IgG anti-*Strongyloides* detection in women with a COVID-19 history

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Strongyloidiasis is a parasitic infection caused by the intestinal nematode *Strongyloides stercoralis*. This parasite can develop a process of self-infection, which can be favored by the prolonged use of corticoids (analogous to the parasite's molting hormone). The exacerbated or prolonged use of these drugs may further the appearance of sevese cases such as Hyperinfection Syndrome and/or disseminated disease, where approximately 50% of patients may lead up to death. Knowing that patients diagnosed with SARS-CoV-2 infection underwent corticosteroid therapy, the presente study aimed to carry out the serological diagnosis of *S. stercoralis* infection in women without or with a history of COVID-19. Serum samples were divided into two groups contemplating SARS-CoV-2 infection (Group I without history and Group II with history). An ELISA was performed using the heterologous membrane antigen of *Strongyloides venezuelensis* for the detection of anti-*Strongyloides* IgG antibodies. Group I (n=35, mean age 25.6 years) had 5.71% (2/35) of positivity for strongyloidiasis, while group II (n=26, mean age 23.6 years) presented 15.38 % (4/26). None of the patients with a positive ELISA report "prophylactic treatment" with ivermectin for COVID-19. In group II, only one patient with a positive ELISA reported having used corticosteroids for the treatment of SARS-CoV-2 infection. Regarding the completion of the stool test, only one patient (group I) with positive serology claims to perform it periodically, all the others state that they do not perform it. It is noted that there were more cases of positive serology for strongyloidiasis in the group with a history of COVID-19. The present results reinforce the need to carry out serological screening for *S. stercoralis* infection in individuals with a history of COVID-19.

Keywords: strongyloidiasis, serology, Covid-19.