## OESOPHAGOSTOMIASIS

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| Old World monkeys, great apes, man | Perorally | Diarrhea, weight loss, weakness | In heavy infections yes | Thiabendazole | In houses
|                     |                  |                   |                      | Ovocontrol, steam desinfection of wood-chip beddings / soil. | in zoos
|                     |                  |                   |                      | ovocontrol Steam desinfection of wood-chip beddings / soil. |

**Fact sheet compiled by**
Manfred Brack, formerly German Primate Center, Göttingen / Germany.

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**Susceptible animal groups**
Great apes, Old World monkeys, man.

**Causative organism**
*Oesophagostomum apiostomum*, *O.aculeatum*, *O. bifurcum*, *O.stephanostomum*, *O.kherai*.

**Zoonotic potential**
Yes.

**Distribution**
As natural infections: Africa, Asia, in captivity : World-wide.

**Transmission**
Perorally through the sheathed fourth larval stages (very resistant to drying!).

**Incubation period**

**Clinical symptoms**
Minor infections are usually well tolerated, heavy infections induce diarrhea, weight loss, weakness, and death, in man “Dapaong tumor”. *O.stephanostomum* appears especially harmful in orangutans.

**Post mortem findings**
Semi-globose to lentil-shaped, pearl-like or greenish-grey to blackish nodules of 2 – 5 mm diameter in the submucosal layer of the large intestines. On the cut surface the nodules are cysts filled by a brown, creamy material and connected to the intestinal lumen by a small ulcer. (The swallowed 3rd larvae burrow into the large intestinal submucosa, and return after one more molt to the intestinal lumen. In pre-immunized hosts the return to the intestinal lumen is blocked by immune reactions, the larvae are trapped and die, thereby leading to inflammation, necrosis and haemorrhages in the surrounding tissues: cyst formation).

**Diagnosis**
Ovodiagnostic (Cave: *Oesophagostomum* – eggs are easily confused with hookworm-eggs!)

PCR-RFLP, Random Amplified Polymorphic DNA –Gel – electrophoresis.

**Material required for laboratory analysis**
Faecal samples, at necropsy adult worms, nodular tissues.

**Relevant diagnostic laboratories**
Local veterinary laboratories.

**Treatment**
Thiabendazole.

**Prevention and control in zoos**
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