

Trichostrongylus Species

Trichostrongylus species are nematodes of cosmopolitan distribution usually found in herbivores. However, some species can be found in humans.

Life cycle and morphology

Trichostrongylus species are small nematode worms similar to those of hookworm. However, unlike adult hookworm, the adult worms of *Trichostrongylus* have no characteristic mouth parts, i.e. have no teeth or cutting plates.

Humans are usually infected with *Trichostrongylus* by the ingestion of the infective 3rd stage larvae on plant vegetation whereas infection by hookworm is through skin penetration.

Trichostrongylus mature in the small intestine in 3 – 4 weeks without any migratory pathway through the lungs. Hookworm, on the other hand mature in the intestine after migrating through the lungs. Both adult hookworm and *Trichostrongylus* species attach themselves to the mucosa of the small intestine.

The eggs of *Trichostrongylus* are very similar to those of Hookworm but are larger with more pointed ends. The eggs of hookworm measure 56 – 75µm by 36 – 40µm and those of *Trichostrongylus* measure 73 - 95 µm by 40 - 50µm. Thus it is essential to use an eyepiece graticule to distinguish between the two eggs.

Clinical Disease

Symptoms are similar to those of hookworm and are related to the worm burden. Several hundred worms must be present before symptoms become significant. Light infections may be asymptomatic.

Diagnosis

Definitive diagnosis is made by finding the characteristic eggs in stool specimens. Hatched larvae may also be found and these must be distinguished from rhabditiform larvae of hookworm and *Strongyloides stercoralis*. The 1st stage larvae of *Strongyloides* have a short buccal cavity whereas both hookworm and *Trichostrongylus* have a long buccal cavity. However, *Trichostrongylus* has a characteristic beadlike swelling at the tip of its tail.

