Introduction: Nematodes of Trichostrongylus genus are mainly parasites of herbivores, although sporadic human infections have been reported in many countries. Objective: To describe the frequency and seasonality of Trichostrongylus spp. infection in individuals attended at a public clinical laboratory. Materials and methods: Fecal samples of 9,283 individuals were evaluated by spontaneous sedimentation (Lutz) in the Parasitology Laboratory of the Pharmacy College, Federal University of Bahia, Brazil, from January of 2006 to May of 2008. The positive samples for either Trichostrongylus spp. or hookworms were further examined to evaluate the morphometry of nematode eggs. Results: One-hundred and ten patients (1.2%) were confirmed to be infected by Trichostrongylus spp. The positive cases were significantly more frequent in females (1.6%; p<0.05), with higher distribution in the age group between 11-20 years (1.9%), compared to those aged 51-60 (0.8%) and older than 60 years (0.9%)(p<0.05), independent of gender. Trichostrongylus spp. infections were more common from March to May (40 cases) and showed a homogeneous distribution over the other periods of the year (21-25 cases). The hematological analyses of 60 Trichostrongylus-infected patients showed normal levels of eosinophils in most of the positive cases. Conclusions: The data reveal that the occurrence of infection by Trichostrongylus spp. in residents of Salvador is more frequent than those reported in other urban regions and that it is essential to distinguish the parasite from other nematodes in routine parasitological examination.

Keywords
Trichostrongylus, infection; diagnosis, differential; eosinophilia, seasons.