OBSERVATIONS ON THE PRESENCE OF SPOROZOA COCCIDIARIA IN DOMESTIC CARNIVOROUS ANIMALS

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The knowledge of the morphobiological characteristics of protozoans parasites belonging to the Coccidia subclass has remarkably developed in the last twenty-five years, since classified as one of these parasites. The importance of Coccidia as aetiologic agents involved in diseases affecting, through carnivorous animals, man and other animals of zooeconomic interest has been pointed out by researches carried out all over the world. Those researches have revealed unsuspected aspects of the pathogenetic action of the coccidia of cats and dogs. When the parasites are found in their final hosts, (i.e. cats and dogs) coccidiosis appears to be a simple infection, whereas when the parasites are found in other species, including man, diverse disturbances are noticed in these intermediate hosts, which form part of the complex biological life cycle of these parasites. Reported herein are the results of a survey carried out in the years 1991-1993 on cats and dogs of different ages, sexes and breeds, which were brought to our Institute of Parasitology for periodical check-ups, or pre-vaccination tests or because they showed clinical symptoms of enteric infection. In the same period, some other veterinary surgeons co-operated with us by performing systematic parasitological tests on fecal samples of animals brought for different kinds of analysis to their laboratories. A total number of 860 fecal samples belonging to n°340 cats and n°520 dogs were examined. The methods of flotation and/or sedimentation were used for the isolation and identification of the Coccidia species. At the same time we estimated the time of sporulation and the morpho-structural characteristics of the oocysts and/or of the sporocysts according to U. Potters (1978, Inaugural Dissertation-Institute of Parasitology -Hanover). When necessary, biological tests for identification of Toxoplasma and Hammondia were also carried out, by infecting groups of strain Balb mice experimentally, giving them some of the suspected material through an oesophageal tube. Parasites of the coccidia subclass were present in 8.47% of the dogs and in the 20.3% of the cats examined, in the following percentages of incidence as for the species collected: Dogs: - E.canis 0.20%; C.canis 2.50%; C.ohioensis 1.35%; Sarcocystis spp. 3.85%; Cryptosporidium spp.0.58%; Cats: - E.felina 0.59%; C.felis 5.89%; C.rivolta 7.06%; T.gondii 1.18%; H.hammondi 0.59%; Sarcocystis spp. 4.12%; Cryptosporidium spp. 0.89%. Our data find substantial confirmation in similar researches done mainly abroad. The incidence of coccidia in domestic carnivorous animals, as seen in our survey (even though low in percentages) must be considered as a high value, since the data refer to cats and dogs living in urban areas, which are checked periodically by their owners. A more complex and dangerous situation can be expected if a similar survey is carried out on stray animals that have never been checked in any way.