

OBSERVATIONS ON EHRlichia CANIS IN IMPORTED DOGS

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Ehrlichiosis is a common clinical disease encountered in police dogs in Sri Lanka. The present investigation was carried out to detect the early stages of the infection by determining the first appearance of the morula stages of *Ehrlichia canis* in blood of dogs that were imported to Sri Lanka. The relationships between the presence of the parasite with haematological changes such as thrombocytopaenia and microagglutination of erythrocytes, clinical signs, and mild exercise were also studied. The findings of the study were meant to improve the health of the dogs in the kennels division of the Police Department.

The blood sampling of dogs imported from Australia in November 1999 (group A) and in October 2000 (group B) were commenced in February and November 2000, respectively. The blood samples from Group A dogs were taken till June 2000, and those from Group B were taken till February 2001. Mild exercise was introduced in March 2000 and in December 2000 for the Group A and B dogs, respectively. Thin smears from peripheral blood were prepared from the ear tips, once every fortnight. Smears were stained with Leishman stain and were microscopically examined for the presence of the morula stages of *Ehrlichia canis* and the indirect platelet counts and other haematological changes were also monitored.

No direct relationships were observed between the presence of the parasite in the peripheral blood, mild exercise or specific clinical signs. Therefore, it seems inappropriate to treat the dogs showing evidence of the parasite in peripheral blood with drugs. Although tetracyclines are used conventionally and sometimes indiscriminately as a treatment for Ehrlichiosis, it may be clinically and economically beneficial to avoid such treatment wherever possible, in order to minimize the side effects of the drug and to allow the host to develop immunity. It was also evident that some dogs were more susceptible to infection than others, despite the presence of the same infection pressure and environment. The morulae were first seen at 8 and 6 weeks after importation in Groups A and B, respectively. Dogs with morula stages did not always show severe thrombocytopaenia (50,000 platelets / μ l) and microagglutination of erythrocytes. Interestingly, thrombocytopaenia and microagglutination were absent in the dogs that did not have morulae in their peripheral blood. Accordingly, the absence of thrombocytopaenia and microagglutination appears to be very good indications of absence of morulae, while their presence may or may not indicate the disease.

However, clinical signs of Ehrlichiosis appeared after the dogs were trained for police commands and police work, possibly related to stress. Detailed studies to alleviate stress of training are needed. Diarrhoea was the only clinical condition reported during the sampling period and that too was cured by dietary management and without any medication.