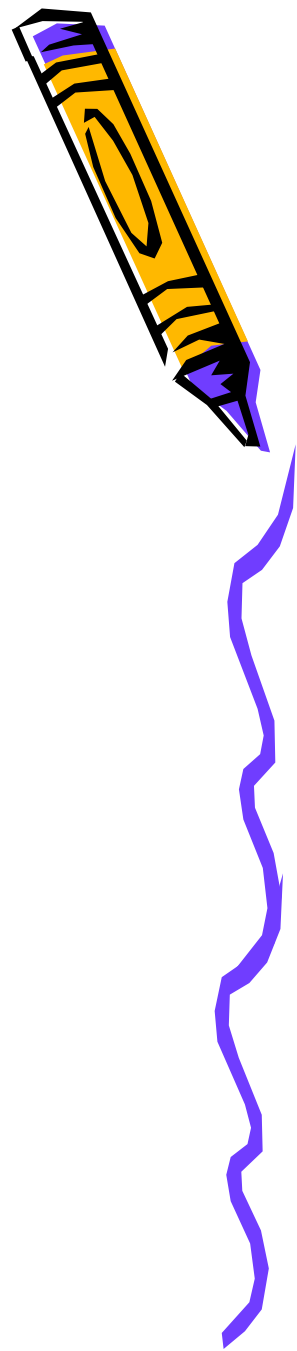


Moniezia spp.



Introduction:

Monieziosis is a **cestodiasis** caused by *Moniezia* sp. including *Moniezia expansa* and *M. benedni*.

They are found in the small intestine of **ruminants**, like cattle, sheep, and camel, especially in lamb and calf.

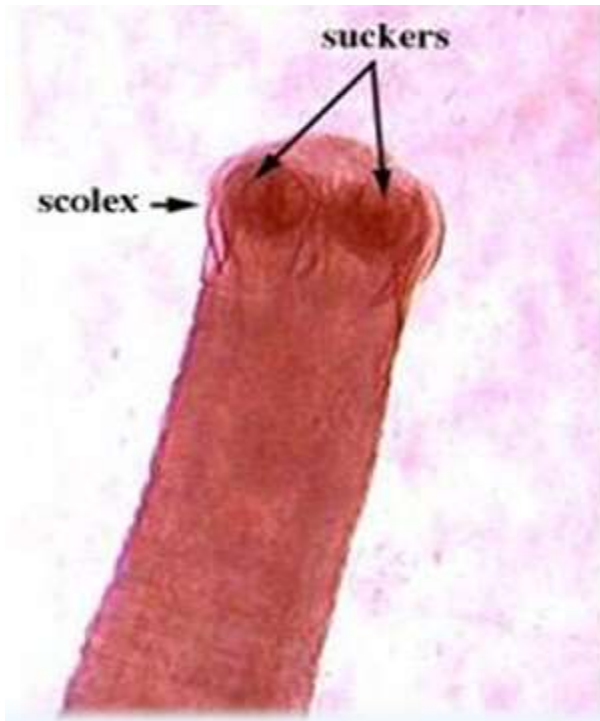
M. expansa : The more common in sheep and goat than in cattle

M. benedni: The more common in cattle than in sheep and goat

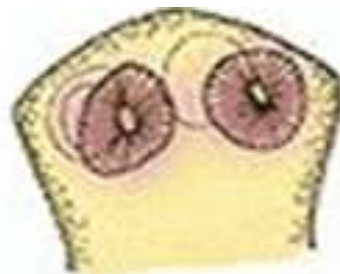


Morphology

- ♦ *Moniezia* spp. have unarmed scolices with four large suckers and very wide segments with bilateral genitalia.

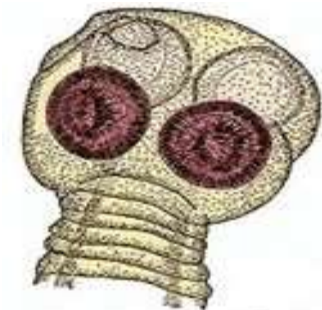


scolices



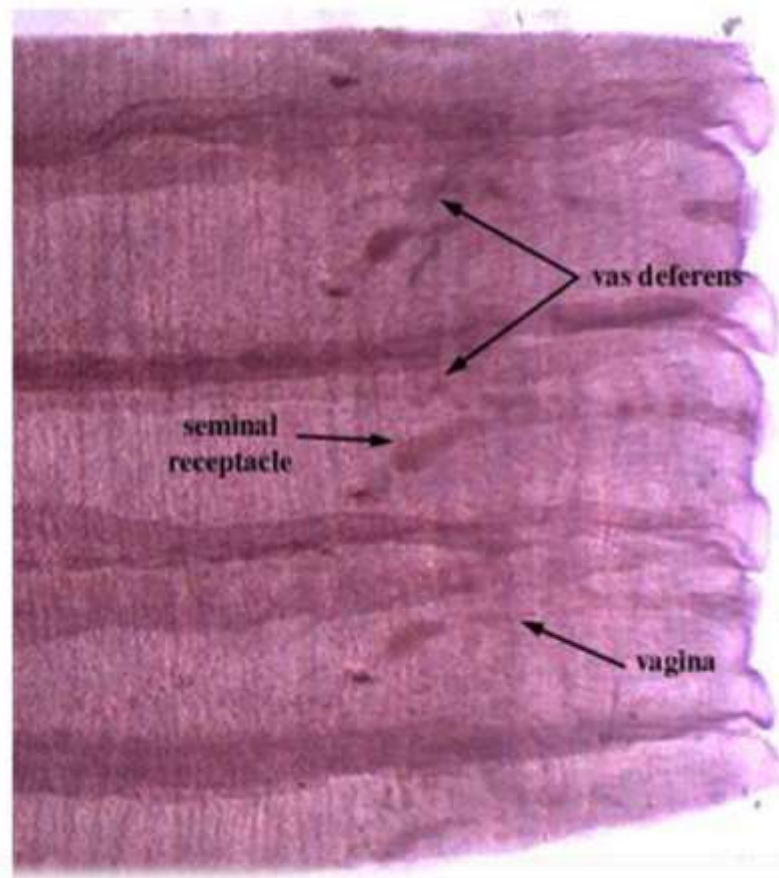
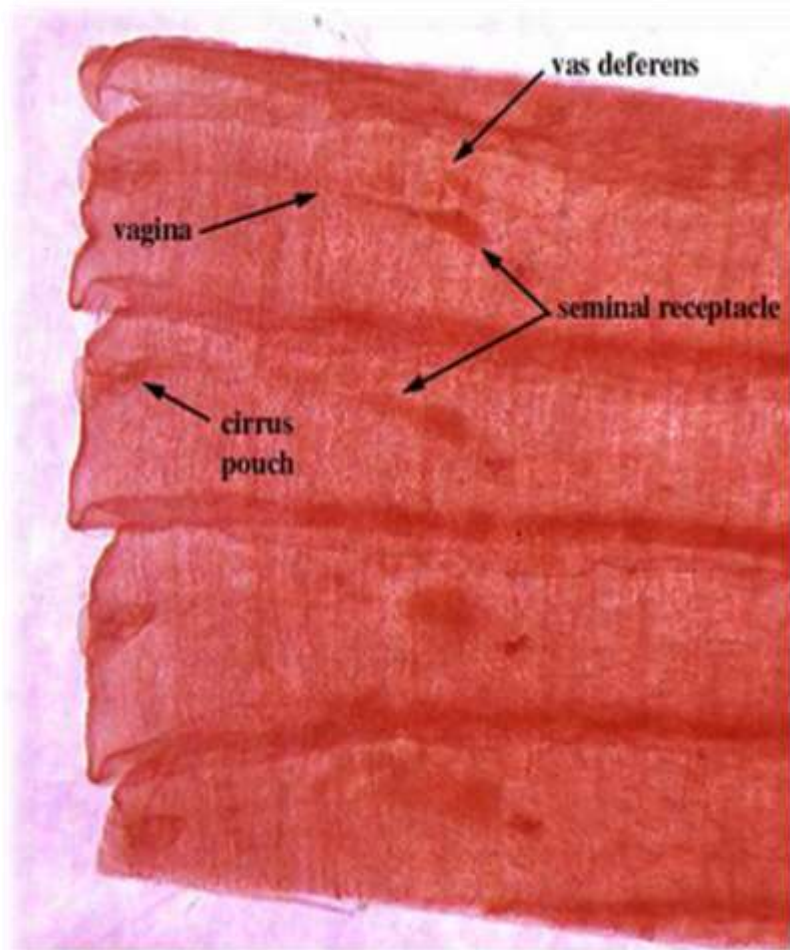
M. expansa

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M. benedeni





Characteristic of eggs

The egg of *Moniezia* spp. found in cattle feces is one of the few eggs that appears **square**, and internally the **pear-shaped** (pyriform apparatus) characteristic of anoplocephalid eggs can be seen.

Pyriform apparatus

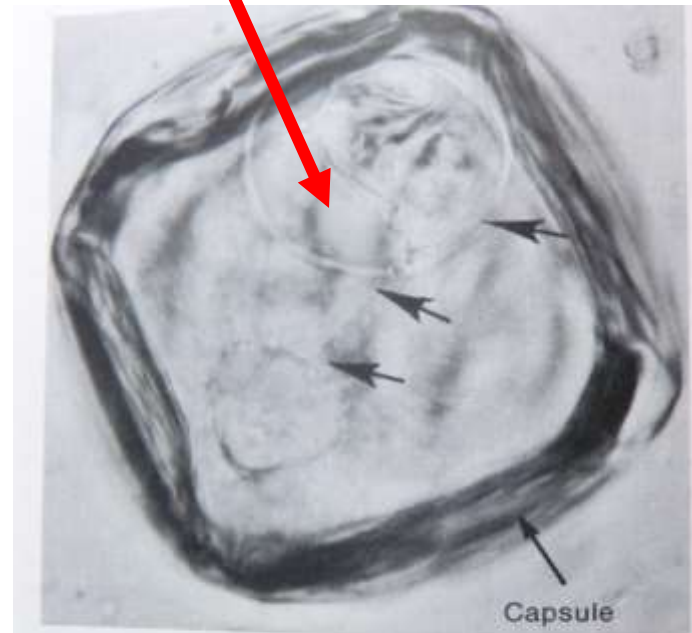


FIGURE 3-50 Egg of *Moniezia* sp. (Anoplocephalidae) of ruminants ($\times 1100$). The pear-shaped embryophore (arrows) is typical of anoplocephalid eggs.

Life cycle of *Moniezia* spp



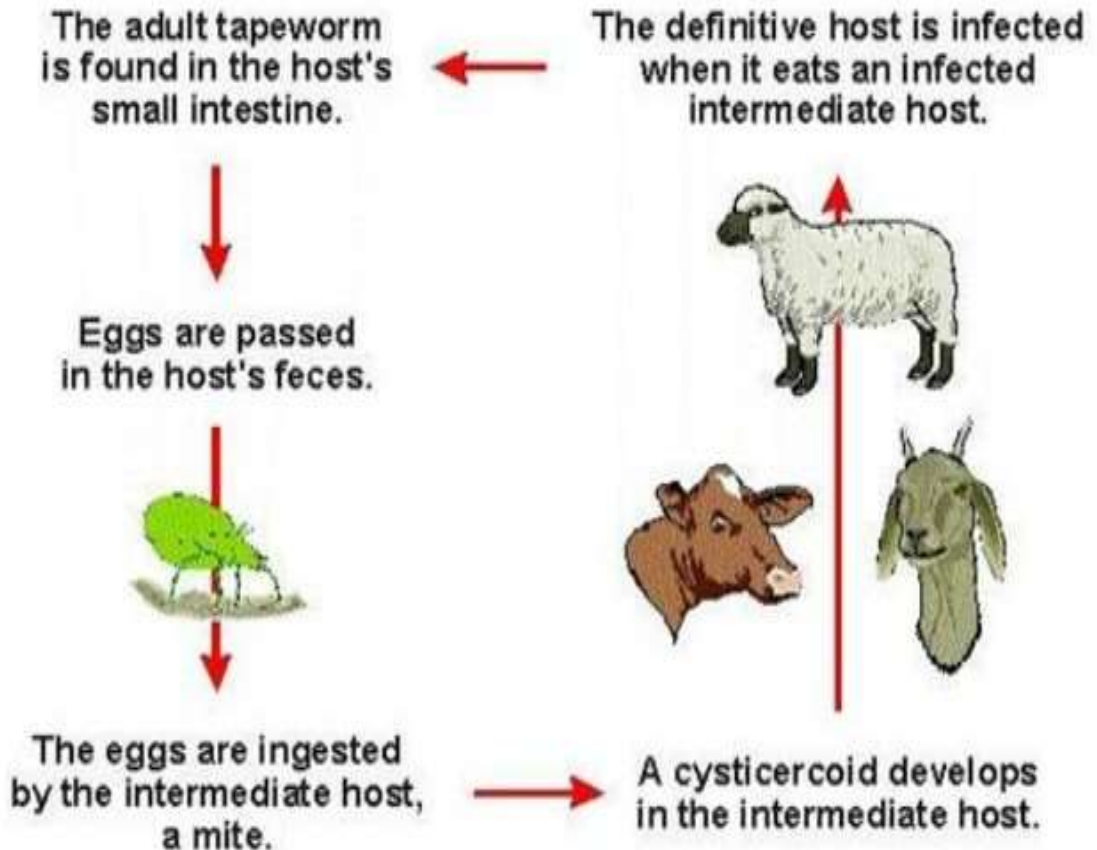
Definitive host:
ruminants.

Site of infection:
small intestine

Intermediate host:
Forage mites

Infective stage:
cysticercoid

Prepatent period :
month 3



(Parasites and Parasitological Resources)

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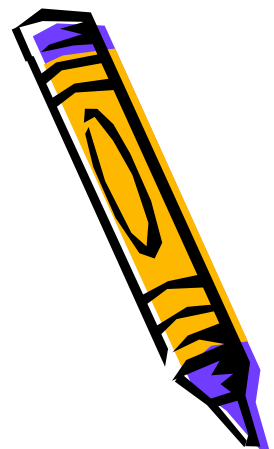




Dribadid mite showing pteromorpha, the intermediate host detected on the ground



egg of M. sp. containing an onchophore



Symptoms

When there are lots of Moniezia, the intestines will become **enteremphraxis** ,even have been ruptured .

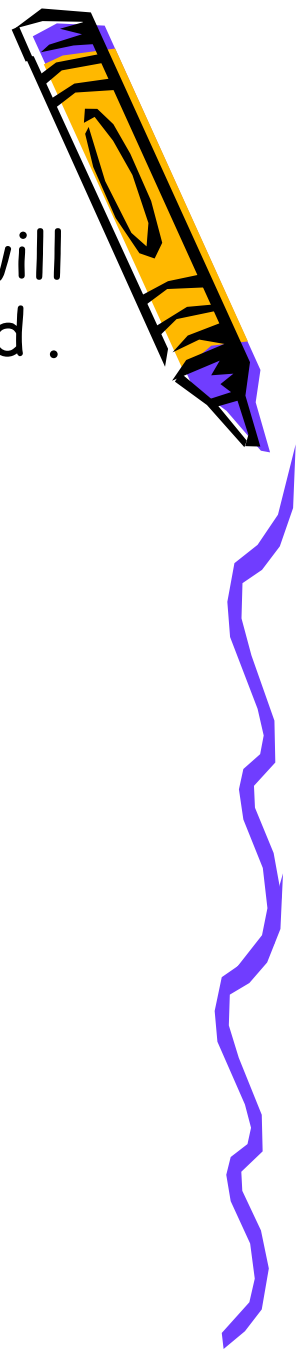
The toxin of parasite cause young animals being **neurosis** ,including walking in circles ,spasm ,non-food mastication .

clinical symptoms:

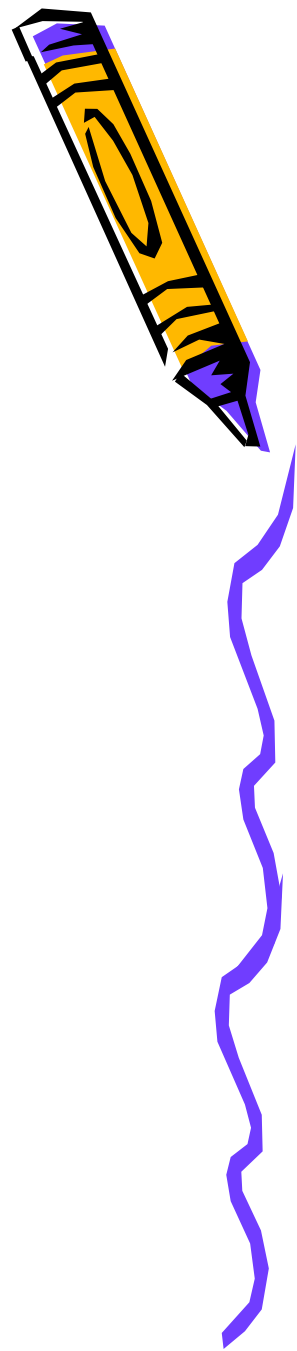
Decreased appetite ,emaciation ,

Anaemia ,listless ,diarrhea ,

gravid proglottid in feces.



Hymenolepis nana – The Dwarf Tapeworm

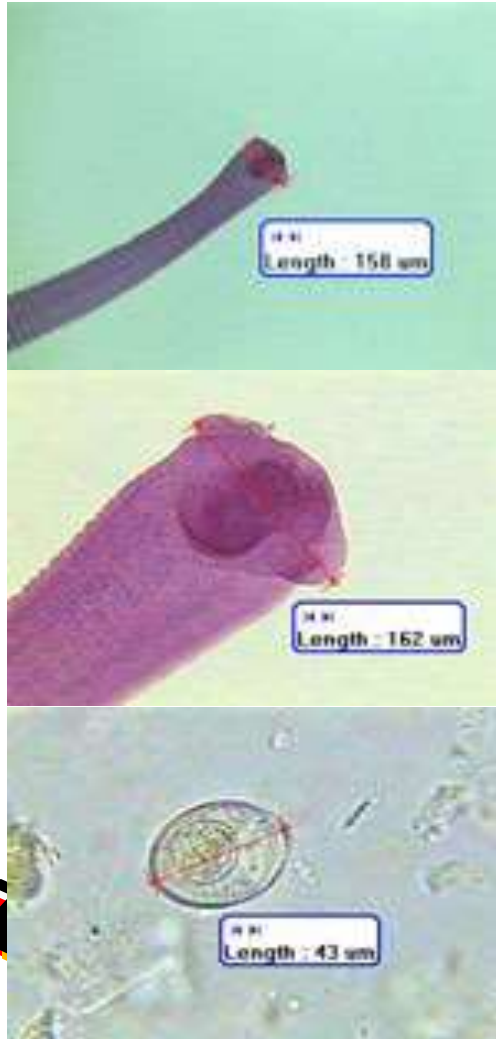


***Hymenolepis nana* – The Dwarf Tapeworm**



- **Frequency** - most common tapeworm infection in humans.
- **Requires no intermediate host** - can use insects such as fleas or beetles, but these are not required.
- **Definitive hosts** - man, rodents.
- **Autoinfection** - infected humans can ingest eggs from their own feces.
- **Mode of Infection** - Ingestion of eggs or insects containing larvae.





Hymenolepis nana - The Dwarf Tapeworm

- Morphology - small, 2 to 4 cm in length.
- Scolex - 4 sucking disks & short rostellum with hooks.
- Proglottid - are broader than long; rarely seen in feces specimens (usually disintegrate in intestine).
- Eggs - most often seen stage in specimens, measuring 45 to 50 microns in diameter and exhibiting polar filaments lying between the egg shell and the hexacanth embryo.

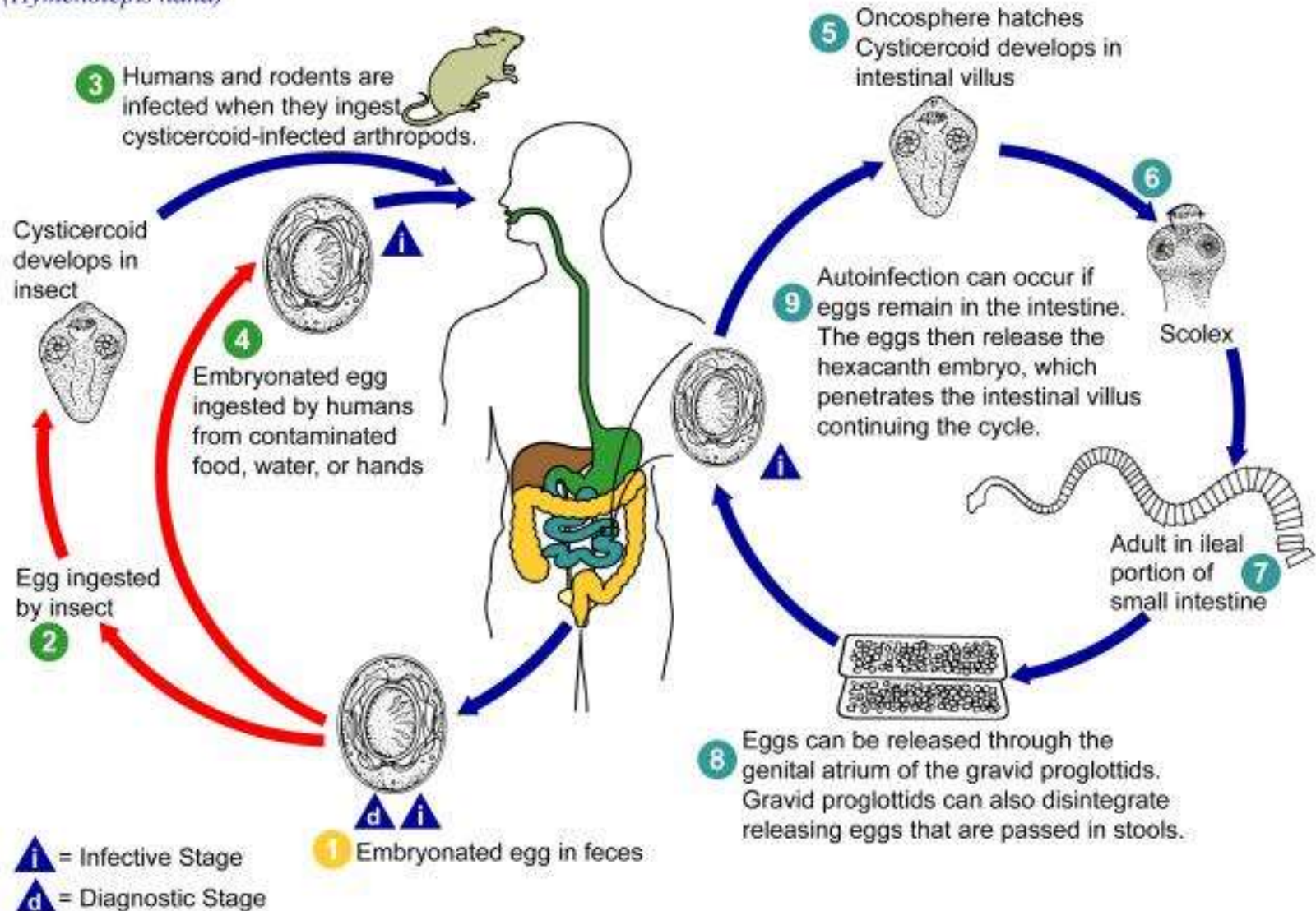
H. nana scolex



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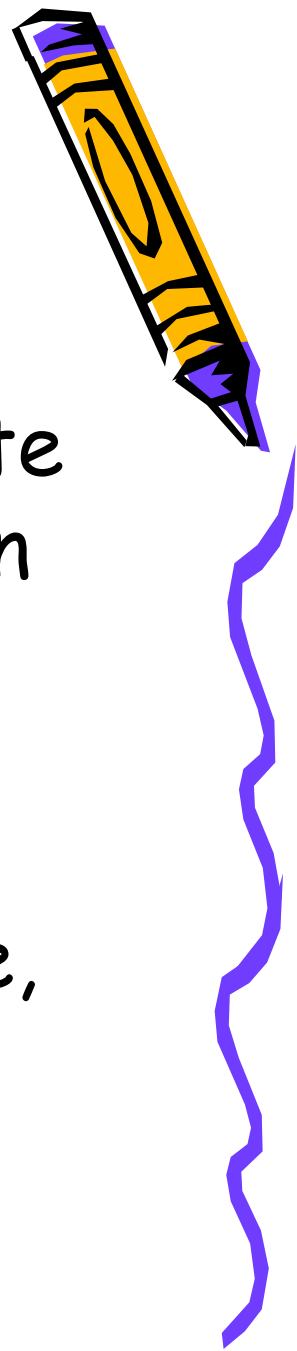
Hymenolepiasis

(*Hymenolepis nana*)



Clinical manifestations:

- In cases with low intestinal parasite burden, there are no symptoms. In heavy infections, especially if autoinfection and hyperinfection occur, patients can experience diarrhea, abdominal pain, headache, anorexia, and other vague complications.



End

