

**EFFECT OF ORAL DISMUPLEX
ENZYME
SUPPLEMENTATION UPON
MUSCULO-SKELETAL
INFLAMMATION A SUMMARY OF
VETERINARY CLINICAL RESEARCH
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ABSTRACT:

387 dogs with various musculo-skeletal inflammatory conditions were supplemented with DISMUPLEXII: antioxidant enzyme preparation. Veterinarians prescribing the product reported significant improvements in mobility, range of motion. relief of pain and reduction of swelling in 340 cases (88%).

INTRODUCTION

Musculo-skeletal inflammation is a major cause of discomfort and debility in millions of older canines. Inflammation as a result of excess free radical activity is well established (Segal. 1984; McCord 1983). Problems with inflammation in the joints may be due to degradation of synovial fluid in the cavity through free radical reactions (McCord, 1974)

The use of injectable superoxide dismutase was thought to be the dawning of a new era in arthritis treatment its antiinflammatory effect is well documented and thought to be due to superoxide dismutase's free radical scavenging ability (Huber, et al, 1978; McCord. 1974; Cushing, et al.. 1973; and Faull, et al., 1976). Limited by cost, convenience superoxide dismutase is rarely utilized in clinical settings.

MATERIALS

The limitations of injectable superoxide dismutase for use in clinical settings have led to the development of a unique, vegetable (sprout) source for this and other related antioxidant enzymes (ie catalase). DISMUT ASFC has established ability to affect blood levels of superoxide dismutase and catalase (Rothschild, et al .. 1988). In light of the correlations between free radicals and inflammation, this study was conducted with the help of veterinarians in private practice to determine the overall effect of this convenient, tableted preparation on the symptoms of inflammation.

METHODS

387 dogs, ranging in sizes from 10 to 125 pounds. in ages from 6 months to 18 years. were reported from the 6 contributing veterinarians. In all cases the inflammations were noninfectious and either the result of injury. stress. developmental conditions or aging. The main characteristic was osteoarthritis with clinical signs of loss of mobility and movement, pain and in some cases edema and swelling. In most cases the patient had received no prior treatment In all cases. DISMUPLEX~ was used as the primary therapy.

In all cases patients were symptomatic at beginning of trial.

The diagnosis was made by the veterinarian using standard techniques including radiographic evaluation, pin-prick test and palpation as well as owner reports.

FINDINGS

Of the 387 cases reported in this study. 340 patients demonstrated increased mobility, function and range of motion, with decreased pain and swelling in affected areas. Although 63 of the 340 patients did not show significant improvement until the fourth week, the average response time of the entire group was 8 days. All 340 cases which demonstrated improvement also reported increased levels of mobility as treatment time extended past initial response point. In most cases, a minimum of 1 tablet for each 20 pounds of body weight per day were necessary to achieve a measurable response. After initial response, maintenance dosages of 1/2 the initial amount, or approximately 1 tablet for every 40 pounds of body weight, were sufficient to sustain the desired result.

Along with obvious benefits to inflammatory conditions, the 340 patients demonstrated one or more of the following changes: increased energy, alertness, stamina, return of normal appetite and accelerated healing in those cases with recent surgery or accidental trauma.

CONCLUSION

Veterinarians supplementing with DISMUPLEX reported objective evidence of improvements in the relief of inflammatory conditions in 340 of 387 dogs. Based upon scientific evidence correlating free radical pathology with inflammatory conditions, it is indicated that the antioxidant qualities of the whole food antioxidant enzyme complex DISMUPLEX are the probable mode of action.

1) DISMUPLEX- whole food antioxidant enzyme complex containing superoxide dismutase and catalase produced entirely from genetically enhanced wheat sorghum. One tablet room temperature anhydrous in no filler or binders. REFERENCES: CuShing, S. Decker, W.E., Sanios, F.J.C. Schulte, F.L. and HuDer, W. Orgoteon therapy for milium matron minor MS. MoO. Vet Pract 54, 17-20, (1973). HULLER, Wn Schulte, T.1., Carson, S., Goldnamer, R.E. and Vogt, E. Some new calano of famlilicoidal grocen, sot a novel anti-inflammatory protein. TOC: aDOI Pharm 12, 308-119781. Faull, G.L. Baller, B. and Wait, M.S. and Hotmeyr, C.F.B. CUnclatris With Orgoteon fPalOZa.nl. .11. S. Atr. vet ASs 47. J8.40.119761. McCorl, J.M. Free radical scavenger: protection of superoxide dismutase. Science 185, 529-31, 119741. McCorl, J.M. The superoxide scavenger: its role in the pathogenesis of OHSIC/Ogy Surgery 94: 404-408, (1983). Park, S. DA, Bulkey, G.B., Granger, ON., et al. Ischemic injury in the cat small intestine: role of superoxide radical. Gastroenterology, 82:9-15, (1982). Rolland, Ph. Ordonez, L. AOSOMilion study with SOD/CAT. Unpublished. Press, 2639 S King St. Honolulu, HI 96828 11988. Segal, A.W. Superoxide generator: cytochrome b-245, and enronilC granulomatose disease. Advances in Inflammatory Research, Vol 8 New York Raven Press, 00,55-82.

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