AUJESZKY’S DISEASE or PSEUDORABIES

<table>
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<th>ANIMAL GROUP AFFECTED</th>
<th>TRANSMISSION</th>
<th>CLINICAL SIGNS</th>
<th>FATAL DISEASE?</th>
<th>TREATMENT</th>
<th>PREVENTION &amp; CONTROL</th>
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<tr>
<td>Natural host: suidae</td>
<td>Naso-oral;</td>
<td>Central nervous system dysfunction, pruritus, respiratory symptoms, abortion and mummification</td>
<td>Yes for carnivores, ruminants and young suidae</td>
<td>None</td>
<td>In houses Vaccination, never feed raw pork in zoos avoid contact with suidae</td>
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<tr>
<td>Accidental victim: most mammals</td>
<td>Genital tract</td>
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Fact sheet compiled by F. Vercammen, Royal Zoological Society of Antwerp, Belgium

Fact sheet reviewed by R. De Deken, Animal Health, Institute of Tropical Medicine, Antwerp, Belgium
J. Mortelmans, Animal Health, Institute of Tropical Medicine, Antwerp, Belgium

Susceptible animal groups
Virtually all mammals, except humans and the tailless apes, can get infected.

Causative organism
The etiological agent of pseudorabies is suid herpesvirus 1, which belongs to the subfamily Alphaherpesvirus of Herpesviridae. Aujeszky virus is enveloped and contains double-stranded DNA. Although only one serotype is known, strain differences exist.

Zoonotic potential
So far, suspected human infections have not been confirmed by isolation of the virus.

Distribution
World-wide.

Transmission
Transmission is primarily via direct contact (the nose and mouth in domestic swine; the genital tract in feral swine). Air-borne transmission is also possible (aerosols). Contaminated drinking water and feed can spread the virus.

Incubation period
Experimental infection in mink has an incubation period of 3-4 days. In young seronegative piglets incubation period is 2 days. Many animal species die within 1-2 days after onset of clinical signs.

Clinical symptoms
In young piglets and other susceptible mammals all the signs relate to central nervous disturbances. Depression and pruritus are characteristic in these animals. In older pigs respiratory symptoms can prevail. Sometimes abortion or mummification of the foetus is observed.

Post mortem findings
Macroscopic lesions are minimal: cutaneous lesions due to pruritus (especially in brown bears and white-tailed deer), hemorrhages in different organs. Microscopy can demonstrate a nonsuppurative meningoencephalitis with intranuclear inclusions.

Diagnosis
1. Virus isolation in cell cultures: cytopathic effect after 2-5 days
2. Virus antigen detection: a) Fluorescent antibody test b) Enzyme immune assays c) Polymerase Chain Reaction (PCR)
3. Serology Different types of serological tests for the detection of antibodies are used. Virus neutralisation, latex agglutination and enzyme-linked immunosorbent assay (ELISA) are the most known techniques.

Material required for laboratory analysis
For virus detection: tonsil, brainstem, brain, spleen, lung. Also swabs from nose or genital tract. Serum for serology.

OIE Reference Laboratories
- Dr S.L. Swenson
Treatment
No treatment exists.

Prevention and control in zoos
Avoid contact between suidae and susceptible animals and do not feed raw pork meat. Vaccination with an inactivated or live sub-unit marker vaccine is possible in companion animals (cats and dogs) and pigs, but so far, this immunization has not been documented in zoo-and wild animals.

Suggested disinfectant for housing facilities
The virus is lipophilic and sensitive to many commonly used disinfectants.

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

Contacts for further information

References
3. Manual of Standards Diagnostic Tests and Vaccines 2000, Part 2, Section 2.2., Chapter 2.2.2