

Bronchoalveolar lavage (BAL) and nasal lavage were performed under sterile conditions on all cats. Cytological and routine bacteriological analysis was done on all samples. Furthermore, all samples were cultured for growth of *Mycoplasma* spp. and DNA was extracted from the lavage fluids and analyzed by PCR to detect feline-specific mycoplasmas. Statistical analysis was done using Fisher's exact test. *Mycoplasma* spp. could only be cultivated from two BAL samples from FBD cats and from two BAL and two nasal lavage samples from cats without respiratory disease. Six cats out of 17 with FBD and seven out of 14 cats without respiratory disease were positive for mycoplasmas by PCR in BAL. In nasal lavage samples, mycoplasmas could not be detected by PCR in cats with FBD, but in five cats without respiratory disease, which were also all positive in the BAL fluid. Sequencing of PCR products confirmed the detected species to be *Mycoplasma felis* in all PCR-positive samples. The prevalence of mycoplasmas was not significantly different between the two groups. Limitations of the study are the small group size and that the group without respiratory disease consisted of cats that were euthanized due to other diseases. *Mycoplasma felis* can be detected in cats with and without respiratory signs in the upper and lower airways and does not appear to be linked to FBD.

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ABSTRACT NO. IM-0-10

EFFICACY OF DOMPERIDONE FOR THE TREATMENT OF MILD AND MODERATE CASES OF CANINE LEISHMANIOSIS: CLINICAL AND IMMUNOLOGICAL SHORT-TERM FOLLOW-UP

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Domperidone, a dopamine D2 receptor antagonist, has recently been included in the list of available anti-Leishmania drugs in the current consensus guidelines for treatment of canine Leishmaniosis1. Its mechanism of action is based on the activation of the cell-mediated immune response. The Nitroblue tetrazolium reduction test (NBT) has been proposed as a valuable tool for the monitoring of cellular immunity in canine leishmaniosis2. The aims of this study were to evaluate the short-term efficacy of Domperidone in mild and moderate canine leishmaniosis by clinical and immunological follow-up, and to assess the eventual effects of treatment on the phagocytic function of polymorphonuclear cells and monocytes using the NBT.

Twenty dogs of different age, breed and sex, with mild and moderate clinical leishmaniosis (antibody titer =1/400-1/1600 using the Direct Agglutination Test and lymphadenopathy as the only clinical sign) were included. All dogs were orally treated with Domperidone at 0.5mg/kg/24h for 30 consecutive days. On days D0 (before treatment), D15, D30, D60 and D90 each dog underwent a clinical examination and blood sampling for serology and NBT.

Throughout the study, antibody titers decreased in 17 dogs (below the cut-off value =1/400 in two) and remained unchanged in two dogs. Lymphadenopathy decreased in 9 dogs (completely disappearing in four) and remained unchanged in eleven dogs. Baseline mean±SE percentages of activated (NBT-positive) neutrophils and monocytes were 10.2 ± 1.66 and 6.5 ± 1.34, respectively. These percentages rapidly increased after treatment initiation and they remained high until the end of the study, reaching their highest value on day D30 (43.3 ± 4.65 and 21.9 ± 2.11). Differences with baseline values were statistically significant (p<0.05) from day D15 onwards in both cell populations.

The results on clinical and immunological improvement are consistent with those reported in a previous study demonstrating that Domperidone is effective in reducing and controlling clinical signs and antibody titers of diseased dogs3. In addition, changes observed in NBT test are consistent with the mechanism of action described for Domperidone. The results of this study evidenced a close relationship between a favourable clinical evolution of dogs when treated with Domperidone and the increase of the NBT rate in blood neutrophil and monocyte populations, being this test a reliable partner in the clinical follow-up of leishmaniosis.

1 Oliva et al. (2010) *J Am Vet Med Assoc.* Jun 1;236(11):1192-8.

2 Gómez-Ochoa et al. (2010) *Vet Parasitol.* Aug 27;172(1-2):135-8.

3 Gómez-Ochoa et al. (2009) *Vet J.* Feb;179(2):259-63.

ABSTRACT NO. IM-0-11

COMPARISON OF THE EFFECT OF HUMAN INTRAVENOUS IMMUNOGLOBULIN VERSUS VINCISTINE ON PLATELET RECOVERY TIME IN DOGS WITH SEVERE IDIOPATHIC IMMUNE-MEDIATED THROMBOCYTOPENIA

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Dogs with severe immune-mediated thrombocytopenia (ITP) are at risk of spontaneous hemorrhage when the platelet count drops below 30,000/μL. While corticosteroids are the mainstay of treatment for ITP, adjunctive treatment may decrease the duration of thrombocytopenia. In separate prospective studies, adjunctive treatment with both vincristine and human intravenous immunoglobulin (hIVIg) has been shown to decrease platelet recovery time compared to corticosteroid treatment alone. This prospective study was designed to compare the adjunctive effect of hIVIg versus vincristine on platelet recovery in dogs with severe ITP.

Twenty dogs with severe, idiopathic ITP (platelet count < 16,000/μL) were enrolled in the study. All dogs received standard care for ITP, including treatment with corticosteroids. Each dog was randomly assigned to receive a single, intravenous dose of either hIVIg (0.5 gm/kg) or vincristine (0.2 mg/kg) within 12 hours of enrollment. The age, sex, weight, breed and initial platelet count for each group were compared to ensure that the groups were equivalent in respect to signalment and disease severity. Outcome measures were platelet recovery time, defined as days required for the platelet count to reach 40,000/μL, and duration of hospitalization for each group.

There was no significant difference in age, sex, weight, or initial platelet count between the dogs treated with hIVIg and dogs treated with vincristine. The median length of hospitalization for all dogs was 4 days and did not differ between groups (p = 0.313). There was no significant difference between groups for platelet recovery time (p = 0.424) as the median time for both groups was 2.5 days.

This study failed to identify a significant difference in platelet recovery time for dogs with severe ITP receiving either hIVIg or vincristine, in conjunction with standard doses of corticosteroids.

ABSTRACT NO. IM-0-12

INVESTIGATION OF RELATIONSHIP BETWEEN VITAMIN D STATUS AND MYCOBACTERIAL INFECTIONS IN CATS

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