Giardiasis

Transmission, Exclusion

Transmission
• Fecal-oral
• Direct: hand-to-mouth transfer from infected person
• Indirect: ingestion of contaminated water or food

Incubation
7-10 days (3-25 days)

Gastroenteritis: watery diarrhea, flatulence, abdominal pain, nausea, malabsorption, fatigue, Anorexia, weight loss

Asymptomatic
Low infectious dose: 10 cysts

Communicability
-as long as cysts are secreted
People with diarrhea should be excluded from childcare centers

Sporadic or Outbreaks:
• Child care centers
• Areas with contaminated water supply

1-20% prevalence in the U.S.

Diagnosis

Caused by Giardia intestinalis, aka G. lamblia or G. duodenalis

2 stage life cycle: trophozoite and cyst
Cyst is ingested, releases trophozoites which attach to epithelium of duodenum

Lab Diagnosis
• Identify trophozoites or cysts in direct smear examination or immunofluorescent antibody test of stool species
• 50-70% identification rate after one stool, 90% after three
• Examination of duodenal contents or string test may be needed for diagnosis

Probable: clinically compatible case that is epidemiologically linked to a confirmed case
Confirmed: a case that is laboratory confirmed

Gastrointestinal:
watery diarrhea, flatulence, abdominal pain, nausea, malabsorption, fatigue, Anorexia, weight loss

Treatment, Prophylaxis

Treatment
• Correct dehydration and electrolyte abnormalities
• Metronidazole (250 mg tid x 5 days for adults; 15 mg/kg/day x 5 days for children) - 80-95% cure rate
• Furazolidine (100 mg PO tid x 7-10 days adults; 6 mg/kg/day in 4 doses x 7-10 days children) - better for children because liquid form available.
• Less common treatments: tinidazole, albendazole, mebendazole

Prophylaxis
• Treatment of asymptomatic carriers is not recommended except to prevent household transmission to pregnant women and patients with other medical conditions.

Control

Infected persons should avoid recreational water areas (pools, lakes, etc.) for 2 weeks after symptoms resolve

• Sanitation & personal hygiene (especially in daycare centers)
• Filter, boil unsafe water

Not necessary to follow-up on isolated case of giardiasis
BUT
- If a physician suggests a water borne infection: refer to IDEpi about management; OPH does not routinely test private wells. Coliform counts may be conducted if necessary.
- Contact the DCC owner/director to notify of the case and to determine if other cases
- If yes, test symptomatic individuals, exclude until asymptomatic
- If outbreak persists, request negative test before readmission
- Outbreak investigation and counseling re-outbreak control;
- Fill summary facility outbreak form
- If case part of a waterborne outbreak: outbreak investigation to determine source of infection (Case control)

http://www.infectiousdisease.dhh.louisiana.gov
(800)256-2748