

Prevalence of *Toxocara canis/cati* in dogs and cats from central Poland

Justyna Bartosik¹, Paweł Górski¹, Aleksandra Cybulska², Jacek Łojek³

¹ Department of Preclinical Sciences, Faculty of Veterinary Medicine, Warsaw University of Life Sciences – SGGW, Ciszewskiego 8, 02-786 Warszawa, Poland; ² Witold Stefański Institute of Parasitology, Polish Academy of Sciences, Twarda 51/55, 00-818 Warszawa, Poland; ³ Animal Breeding and Production Department, Faculty of Animals Sciences, University of Life Sciences – SGGW, Ciszewskiego 8, 02-786 Warszawa, Poland

Toxocara canis and *Toxocara cati* are distributed worldwide, due to human settlement of nearly all land masses (Despommier 2003). Transmission of the *Toxocara* parasite occurs when an infected dog or cat sheds eggs in their feces into the environment; it takes 2–4 weeks for larvae to develop and for the eggs to become infectious (Glickman 1981). Children are at higher risk for infection because of their play habits and poor hygiene practices. Three clinical entities have been recognized in humans: visceral larval migrans, ocular larval migrans, and covert toxocarosis. That result in definable syndromes and present as serious health problems (Despommier 2003, Good 2004).

The aim of the study was to establish the prevalence of *T. canis/cati* in animals from Warsaw and surroundings in years 2012–2018. In total 14458 fecal samples were collected and analyzed using flotation method. The eggs of *Toxocara* were found in 335 samples of dog's feces (3,46%) and in 127 cat's feces (2,64%). The prevalence of *T. canis* oscillated from 4,39% in 2012 to 3,12% in 2018, in case of *T. cati* from 5,31% in 2012 to 0,36% in 2018 (fig.1). Both in dogs and cats the eggs of roundworms were identified more often in male (dogs - 5,33%, cats 4,91%) than female (dogs - 3,98%, cats- 4,45%) (fig. 2).

This study provides evidence that prevalence of roundworm invasion in dogs and cats show a downward trend comparing with similar study from previous decade, however domestic animals need to be controlled and treated against intestinal parasites. Moreover their owners need to be educated about zoonotic potential of some parasites species. The evident decline of toxocarosis over years 2015-2016 might be connected with educating campaign of ESCCAP Polska Association operating since 2011, providing free expert information in the form of guidelines.

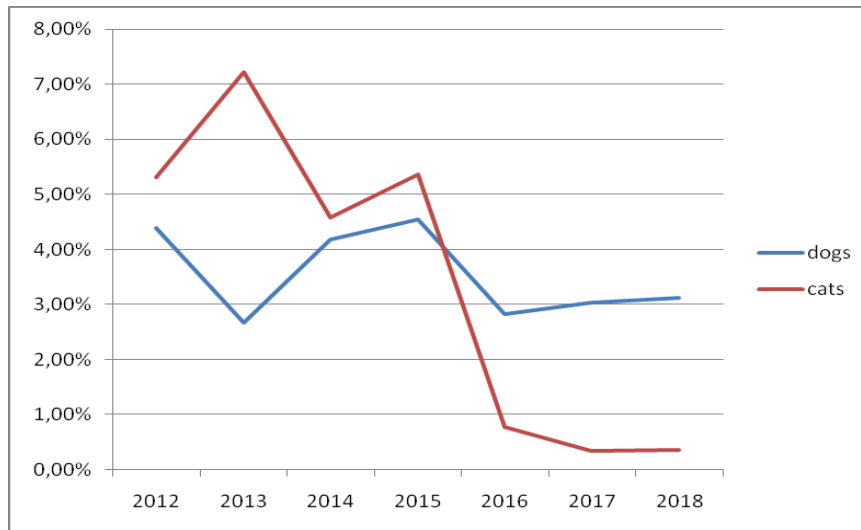


Fig 1. Prevalence of *Toxocara canis/cati* during years 2012–2018.

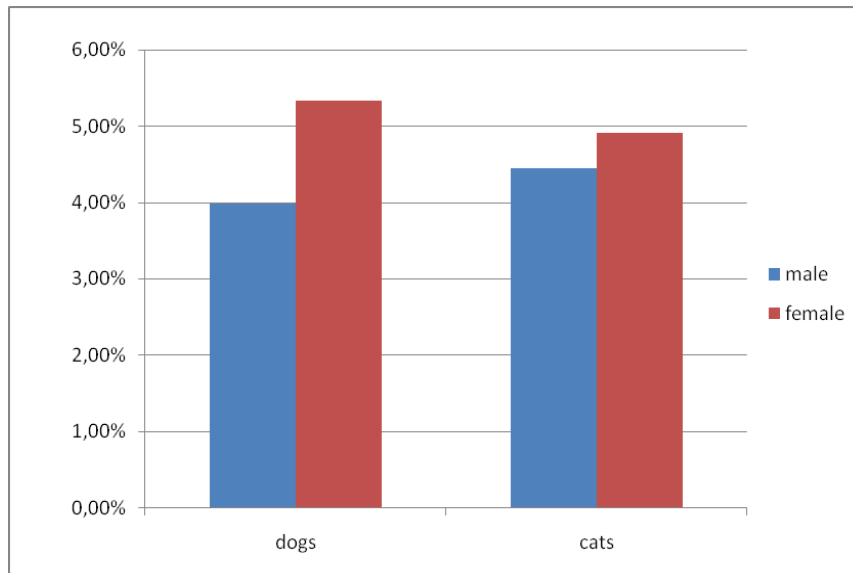


Fig. 2 Comparison of *Toxocara* prevalence in both sexes.