

Helminths (Flatworms-Cestodes)-Taenia Saginata (beef tap worm)

CAUSATIVE AGENT

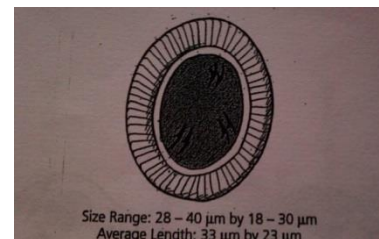
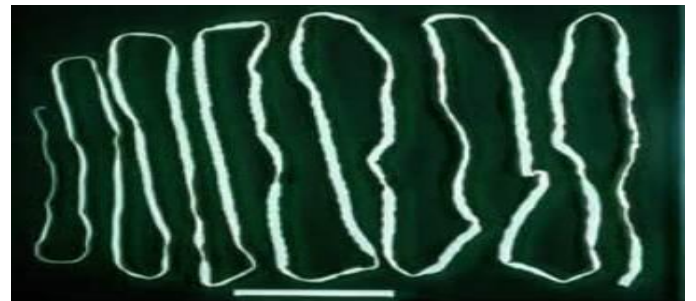
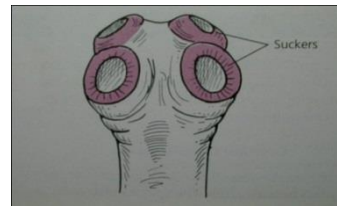
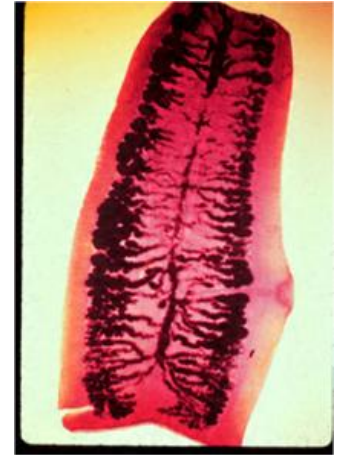
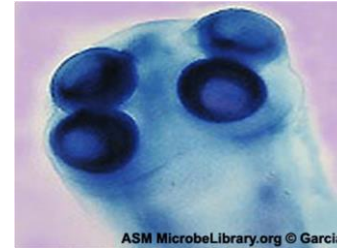
– *Taenia saginata*, the beef tapeworm, is a zoonotic tapeworm belonging to the order Cyclophyllidea and genus *Taenia*.

TRANSMISSION & POSSIBLE SOURCES OF INFECTION

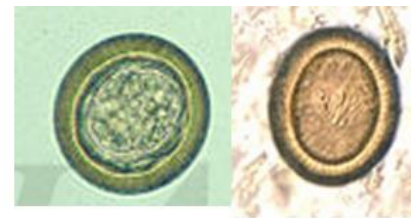
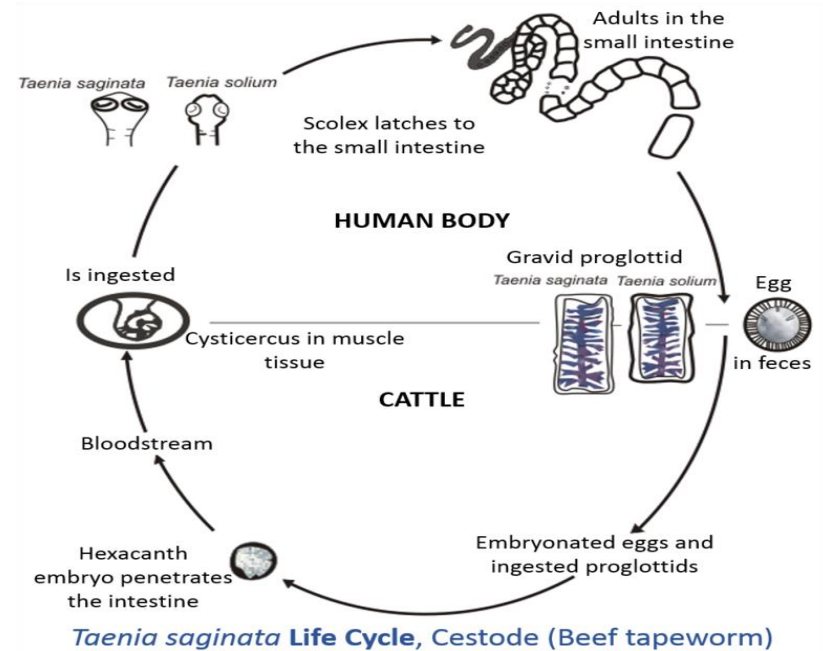
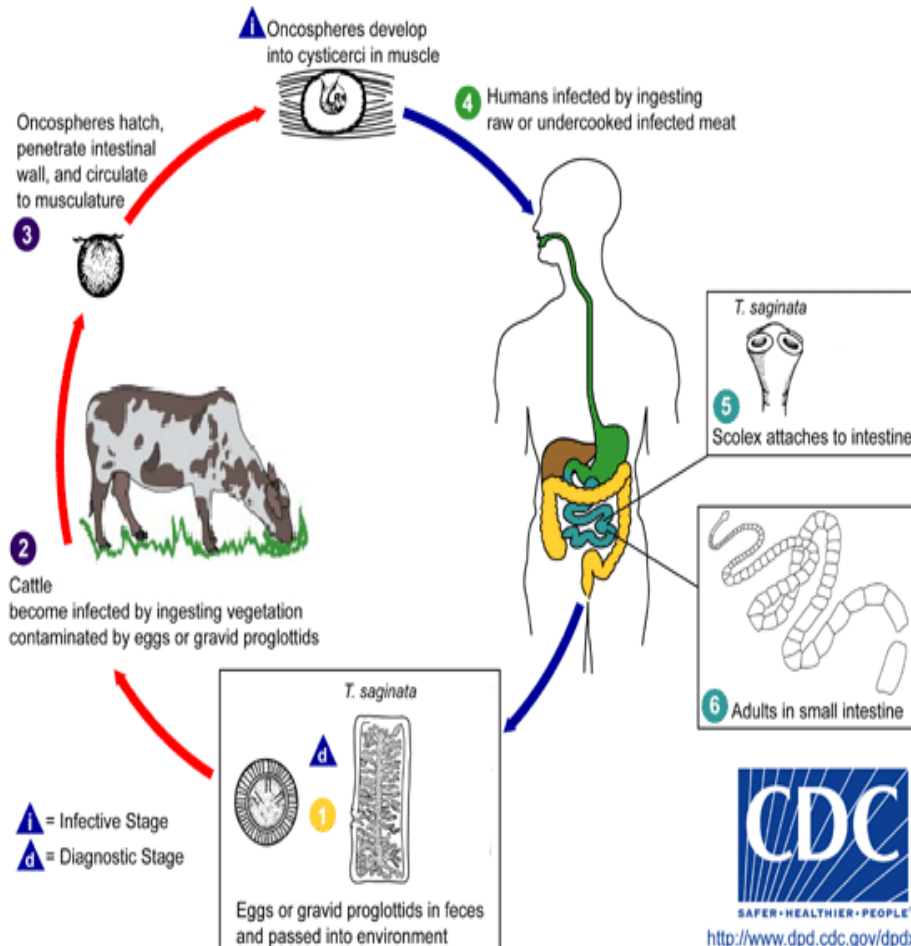
SYMPTOMS

DIAGNOSIS

TREATMENT, PREVENTION & CONTROL

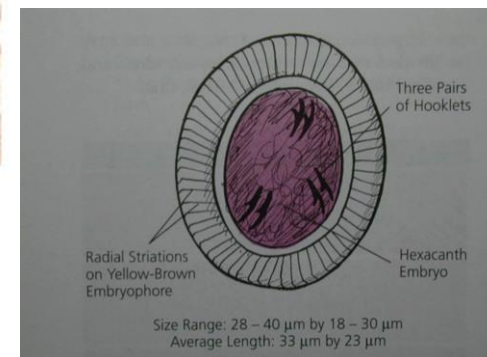


Lifecycle of *Taenia Saginata*



32μ - 45μ

3 pairs of hooklets



Helminths (Flatworms-Cestodes)-Taenia Solium (pork tap worm)

CAUSATIVE AGENT

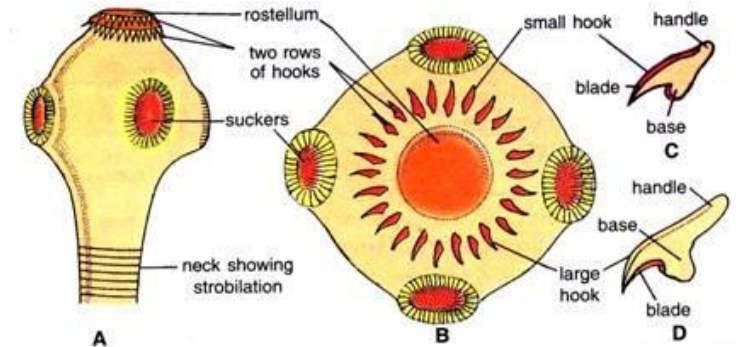
– *Taenia solium* is the pork tapeworm belonging to cyclophyllid cestode the family Taeniidae.

TRANSMISSION & POSSIBLE SOURCES OF INFECTION

SYMPTOMS

DIAGNOSIS

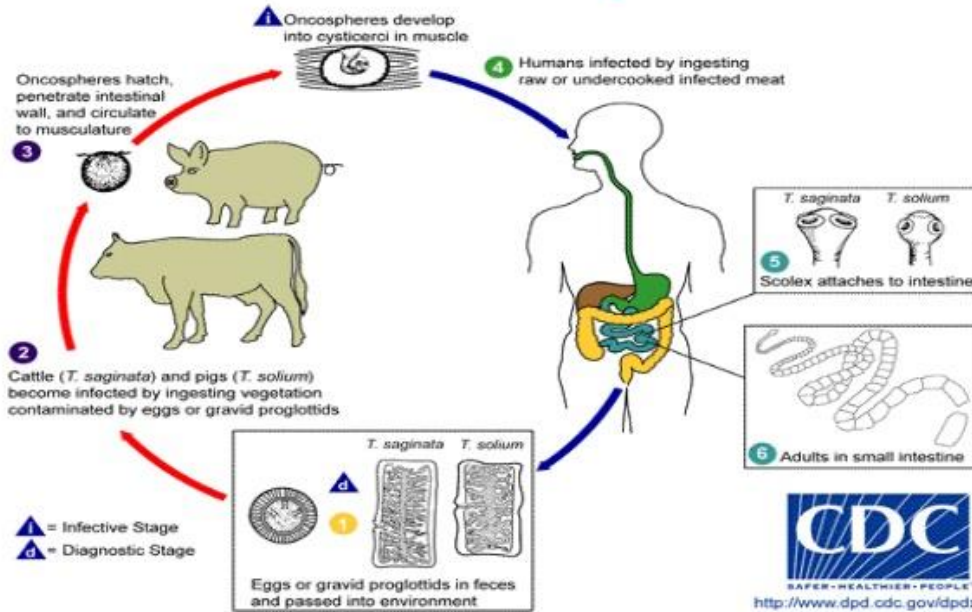
TREATMENT, PREVENTION & CONTROL



Source: M. A. Papadakis, S. J. McPhee, M. W. Rabow: Current Medical Diagnosis & Treatment 2016, 56th Ed. www.accessmedicine.com
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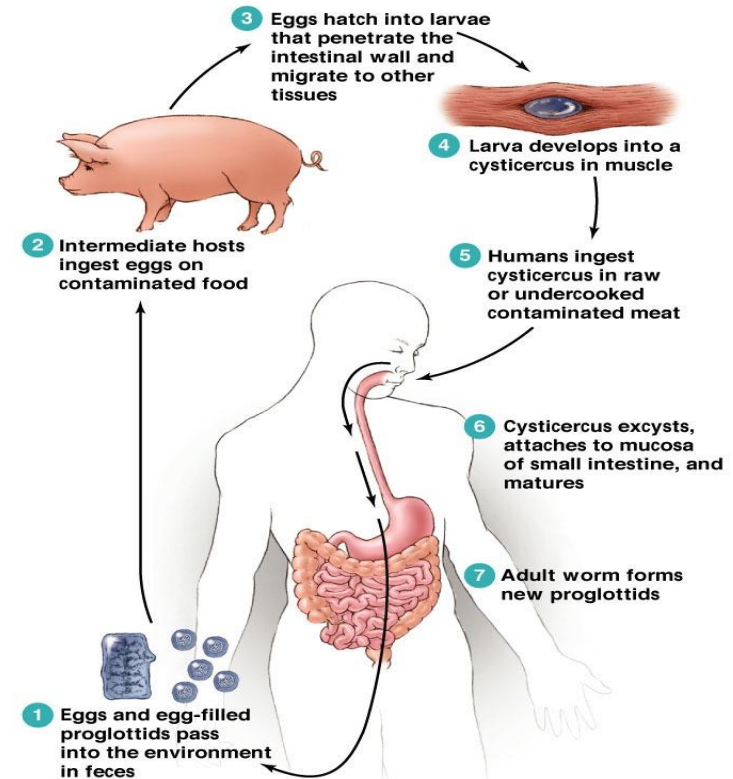
Lifecycle of *Taenia Solium*

Taenia Life cycle



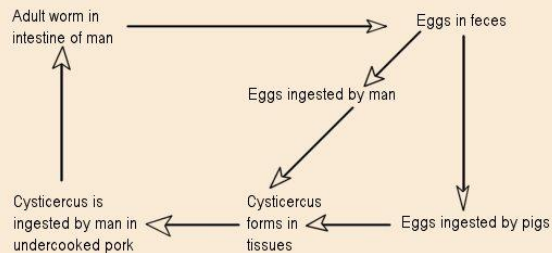
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37

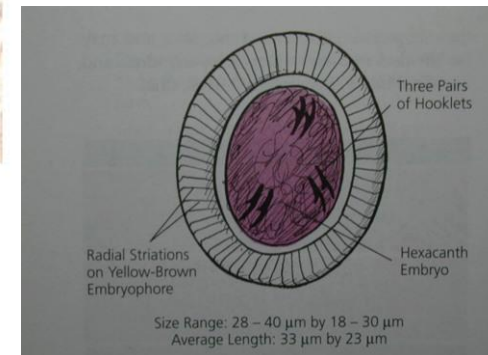
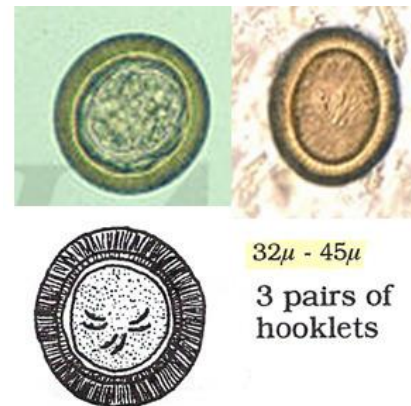


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Taenia solium Life Cycle



See reference No. 6



Helminths (Flatworms-Cestodes)-Echinococcus granulosus

CAUSATIVE AGENT

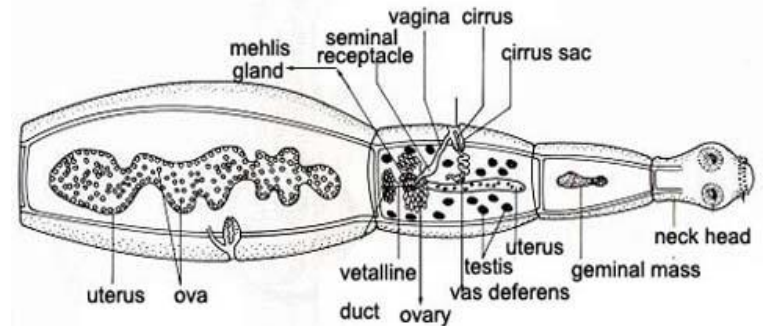
–the **hydatid worm**, hyper tape-worm or dog tapeworm, is a cyclophyllid cestode that parasitizes the small intestine of canids as an adult, but which has important intermediate hosts such as livestock and humans

TRANSMISSION & POSSIBLE SOURCES OF INFECTION

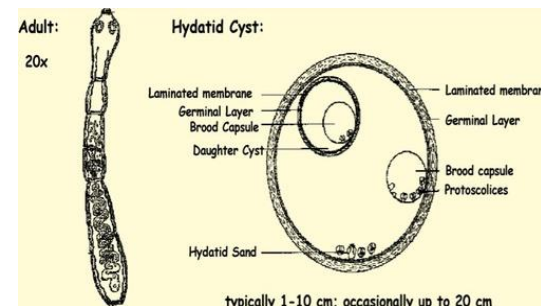
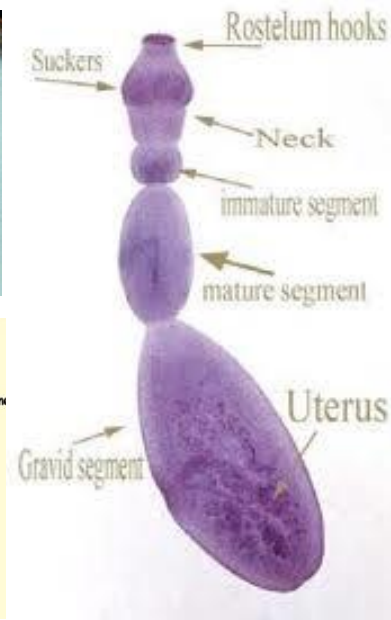
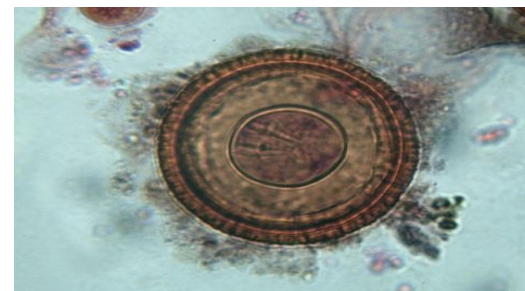
SYMPTOMS

DIAGNOSIS

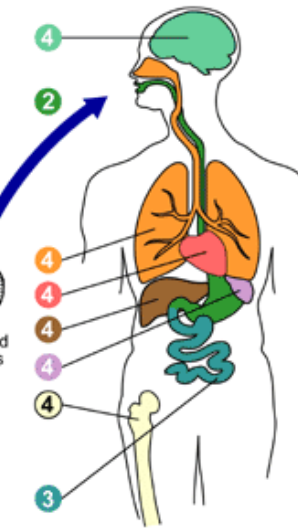
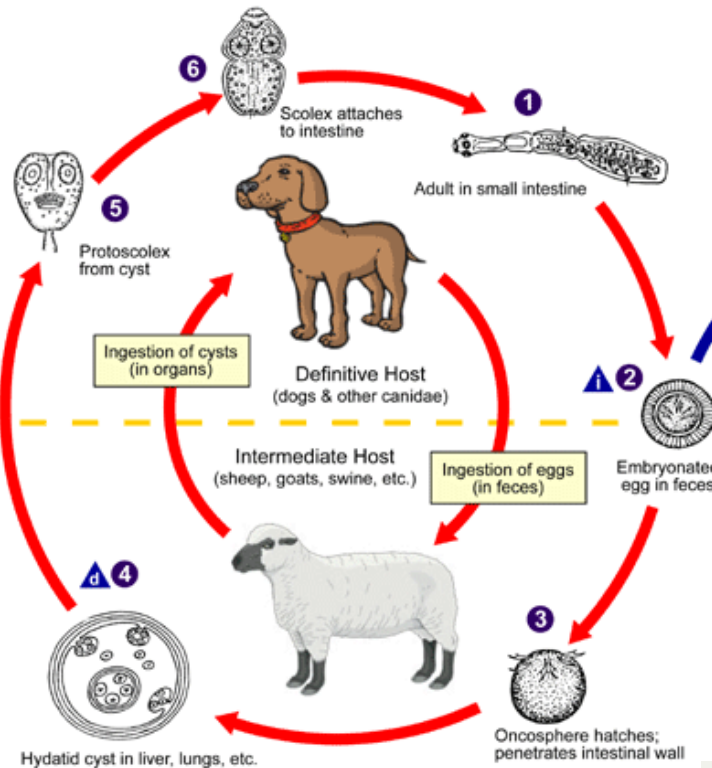
TREATMENT, PREVENTION & CONTROL



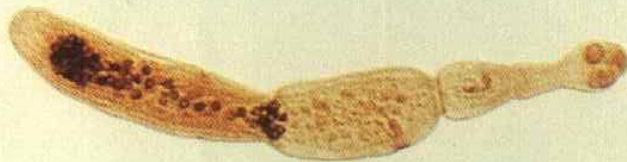
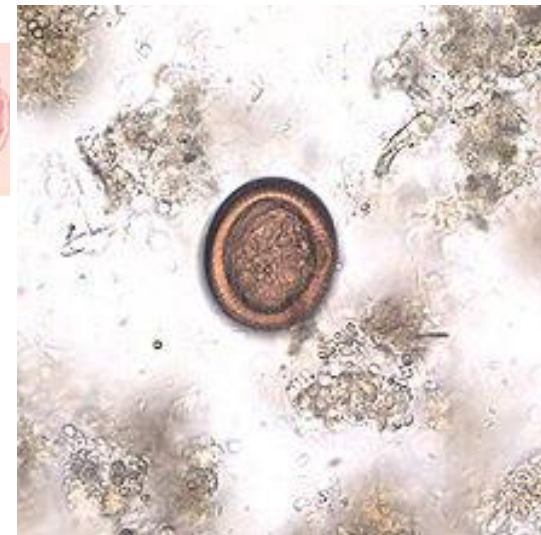
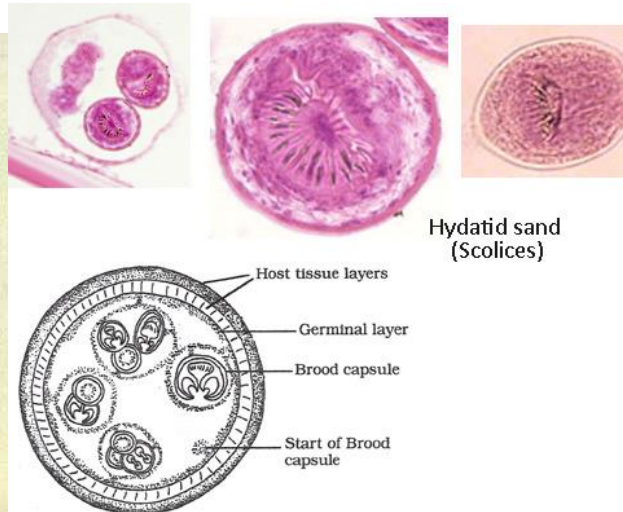
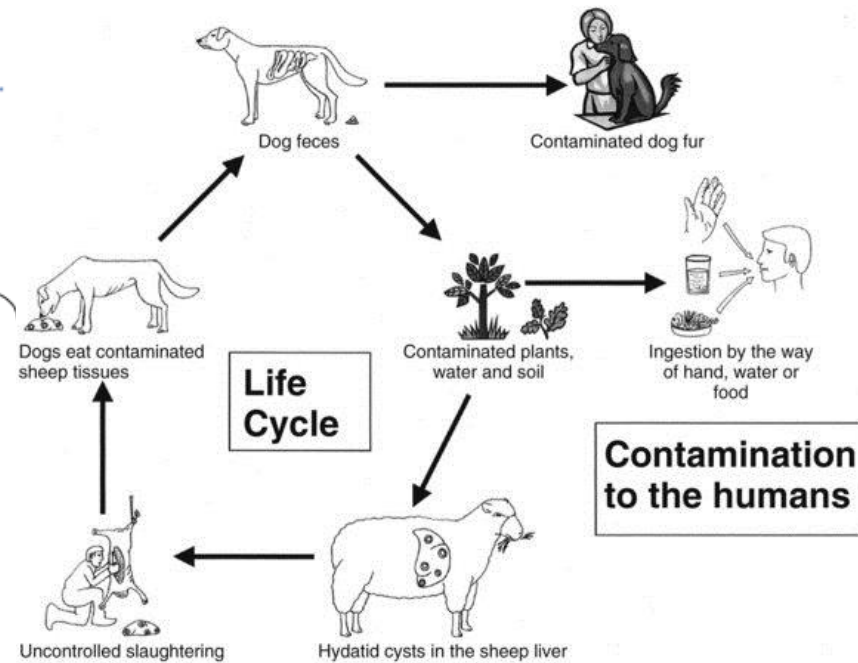
Adult worm of Hydatid



Lifecycle of *Echinococcus granulosus*



▲ = Infective Stage
 ▲ = Diagnostic Stage



Helminths (Flatworms-Cestodes)-Hymenolepis nana (dwarf tap worm)

CAUSATIVE AGENT

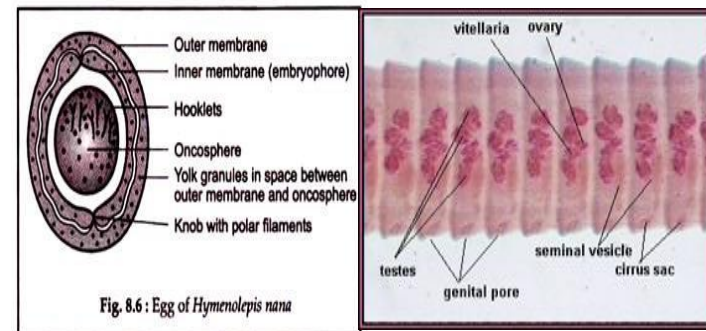
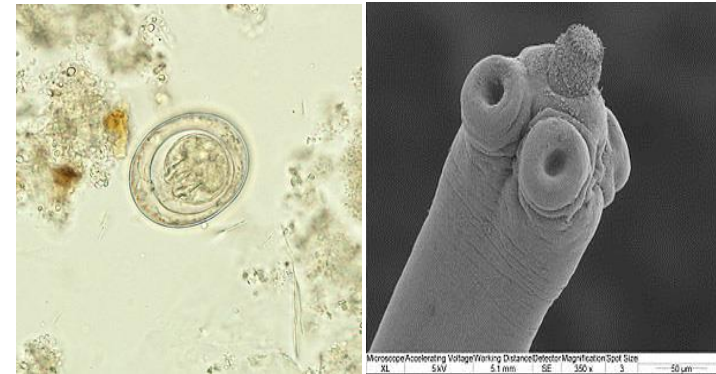
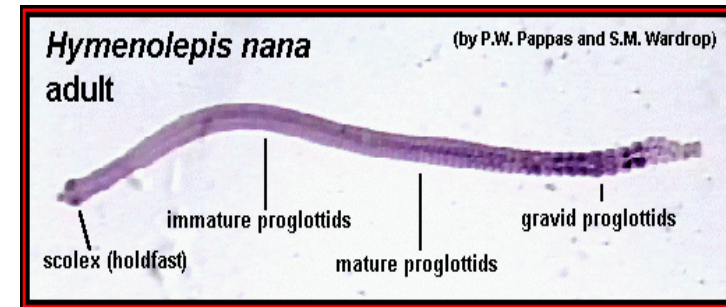
– Dwarf tapeworm (*Hymenolepis nana*, *Vampirolepis nana*, *Hymenolepis fraterna*, and *Taenia nana*) is a cosmopolitan species though most common in temperate zones, and is one of the most common cestodes (a type of intestinal worm or helminth) infecting humans, especially children in countries in which sanitation and hygiene are inadequate.

TRANSMISSION & POSSIBLE SOURCES OF INFECTION

SYMPTOMS

DIAGNOSIS

TREATMENT, PREVENTION & CONTROL

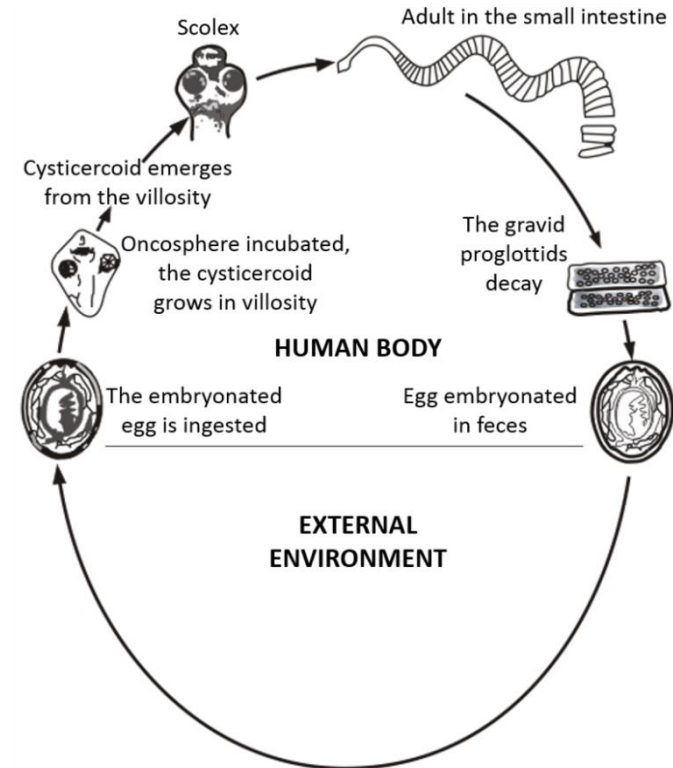
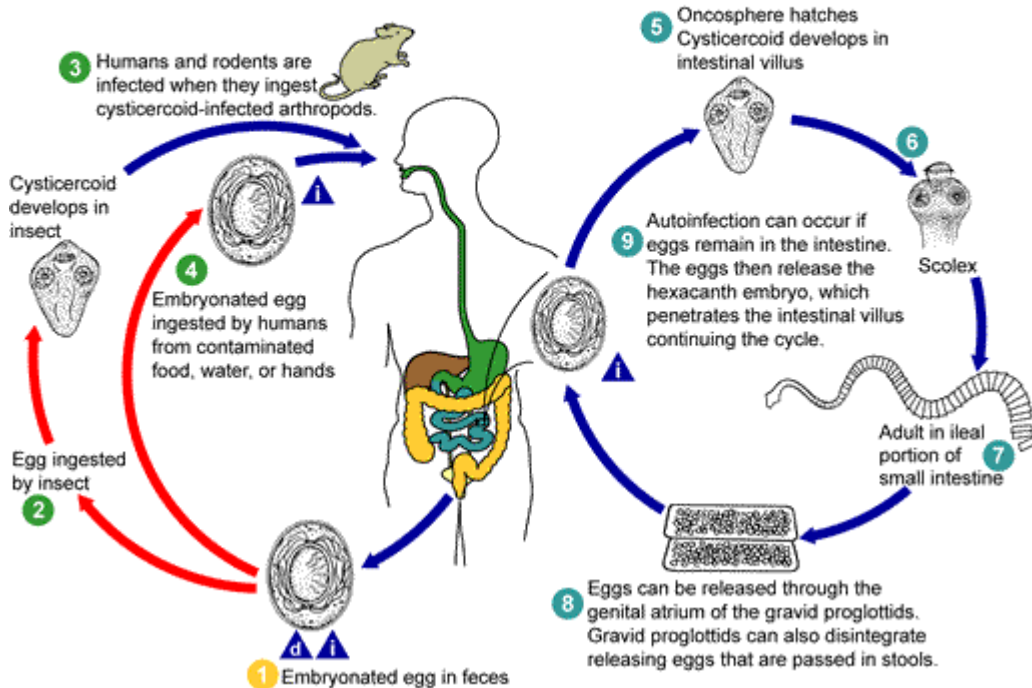


Lifecycle of *Hymenolepis nana*

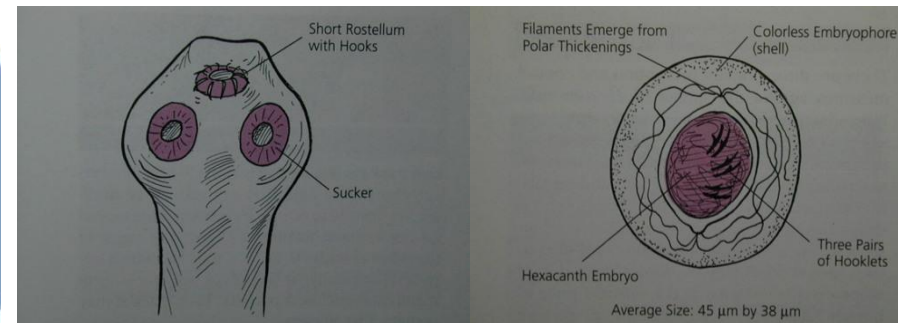


<http://www.dpd.cdc.gov/dpdx>

i = Infective Stage
d = Diagnostic Stage



Hymenolepis nana Life Cycle, Cestode (Dwarf tapeworm)



Helminths (Flatworms-Trematodes)-Fascioliasis (large flukes)

CAUSATIVE AGENT

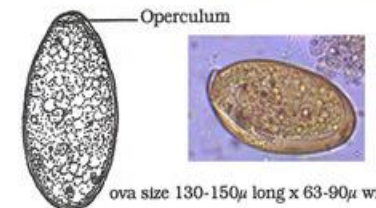
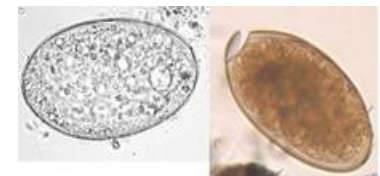
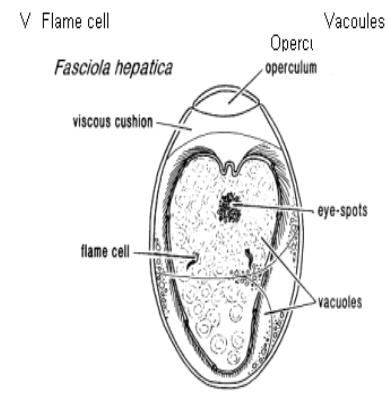
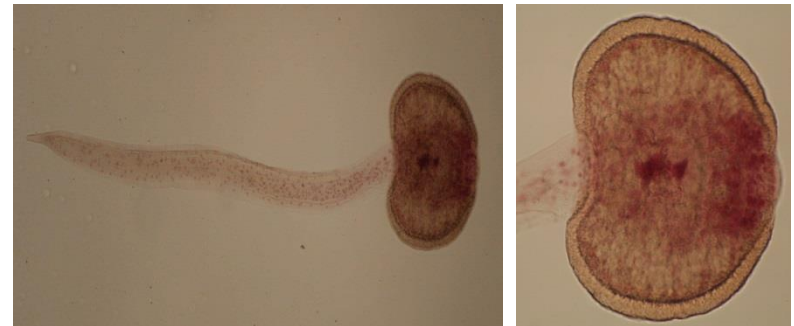
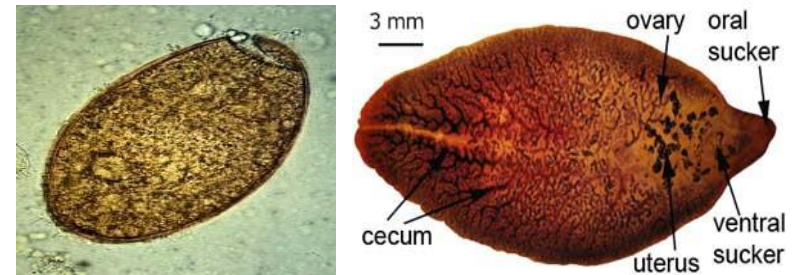
– Fasciolosis (also known as fascioliasis, fasciolosis, distomatosis and liver rot) liver fluke *Fasciola hepatica* and *Fasciola gigantica*. The disease is a plant-borne trematode zoonosis, and is classified as a Neglected Tropical Disease (NTD).

TRANSMISSION & POSSIBLE SOURCES OF INFECTION

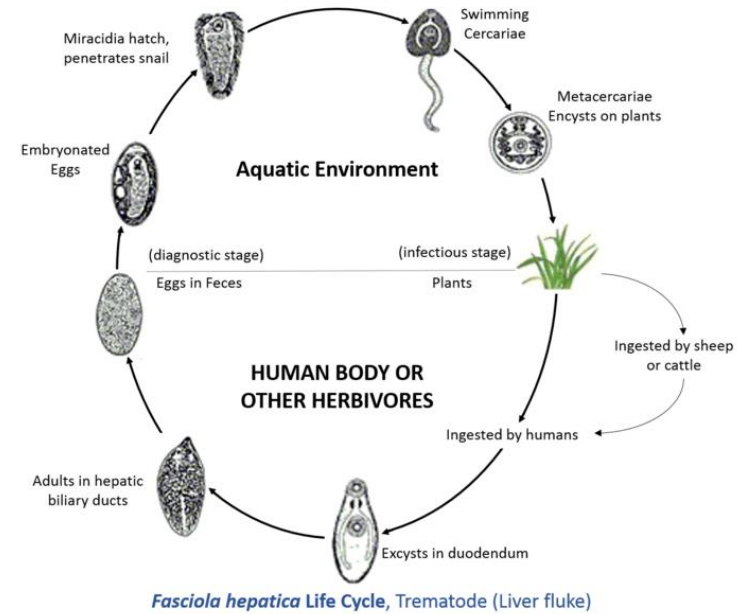
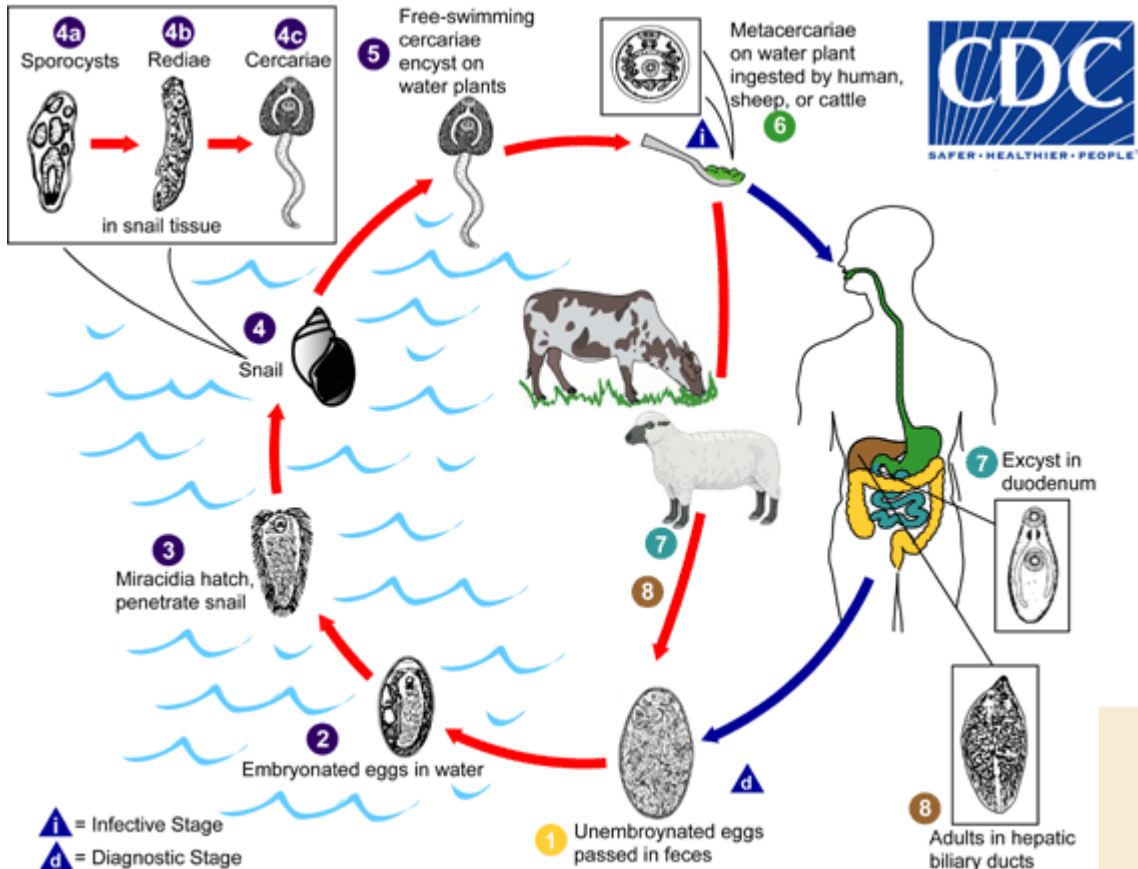
SYMPTOMS

DIAGNOSIS

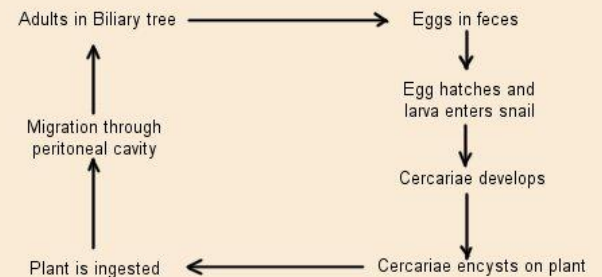
TREATMENT, PREVENTION & CONTROL



Lifecycle of *Fascioliasis* (large flukes)



Fasciola hepatica Life Cycle



Helminths (Flatworms-Trematodes)-Schistosomes (blood flukes)

CAUSATIVE AGENT

– known as blood-flukes, The larval forms of the worm live in freshwater snails. a major source of morbidity and mortality for developing countries in Africa, South America, the Caribbean, the Middle East, and Asia.

TRANSMISSION & POSSIBLE SOURCES OF INFECTION

SYMPTOMS

DIAGNOSIS

TREATMENT, PREVENTION & CONTROL

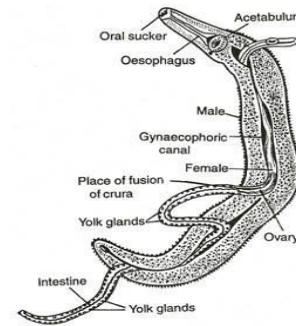
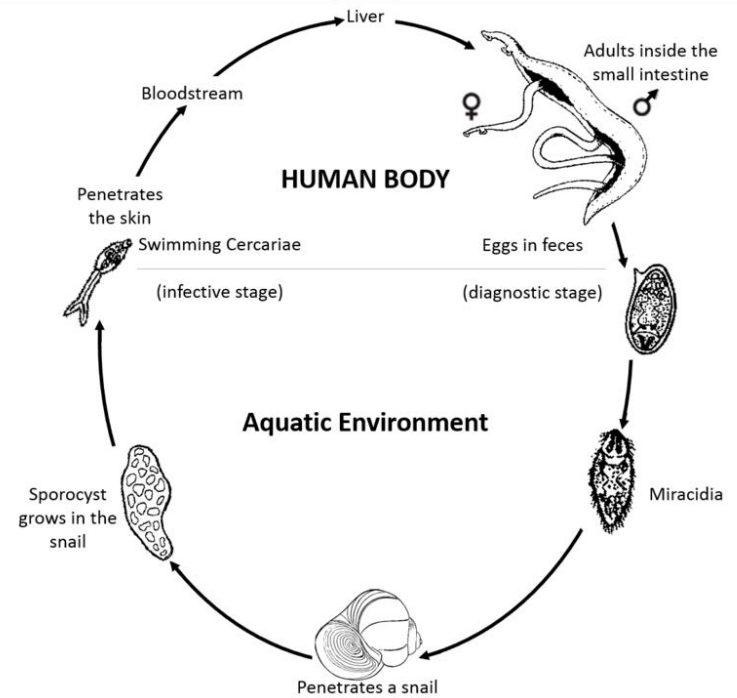
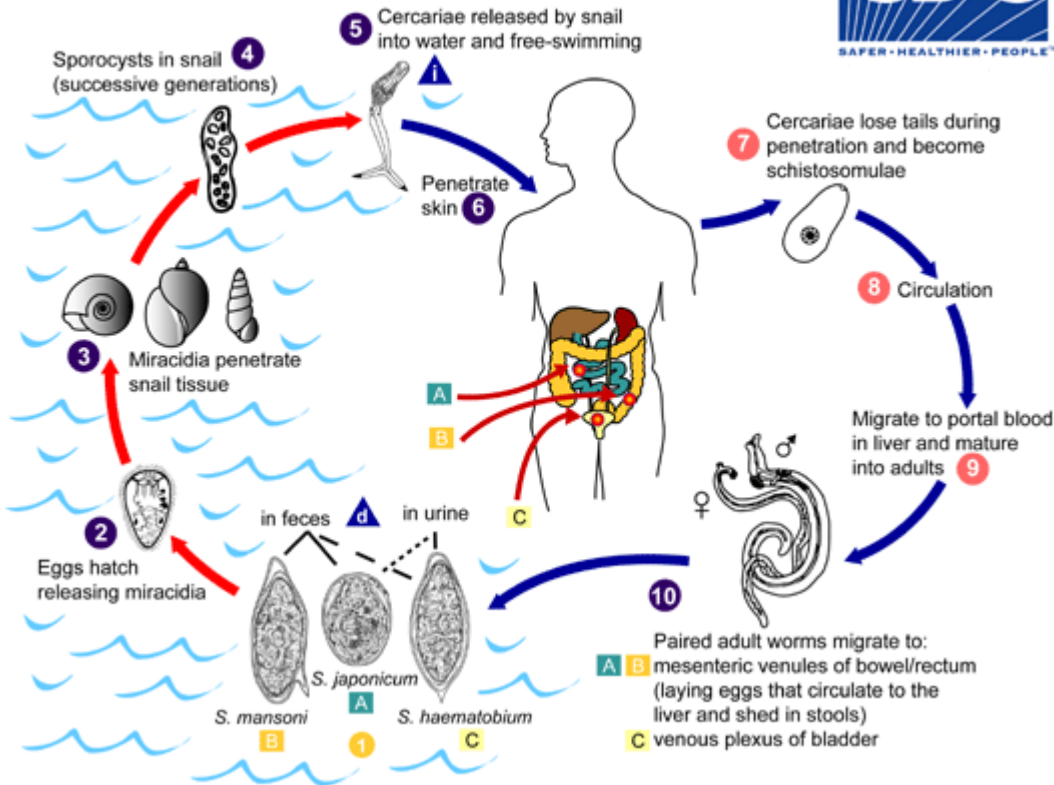


Fig. 191. *Schistosoma* (Male and female)



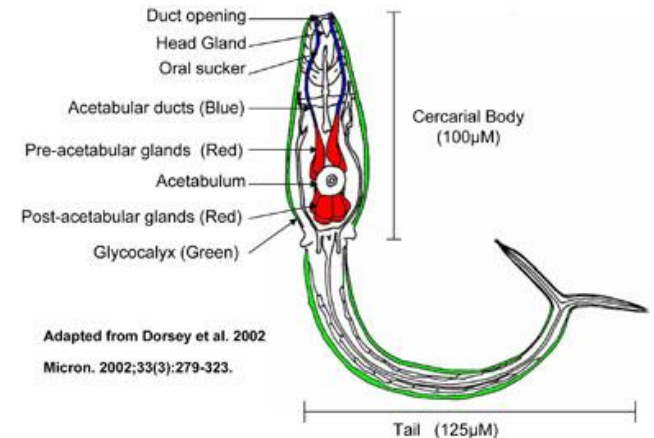
Lifecycle of *Schistosomes* (blood flukes)

▲ = Infective Stage
▲ = Diagnostic Stage



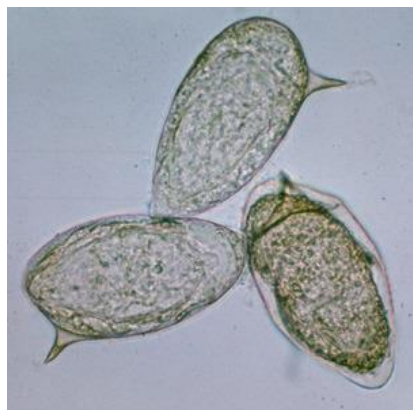
Schistosoma mansoni Life Cycle, Trematode (Bloodworm)

Diagram of *Schistosoma mansoni* cercaria



Adapted from Dorsey et al. 2002
Micron. 2002;33(3):279-323.

Schistosoma mansoni egg



Intermediate Host

Miracidium



Snail I. H



S. Haematobium

***Bulinus*
*truncatus***



S. mansoni

***Biomphalaria*
*alexandrina***



S. japonicum

Oncomelania

Morphology

Male

<i>S. haematobium</i>	<i>S. mansoni</i>	<i>S. japonicum</i>
10x 1 mm	8x1 mm	15x0.5 mm
3-5 testes in a line	6-9 testes in cluster	6-8 testes in a line
Fine tubercles	course tubercles	No tubercles



Female

<i>S. haematobium</i>	<i>S. mansoni</i>	<i>S. japonicum</i>
20x0.2 mm	14x0.15 mm	26x0.3 mm
Ovary post 1/3	ovary ant. 1/3	Ovary in the middle
Vit. gl. post 1/3	vit. gl post 2/3	Vit. gl. in post 1/2



Morphology

Egg

	<i>S. haematobium</i>	<i>S. mansoni</i>	<i>S. japonicum</i>
	In urine	In stool	
Size	140x 60 μ m	150x60 μ m	85x65 μ m
Shape	Oval terminal spine	Oval Lateral spine	Ovoid Minute knob
Shell	translucent, non operculated		
Content	Mature embryo (miracidium)		

