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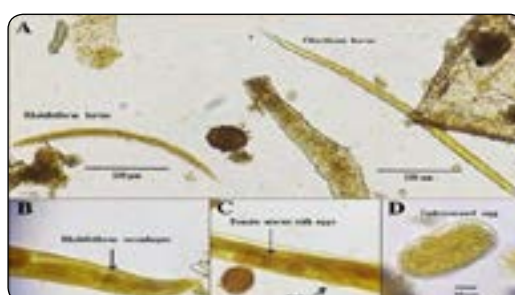
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## **Strongyloides stercoralis hyperinfection in a patient with HTLV-1: A case report of an infection with rhabditoid and filariform larvae, eggs and free-living adult female**

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**S**trongyloides stercoralis is the main etiological agent of human strongyloidiasis. Severe strongyloidiasis is commonly associated to alcoholism, corticosteroid use and HTLV-1 coinfection. Herein, we report a case of a 13-yr-old boy coinfecting with *S. stercoralis* and HTLV-1, excreting several parasitic forms in the stool. The parasitological examination of his feces, showed a large amount of filariform (about 3,000 larvae per gram of feces) and rhabditiform larvae (about 2,000 larvae per gram of feces). In addition, free-living adult female (about 50 parasites per gram of feces) and eggs (about 60 eggs per gram of feces) were detected. The main laboratory findings pointed to high IgE levels (228 UI/mL) and eosinophilia (11.6%). The patient was treated with three courses of ivermectin (200 µg/Kg twice, two weeks apart), achieving the parasitological cure. An increase of about 19 times in IL-17 level was observed following the parasitological cure, in addition to a decrease in the white blood cell, eosinophil counts and IgE levels. This is the first case report, to our knowledge, in which *S. stercoralis* adult free-living female was described in human feces and where an increase in IL-17 levels after *Strongyloides* treatment in a HTLV-1 coinfecting individual was observed. This finding raises the need for further studies about IL-17 immunomodulation in *S. stercoralis* and HTLV-coinfecting patients 1.



**Figure 1** -Photomicrographies of *Strongyloides stercoralis* stages in fecal smear stained with iodine showing rhabditiform and filariform larva (A), rhabditiform oesophagus (B) and uterus with eggs (C) of a free-living female, and an embryonated egg (D).

### Biography

Neci Matos Soares is PhD in Cell and Molecular Biology from the Oswaldo Cruz Foundation (1996), Rio de Janeiro, Brazil in the area of immunoparasitology. She is a professor of undergraduate and postgraduate students, Federal University of Bahia, Faculty of Pharmacy, and Brazil. Develops research projects in the lines of parasitological, immunological and molecular diagnosis of parasitic diseases, with emphasis on strongyloidiasis, in addition to studies on immunopathology of *Strongyloides stercoralis* and *Leishmania* infections. In the last five years, 18 papers have been published that are results of masters and doctoral studies. It is worth mentioning the activities of Research as a reviewer of journals like PLoS Neglected Tropical Diseases, Plos Advances in Infectious Diseases, Journal of the Institute of Tropical Medicine of São Paulo and Journal of Medical and Biological Sciences.

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