

## ANATRICHOSOMIASIS

<b>ANIMAL GROUP AFFECTED</b>	<b>TRANSMISSION</b>	<b>CLINICAL SIGNS</b>	<b>FATAL DISEASE ?</b>	<b>TREATMENT</b>	<b>PREVENTION &amp; CONTROL</b>
<i>Macaca</i> spp. <i>Presbytis obscurus</i> , Cercopithecidae, <i>Callithrix jacchus</i> , <i>Pongo pygmaeus</i> , (Tupaia belangeri)	Probably perorally	Nasal discharge, creeping eruptions; ocular parasitism ( <i>A. ocularis</i> )	No	Fenbendazole	In houses  in zoos Good hygienic practices.

<b>Fact sheet compiled by</b> Manfred Brack, formerly German Primate Center, Göttingen/Germany.	<b>Last update</b> November 2002
<b>Fact sheet reviewed by</b> W. Rietschel, Wilhelma Zoologischer-Botanischer Garten, Stuttgart, Germany <b>C. Furley, Howletts Zoo, Bekesbourne, United Kingdom</b>	
<b>Susceptible animal groups</b> <i>Macaca mulatta</i> , <i>M.fascicularis</i> , <i>M.nemestrina</i> , <i>M.maurus</i> , <i>M.niger</i> , <i>M.assamensis</i> , <i>Presbytis obscurus</i> , <i>Cercopithecus aethiops</i> , <i>Miopithecus talapoin</i> , <i>Erythrocebus patas</i> , <i>Papio</i> spp., <i>Cercocebus</i> spp., <i>Callithrix jacchus</i> , <i>Pongo pygmaeus</i> , man.	
<b>Causative organism</b> <i>Anatrichosoma cutaneum</i> , <i>A. cynamolgi</i> , <i>A. nacepobi</i> , <i>A. rhina</i> (Trichiuridae).	
<b>Zoonotic potential</b> Yes (in Asia).	
<b>Distribution</b> Asia.	
<b>Transmission</b> Anatrichosomatidae are directly transmitted without intermediate hosts, transmission is probably perorally. Eggs are excreted into the nasal mucus, some are swallowed and shed with the faeces.	
<b>Incubation period</b>	
<b>Clinical symptoms</b> Nasal mucosal forms: mild to severe nasal discharge; Cutaneous form Creeping eruptions at palms and / or soles, lymphadenopathy.	
<b>Post mortem findings</b> Nematodes in the deep Malpighian layer, pressure atrophy of adjacent tissues.	
<b>Diagnosis</b> Ovodiagnosis in tissue scrapings.	
<b>Material required for laboratory analysis</b> Nasal swabs, tissue scrapings, biopsies.	
<b>Relevant diagnostic laboratories</b>	
<b>Treatment</b> Fenbendazole (10 – 35 mg / kg for 3 days, repeated 2 weeks later)	
<b>Prevention and control in zoos</b> General hygienic practice	
<b>Suggested disinfectant for housing facilities</b>	
<b>Notification</b>	



<b>Guarantees required under EU Legislation</b>
<b>Guarantees required by EAZA Zoos</b>
<b>Measures required under the Animal Disease Surveillance Plan</b>
<b>Measures required for introducing animals from non-approved sources</b>
<b>Measures to be taken in case of disease outbreak or positive laboratory findings</b>
<b>Conditions for restoring disease-free status after an outbreak</b>
<b>Experts who may be consulted</b>
<b>References</b> <ol style="list-style-type: none"><li>1. Brack, M. 1987. Agents Transmissible from Simians to Man. Springer, Berlin.</li><li>2. Eberhard, M. L., and C. S. Frisk. 1982. <i>Anatrichosoma</i> from the eye of a cynomolgus monkey. Proc. Helminthol. Soc. Wash. 49: 154 – 155.</li><li>3. File, S. K. 1974. <i>Anatrichosoma ocularis</i> sp. n. (Nematoda: Trichosomoididae) from the eye of the common tree shrew, <i>Tupaia glis</i>. J. Parasitol. 60: 985 – 988.</li><li>4. Jackson, R. K., S. L. Motzel, and J. E. Corrigan. 1996. Diagnostic exercise: cutaneous lesions and unilateral limb swelling in a rhesus monkey. Lab. Anim. Sci. 46: 444 – 447.</li><li>5. Long, G. G., J. R. Lichtenfels, and J. L. Stookey. 1976. <i>Anatrichosoma cynamolgi</i> (Nematoda: Trichinellida) in rhesus monkeys, <i>Macaca mulatta</i>. J. Parasitol. 62: 111 – 115.</li><li>6. Takenaka, T., H. Ueki, Y. Hashimoto, K. Hashimoto, and S. Matsumoto. 1989. A survey for the prevalence of <i>Anatrichosoma</i> sp. in nasal cavities of cynomolgus monkeys. Exp. Anim. 38: 93 – 96.</li></ol>