Parasitological and immunological diagnosis of Strongyloides stercoralis in patients with gastrointestinal cancer.

Machado ER, Teixeira EM, Gonçalves-Pires MD, Loureiro ZM, Araújo RA, Costa-Cruz JM.

From the Laboratório de Parasitologia, Instituto de Ciências Biomédicas, Brazil.

This study examined the frequency of Strongyloides stercoralis infection in patients with gastrointestinal cancer through parasitological and immunological tests. A total of 77 patients were evaluated, 33 with gastrointestinal cancer and 44 controls with other types of cancers. All the patients were undergoing chemotherapy and 14 (18.2%) were receiving concomitant radiotherapy. For a parasitological diagnosis, we applied the Baermann and Lutz methods. The immunological diagnosis involved the indirect fluorescence antibody test (IFAT) and enzyme linked immunosorbent assay (ELISA) to detect IgG antibodies using Strongyloides ratti antigens. The frequency of positive S. stercoralis in gastrointestinal cancer diagnosed by parasitological methods was 3 cases (9.1%), by serology it was 8 cases (24.2%). In the control group 1 case (2.3%) of S. stercoralis was diagnosed by parasitological methods and 2 cases (4.5%) by immunological tests (p<0.05). Patients with gastrointestinal cancer had a 6.7-fold greater chance of testing positive for S. stercoralis infection. Our data highlight the importance of parasitological and immunological diagnosis for S. stercoralis in patients with gastrointestinal cancer living in endemic areas of strongyloidiasis, since they have a higher risk of becoming infected with S. stercoralis than patients with other types of cancer.

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