



Synoptic Overview on Causes and Treatment of Tapeworm Infections

Jin Fan*

Department of Science and Technology, Jiangnan University, Jiangsu, China

DESCRIPTION

Tapeworm infections, also known as cestodiasis, are a group of parasitic diseases caused by tapeworms, which are flatworms belonging to the class *Cestoda*. These parasites have a long and ribbon-like body, segmented into multiple units known as proglottids. Tapeworms can infect various animals, including humans, and their life cycle often involves multiple hosts. While tapeworm infections are relatively common in many parts of the world, they can often go unnoticed due to their asymptomatic nature or mild symptoms.

Causes of tapeworm infection

Tapeworm infections are primarily caused by the ingestion of tapeworm larvae or eggs. Humans can become infected in several ways:

Consuming contaminated food: The most common route of tapeworm infection is through the consumption of undercooked or contaminated food, especially meat from infected animals. Pork tapeworm (*Taenia solium*), beef tapeworm (*Taenia saginata*), and fish tapeworm (*Diphyllobothrium latum*) are some of the tapeworm species that can infect humans through contaminated meat.

Ingesting tapeworm eggs: Another route of infection occurs when humans accidentally ingest tapeworm eggs present in contaminated water, soil, or on unwashed fruits and vegetables. This can lead to infections like the dwarf tapeworm (*Hymenolepis nana*) or the beef tapeworm (*Taenia saginata*).

Autoinfection: In some cases, individuals with an existing tapeworm infection can accidentally re-infect themselves by ingesting their own tapeworm eggs or larvae. This can happen through poor hygiene practices.

Symptoms tapeworm infection

Tapeworm infections can vary widely in terms of symptoms, with some individuals experiencing no noticeable symptoms at all.

The severity of symptoms often depends on the type of tapeworm involved, the location of the infection, and the individual's overall health. Common symptoms of tapeworm infection may include:

Gastrointestinal disturbances: Mild gastrointestinal symptoms such as abdominal pain, diarrhea, and nausea may occur.

Weight loss: Some tapeworm infections can lead to unexplained weight loss, as the tapeworm absorbs nutrients from the host's intestine, depriving the host of essential nutrients.

Anal itching: An itchy anus, known as pruritus ani, may occur when tapeworm segments or eggs are present in the anal area.

Visible tapeworm segments: In certain cases, individuals may pass tapeworm segments or whole tapeworms in their stool, which can be a startling and definitive sign of infection.

Allergic reactions: Rarely, some individuals may experience allergic reactions to tapeworms, leading to skin rashes, hives, or even anaphylactic shock in severe cases.

Neurological symptoms: In cases of cysticercosis, a condition caused by the larvae of the pork tapeworm, individuals may experience neurological symptoms such as seizures, headaches, or confusion.

Treatment of tapeworm infection

The treatment of tapeworm infections typically involves the use of antiparasitic medications. The choice of medication depends on the type of tapeworm involved:

Praziquantel: Praziquantel is one of the most commonly used medications for treating tapeworm infections. It is effective against a wide range of tapeworm species and works by disrupting the parasite's ability to absorb nutrients from the host.

Albendazole: Albendazole is another antiparasitic drug that may be prescribed for certain tapeworm infections, particularly those caused by pork tapeworm (*Taenia solium*).

Correspondence to: Jin Fan, Department of Science and Technology, Jiangnan University, Jiangsu, China, E-mail: fan_jin@163.com

Received: 21-Jul-2023, Manuscript No. JBP-23-23146; **Editor assigned:** 24-Jul-2023, PreQC No. JBP-23-23146 (PQ); **Reviewed:** 07-Aug-2023, QC No. JBP-23-23146; **Revised:** 14-Aug-2023, Manuscript No. JBP-23-23146 (R); **Published:** 21-Aug-2023, DOI: 10.35248/2155-9597.23.S23.063.

Citation: Fan J (2023) Synoptic Overview on Causes and Treatment of Tapeworm Infection. J Bacteriol Parasitol. S23:063.

Copyright: © 2023 Fan J. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Niclosamide: Niclosamide is used less frequently but may be prescribed for some tapeworm infections.

Surgery: In cases where tapeworm cysts have formed in organs or tissues, surgical removal may be necessary. This is particularly true for cysticercosis.

Tapeworm infections are a significant public health concern, particularly in areas with poor sanitation and inadequate access

to healthcare. While tapeworm infections can often go unnoticed due to their asymptomatic nature, they can lead to serious health issues when left untreated. Therefore, it is crucial to raise awareness about prevention, improve hygiene practices, and provide access to healthcare services for diagnosis and treatment. By addressing these challenges, we can reduce the burden of tapeworm infections and improve the overall health and well-being of affected individuals and communities.