

## EPSTEIN – BARR VIRUS (EBV) AND EBV – RELATED SIMIAN VIRUSES

ANIMAL GROUP AFFECTED	TRANSMISSION	CLINICAL SIGNS	FATAL DISEASE ?	TREATMENT	PREVENTION & CONTROL
EBV: possibly Pongidae. EBV-like viruses: orang-utans, baboons, Cebidae, <i>Nycticebus coucang</i>	Contact, EBV also by oral routes in early childhood	EBV in man mostly silent, otherwise Infectious Mononucleosis, Burkitt's lymphoma, nasopharyngeal carcinomas. In great apes lymphoproliferative disorders  EBV-like viruses: usually silent, occasionally weight loss, inappetence, diarrhoea, lymphoproliferative disorders	In cases of malignant tumours or lymphomas		<i>In houses</i>  <i>in zoos</i>

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<b>Susceptible animal groups</b> EBV : Pongidae ; EBV-like simian viruses particularly New World monkeys (Callitrichidae, Aotidae).	
<b>Causative organism</b> Lymphocryptoviruses: Epstein-Barr virus, <i>Herpesvirus saimiri</i> , <i>H.pongo</i> , <i>H.papio</i> , Callitrichine herpesvirus –3, <i>Nycticebus coucang</i> herpesvirus.	
<b>Zoonotic potential</b> Yes.	
<b>Distribution</b> EBV in man World - wide, <i>H.saimiri</i> naturally in <i>Saimiri sciureus</i> .	
<b>Transmission</b> Mostly by direct contact, EBV in children also by oral route.	
<b>Incubation period</b>	
<b>Clinical symptoms</b> Mostly silent infections. EBV in man otherwise Infectious Mononucleosis, nasopharyngeal carcinomas (Chinese), Burkitt's lymphoma (Africa), non-Hodgkin's lymphoma; in great apes possibly malignant lymphomas. <i>Herpesvirus saimiri</i> in squirrel monkeys symptomless, in <i>Callithrix jacchus</i> and <i>Aotus trivirgatus</i> occasionally weight loss, inappetence, diarrhoea, abdominal masses, rarely spontaneous malignant lymphomas. <i>H.pongo</i> has been isolated from leukemic orang-utans, <i>H. papio</i> from leukemic <i>Papio hamadryas</i> .	
<b>Post mortem findings</b> Lymphoproliferative disorders due to delayed apoptosis of B-cell lineage.	



<b>Diagnosis</b> Histopathology, immunohistochemistry, tissue culture, PCR.
<b>Material required for laboratory analysis</b> Lymph nodes, spleen, whole blood, bone marrow.
<b>Relevant diagnostic laboratories</b> 1. Virus Reference Laboratories, Inc. 7540 Louis Pasteur Road, SAN ANTONIO ,Tx 78229 Phone (210) 614 – 7350 Fax: (210) 614-7355  2. Konsiliarlaboratorium für EBV, HHV 6,7,8 Institut für Medizinische Mikrobiologie und Hygiene Staatliche Medizinaluntersuchungsstelle Universitätskliniken, Haus 47 D 66421 Homburg/Saar Tel.: 06841 162 3931 “ “ 3935 Fax: “ “ 3980 e-mail: vinmue@uniklinik-saarland.de
<b>Treatment</b>
<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> 1. Prof. Dr. Müller – Lantzsch, Konsiliarlaboratorium Homburg/Saar, 2. Dr. B. Gärtner, “ “
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