SURVEY OF INTERNAL AND EXTERNAL PARASITIC INFECTION OF BIRDS IN A ZOOS, TEHRAN
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BACKGROUND: Parasitic infections are pathogens of importance in captive birds. Restricting wild captured birds in populated environment may increase the pathogenicity of parasites. Surveying the presence of parasitic infections can be a good indicator for assessing the success of health management and veterinary preventive measures in any captive environments.

OBJECTIVES: A descriptive cross-sectional study was conducted to investigate the presence of external and intestinal parasitic infections in an aviary in Tehran.

METHODS: Fresh samples of birds' dropping were collected individually or cumulatively from the birds' habitats. The droppings were examined by wet smear, sedimentation and flotation with saturated sugar solution. External parasites detected during clinical examinations were also collected for further identification.

RESULTS: Seventy-two dropping samples belonging to 17 different species of eight bird orders were collected. Helminth infections were detected in 16.67% of samples including unrecognizable nematode eggs of birds. No cestode or trematode were identified in the examined samples. Fecal flagellates were established in 27.8% of the samples. Eimeria oocysts were identified in three samples from two peafowls and a partridge. Furthermore, in a sample from a common mynah, Isospora oocysts was detected. Infection with Argas soft tick was detected in pheasants and a common buzzard.

CONCLUSION: Various parasitic infections were detected in this study. Due to the subclinical nature of parasitic infections, detection of these infections is possible only by parasitological tests. Based on the results, therapeutic and preventive strategies for controlling subclinical infections were recommended.

Key words: Parasite, Parasitic Infection, Aviary, Bird Intestinal Parasites, Zoo.

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SEROEPIDEMIOLOGICAL STUDY OF TOXOPLASMOSIS IN BABOLSAR CITY
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BACKGROUND: Toxoplasma gondii is an obligatory intracellular parasite, that is zoonotic. It is seen in humans in two forms: active form (tachyzoite) and inactive cyst (bradyzoites). Two main ways of human contaminating include accidental ingestion of oocysts excreted by cat’s stool, eating raw or semi-baked infected meat and conjugation through placenta.

OBJECTIVES: The research was carried out according to the statistics and analysis of toxoplasmosis contamination and factors related to the prevalence of parasites in Babolsar.

METHODS: In this descriptive-analytical cross-sectional study in 2018, 430 patients suspected to toxoplasmosis were surveyed that referred to the diagnostic laboratory of Dr. Azarmeydokht Ghahari in Babolsar. Demographic information was recorded by interviewing them. The TOXO-IgM serological test was measured by luminescence electrochemical method and positive cases were placed in the statistical diagram.

RESULTS: Out of 430 patients, 18 patients (4.18%) had high levels of TOXO-IgM that 11 persons (2.55%) were in rural areas and 7 persons (1.62%) were in the city, and 2 persons (0.46%) had significant lymphadenopathy.

CONCLUSIONS: Based on the results of this study, it is concluded that Toxoplasma infection has high prevalence in Babolsar due to the mild and humid of the climate and the high survival rate of the parasite oocysts, and in rural areas is more than the urban areas because of outdoor works. In children and pregnant women, due to the immunosuppression, on-time identification and treatment is very important.

Keywords: Toxoplasma, IgM antibody, Electrochemical Luminescence, Zoonosis, Parasitic disease.