**Macracanthorhynchus**

**Host:**

Pig

**Intermediate hosts:**

Various dung beetles

**Species:**

*Macaracathorhynchus hirudinaceus*

**Distribution:**

Worldwide, absent from certain areas. For example, parts of Western Europe.

***IDENTIFICATION***

Gross: Adults resemble A. Suum, but taper posteriorly. The males are up to 10cm and the females up to 65 cm in length. When placed in water, the spiny proboscis is protruded, thus differentiating from Ascaris.

Microscopic: The egg is oval, 110µm by 65 µm, with a thick brown shell and contains the acanthor larva when laid.

***LIFE CYCLE***

Adults, attached to the small intestinal mucosa, lay eggs which are passed in the feces. These are produced in large numbers, are very resistant to extremes of climate and can survive for years in the environment. After ingestion by dung beetle larvae, the acanthor develops to the infective cystacanth stage in approximately 3 months. Infection of the pigs occurs after the ingestion of beetle grubs and adults and the prepatent period is 2-3 months.

***PATHOGENIC SIGNIFICANCE***

Produces inflammation and may provoke granuloma formation at the site of attachment in the small intestinal wall. Heavy infections may cause weight loss and, rarely, penetration of the intestinal wall results in a fatal peritonitis.

***DIAGNOSIS***

Finding eggs in the feces.

***TREATMENT AND CONTROL***

Pigs should be prevented from access to the intermediate hosts.

In modern management systems, this may easily be achieved, but where pigs are kept in small sties, the feces should be regularly removed to reduce the prevalence if the dung beetle intermediate hosts. Although there is little information on treatment, levamisole and ivermectin are reported to be effective.