



CESTODA

Practical Parasitology 3rd class

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Echinococcus granulosus

Type: Eucetodan Cyclophyllidea Tapeworm

Zoonotic: yes

Final hosts: Dogs

Intermediary host: sheep, goats, primates Infective site : small intestine

Diagnostic Technique: Fecal Flotation

Diagnostic stage: Egg containing Hexacanth Embryo length 80-90um, width 80-90-um,

Infective stage larva stage: Hydatid Cyst

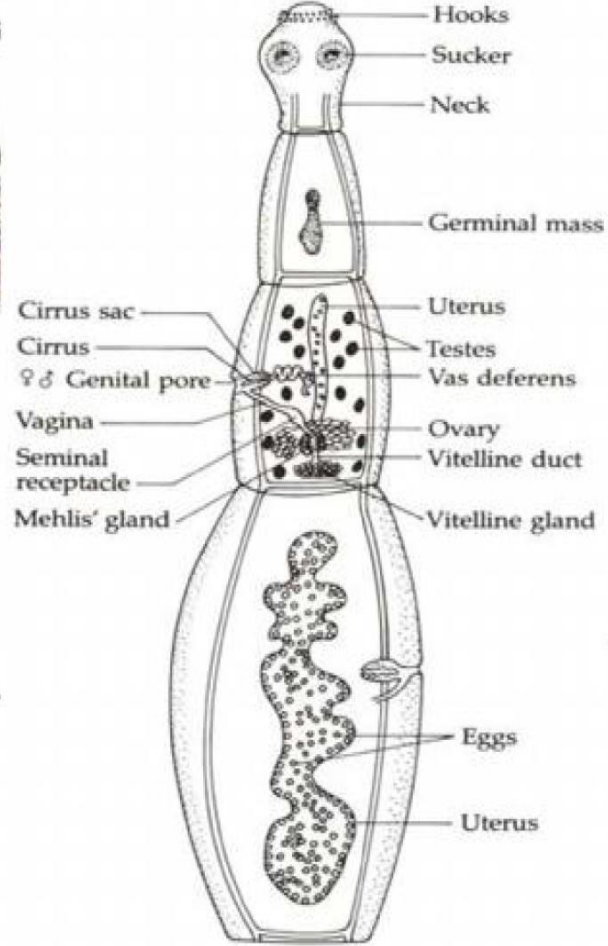
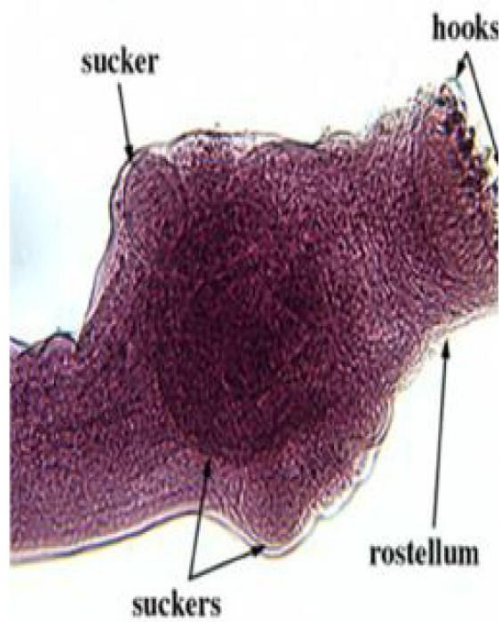
Morphology:

The body of worm composed from head and three segments moreover the total body length about 2.1 to 5.2 mm.

(b) the middle laminated membrane, which is acellular and allows the passage of nutrients.

(c) the inner germinal layer, where the scolices (the larval stage of the parasite) and the laminated membrane are produced.

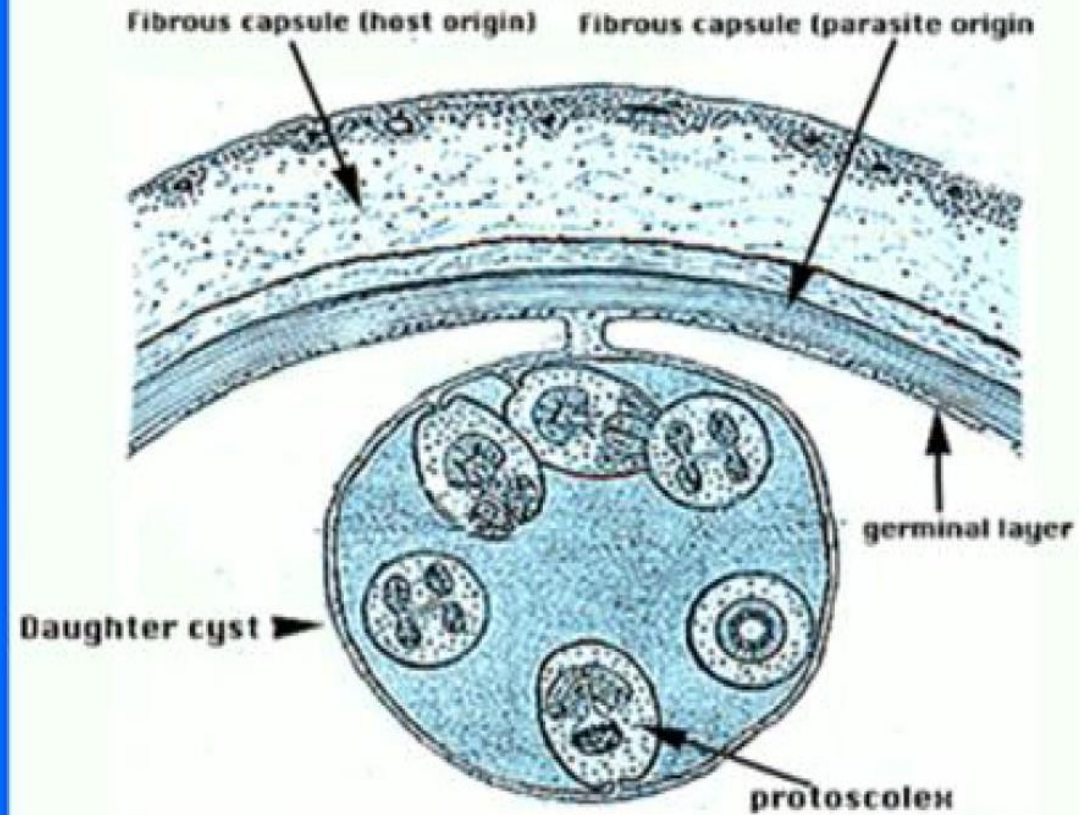
The middle laminated membrane and the germinal layer form the true wall of the cyst.



Scolex
 Immature proglottid
 Mature proglottid
 Gravid proglottid



Cyst layers and contents



Hydatid cyst

Raillietina sp.

Final Host: chicken rather bird .

Intermediate host: of larvae stage (cysticercoids) is *musca domestica*

Mature and gravid segment

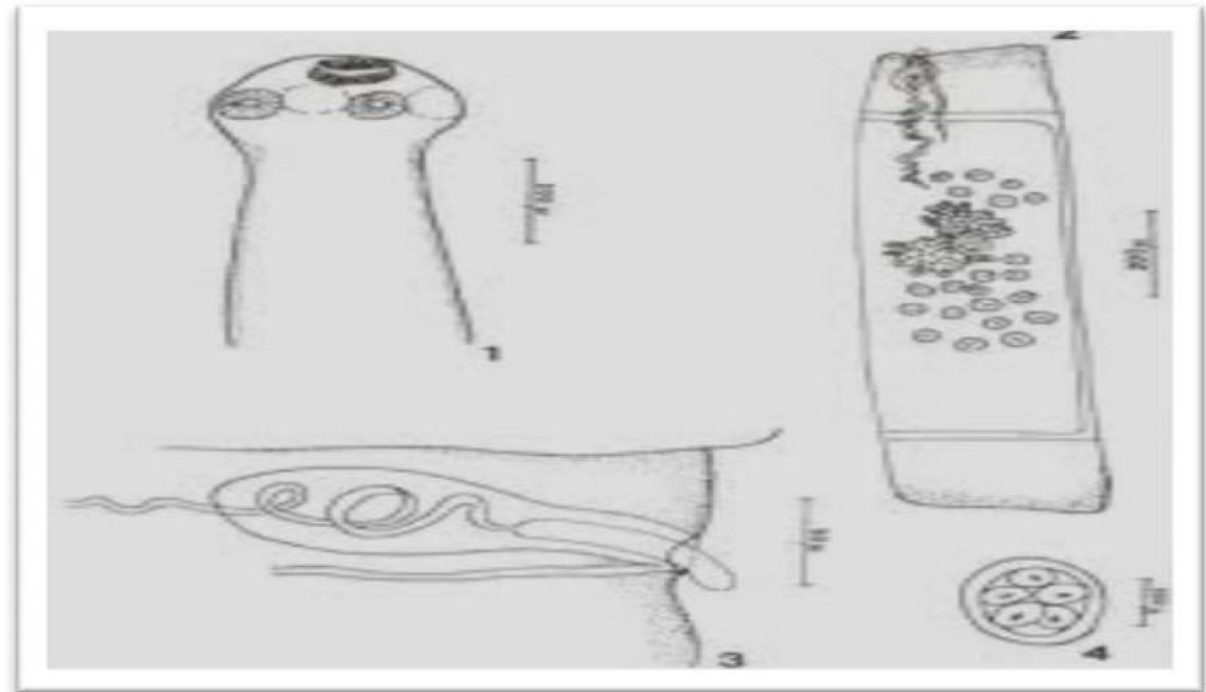
Characteristics: Morphological

- 1- Testes numerous, cirrus pouch small.

- 2- Genital pores unilateral or irregular alternative
- 3- Ovary bilobed or not.
- 4- Vitelline gland compact
- 5- Egg 25 μm – 50 μm Shell thick, Hexacanth embryo present



Raillietina spp



Raillietina sp

– Scolex bear (200 booklets) with four oval sucker containing 20-13 hooklets in different size.

C- Scolex of *Raillietina cesticillus*

Characters :

- 1- Rostellum flattened and bears double row of 300-500 hammer –shaped hooks .
- 2- There are four unarmed weak Sucker .

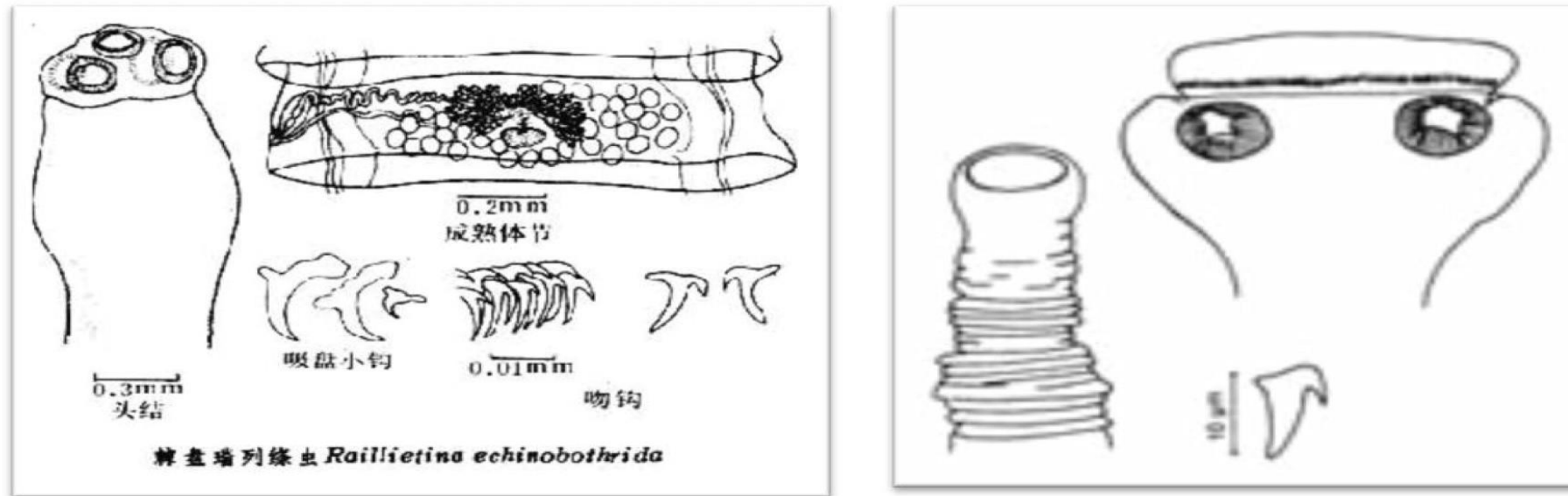
A- Scolex *Raillietina tetragona*

Characters :

- 1- have rostellum is armed with 90-100 hooks arrange in in double row .
- 2- Sucker are oval in shape armed with 8-12 row of minute hooks .

B- Scolex of *Raillietina echinobothrida*

Character:



R. echinobothrid

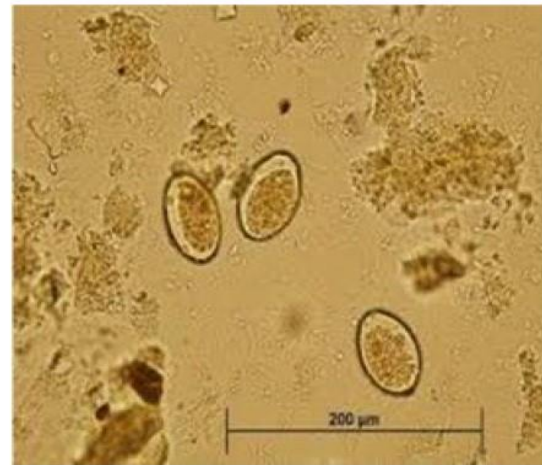
Scolex of *Raillietina cest icillus*

Diphyllobothrium latum

Final host : Dog, human ,pig ,fox ,polar bear ,fish eaters.

Intermedai host: Fish.

Egg: pale yellow and ovale in shape ,has an operculam,contains amass of granulated, yolk cell surrounding an un developed ovum ,small projection is seen at the non-operculated end of the egg.

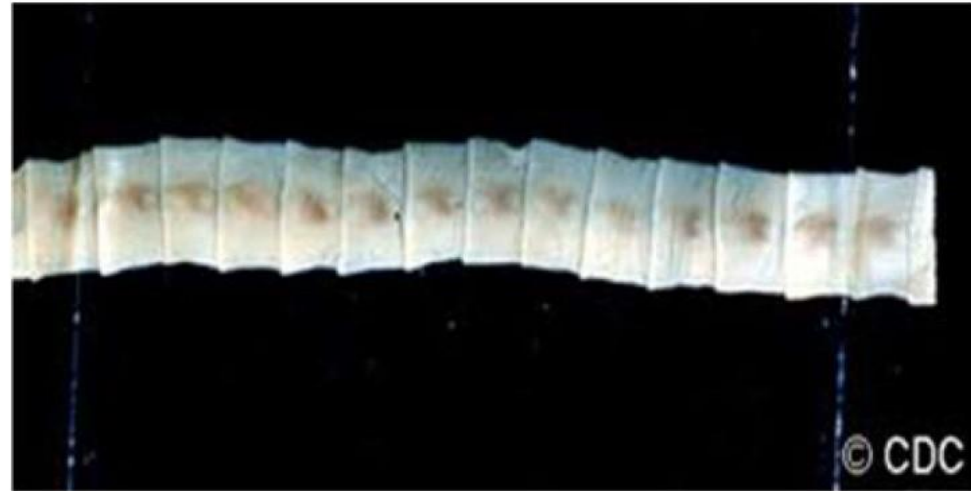


larva stage: plerocercoid larva.

Site of infection : small intestine.

Diagnostic Technique: Fecal Flotation.

Length ranges of *Diphyllobothrium latym* 2-10 m., containing blackout marker centrally to mature segment.(location of uterus filled with egg).



Morphology:

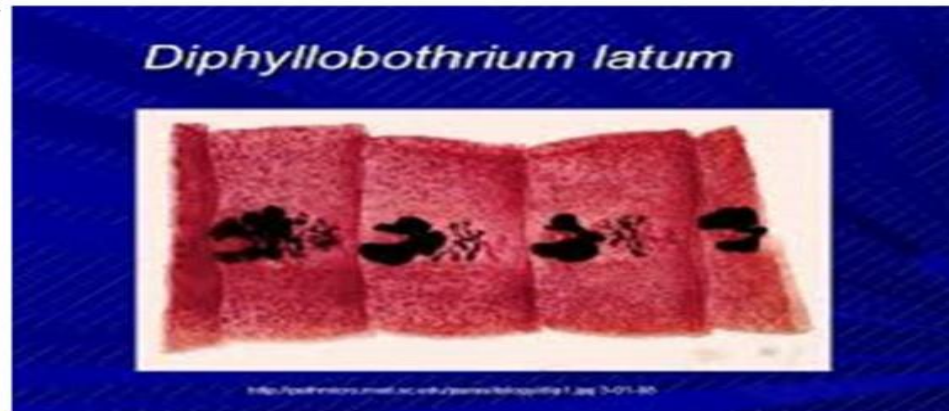
Egg: pale yellow and ovale in shape ,has an operculam,contains amass of granulated, yolk cell surrounding an un developed ovum ,small projection is seen at the non-operculated end of the egg.

Head: almonds –shaped ,length 2-3mm, provided by tow groove (dorsal & ventral).

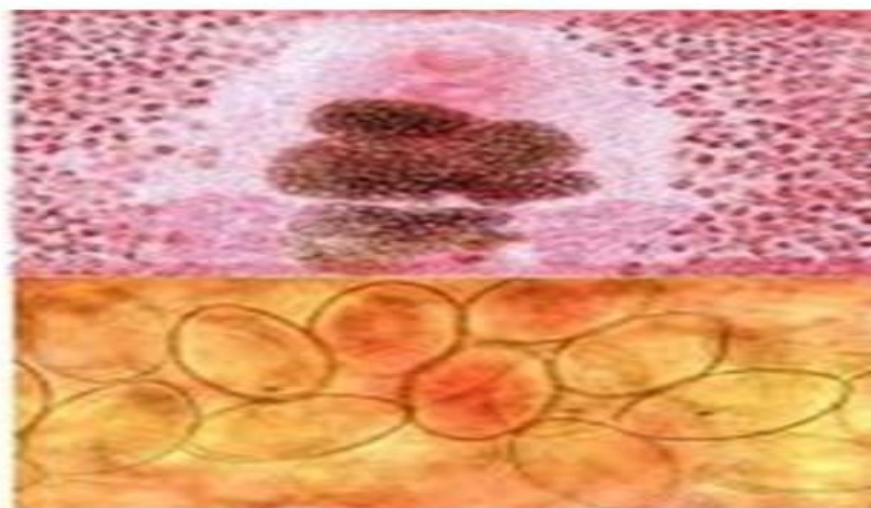


Mature segment:

a large number of testes both side of the mature segment ,ovary with tow lobes behind to segment, found vitelline glang both side of it,uterus located centrally and similar rose.



gravid segment: like square filled with eggs.



Scolex - bothrium



Centrally Located Rosette Shaped Uterine Structure

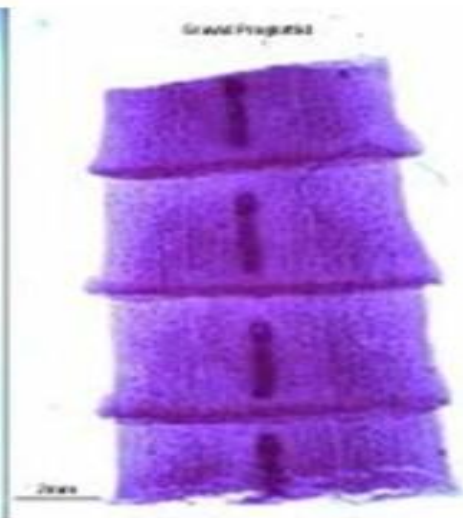


Dipyllobothrium latum

Scolex

1mm

0.5mm



Grand Proglottid

2mm



Thank you