Amebiasis

ICD-10 A06

Identification

Case classification:

• Suspected Case: A protozoan parasite infection that exists in 2 forms: the hardy infective cyst and the more fragile potentially pathogenic trophozoite. The parasite may act as a commensal or invade the tissues and give rise to intestinal or extra intestinal disease.

• Probable Case: Most infections are asymptomatic ,Intestinal disease varies from acute or fulminating dysentery with fever, chills and bloody or mucoid diarrhea (amoebic dysentery), to mild abdominal discomfort with diarrhea containing blood or mucus.

• Confirmed case: microscopic demonstration of trophozoites or cysts in fresh or suitably preserved fecal specimens.

Infectious agent

Entamoeba histolytica.

Occurrence

Amebiasis is mostly a disease of young adults; liver abscesses occur predominantly in males. Amebiasis is rare below age 5 and especially below age 2, when dysentery is due typically to shigellae. prevalence rates of cyst passage, usually based on cyst morphology, vary from place to place, with rates generally higher in areas with poor sanitation. In areas with good sanitation, amoebic infections tend to cluster in households and institutions.

Reservoir

Humans

3.15.5 Mode of transmission

Mainly through ingestion of fecally contaminated food or water containing amoebic cysts, which are relatively chlorine resistant. Patients with acute amoebic dysentery probably pose only limited danger to others because of the absence of cysts in dysenteric stools and the fragility of trophozoites.

3.15.6 Incubation period

From a few days to several months or years; commonly 2-4 weeks.

3.15.7 Period of communicability

During the period E. histolytica are passed, which may continue for years.

3.15.8 Susceptibility and resistance

General. Susceptibility to reinfection has been demonstrated but is apparently rare.

3.15.9 Methods of control

3.15.9a Preventive measures

1) Educate the general public in personal hygiene, particularly in sanitary disposal of feces and in hand washing after defecation and before preparing or eating food. Disseminate information regarding the risks involved in eating un cleaned or uncooked fruits and vegetables and in drinking water of questionable purity.

2) Dispose of human feces in a sanitary manner.

3) Protect public water supplies from fecal contamination.

4) Treat known carriers; stress the need for thorough hand- washing after defecation to avoid reinfection from an infected domestic resident.

5) Health agencies should supervise the sanitary practices of people who prepare and serve food in public eating places and the general cleanliness of the premises involved. Routine examination of food handlers as a control measure is impractical.

6) Disinfectant dips for fruits and vegetables are of unproven value in preventing transmission of E. histolytica. Thorough washing with potable water and keeping fruits and vegetables dry may help; cysts are killed by desiccation, by temperatures above 50°C (122°F) and by irradiation.

7) Use of chemo prophylactic agents is not advised.

3.15.9b Control measures

1) Report to local health authority: In selected endemic areas.

2) Isolation: For hospitalized patients, enteric precautions in the handling of feces, contaminated clothing and bed linen. Exclusion of individuals infected with E. histolytica from food handling and from direct care of hospitalized and institutionalized patients. Release to return to work in a sensitive occupation when chemotherapy is completed.

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: Household members and other suspected contacts should have adequate microscopic examination of feces.

c Epidemic measures

Any group of possible cases requires prompt laboratory confirmation to exclude false-positive identification of E. histolytica or other causal agents and epidemiological investigation to determine source of infection and mode of transmission. If a common vehicle is indicated, such as water or food, appropriate measures should be taken to correct the situation.

d Disaster implications

Disruption of normal sanitary facilities and food management will favor an outbreak of amebiasis, especially in populations that include large numbers of cyst passers.

Management of the disease

Specific treatment: Acute amoebic dysentery should be treated with metronidazole. In cases of extra intestinal Amoebiasis or refractory intestinal amebiasis, metronidazole should be followed by iodoquinol, paromomycin or diloxanide furoate. Tinidazole and ornidazole are also useful single-dose treatments against luminal and tissue disease. If a patient with a liver abscess continues to be febrile after 72 hours of metronidazole treatment, nonsurgical aspiration may be indicated. Chloroquine is sometimes added to metronidazole or dehydroemetine for treating a refractory liver abscess. Abscesses may require surgical aspiration if there is a risk of rupture or if the abscess continues to enlarge despite treatment. Asymptomatic carriers may be treated with iodoquinol, paromomycin or diloxanide furoate. Metronidazole is not recommended for use during the first trimester of pregnancy.