

Pentastomida

- *Linguatula serrata* lives in the nasal airways or frontal sinuses of dogs, wolves, foxes and other carnivorous mammals.
- The ventral part is flat, and the cuticle is line-transverse.
- Adult male's of *L.serrata*, 1.8-2 cm,
- while an adult female is 8-13 cm long.
- The worm is colorless and transparent.

□ Life cycle is indirect.

Definitive host;

- dog, fox, wolve or other carnivour mammals.
- It lives in the nasal airways or frontal sinuses.

Intermediate host;

- Ruminant, horse, rabbit- in which visceral linguatulosis have been described.
- Larvae lives in mesenchymal lymph nodes, liver, lungs of intermediate host.
- Larvae is «**nymp**».

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L.serrata egg

Life cycle

Life cycle

- ❑ After being ingested by an herbivorous intermediate host from an aquatic environment.
- ❑ Eggs hatch into their first larval stage looking superficially like a mite.
- ❑ These larvae as «nyphs».
- ❑ The first larval stage of *L.serrata* tunnels through gut wall with stylet.
- ❑ The immature larvae are then encysted.
- ❑ Encysting can happen in number of tissues, including the liver, lymph nodes and muscle.
- ❑ After a series of molts in these cysts.
- ❑ The third stage larvae lose the leg-like appendages and
- ❑ The third stage larvae can travel the abdominal cavity and abdominal wall.
- ❑ While the larvae are encysted, many of them die and calcify after about 2 years.
- ❑ Carnivorous host feeds upon the intermediate host when the larvae are in their third stage.
- ❑ The larvae develop to their adult stage in the nasopharynx of the carnivorous.

Clinical signs, Diagnosis and Treatment

Clinical signs:

- ❑ in definitive host;
 - ✓ sneeze, cough, dyspnoea
 - ✓ snore
 - ✓ nose scratching with front feet
 - ✓ Quick fatigue in hunting dogs.

Diagnosis:

- ❑ Eggs are searched in feces and nasal stream.

Treatment:

- ❑ Treatment is relatively effective with Praziquantel 10% creolin, 3-5% ammonia application in the nose.
- ❑ Dogs and other carnivorous should not be given infected organ.

Nematomorpha = Horsehair/wire worm

- ❖ They are parasitic in arthropods during their juvenile stage.
- ❖ It is not parasite of pets and are confused with nematodes.
- ❖ Cylindrical, cuticle flat
- ❖ Sexes is separated (male and female)
- ❖ **Mature**; predatory insecta
 - Larvae**; polypod (centigeda), crab and insect larvae
- ❖ Larvae which leave the egg (thorny ring overflows) become encystic in the arachnoid.
- ❖ **Intermediate host** with cyst is matured by the last host, leaves the host and lives free in the water.
- ❖ They randomly enter the digestive tract of people or animals with drinking water.
- ❖ But do not live much.

Species:

❖ *Gordius aquaticus*

- ❖ Horsehair worm, wire worm
- ❖ Male is 17-27 cm. / female is 30-90 cm. long.
- ❖ Juvenile horsehair or gordian worms (*Nematomorpha*) are obligate parasites of terrestrial insects and as adults are freeliving in freshwater sites including lakes, streams and rivers.