Diarrhea caused by multiparasitic infection

Key words: Diarrhea. Parasites. Necator americanus (hookworm).

Dear Editor,

Diarrhea caused by nematode multiple infection is uncommon in Spain; therefore, we are not very familiar with the diagnosis and treatment of these patients.

Clinical case

The patient, a 26-year-old woman born in Matagalpa (Nicaragua), resident in Spain for 3 years, sought medical treatment for postprandial epigastric pain, nausea, vomiting and diarrhea which had lasted for 18 months. The diarrhea was watery and had no other pathological signs. Analytical tests revealed a total (eosinophil 2,160/mm³) and relative (26.50%) peripheral hypereosinophilia. A coproculture was carried out and no alterations were observed. The parasitological study of feces showed eggs of Necator americanus and Trichuris trichiura parasites as well as Endolimax nana cysts. Treatment was initiated with mebendazole 100 mg orally every 12 hours for 3 days, which was repeated after two weeks. Following treatment, the fecal parasites study showed only Endolimax nana cysts. The diarrhea disappeared and eosinophils count was normalized with some mild epigastric discomfort and intestinal bloating remaining.

Discussion

Infection due to multiple intestinal parasites is common in tropical and subtropical areas (1), but rare in Spain, where any cases have been imported.

The Necator americanus, known as hookworm, infects humans by larvae passing through the skin into the bloodstream, then into the lungs, and finally reaching the intestines. The main clinical manifestation is iron deficiency anemia, which is present in 30% of patients. The treatment of choice is a single dose of albendazole, although mebendazole or pyrantel pamoate can also be used (2).

Trichuriasis is caused by the nematode Trichuris trichiura. Infection occurs by ingestion of eggs. If the amount of parasites is low, infection may go unnoticed. The treatment of choice is mebendazole. Alternatively, albendazole or ivermectin (3) may be used.

Endolimax nana is considered to be a non-pathogenic protozoa and isolation in stool samples without other co-infections is not an indication for treatment.

This case highlights how in patients from subtropical and tropical areas multiple parasite infestation can be a cause of diarrhea, even if they have lived in Spain for several years.

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References