Proceedings of the XXXVI GIRI meeting

Giardia nosode 30cH in treatment of captive Brown Howler Monkey (Alouatta guariba) with giardiasis in Brazil

Cideli de Paula Coelho 1, Thaís Sanches 2, Mayra Frediani 2, Luana Rivas 2, Talita Risério 2, Alice Tico 2, Francisco Conde 2, Juliana Summa 2, Sonia Pinheiro 3

1-PhD USP, Professor Santo Amaro University and HD Science, São Paulo, BRAZIL.
2-Division of Wildlife (city of São Paulo- SP, BRAZIL)
3-Professor HD Science, São Paulo, BRAZIL.

Abstract

Brown Howler Monkey (Alouatta guariba) is an endemic primate species of the Atlantic Forest. It has been considered threatened and classified as vulnerable. It is susceptible to several diseases, including giardiasis, whose zoonotic potential has an impact on human health and species conservation. Some studies have revealed Giardia occurrence in wild and captive individuals. Asymptomatic infection is common in captivity, although stress and immunosuppression can lead to severe clinical cases. The objective of this study was to determine the prevalence of Giardia duodenalis (syn. G. intestinalis, G. lamblia) in captive Brown Howler Monkey (Alouatta guariba) from São Paulo city, Brazil. Fecal samples of 43 A. guariba (N = 43) kept in 17 enclosures were collected over three alternate days, totaling 153 tests. A pool of fecal samples was collected from each enclosure. These animals were kept in captivity in Divisão da Fauna Silvestre, Prefeitura Municipal de São Paulo, Estado de São Paulo, Brasil. Animals were asymptomatic, with some groups showing slightly softer stools. Some of the material was immediately processed for direct examination with buffered saline. Another portion was subjected to centrifugal flotation as described by Sheather. The qualitative analysis was based on a number of cysts per slide classifying as negative (none), rare (1-5 cysts/slide), mild (6-25 cysts/slide), moderate (26-50 cysts/slide) and severe (up 50 cysts/slide) infection. Only one enclosure tested negative (5,8%); others (16) were positive being classified as rare (4–23,5%), mild (8 – 47,0%), or moderate (4 – 23,5%). Severe infection did not occur. Despite being asymptomatic, treatment was chosen to prevent positive animals from spreading infection. Allopathic treatment was impractical due to the large enclosure size and high-stress handling restraint. Homeopathic Giardia 30 cH nosode was administered orally (drink water and mix into the feed) to animals of 16 positive enclosures, sid, for 15 days. After treatment, a pool of fecal samples were recollected from all 16 positive enclosures, over three alternate days, totaling 144 tests. The same techniques and qualitative analysis were used. Seven enclosures were negative (43,7%), 8 were rare (50%) and 1 was mild (6,2%). Moderate and severe infection did not occur. Only normal stools were observed. A statistically significant difference (p=0.004) in treatment efficiency could be assessed with the Kruskal-Wallis test. Homeopathic Giardia 30 cH nosode reduced parasitism, and environmental contamination, with easy administration and no stress/adverse effects.

Keywords: Homeopathy, cysts, primate, parasitism

References


© International Journal of High Dilution Research.
Not for commercial purposes.