



Family: Dipledidae



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पटना-800014 (बिहार)

Family : Dilepididae

Dipylidium caninum

**Common Name : Flea tapeworm or Cucumber tapeworm or
Double pored tapeworm of dog**

Definitive host or Final host : Dog, cat, fox and children

**Intermediate host : Dog fleas (*Ctenocephalides canis*,
Ctenocephalides felis and *Pulex irritans*)
and dog louse (*Trichodectes canis*)**

**Type of larva (metacestode)- Cysticercoid in intermediate
host**

Predilection site : Small intestine

Family : Dilepididae

Salient features:

- Commonest tapeworm of dog.
- Scolex has a rostellum which is armed with 3-5 rows of rose thorn shaped irregularly arranged hooks.
- Suckers are unarmed.
- Each segment has double sets of genital organs with bilateral genital pore.
- Ovary and vitelline gland form a bunch of grapes on either side.
- Eggs lie in egg capsules and each egg capsule contains up to 30 eggs.
- Mature and gravid segments are cucumber seed shaped.

Life-cycle of *Dipylidium caninum*

- Gravid segments of *D. caninum* are passed out with the feces of infected definitive host like dog etc.
- Gravid segments of *D. caninum* are active and motile.
- During migration or crawling of gravid segments in perineal region or on floor, their eggs are released from the gravid segments.
- Eggs are ingested by fleas and lice and oncospheres are released from the eggs and these migrate into the abdominal cavity and develop into cysticercoid.

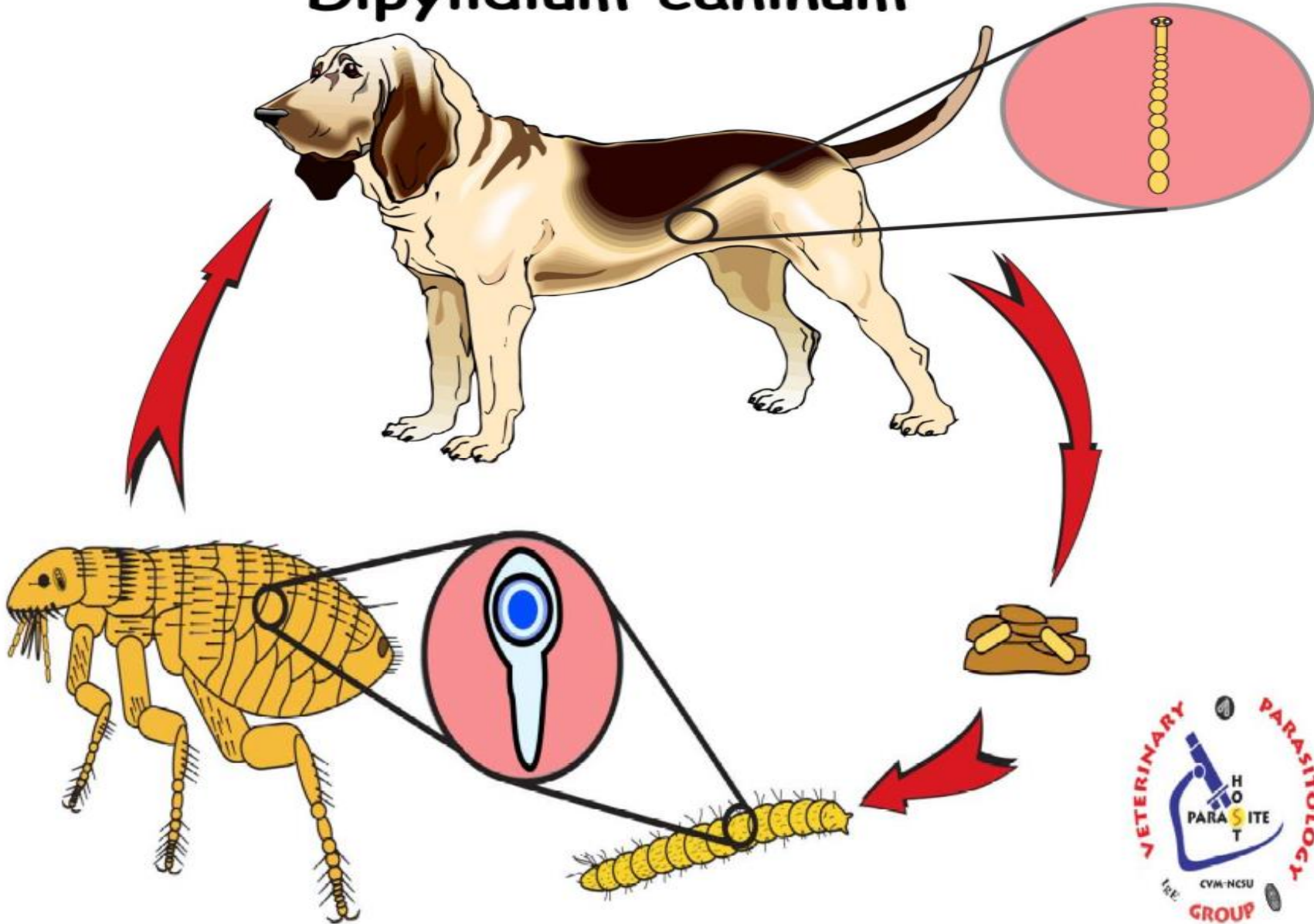
Life-cycle of *Dipylidium caninum*

- Definitive host like dog **gets the infection by the ingestion of cysticercoid infected flea or lice**
- **Adult *Dipylidium caninum* will be developed in the small intestine of definitive host 3-4 weeks after infection.**
- **Children get the infection of *Dipylidium caninum* by accidental ingestion of infected flea or lice during playing with pets**

Life-cycle of *Dipylidium caninum*

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Dipylidium caninum



Dipylidium caninum

Pathogenesis :-

- Adults are usually non-pathogenic but severe infection may cause enteritis, mechanical obstruction of intestine etc.
- Migration of gravid segments in the perianal region caused constant irritation resulting anal pruritus.



Dipylidium caninum

Symptoms:

- Diarrhoea or constipation, unthriftiness, abdominal pain etc.
- Dragging of anus on the ground (affected dog drag the anus over the ground because of anal pruritus due to gravid segments crawling.
- Nervous disorders due to absorption of the metabolites released by the *D. caninum*

Dipylidium caninum

Diagnosis

❖ on the basis of typical clinical signs like dragging anus over the ground or any hard objects etc.



Scolex

❖ By finding the gravid segments around perianal region of infected dogs, on the floor or beds etc.



❖ By detecting cucumber seed like gravid segments.

❖ Microscopic detection of 20-30 eggs containing egg capsule in faces.



egg capsule containing eggs

Dipylidium caninum

Treatment-

○ **Praziquantel (10mg/kg body weight) and Niclosamide(2g) are effective against adult worms.**

Control-

➤ **Treatment of the infected animals and man with anticestodal drugs like praziquantel etc.**

➤ **By controlling the intermediate hosts (flea and lice) by using insecticidal drugs like amitraz, cypermethrin etc.**



THANK YOU