

Hymenolepis nana

In 1921 Saeki demonstrated direct transmission (i.e. without intermediate host) of *H. nana* in humans, in contrast with *H. diminuta* for which human infection requires ingestion of infected insects. *H. nana* occurs in foci and has a cosmopolitan distribution.

The highest prevalence of this cestode is found in hot, dry regions. People become infected by swallowing an egg (faeco-oral transmission) or by accidentally swallowing an insect (flea, weevil) which acts as intermediate host. An intermediate host is not essential for infection. Humans are the only definitive host. The adult worm is found in the lumen of the small intestine. The adult parasite is smaller than *H. diminuta*: it only measures 2-4 cm (dwarf tapeworm). The strobila contains 100 to 200 proglottids.

The course of infection is almost always asymptomatic, but marked hypereosinophilia can be present. Malignant transformation of *H. nana* has been described in an HIV-infected patient in 2015, being a novel disease mechanism of a neoplasm in invertebrates invading human tissue. The treatment of choice is praziquantel.