# BAYLISASCARIASIS

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| Raccoons; Orangutan; Gibbon, macaques, Ateles sp.; Golden lion tamarins; Ruffed lemur man | perorally | Eosinophilic encephalitis, neuroretinitis | yes | Albendazole | In houses 
Strict hygienic control 
in zoos 
destruction of raccoon latrines |

Fact sheet compiled by Manfred Brack, formerly German Primate Center, Göttingen/Germany. Last update 22.11.2008

Susceptible animal groups: primary host: raccoon (*Procyon lotor)*

Causative organism *Baylisascaris procyonis* (rarely *B. columnaris*).

Zoonotic potential Yes- through contact with raccoon feces.

Distribution In raccoons: USA, Germany, Canada, Poland, Czech Republic, Japan., in nonhuman primates: USA

Transmission Peroral ingestion of embryonated eggs.

Incubation period Up from 15 days (exp.infection) to several months.

Clinical symptoms In nonhuman primates: depression, head tilt, Babinski-reflexes, araxias, tremors, death; in man: lethargy, irritation, somnolence, Babinski-reflexes, ataxias, paralyses, spasms, coma, death. In ocular infections unilateral neuroretinitis, blindness.

Post mortem findings Eosinophilic, granulomatous encephalitis.

Diagnosis In raccoon feces: ovodiagnosis;
In man and nonhuman primates mainly post-mortem: eosinophilic encephalitis with cross sections of large nematode larvae with patent, round gut.

Material required for laboratory analysis Raccoon feces, brain tissues of suspected animals.

Relevant diagnostic laboratories Dept. Pathobiol. Purdue Univ., West Lafayette, Indiana/USA.

Treatment In raccoons: piperazine citrate, in man and nonhuman primates Albendazole possible (anti-nematode effects, blood-brain barrier crossing), but still questionable.

Prevention and control in zoos Identification and heat destruction (propane torch) of raccoon latrines.

Suggested disinfectant for housing facilities Heat destruction of raccoon latrines.
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**Experts who may be consulted**

Dr. Kevin Kozakos, Purdue University, West Lafayette/Indiana/USA.

**References**


