Apyretic gastrointestinal disorders due to giardiasis contracted in Morocco

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Abstract

We present the case of a 32-year-old French man who presented with morning nausea, bloating, frequent flatulence, burping, occasional pyrosis, and alternating diarrhea and constipation two weeks after a trip to Morocco. The diagnosis was established by a parasitological stool exam that revealed cysts of Giardia lamblia. He was successfully treated with tinidazole.

Case Report

The patient is a 32-year-old French man. He is an electronic engineer who does not smoke and drinks occasionally. He has no significant family, medical, or surgical history. The patient's symptoms began two weeks after returning from Agadir, Morocco. They included morning nausea, bloating, frequent flatulence, burping, occasional pyrosis, alternating diarrhea and constipation. The patient consulted a primary care physician who prescribed symptomatic treatment that resulted in temporary relief. His clinical exam was entirely normal. A parasitological stool exam revealed cysts of Giardia lamblia. The following treatment was prescribed: four tablets of 500 mg Tinidazole (2,000 mg) taken orally in a single dose and repeated ten days later. All symptoms disappeared three days after the first 2,000 mg drug intake. A parasitological stool exam performed after one month was negative.

Discussion

Giardiasis is most common in tropical countries because of widespread fecal germs.[1] It is a heavily under-diagnosed and as a result under-treated disease.[2] Contamination is usually indirect via water or vegetables, but can occur from dirty hands and though oro-anal sex.[3] Outbreaks of giardiasis have been noted in communities with contaminated public water.[4]

Giardiasis is usually a benign disease and the majority of cases are asymptomatic. The only severe complication is malabsorption - a disorder only occurring in children of endemic areas.[5-7] Dyspeptic symptoms are often prominent and can be mistaken as stemming from viral hepatitis or peptic ulcer.[8] Giardiasis never triggers eosinophilia.[9] Diagnosis is made by parasitological stool exams showing cysts or mobile trophozoites. Because there are periods when parasites are not excreted in feces, it is necessary to repeat stool exams.[10] The most effective treatment is provided by nitroimidazole compounds such as ornidazole, tinidazole, and secnidazole. For adults, 30 mg/kg should be taken orally in a single intake.[11] Improved outcomes are associated with a repeated dose ten days after the first intake. Concomitant treatment of household members is recommended.[12] Therapeutic tests are of value when parasitological stool exams are negative. If symptoms subside following a therapeutic test, an indirect positive diagnosis is made.[13]

Prevention of giardiasis is possible at the individual and collective levels. Individually, prevention rests upon: i) body hygiene, particularly washing hands before eating; ii) drinking encapsulated or boiled water; iii) avoiding vegetables in endemic areas. Collectively, prevention relies on: i) the improvement of sanitary infrastructure and water networks like sewage; ii) the encouragement of breast feeding, particularly in urban areas;[14] iii) the discontinuation of human feces used as fertilizer in many Asian countries.[15]

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