Gastrointestinal helminths in large felines from a zoo in Malaysia

ABSTRACT

In nature, wild animals live in an enormous space and usually have very low genetic resistance against parasitic infection mainly due to low exposure towards the parasites themselves. However, when herds of these wild animals are kept in captivity, or in zoological gardens, parasitic infections might be worse and pose a serious threat to endangered species. The present study was conducted to observe the occurrence of gastrointestinal parasites in large felines in a Malaysian zoo. Ten faecal samples were collected from pumas (Puma concolor, n = 5), African lions (Panthera leo, n = 3), a spotted leopard (Panthera pardus, n = 1), and a black panther (Panthera onca, n = 1). All faecal samples were examined for parasite eggs, larvae, and oocysts by simple faecal floatation and formalin – ether sedimentation technique. All large felines in the zoo were infected with gastrointestinal parasites. A total of six species of gastrointestinal parasites were recovered including four nematodes (Toxocara cati, Ancylostoma spp., Toxascaris leonina, and Oxyuris sp.), a cestode (Spirometra sp.), and a protozoan (Isospora sp.). Half (n=5/10) of the large felines had mixed infections with Toxocara cati and Ancylostoma spp.

Keyword: Gastrointestinal parasites; Wild carnivores; Fecal sample; Zoo; Malaysia