

**CONTAMINATION OF DOG HAIR BY *Toxocara* spp. EGGS IN A DISADVANTAGED POPULATION OF SOUTHEAST BRAZIL: A ZOONOTIC RISK**

**AMANDA LOPEZ NAVARRO<sup>1</sup>, ISABELLA BRAGHIN FERREIRA<sup>1</sup>, VAMILTON ALVARES SANTARÉM<sup>1</sup>**

**<sup>1</sup>UNIVERSIDADE DO OESTE PAULISTA (UNOESTE), SÃO PAULO, BRAZIL**

Toxocariasis is considered a worldwide geohelminthiasis, particularly in disadvantaged populations. Transmission of toxocariasis to humans occurs mainly by accidental ingestion of soil containing infective *Toxocara* spp. eggs, shed by dogs and cats (definitive hosts). Other routes of transmission have been postulated, including the direct contact with dogs or cats harbouring infective eggs in their hair. The aim of the present study was to evaluate the frequency and the factors associated with the presence of *Toxocara* spp. eggs in the hair of dogs raised by disadvantaged population in Presidente Prudente, southeast Brazil. Hair samples were collected (perineal, tail and dorsal regions) from 100 dogs, processed (rinsing in Tween 80 followed by sieving: 300µm, 212µm, and 38µm) and analysed under microscope (10 and 40X). Association between the presence of eggs and some variables (age, sex, dirty floor at household, cohabitation with other pets, free-roaming on the streets, and deworming) were evaluated. Presence of *Toxocara* spp. eggs was observed in the hair of 8/100 dogs (8%; IC 95%: 4.1-15.0), mainly in male (5/8), dogs aging over 1-year (6/8), living in a house with dirty floor (5/8), living with other pets (6/8), and having access to street (7/8). Lack of deworming was observed in all positive dogs. No variables influenced the presence of eggs in the hair samples ( $p>0.05$ ). Excepting one, all the *Toxocara* spp. eggs retrieved were classified as viable. The number of eggs ranged from 1 to 6 per dog. Our results show that the presence of *Toxocara* spp. eggs in dogs' hair may predispose disadvantaged population at risk of toxocariasis. Therefore, educative programs should be considered for enhancing hygienic habits and prophylactic anthelmintic treatment of dogs to mitigate the risk of toxocariasis transmission.

**Supported by:** FAPESP (2024/02836-3)

**Keywords:** infection, toxocariasis, zoonosis