PROTEIN CHARACTERIZATION OF EXCRETORY SECRETORY SECOND STAGE LARVAE DORMAN AGAINSTS ANTIBODY ANTI-SECOND STAGE LARVA Toxocara canis BY WESTERN BLOT TECHNIQUES

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ABSTRACT

Toxocariasis is caused by Toxocara canis, Toxocara cati and other Toxocara species, which are intestinal nematodes (roundworms) found in dogs and cats. Human are incidental host, and the parasites cannot completely mature in the human body. Three clinical forms of toxocariasis are described: these include visceral larvae migrans (VLM), ocular larvae migrans (OLM), and covert toxocariasis. Toxocariasis is a disease whose clinical manifestation are unspecific, characterized by larvae migration to inner organs of human and some animal. In the absence of parasitological evidence of infection, immunological methods are required for its diagnosis. The identification of specific antigens of Toxocara canis is important in order to develop better diagnostic techniques. Fourteen mouse were infected orally with a dose of 850 of Toxocara canis embryonated eggs. Mouse were bled periodically to collect the antibody. Western blot (WB) assay was perfomed using excretory secretory antigens (E-S) of T. canis second stage larvae dorman. Mouse sera were diluted 1:50, secondary antibody was used at a dilution of 1:1000. The result of the study indicated eight protein bands, which are 62,4 kDa; 46,4 kDa; 43,1 kDa; 37,3 kDa; 30,1 kDa; 24,4 kDa; 19,4 kDa and 10,7 kDa by western blot techniques These protein need further evaluation as candidate for use in diagnosis.

Key words: Toxocara canis, Western blot, Toxocariasis.