

Diphyllobothrium Latum

Diphyllobothrium latum is a parasitic infection classified as a tapeworm, or cestode. It occurs through the ingestion of larvae from raw freshwater fish, and leads to macrocytic anemia in patients. This occurs because this tapeworm competes for B12 with the host in the intestines. The preferred treatment for diphyllobothrium latum infection is praziquantel.



PLAY PICMONIC

Pathophysiology

Cestode (Tapeworm)

Crest-toad with Tapeworm

Diphyllobothrium latum is a cestode, or tapeworm.

Ingestion of Larvae from Raw Fish

Raw Fish

Patients become infected with diphyllobothrium after ingesting larvae from raw fish.

Competes for Vitamin B12

Competing with (12) Dozen Viking (B) Bees

Roughly 80% of patients infected are asymptomatic and can go for years without having their infection detected. The parasite then absorbs up to 80% or more of the host's B12 intake, which leads to megaloblastic anemia.

Megaloblastic Anemia

Mega-blast Anemone

The B12 deficiency in patients can lead to megaloblastic anemia, which is indistinguishable from pernicious anemia. This megaloblastic anemia can also translate into subtle demyelinative neurological symptoms.

Treatment

Praziquantel

Pretzel-queen

The standard treatment for this infection is praziquantel, but it should be noted that this treatment regimen is not FDA-approved.