

Toxocara canis and *T. cati*

- Females are 4 – 18 cm long
- Males are 3 – 10 cm long
- Head usually curved ventrad
- Egg shell is usually pitted

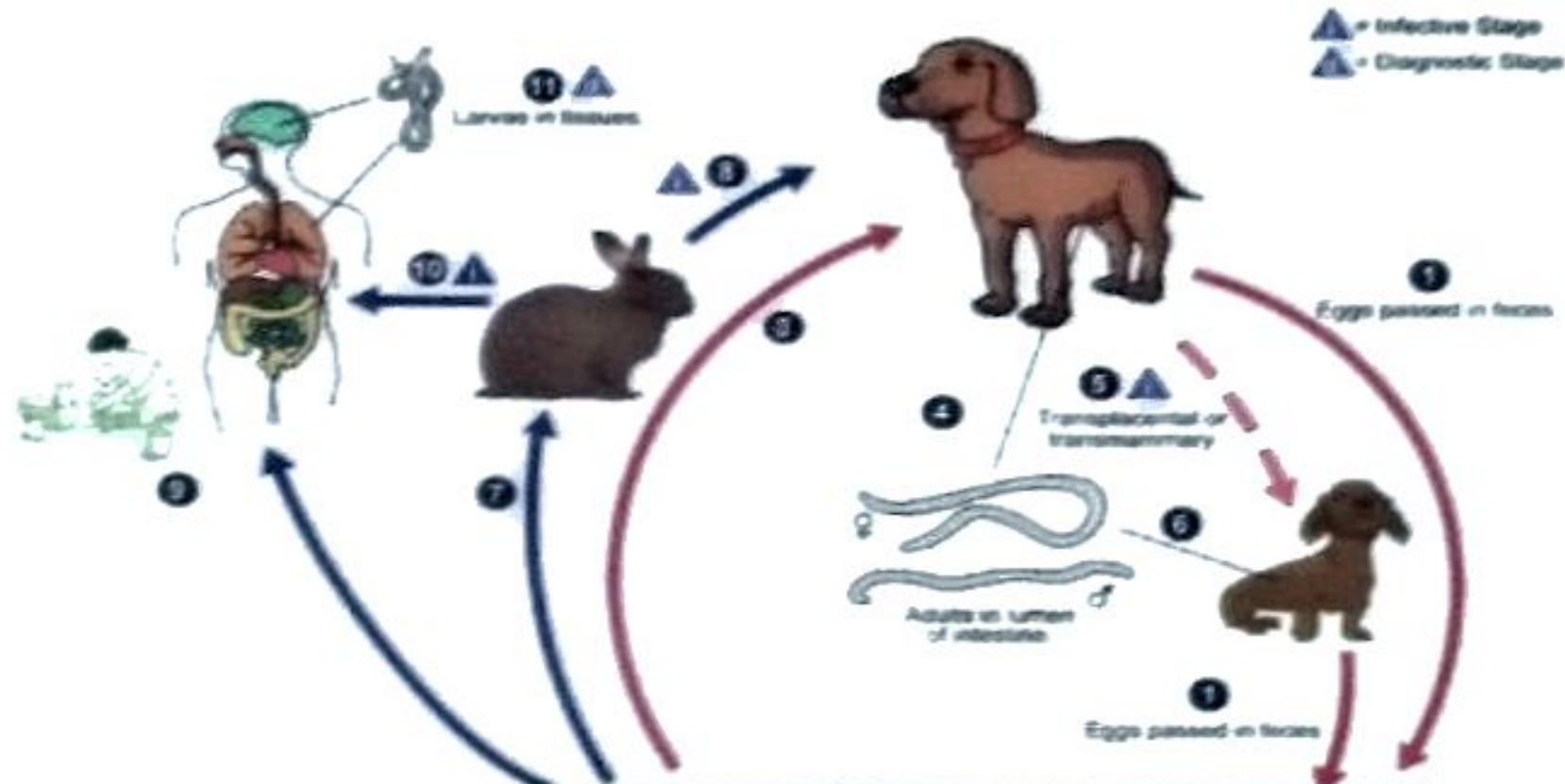


Life cycle of *T. canis*

Two different patterns of development (age of host)

i) Intestinal phase occurs in puppies (resembles *A. lumbricoides*)

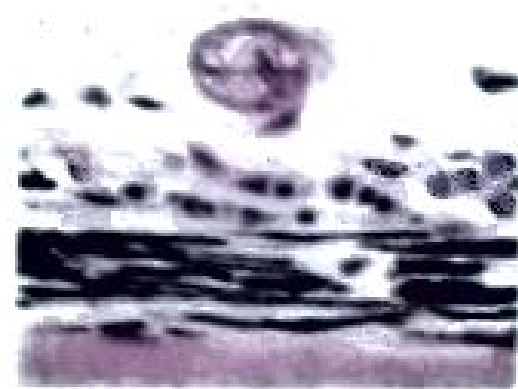
- Puppies (5 wks old) and lactating dogs release eggs in faeces
- Eggs embryonate in soil
- Young puppies ingest eggs (contamination) or larvae in paratenic hosts
- Tissue migration in puppies (= *A. lumbricoides*)
- In older dogs – developmental arrest in intestinal mucosa & wanders in tissues



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

Pathology

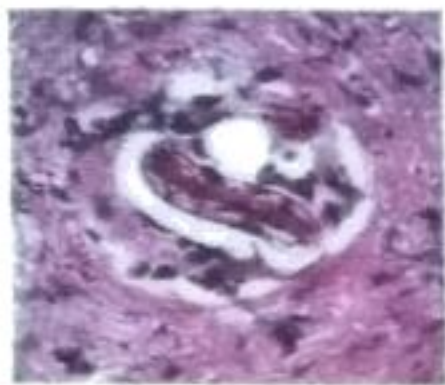
- Prolonged random wandering in tissues (mostly in liver, brain, eyes, kidney, liver, lungs and muscles)
- Severity pathology depends on the size of inoculum and previous exposure



Symptoms

- Fever,
- Pulmonary symptoms,
- Hepatomegaly,

- Eosinophilia (particularly peripheral),
- Severe allergic reaction in tissues & granulomatous formation
- leading to a scar tissue formation
- Visceral larva migrans can be caused by other larval nematodes (e.g. Spirurida, Filarida, Strongylida)
- E.g. *Gnathostoma spinigerum*, *Angiostrongylus cantonensis*, *Anisakis marina*, *Capillaria hepatica*, *Dirofilaria* sp.



Diagnosis

- Hard to diagnose (serological diagnosis & tissue biopsy are important)
- Eosinophilia
- Leucocytosis
- Decreased albumin: globulin ratio
- History of exposure (contact with puppies) is important

Control

- **Periodic deworming of pets**
- **General hygiene is also of help in control of the infection**

Treatment

- **Diethylcarbamazine**
- **Thiabendazole**