

Prevalence of Canine Babesiosis among Stray Dogs in Kuala Lumpur and Risk Factors of Hypoglycemia in Canine Babesiosis

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Abstract

A study was conducted to review the importance of measuring blood glucose levels in canine babesiosis as hypoglycaemia is a sign of profound metabolic derangement and its occurrence and possible risk factors can aid in determining the severity of the disease. A total of sixty stray dogs at Dewan Bandaraya Kuala Lumpur, were included in this study. Thin blood films from the marginal ear vein of each dog were made and stained with Giemsa stain and observed under the light microscope to detect the *Babesia* organisms. Four out of the 60 stray dogs (6.7%) were found to be positive for canine *Babesia*; 5.0% (3/60) were *Babesia canis* positive and 1.7% (1/60) *Babesia gibsoni* positive. Blood was collected from the infected dogs and packed cell volume was measured. Serum was obtained and serum glucose levels were determined. Two of the *Babesia* positive dogs were anemic and two of the positive dogs were hypoglycemic. Risk factors of hypoglycemia could not be evaluated as the number of positive dogs was too low and the results would have been inconclusive.

Keywords: canine babesiosis, *Babesia canis*, *Babesia gibsoni*, thin blood films, hypoglycaemia