

## BERTIELLOSIS (TAPE WORMS)

ANIMAL GROUP AFFECTED	TRANSMISSION	CLINICAL SIGNS	FATAL DISEASE ?	TREATMENT	PREVENTION & CONTROL
Old World primates ( <i>Bertiella studeri</i> ), New World primates ( <i>B. mucronata</i> )	Perorally through oribatid mites	Usually none	No	Praziquantel	<i>In houses</i>  <i>in zoos</i>

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<b>Susceptible animal groups</b> <i>Macaca mulatta, M. fascicularis, M. cyclopis, Papio spp., Cercopithecus spp., Hylobates hoolock, Pan troglodytes, Pongo pygmaeus, man – B. studeri. Cebus apella, C. capucinus, Alouatta caraya, Callicebus personatus, Saguinus personatus, man– B. mucronata.</i>	
<b>Causative organism</b> <i>Bertiella studeri, B. mucronata.</i>	
<b>Zoonotic potential</b> Through oribatid mites only (soil eating habits in children).	
<b>Distribution</b> <i>B. studeri</i> : Asia Africa, <i>B. mucronata</i> : Americas.	
<b>Transmission</b> Perorally through oribatid mites ( <i>B. studeri</i> : <i>Scheloribates laevigatus, Galumna sp; B. mucronata: Dometorina sudamericana, Scheloribates atahualpensis</i> ).	
<b>Incubation period</b>	
<b>Clinical symptoms</b> Usually none in nonhuman primates. In infected children occasionally anorexia, weight loss, dyspepsia, abdominal pain, congestion or diarrhoea.	
<b>Post mortem findings</b> Tape worms in the small intestines.	
<b>Diagnosis</b> Faecal shedding of proglottids, ovoidiagnosis (sedimentation tests!) , finding of tape worms at necropsy.	
<b>Material required for laboratory analysis</b> Faecal samples, at necropsy intestinal tract.	
<b>Relevant diagnostic laboratories</b>	
<b>Treatment</b> Praziquantel 5 mg /kg.	
<b>Prevention and control in zoos</b>	
<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. Appleton, C. C., and C. Brain. 1995. Gastro – intestinal parasites of <i>Papio cynocephalus ursinus</i> living in the central Namib desert, Namibia. <i>Afr. J. Ecol.</i> 33: 257 – 265.</li><li>2. Brack, M. 1987. Agents Transmissible from Simians to Man. Springer, Berlin.</li><li>3. Conder, G. A., P. A. Roehm, D. A. Duprey, S. S. Johnson, and P. J. Pagano. 1991. Treatment of bertiellosis in <i>Macaca fascicularis</i> with Praziquantel. <i>J Helminthol. Soc. Wash.</i> 58: 128.</li><li>4. Denegri, G. M. 1985. Consideraciones sobre sistematica y distribucion geografica del genero <i>Bertiella</i> (Cestoda – Anoplocephalidae) en el hombre y en primates no humanos. <i>Neotropica</i> 31: 55 – 63.</li><li>5. Denegri, G. M. 1985. Desarrollo experimental de <i>Bertiella mucronata</i> (Cestoda – Anoplocephalidae) de humano en su huesped intermediario. <i>Zbl. Vet. Med. B</i> 32: 498 – 504.</li><li>6. Feldman, R. E., G. M. Denegri, J. O. Ovolio y N. O. Cantu. 1983. Nuevo caso humano de teniasis por <i>Bertiella mucronata</i> (Cestoda <i>Anoplocephalidae</i>), Meyner 1895, en la Argentina. I. Diagnostico y tratamiento. <i>Acta Bioquim. Clin. Latinoam.</i> 17: 571 – 578.</li><li>7. Galan – Puchades, M. T., M. V. Fuentes, P. P. Simarro, and S. Mas – Coma. 1997. Human <i>Bertiella studeri</i> in equatorial Guinea. <i>Transact. Roy. Soc. Trop. Med. Hyg.</i> 91: 680.</li><li>8. Panda, D. N., and M. R. Panda. 1994. Record of <i>Bertiella studeri</i> (Blanchard, 1891), an anoplocephalid tapeworm, from a child. <i>Ann. Trop. Med. Parasitol.</i> 88: 451 – 452.</li></ol>