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Abstract (poster session)

Utility of a screening program of strongyloidiasis in immigrant population

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Objective: Strongyloidiasis is an infection caused by the nematode *Strongyloides stercoralis*. Populations with high risk include immigrants from tropical countries. The goals of this study were: i) to determine the frequency of imported strongyloidiasis; ii) to describe epidemiological, laboratorial and clinical features of imported strongyloidiasis. **Methods:** During 2008-2011 we conducted a prospective screening program of chronic strongyloidiasis in all immigrants patients attending in Tropical Medicine Unit. Combined examination of three concentrated stool samples, culture in blood agar and Enzyme-linked immunosorbent assay for serum anti-*S. stercoralis* antibodies was used as screening. We considered that infection exists if the microscopic visualization of larvae in stool sample and/or the ELISA was positive. In positive patients was discarded the presence of other nematodes. We realized an epidemiological questionnaire that included: risk factors to have the disease and presence of symptoms. Eosinophilia in blood test was studied. All positive patients were treated with ivermectin. Quantitative variables were analyzed with the Student t test or the Mann-Whitney test when appropriate. Qualitative variables were analyzed with the chi square test or Fischer's exact test when necessary. All p values of 0.05 or less were considered statistically significant. **Results:** we screened 570 patients. The most frequent countries of origin were: Equatorial Guinea (26%), Senegal (20%), Ecuador (13%), and Bolivia (7%). 65 patients (16%) had positive serological test and in 4 patients the microscopic visualization was positive. The countries of origin were: Equatorial Guinea (34%), Ecuador (20%), Senegal (11%), Nigeria (10%). Strongyloidiasis was more frequent in subsaharian patients (51 vs 14, $p=0,052$). Mean time in Spain was 936 days (31-2,987). The most frequent symptoms are abdominal pain (60%), eosinophilia (28%). 14 patients (21,5%) were asymptomatics. Two patients have HIV infection and 1 patient HTLV-I infection. 30 patients have eosinophilia in blood (mean 2,552 cells/mm³). The eosinophilia in blood were significantly higher in subsaharian immigrants (2,262 vs 1,462, $p=0.014$). **Conclusions:** The presence of infection for *S. stercoralis* is frequent although without symptoms. To prevent potentially fatal hyperinfection syndrome, it is necessary realized screening with several stool examinations and serologic testing in immigrant population, and in infected instituted the treatment.