INTISARI

GAMBARAN DARAH ANJING BABESIOSIS YANG DIDETEKSI DENGAN *POLYMERASE CHAIN REACTION* DI YOGYAKARTA

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Babesiosis adalah penyakit yang disebabkan oleh *Babesia sp.* yang dapat menginfeksi anjing dan berkisar dari kronis atau subklinis hingga perakut dan fatal, bergantung pada virulensi spesies dan kepekaan dari hospes. Penelitian ini bertujuan untuk melihat gambaran darah anjing yang terinfeksi *Babesia sp.* dengan pemeriksaan eritrosit, hemoglobin, trombosit, dan hematokrit sebagai diagnosis penunjang babesiosis. Seratus dua puluh tiga sampel darah anjing dibuat preparat apus darah dan sisanya disimpan dalam *vacutainer Ethylenediaminetetraacetic acid* (EDTA). Darah dalam *vacutainer* selanjutnya dilakukan pemeriksaan hematologi rutin, sementara peparat apus darah kemudian dibaca menggunakan mikroskop untuk mencari adanya benda inklusi intraeritrosit. Sebanyak 61 sampel darah yang diduga terinfeksi *Babesia sp.* selanjutnya diperiksa dengan uji *Polymerase Chain Reaction* (PCR) sebagai diagnosis peneguh. Hasil uji PCR sebanyak 50 sampel positif dan 11 sampel negatif terinfeksi *Babesia sp.* kemudian dianalisis secara deskriptif dengan membandingkan hasil hematologi dengan rujukan nilai normal. Hasil penelitian menunjukkan penurunan jumlah eritrosit sebesar 50%, hematokrit 48%, hemoglobin 54%, trombosit 66% pada anjing positif babesiosis; sementara pada anjing negatif penurunan jumlah eritrosit sebesar 36,36%, hematokrit 36,36%, hemoglobin 27,27%, trombosit 27,27%. Disimpulkan bahwa infeksi *Babesia* dapat menyebabkan penurunan jumlah eritrosit, hematokrit, hemoglobin, dan trombosit lebih besar daripada anjing yang tidak terinfeksi.

Kata kunci : *Babesia sp.*, Anjing, Benda inklusi intraeritrosit, Hematologi, *Polymerase Chain Reaction*

ABSTRACT

BLOOD PROFILE OF DOG WITH BABESIOSIS DETECTED BY POLYMERASE CHAIN REACTION IN YOGYAKARTA

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Babesiosis is a disease caused by *Babesia sp.* which can infects dogs with fatality rate varies from chronic or subclinical to peraccute and fatal, depending on the species virulence and the sensitivity of the host. This research aims to see blood count result of the dogs that infected by *Babesia sp*. The examination were done in erythrocytes, hemoglobin, platelets, and hematocrit count as a supportive diagnosis of Babesiosis. As much as 123 blood samples of dogs made into blood smear and the remaining stored in a vacutainer Ethylenediaminetetraacetic acid (EDTA). Hematologic test was done in stored blood, while the blood smear to be seen under microscope to found intraeritrocyte inclussion body. The 61 suspected blood samples were then examined using Polymerase Chain Reaction (PCR) test as a confirmatory diagnosis. The 50 samples positive infected and 11 samples negative PCR results were then descriptively analyzed by comparing the hematology test result to normal range. The results obtained were 50% of positive dogs samples experiencing decreased erythrocytes, 48% in hematocrit, 54% in hemoglobin, 66% decreased in platelet; while 36,36% of negative dogs samples experiencing decreased erythrocytes, 36,36% in hematocrit, 27,27% in hemoglobin, 27,27% decreased in platelet. Concluded that *Babesia* infected dogs have higher risk in erythrocytes, hematocrit, hemoglobin, and platelet decreased then uninfected dogs.

Keyword : *Babesia sp.*, Dogs, Intraerytrocitic inclussion body, Hematology, Polymerase Chain Reaction