



Kingdom: Anamalia
Phylum: Platyhelminthes
Class : Cestoidea
Subclass :Cestoda

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Prof. Dr. Muna M. Jori





Family: Hymenolepididae



Genus : *Hymenolepis*

sp. : *H. nana*

Is the **dwarf tapeworm**. it does occur worldwide, requiring an intermediate host. It is a short worm, growing only about one and one-half inches, complete with about 200 segments.

Scolex: Small with a ring of hooks and four sucker cups. The tapeworm infects humans only when the eggs are ingested. Eggs can be transmitted by infected food handlers, grain beetles and other insects that infest grains, as well as rodent contamination of foods.



Symptoms: Diarrhea, itching, abdominal pain, headaches.

severe cases: general body weakness, weight and appetite loss, abdominal pain, vomiting, allergies, nervous disturbances, and anemia.

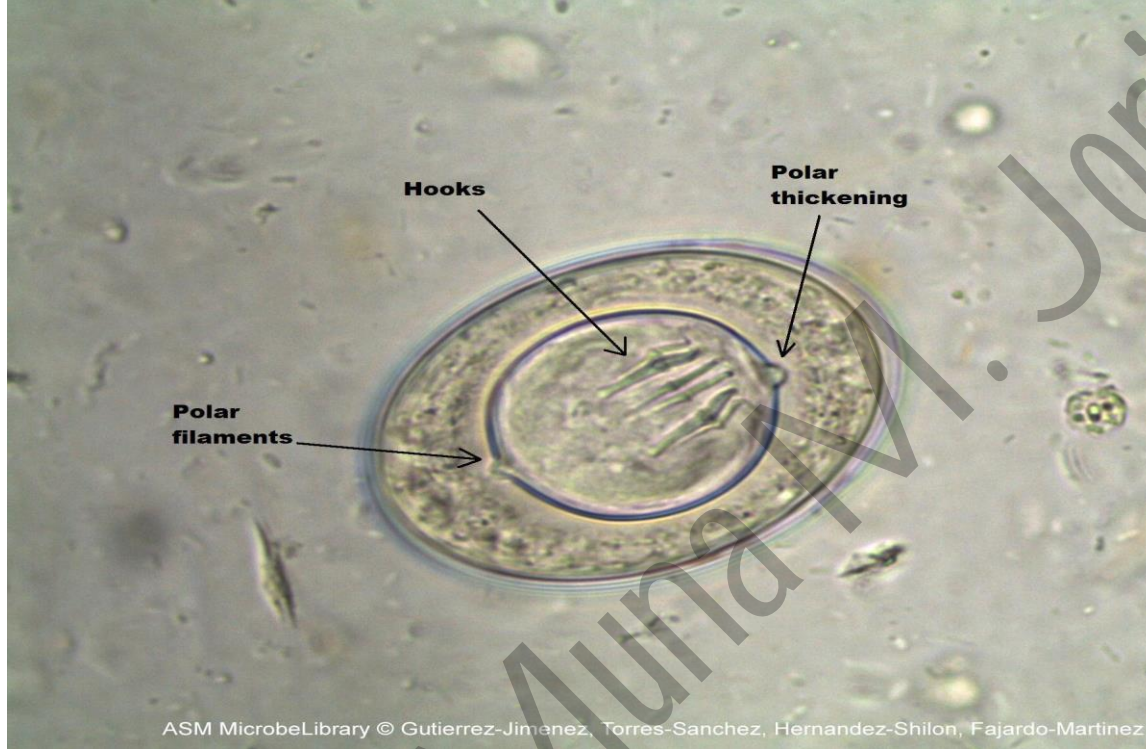
The eggs in fecal samples are easily identified, displaying two membranes enclosing an embryo with six hooklets. White blood cells may also be elevated, especially the eosinophils.

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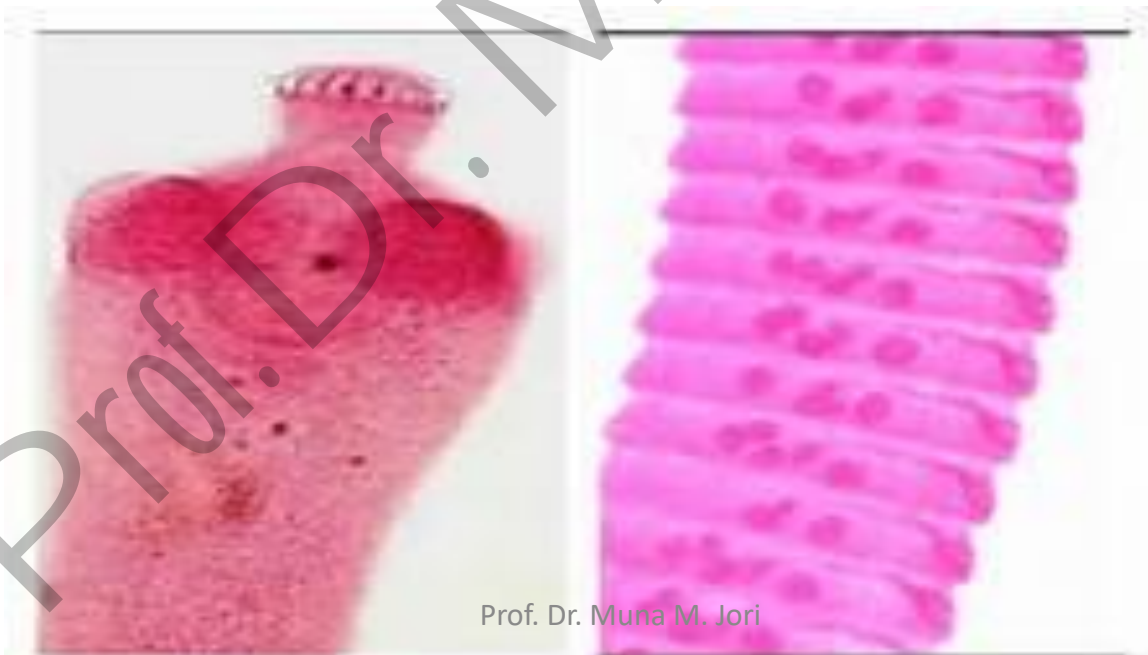


Life cycle:

- Larval stage: cysticercoid is passed in fleas.
- Adult stage: in rats and mice and accidentally in humans especially children who accidentally ingest infected fleas.
- Genus is derived from the membranous character of the egg shell “**hymen**”.
- Presence of 3 testes in each mature segment.
- Uterus is sac-like and transverse.
- Eggs possess two membranes’ outer membrane is thin and transparent.



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Order: Pseudophyllidea
Family: Diphylobothriidae
Genus : *Diphylobothrium*
sp. : *D. latum*

There are three larval stages :

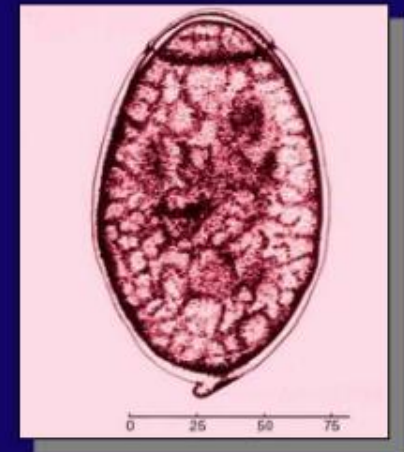
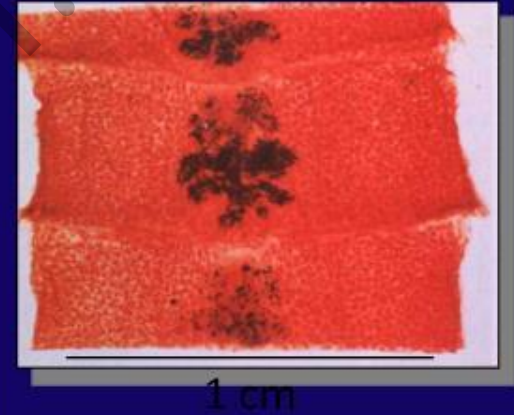
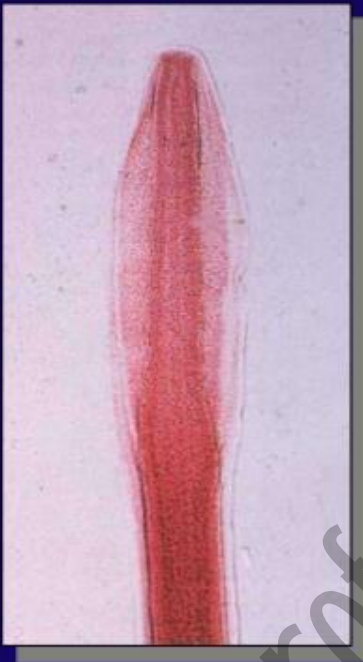
First stage: Coracidium :Ciliated oncosphere that develops from egg in water.

Second stage: Proceroid: Spindle-like solid body with cephalic invagination, found inside the cyclops (the first intermediate host).

Third stage: Plerocercoid: Head is invaginated in the neck, found in the fresh water fish, the second intermediate host.

Final Host: Man, dog, cat

Diphyllobothrium latum: Morphology





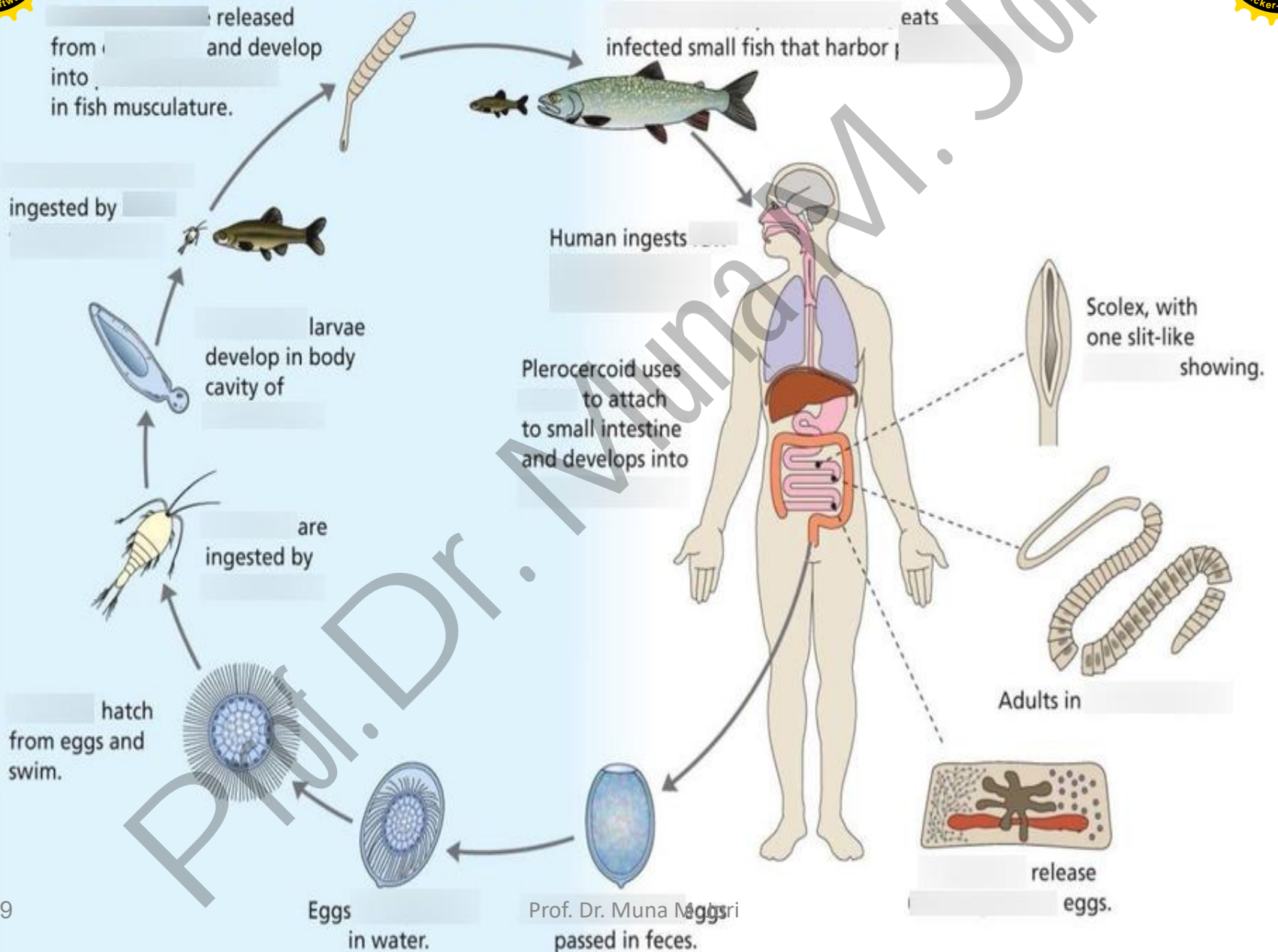
Diagnosis: Microscopic examination of feces for the characteristic operculated eggs.

Features: Fish tapeworm, and is the largest parasite found in humans, with its length reaching 4,000 proglottids. It is usually picked up after eating raw or lightly cooked freshwater fish.

In the intestine, a fish tapeworm can consume 80 to 100% of the host's vitamin B12. It is this deficiency (pernicious anemia) that is the most debilitating effect.

After it has been eliminated from the body, it can take up to a year for B12 levels to return to normal. Digestive disturbances that include pain and fullness in the upper abdomen, nausea, and anorexia are common symptoms.

Diphyllobothrium Latum life cycle





Thank You

And

Good Luck

