ANCYLOSTOMIASIS (HOOKWORM DISEASE)

ANIMAL GROUP AFFECTED	TRANS-MISSION	CLINICAL SIGNS	FATAL DISEASE ?	TREATMENT	PREVENTION & CONTROL
Pongidae, Cercopithecidae, Cebidae.	Percutaneously (in man also perorally via breast milk).	Larva migrans symptoms, dyspnea, diarrhea.	rarely	Mebendazol	*In houses* *in zoos*

Fact sheet compiled by Manfred Brack, formerly German Primate Center, Göttingen/Germany.	**Last update** 22.11..2008
Susceptible animal groups *Gorilla gorilla,Pan troglodytes, Hylobates* sp.,*Papio* sp.,*Macaca mulatta,Cercopithecus mona : A.duodenale ; Cebus capucinus, Ateles* sp.,*Erythrocebus patas, Cercopithecus mona : Necator americanus.*	
Causative organism *Ancylostoma duodenale, Necator americanus* (Nematoda, Strongylina: Ancylostomatidae).	
Zoonotic potential Yes.	
Distribution *A.duodenale* : world-wide, predominantly in tropical/subtropical S.E.Asia and America; *N.americanus* : tropical and subtropical rain forests.	
Transmission Percutaneously by filariform (3 rd stage) larvae.	
Incubation period	
Clinical symptoms Pot belly syndrome, apnea, cutaneous larva migrans, persistent diarrhea, in man also anemia.	
Post mortem findings Not reported in nonhuman primates.	
Diagnosis Ovodiagnosis (cave: ancylostomatid eggs may be confused with the very similar oesophagostomid eggs!), followed by fecoculture of filariform larvae (Harada-Mori technique).	
Material required for laboratory analysis	
Relevant diagnostic laboratories	
Treatment Mebendazole (2 x 15 mg / kg or 10 x 3 mg / kg). Ivermectin is almost useless against adult ancylostomes, but very effective against migrating larva nigrans. Albendazole (400 mg for 1 – 5 days).	
Prevention and control in zoos	
Suggested disinfectant for housing facilities	
Notification	
Guarantees required under EU Legislation	
Guarantees required by EAZA Zoos	
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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