urbana, Illinois, [1]Virbac SA, Medical Department, Carros, France, [2]Statistical Consultant, Fort Collins, Colorado, and, [3]Virbac Research and Development, Fort-Worth, Texas

A cross-over study was conducted to evaluate essential fatty acid (EFA) supplementation with Megadermâ (Omegaderm®, Virbac) oral emulsion in canine atopic dermatitis (CAD). Twenty-three dogs diagnosed with CAD according to revised Willemse 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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