



PREVALENCE OF STRONGYLOIDES INFECTION IN PATIENTS REFERRED TO RASHT RAZI LABORATORY THROUGH FORMALIN-ETHER AND ELISA

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Strongyloides stercoralis is an intestinal nematode endemic in the tropical and subtropical areas. Parasitological diagnosis based on the fecal examination is usually difficult in cases of chronic and low-level *Strongyloides* infection. Additionally, it is important to note that a negative result does not necessarily indicate the absence of the infection. This research was performed to study the prevalence of *Strongyloides* infection in patients referred to Rasht Razi Laboratory using two methods: formalin-ether and ELISA (Enzyme-linked Immunosorbent Assay). This descriptive cross-sectional study was conducted through random selection of 370 patients referred to Rasht Razi Laboratory. The fecal and serum samples were collected. The fecal samples were examined through the formalin-ether method. An ELISA test was performed using an ELISA kit for the diagnosis of human Strongyloidosis (Bordier, Switzerland) and based on the manufacturer's instructions on the serum samples. The prevalence of *Strongyloides* infection, based on findings in the formalin-ether method, was 1.6%. Regarding the ELISA test, the results proved the prevalence of 15.4%. In the ELISA results, there was a significant relationship between participants' age, residence, level of education and occupation with the prevalence of *Strongyloides*. However, there was not any relationship with sex. In results of the formalin-ether method, there was only a significant relationship between participants' age, residence and level of education with the prevalence of *Strongyloides*. Since the ELISA test can determine the chronic and low-level infections with *Strongyloides* and has higher sensitivity and specificity, it is recommended for epidemiological studies.

Keywords: prevalence, *Strongyloides stercoralis*, ELISA, Rasht, Iran.

SOIL CONTAMINATION WITH TOXOCARA SPP. EGGS IN PUBLIC PLACES OF ARDABIL CITY

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Toxocariasis is a parasitic zoonosis with worldwide distribution. It is caused by the ascarids of dogs (*Toxocara canis*) and cats (*Toxocara cati*). Human become an incidental host for *Toxocara* when they ingest the eggs of the parasite, chiefly by hand-to-mouth contact, from exposure to areas polluted with *Toxocara* eggs, such as contaminated soil in public places. Therefore, soil is noted as the main source of transmission of *Toxocara* infection to human beings. There are no data about soil contamination by *Toxocara* spp. eggs from Ardabil city. The aim of current study was to estimate the extent of soil contamination with *Toxocara* eggs in public places. This survey was conducted from March 2013 to March 2014. A total of 200 samples collected randomly from 41 public places in various parts of Ardabil city and examined by microscopy following sodium nitrate flotation. *Toxocara* eggs were recovered from 14 soil samples indicating an overall frequency rate of 7 percent. This investigation gives baseline knowledge regarding soil contamination with *Toxocara* spp. eggs in Ardabil city and will provide information for implementation of control measures in the area.

Keywords: *Toxocara*, soil contamination, public places, Ardabil