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## DETECTION OF ANTI-STRONGYLOIDES IgG ANTIBODIES: A SEROEPIDEMIOLOGICAL STUDY IN BLOOD DONORS FROM CURITIBA

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### Abstract

Strongyloidiasis is an intestinal parasitic disease caused by the nematode *Strongyloides stercoralis*, with a worldwide distribution and an estimated 600 million people infected. This study aims to detect anti-*Strongyloides* IgG antibodies in blood donors from the Paraná Center for Hematology and Hemotherapy (HEMEPAR) using the Enzyme-Linked Immunosorbent Assay (ELISA) technique. For this purpose, a heterologous extract of the cuticle from infective larvae of *Strongyloides venezuelensis* was prepared using the CTAB detergent. A total of 823 serum samples from donors were analyzed. To determine the reaction cut-off, control samples were used: parasitological positive for *S. stercoralis* (n=28), negative (n=53), and positive for other parasitic infections (n=20). The cut-off value was 0.488, with a sensitivity of 100.0% (95% CI = 86.77% to 100.0%) and a specificity of 96.55% (95% CI = 88.09% to 99.58%). Absorbance values (450 nm) ranged from 0.079 to 2.339 (median of 0.344). Of the 823 samples analyzed, 230 were classified as reactive, corresponding to a positivity rate of 28% (mean  $0.414 \pm 0.260$ ). Given that strongyloidiasis is a neglected helminthiasis, the present results can be used as a basis for future investigations and contribute to public health strategies.

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