PROSPECTIVE STUDY OF CLINICAL AND EPIDEMIOLOGICAL TRENDS OF INTESTINAL NEMATODES INFECTION IN DOGS IN UPPER EGYPT

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Abstract:

ABSTRACT The study was carried out to determine the clinical course and epidemiological pattern of intestinal nematodes in dogs in Upper Egypt, and their impact on various hematological and biochemical parameters. A total number of 120 dogs (Age =1 month to 3 year), both sex and of different breed’s size (small and large) were included in the present study. Parasitological, clinical, hemato-biochemical and epidemiological examinations were conducted. Microscopic analysis of fecal samples (n=120) revealed three types of intestinal nematodes: Toxocara canis (n= 28), Toxascaris leonina (n =5), Ancylostoma caninum (n = 4) and mixed infection of Toxocara canis and Dipylidium caninum (n =2) with an overall infection rate 32.5% (39/120). Toxocara canis was predominate type of nematodal parasite infection in the studied population (23.3%). Puppies (0-0.05) on infection rate of intestinal nematodes but season had high impact on nematodal infection The infection rate showed significant (P<0.05) in erythrocytic parameters (RBCs, Hb, PCV) and platelets count in infected group, whereas group differences for TWBCs, neutrophils, monocytes, lymphocytes, eosinophils and basophils were non-significant high. Biochemical data generated revealed significant decrease (P >0.01) in the value of serum total protein in infected group. Liver enzymes showed significant increase (P>0.01) in serum AST, ALT and ALP in infected group compared with healthy one. In conclusion, intestinal nematode in dogs was common in Upper Egypt with infection rate of 32.5% and Toxocara canis was the most common nematode infection (23.3%). They have significant effects on hematological and biochemical parameters suggesting their importance as a health problem in dogs.

Keywords:

Nematodes, Toxocara canis, Toxocara leonina, infection, dogs.

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