



Heterophyes heterophyes



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Introduction

Heterophyes heterophyes is a small parasitic trematode fluke that infects humans who **eat raw or undercooked fish**. Heterophyes heterophyes infect, other mammals, such as **dogs and cats**, are more commonly infected. It's a minute intestinal fluke with different shapes

Symptoms

Infection usually remain asymptomatic and mild. Symptoms of heavy infections include abdominal discomfort, loss of appetite, chronic mucous diarrhea nausea. Inflammatory reactions in the area where the parasite entered the intestine. Eggs can leave the intestine and move through lympho_ vascular system and blood of their host. Eggs can enter the heart resulting in fetal myocardial and valvular damage (**ectopic infection**)

Diagnosis

By stool microscopy.

The ova of **H.heterophyes** are difficult to distinguish from other heterophyid species and some other flukes.

but collection of the adult worm allows accurate identification of the species.

Life cycle

Embryonated eggs are passed in the hosts feces into brackish water, then ingested by a snail (cerathidia or pironella). In the snail, eggs hatches and release miracidia which penetrate small intestine. The cercariae are released from the snail and encyst as metacercaria in the tissue such as tilapia and mugil. The man becomes **infected by ingesting undercooked or law salted fish containing metacercaria**. The metacercaria excyst, attach to the mucosa and mature into adults.

Hosts and Treatment

- 1- **Definitive host:** man
- 2- **Reservoir host:** fish eating mammals (cat & dog)
- 3- **Intermediate host:** primary: snail (pironella & cerithidia) are important snail host. secondary: Brackish water fish (mugil & tilapia)
Treatment : Praziquantel is a drug of choice

References

Heterophyes heterophyes (von Siebold, 1852) Stiles and Hassal, 1900
- Hamdy El, Nicola E. 1980. On the histopathology of the small intestine in animals experimentally infected with *H. heterophyes*.

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