## ANGIOSTRONGYLOSIS

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<th>ANIMAL GROUP AFFECTED</th>
<th>TRANSMISSION</th>
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<td>Mainly New World monkeys (naturally in rats !)</td>
<td>Perorally via mollusc vectors</td>
<td>Lethargy, Ataxia, incoordination, tumorlike masses, death</td>
<td>Yes</td>
<td>Mebendazole (Cave: anaphylactic shock!)</td>
<td>In houses in zoos Physical removal of infected slugs, snails, crabs etc.</td>
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**Fact sheet compiled by**
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**Susceptible animal groups**
Callitrichidae, Cebidae, 1 x Hyl obates lar, Lemur variegatus, Miopithecus talapoin, rats, man.

**Causative organism**
Angiostrongylus costaricensis, A.cantonensis.

**Zoonotic potential**
Only indirectly through slugs.

**Distribution**
Central- and South America, South East Asia, China, Hawaii, (Africa, Europa ?).

**Transmission**
Perorally via uptake of larvae-containing slugs (*Vaginulus plebius*) or fresh-water snails (*Achatina sp , A. fulica*, *Pamacea canaliculata*). *A. cantonensis* also through freshwater prawns, land crabs, frogs etc.

**Incubation period**
Prepatent period : 4 weeks.

**Clinical symptoms**
Lethargy, ataxia, palpable abdominal masses, incoordination in walking, death. In man: headache, stiffness, vomiting, myalgia (cranial nerve palsies III, IV, VI, VII)

**Post mortem findings**
*A. costaricensis*: mesenteric tumor-like,larvae containing granulomas, otherwise congested lungs, eosinophilic meningoencephalitis.

**Diagnosis**
Necropsy, serology (IF or EIA), CSF leocytosis

**Material required for laboratory analysis**
Altered tissues.

**Relevant diagnostic laboratories**
Local parasitological /pathological laboratories.

**Treatment**
Repeatedly Mebendazole (5 mg/kg). Cave : The death of migrating larvae after anthelminthic treatment may increase inflammatory and anaphylactic responses.

**Prevention and control in zoos**
Physical removal of slugs and snails from animal and public contact.

**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