Keys to Unlock the Enigma of Ocular Toxocariasis: A Systematic Review and Meta-analysis

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Abstract

Purpose: Ocular toxocariasis (OT) is a zoonotic infection caused by larval stages of Toxocara canis and T. cati. The current review and meta-analysis aimed to evaluate the global prevalence of OT. Methods: Five English (PubMed, Scopus, Science Direct, Web of Science, and Google Scholar) databases were explored and 101 articles met the inclusion criteria. Results: The pooled prevalence (95% confidence interval) of OT was higher in immunological studies (9%. 6-12%) than in studies that applied ophthalmic examination (1%. 1-2%). The lower middle-income level countries had the highest prevalence (6%. 2-12%) as well as the African region (10%. 7-13%). The highest infection rate (4%. 2-7%) was detected in the 1-25 mean age group. Conclusion: Regular anthelminthic treatment of cats and dogs, and removal of animal feces from public places must be considered.

Keywords

Author Keywords: Toxocariasis; ocular larva migrans; public health; humans; zoonoses

KeyWords Plus: ASCARID INFECTIONS; CANIS; PREVALENCE; RETINOBLASTOMA; TEMPERATURE; SURVIVAL; EGGS