

## CAPILLARIASIS

ANIMAL GROUP AFFECTED	TRANSMISSION	CLINICAL SIGNS	FATAL DISEASE ?	TREATMENT	PREVENTION & CONTROL
All nonhuman primate genera	Perorally – ingestion of infected liver tissues or possibly infected ground beetles	Usually none, in severe infections /massive death of helminths occasionally sudden death	Rarely	Albendazole or Fenbendazole	<i>In houses</i> Rodent control  <i>in zoos</i>  Rodent control

<b>Fact sheet compiled by</b> Manfred Brack, formerly German Primate Center, Göttingen/Germany	<b>Last update</b> 22.11.2008
<b>Susceptible animal groups</b> All nonhuman primates can be infected, primary hosts : rodents ( <i>Peromyscus maniculatus</i> , <i>Clethrionomys gapperi</i> , <i>Rattus norvegicus</i> , <i>R.rattus</i> , <i>Mus musculus</i> ).	
<b>Causative organism</b> <i>Capillaria hepatica</i> (syn.: <i>Calodium hepatica</i> ) in <i>Pan paniscus</i> also <i>C.brochieri</i> .	
<b>Zoonotic potential</b> Yes, > 30 human cases reported.	
<b>Distribution</b> Worldwide.	
<b>Transmission</b> Peroral uptake of 2-8 cell stage eggs trapped in liver tissues of rodents, transmission via ground beetles as vectors are possible.	
<b>Incubation period</b> 52 hs.	
<b>Clinical symptoms</b> In nonhuman primates usually none, occasionally sudden death. Capillariasis recorded in died mountain gorillas in Rwanda. In man abdominal pain and weight loss reported.	
<b>Post mortem findings</b> Focal hepatocyte necrosis, cellular infiltration and fibrosis of migration tunnels in the liver tissues. In fatal cases hepatitis. Rarely intestinal capillariasis reported in nonhuman primates.	
<b>Diagnosis</b> Histological demonstration of adult helminths or of bioperculate eggs in the liver ( percutaneous needle biopsy) or occasionally intestinal tissues. Serology: indirect immunofluorescence assays.	
<b>Material required for laboratory analysis</b> Liver/intestines	
<b>Relevant diagnostic laboratories</b> Local veterinary laboratories	
<b>Treatment</b> Fenbendazole (35 mg/kg for 3 days : cave: massive destruction of helminths in the liver may induce hepatitis. In intestinal capillariasis Albendazole 10 – 20 mg/kg/day recommended.	
<b>Prevention and control in zoos</b> Rodent control	
<b>Suggested disinfectant for housing facilities</b>	
<b>Notification</b>	
<b>Guarantees required under EU Legislation</b>	
<b>Guarantees required by EAZA Zoos</b>	

**Measures required under the Animal Disease Surveillance Plan****Measures required for introducing animals from non-approved sources****Measures to be taken in case of disease outbreak or positive laboratory findings****Conditions for restoring disease-free status after an outbreak****Experts who may be consulted****References**

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