EVALUATION OF DIFFERENT ANTIBODIES ISOTYPES IN *Strongyloides stercoralis* IMMUNOBLOTTING

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Parasitological methods are ineffective for *S. stercoralis* diagnosis. Serological tests are an important alternative. In this way, the aim of this work was to evaluate the sensitivity and specificity of *S. stercoralis* immunoblotting in the detection of IgG, IgG1, IgG4, IgE and IGA1 specific antibodies in alcoholic individuals.

For this work, 50 male chronic alcoholic patients were selected from a previous published study. Among them, 15 tested negative for any parasitic disease, while 35 were monoparasitized with *S. stercoralis* (n = 20), *S. mansoni* (n = 8) or Hookworm (n = 7). The immunoblotting was performed using *S. venezuelensis* membrane antigen to detect IgG, IgG1, IgG4, IgA1 and IgE specific antibodies, using sera diluted 1:100 for all isotypes, except IgE (1:10 dilution). For diagnosis, there were selected bands with sensitivity and specificity greater than 50 and 80%, respectively.

There were observed bands ranging from 5 to 170 kDa, with the main immunodominant composed of 14, 17, 22, 26, 75 and 90 kDa components. IgG, IgA1, and IgE immunoblotting presented the best results, with all of them presenting a sensitivity of 100% and specificities of 87.0, 91.3 and 95.7%, respectively. Although IgG1 and IgG4 presented a good specificity, both 95.7%, they presented a low sensitivity, 69.2 and 61.5%, respectively. Interestingly, the same band presented different responses according to the isotype. For example, the 22 kDa band presented excellent sensitivity for IgG and IgE, 100% for both, and specificity of 91.3 and 95.7%, respectively. However, it did not react to IgA1.

In an endemic area, a positive serological test for *S. stercoralis* infection in someone without larval elimination in feces may indicate an active infection. In such cases, immunoblotting can be used to confirm the diagnosis. Also, this study shows a different pattern of response to the same band according to the antibody isotype which can be useful in the development of new recombinant antigens.

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