
Cryptosporidiosis in the Stomach of Patients with Acquired Immunodeficiency Syndrome

Cryptosporidiosis is one of the most common opportunistic infections occurring in patients with acquired immunodeficiency syndrome (AIDS). The cryptosporidium parasite colonizes the intestinal mucosa and leads to a cholera-like diarrhea. Few reports are available on cryptosporidiosis of the stomach (1), which may even lead to situations of partial outlet obstruction (2,3). Esophago-gastroduodenoscopy was indicated for two patients with AIDS:

1. a 41-year-old white man with CD4 lymphocyte counts of 38 cells/mm³, who had been presenting with diarrhea, epigastric pain, a feeling of fullness, nausea, and vomiting for five months; and
2. a 27-year-old black man with CD4 lymphocyte counts of 21 cells/mm³, who had been complaining of epigastric pain and vomiting of four months' duration.

Endoscopy of Case 1 showed that the mucosa of the entire organ was highly erythematous and edematous and covered with small whitish nodules in the body and antrum (Figure 1). The pylorus and duodenum presented the same appearance. Biopsies from these sites showed moderate inflammation of the mucosa with the presence of large numbers of *Cryptosporidium*. In Case 2, the body was of normal appearance, whereas the mucosa of the

antrum and especially of the prepyloric region was erythematous, edematous, friable, and with nodules having the same characteristics as those of Case 1 (Figure 2). The duodenum also presented the same lesions. Histopathological examination revealed the presence of the parasite in the antrum and duodenum. Both patients were treated with spiramycin, with partial improvement in the first and with total disappearance of symptoms in the second after one month of treatment. Endoscopy of Case 1 showed total regression of the lesions in the stomach, but *Cryptosporidium* was still present in the duodenum. He died two months later due to a neuroinfection. The follow-up of Case 2 was not possible. Cryptosporidiosis of the stomach was first observed in radiologic studies using barium (4). The endoscopic appearance of the duodenum in the presence of infection with the protozoan may be normal, or edematous, erythematous and multiple small white nodules may be present (5). Out of 60 patients with AIDS systematically submitted to biopsies of the antrum and body, we only detected *Cryptosporidium* in the two cases reported here. Further studies are needed to confirm whether the endoscopic features observed are sufficient to confirm a presumptive diagnosis of cryptosporidiosis of the stomach.

L. K. Coelho¹, G. Castro¹,
R. Martinez¹, J. L. P. Modena²

¹ Dept of Internal Medicine,
Faculty of Medicine,
University of São Paulo,
Ribeirão Preto, Brazil

² Dept. of Surgery and Traumatology,
Faculty of Medicine,
University of São Paulo,
Ribeirão Preto, Brazil

References

1. Bessaso HR, Macias J, Trombetta LA, et al. Erosive gastritis associated with *Cryptosporidium* in two patients with AIDS. *Acta Gastroenterol Latinoam* 1994; 24: 41–3.
2. Garone MA, Winston BJ, Lewis JH. Cryptosporidiosis of the stomach. *Am J Gastroenterol* 1986; 81: 465–70.
3. Cersosimo E, Wilkowske CJ, Rosenblatt JE, Ludwig J. Isolated antral narrowing associated with gastrointestinal cryptosporidiosis in acquired immunodeficiency syndrome. *Mayo Clin Proc* 1992; 67: 553–6.
4. Berk RN, Wall SD, Mcardle CB, et al. Cryptosporidiosis of the stomach and small intestine in patient with AIDS. *Am J Roentgenol* 1984; 143: 549–54.

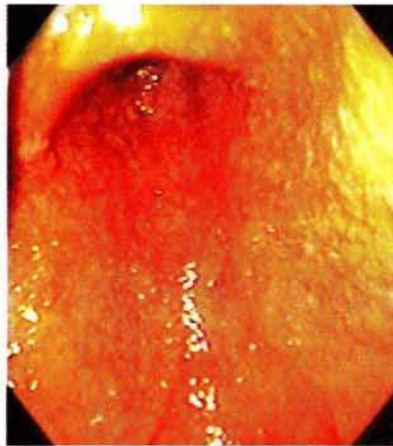


Figure 1: Appearance of cryptosporidiosis in the antrum. Note the enanthematous mucosa covered with multiple small whitish nodules.

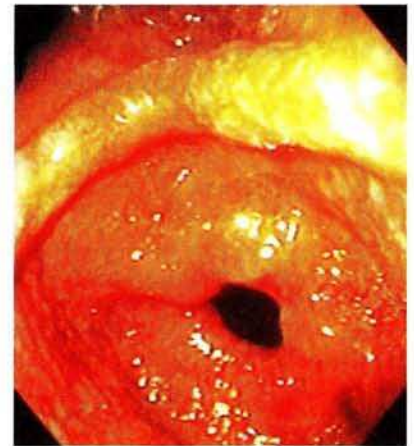


Figure 2: Detail of the prepyloric region and of the pylorus infected with *Cryptosporidium*. The lesions in the duodenum were identical.

5. Danygier H. AIDS and the gastrointestinal tract. *Endoscopy* 1996; 28: 174–86.

Corresponding Author

L. K. Coelho, M.D.
Carl Heinz Buechler 83 ap 66
Garcia, Blumenau-SC
89021-120 Brazil
Fax: +55-16-633 6695