7<sup>th</sup> Proceedings of the Seminar in Veterinary Sciences, 27 February - 02 March 2012

## A RETROSPECTIVE STUDY OF CANINE MONOCYTIC EHRLICHIOSIS IN UNIVERSITY VETERINARY HOSPITAL, UNIVERSITI PUTRA MALAYSIA

Ng Che Giap, <sup>1</sup>Hazilawati Hamzah & <sup>2</sup>Malaika Watanabe

<sup>1</sup>Department of Veterinary Pathology & Microbiology <sup>2</sup>Department of Veterinary Clinical Studies Faculty of Veterinary Medicine Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia

## Abstract

The purpose of this retrospective study was to determine the risk factors and clinical disorders of canine monocytic ehrlichiosis at University Veterinary Hospital (UVH), Universiti Putra Malaysia (UPM). Medical records of dogs admitted to the UVH from year 2007 to 2011 were reviewed and the sole inclusion criterion was dogs tested for E. canis antibodies using dot-ELISA, Immunocomb® Canine Ehrlichia Antibody Test kit. Data on signalment (age, sex and breed), occupation of dog (police and non-police), preventive healthcare status, Immunocomb® antibody titer, tick infestation, clinical and clinicopathological findings were obtained. Over the 5 years, only 27 dogs admitted to UVH tested for E. canis antibody. Twenty-two dogs were E. canis seropositive while the remaining 5 dogs were E. canis seronegative. No statistically significant association was found between E. canis seropositivity and sex, age, breeds, occupation of dogs and tick infestation. The most common clinical findings were anorexia, lymphadenopathy, pyrexia, lethargy, ocular signs and splenomegaly. Thrombocytopaenia, lymphopaenia, anaemia (mainly non-regenerative anaemia), hypoalbuminaemia and hyperglobulinaemia were the predominant clinicopathological abnormalities. E. canis seropositive dogs were at risk to develop thrombocytopaenia and lymphopaenia (p<0.05).

Keywords: canine monocytic ehrlichiosis, *E. canis*, retrospective study, thrombocytopaenia