

# Is the treatment of *Enterobius vermicularis* co-infection necessary to eradicate *Dientamoeba fragilis* infection?

Boga J.A.

Rojo S.

Fernández J.

Rodríguez M.

Iglesias C.

Martínez-Cambor P.

Vázquez F.

Rodríguez-Guardado A.

**Objectives:** *Dientamoeba fragilis* is a pathogenic protozoan of the human gastrointestinal tract with a worldwide distribution, which has emerged as an important and misdiagnosed cause of chronic gastrointestinal illnesses such as diarrhea and 'irritable-bowel-like' gastrointestinal disease. Very little research has been conducted on the use of suitable antimicrobial compounds. Furthermore, higher rates of co-infection with *Enterobius vermicularis* have been described, suggesting that *E. vermicularis* could influence the treatment of *D. fragilis*-infected patients. To study this, the treatment of *E. vermicularis* and *D. fragilis* co-infected patients was evaluated. **Methods:** Forty-nine patients with a *D. fragilis* infection, including 25 (51.0%) patients co-infected with *E. vermicularis*, were studied. All of them were treated with metronidazole. Patients with *E. vermicularis* co-infection and/or an *E. vermicularis*-positive case in the family were treated with mebendazole. **Results:** Metronidazole treatment failure was significantly more frequent in patients with *E. vermicularis* co-infection and in patients with children in the family. **Conclusions:** Co-infection with *E. vermicularis* may act as a factor favoring *D. fragilis* infection by preventing eradication measures. This suggests that both parasites should be treated simultaneously. © 2016 Published by Elsevier Ltd on behalf of International Society for Infectious Diseases.

*Dientamoeba fragilis*

Enterobius vermicularis

Metronidazole

Parasite infection

Treatment

mebendazole

metronidazole

paromomycin

anthelmintic agent

antiprotozoal agent

mebendazole

metronidazole

adolescent

adult

aged

Article

asymptomatic disease

child

clinical article

clinical feature

consultation

dientamoebiasis

drug treatment failure

enterobiasis

Enterobius vermicularis

eradication therapy

female

human

immigrant

male

mixed infection

treatment response

animal

Coinfection

Dientamoeba

dientamoebiasis

drug effects

enterobiasis

Enterobius

feces

middle aged

parasitology

physiology

preschool child

young adult

Adolescent

Adult

Aged

Animals

Anthelmintics

Antiprotozoal Agents

Child

Child, Preschool

Coinfection

Dientamoeba

Dientamoebiasis

Enterobiasis

Enterobius

Feces

Female

Humans

Male

Mebendazole

Metronidazole

Middle Aged

Young Adult