

## Toxocariasis in school children in urban and rural areas of Argentina

Nora B. Molina

National University of La Plata, Argentina

Toxocariasis is caused by roundworms commonly found in the intestine of dogs and cats. The proportion of subjects with *Toxocara* sp. varies between 2 and 93%, with the highest seroprevalence rates found among children. Most of the studies from Argentina have focused on toxocariasis as an environmental problem of urban areas and there are few reports about infection in rural areas. We conducted epidemiological surveys on the seroprevalence of anti-*Toxocara* (ACTO), nutritional profile and intestinal parasite infection (PI) in rural schoolchildren of the province of Buenos Aires. In 2009, in Atalaya, seroprevalence of ACTO was 27%, with a significant association with possession of cats ( $p=0.006$ ). In 2010, in La Hermosura, seroprevalence of ACTO was 16%. Anemia, low calcium and magnesium levels were uniformly distributed, while children ACTO(+) showed a significant increase in blood copper in response to parasite infection. In 2011, in Magdalena, seroprevalence of ACTO was 19% and PI infection in 65%. The parasites were *Enterobius*, *Blastocystis* and *Giardia*. Eosinophilia was significantly associated with ACTO ( $p=0.000$ ) but was not associated with PI. In 2012, in schoolchildren from urban areas, seroprevalence of ACTO was 17% and PI infection was 75%. Urban children with ACTO(+) showed prevalence of infection with geohelminths (*Ascaris* and *Trichuris*) higher than children with ACTO(-) which could indicate that the soil of urban areas act as a source of common infection. These results suggest that toxocariasis is an endemic infection in schoolchildren. This situation should be considered in public health programs for the control of this neglected disease.

### Biography

Nora B. Molina has obtained her master's degree in 2009. She is biochemist and the director of clinical laboratory. She participates in several academic research projects at University. She has published scientific articles and book chapters, and has presented research papers at Congresses of the Specialty. These studies were conducted in collaboration with Minvielle Marta.

[nbmolina@aetos.med.unlp.edu.ar](mailto:nbmolina@aetos.med.unlp.edu.ar)