

Seroprevalence of toxocariasis among patients of AlfenasMG, attended at clinical laboratory of the pharmaceutical sciences faculty of Unifal-MG.

Authors: Dayse Silva<sup>1</sup>, Tainara Pinho<sup>1</sup>, Raquel Souza<sup>1</sup>, Ivo caldas<sup>1</sup>, Dionicia Souza<sup>2</sup>, Herminia Kanamura<sup>1</sup>.

Institution:Unifal<sup>1</sup>, LACEN- unifal<sup>2</sup>.

Toxocariasis can be a public health problem, affecting people living in areas with deficient basic sanitary facilities and low hygiene conditions, particularly children. This is a parasitic disease caused by the larvae of two species of *Toxocara*, nematodes of the family Ascaridae: *Toxocara canis* and, less commonly, *Toxocara cati*. The adult parasites live in the small intestine of dogs or cats, respectively, and they release, in the soil, unembryonated eggs, which can embryonate in the environment to become infective. Most people infected with *Toxocara* sp do not have any symptoms. When symptomatic, depending on the intensity of parasitism, location and the general state of the host, symptoms such as fever, coughing, enlarged liver or pneumonia can be present. The clinical disease is more frequent in children, but adults may develop the disease. Diagnosis is based on clinical and epidemiological anamneses, and in the laboratory is usually made by the finding of larvae in biopsy or autopsy specimens, and serology, through detection of anti-*Toxocara* antibodies in the serum or other biologic fluids. The present study aimed to estimate the serological frequency of toxocariasis in the city of Alfenas, MG, using blood samples from patients attended at the Clinical Laboratory of the Pharmaceutical Sciences Faculty of the Federal University of Alfenas (UNIFAL-MG). The detection of anti-*Toxocara* IgG antibodies was performed by the ELISA test on microplates sensitized with *Toxocara*-excretion-secretion (TES) antigen. According to the partial result of the study, among the 121 samples submitted to the enzymatic immune test, 49 (40.5%) were serologically positive for toxocariasis. Regarding the sex, 62 (51.2%) were female and 59 (48.8%) male, and seropositivity rates were, respectively, 43.5% (27 positives/62) and 37.3% (22 positives/59). The frequency of seropositive individuals was higher among those from the peripheral districts of the municipality, when compared to those living in neighborhoods of the central region. The results indicate high seropositivity rates for toxocariasis among the residents of the municipality of Alfenas, located in the south region of Minas Gerais state, but further investigation is needed to understand the social and environmental factors in the different regions of the city, which can justify this high positivity.

Key words: Toxocariasis. Diagnosis. ELISA. Serology. Epidemiology.