Trichuriasis

ICD-10 B79

Identification

Whipworm disease

Case classification:

• Suspected case: A nematode infection of the large intestine, usually asymptomatic.

• Probable case: Heavy infections may cause bloody, mucoid stools and diarrhea. Rectal prolapse, clubbing of fingers, hypoproteinemia, anemia and growth retardation may occur in heavily infected children.

• Confirmed case: demonstration of eggs in feces or sigmoidoscopic observation of worms attached to the wall of the lower colon in heavy infections.

3.10.2 Infectious agent

Trichuris trichiura

3.10.3 Occurrence

Worldwide, especially in warm, moist regions.

3.10.4 Reservoir

Humans

3.10.5 Mode of transmission

Indirect, particularly through pica or ingestion of contaminated vegetables; no immediate person-to-person transmission. Eggs passed in feces require a minimum of 10-14 days in warm moist soil to become infective. Hatching of larvae follows ingestion of infective eggs from contaminated soil, attachment to the mucosa of the caecum and proximal colon, and development into mature worms. Eggs appear in the feces 70-90 days after ingestion of embryonated eggs; symptoms may appear much earlier.

Incubation period

Indefinite

Period of communicability

Several years in untreated carriers.

Susceptibility and resistance

Universal.

Methods of control

a Preventive measures

1) Educate all members of the family, particularly children, in the use of toilet facilities.

2) Provide adequate facilities for feces disposal.

3) Encourage satisfactory hygienic habits, especially hand washing before food handling; avoid ingestion of soil by thorough washing of vegetables and other foods contaminated with soil.

4) WHO recommends a strategy focused on high-risk groups for the control of morbidity due to soil-transmitted helminthes, including community treatment.

3.10.9b Control measures

1) Report to local health authority.

2) Isolation: Not applicable.

3) Concurrent disinfection: Sanitary disposal of feces.

4) Quarantine: Not applicable.

5) Immunization of contacts: Not applicable.

6) Investigation of contacts and source of infection: Examine feces of all symptomatic members of the family group, especially children and playmates.

7) Specific treatment: Mebendazole is the drug of choice. Albendazole (half dose for children 12-24 months), and pyrantel are alternative drugs.

Management of the disease

 Mebendazole taken by mouth for 3 days is commonly prescribed when the infection causes symptoms. Albendazole (half dose for children 12-24 months) and pyrantel are used as alternative therapies.