HEMATO-BIOCHEMICAL AND SEROLOGICAL EVALUATION IN CANINE BLOOD DONORS RECEIVING CANILEISH® VACCINE

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Body
A vaccine against canine leishmaniasis (CaniLeish®) is commercially available. The vaccine’s claim is to stimulate a dominant Th1 immune responses in Leishmania seronegative dogs and to reduce significantly the risk of developing an active infection and clinical disease in case of infection with Leishmania infantum. We evaluated the hemato-biochemical and serological effects of this vaccine in canine blood donors. Twenty-five blood donors dogs (19 naïve and 6 with annual booster) have been administered the vaccine (anti-feeding and repellent prevention was also administered) and were followed for two years. Vaccine protocol was according to manufacturer indications, including the use of SpeedLeishK™ serological test. All dogs were clinical healthy and were monitored with CBC, biochemical profile, serum protein electrophoresis (SPE), and IFAT for leishmania during the initial immunization, after six months and before and after annual boosters.

The most striking results were: IFAT positivity (generally low titers) in about 60% of dogs, SpeedLeishK™ assay negative for all dogs, mild hyperprotidemia for about 50% of dogs. Slight modification in alfa2 and beta2 globulin at SPE graph for about 70% of dogs was observed. CBC and other biochemical analytes were substantially unvaried.

The CaniLeish® vaccine induces minor hemato-biochemical variation in dogs enrolled (almost all parameters were within reference ranges) and it is not conflicting with the blood donor activity. To monitor the vaccinated dogs the SpeedLeishK™ assay is indicated instead of IFAT for serological status, and total protein concentration and SPE for biochemical modification.

Work supported by CLWG and Hill’s Pet Nutrition