Histopathological examination of the rectal tissue revealed necrosis with inflammatory exudates and abundant amoebic trophozoites (see Fig. 1B to D in the photo quiz), confirming the diagnosis of *Entamoeba histolytica* infection. There was no evidence of malignancy.

*Entamoeba histolytica*, a nonflagellated protozoan, exists in an environmentally resistant cyst stage and an infective trophozoite stage, which causes invasive disease. Infections occur when cysts are ingested, usually via contaminated food or water, such as during exposure to poor sanitary conditions or travel to developing countries. (1). HIV-positive patients and men who have sex with men may also acquire *E. histolytica* through sexual transmission via fecal-oral contact and, in rare cases, anal-genital intercourse (1–3).

Ninety percent of infections are asymptomatic (4). Symptomatic disease comprises intestinal amebiasis and extraintestinal amebiasis, most commonly involving the liver (4).

Amebic colitis may occasionally manifest as amebomas, a mass of granulation tissue and chronic inflammation mimicking colon cancer, as seen in this patient (5).

Key histopathological findings include the presence of amebas on the mucosal surface on intestinal mucosal biopsy specimens in an overlying inflammatory exudate. A large, flask-shaped mucosal ulceration may develop over time. The infective trophozoites may be substantially larger (10 to 60 μm) than macrophages, have a punctate central karyosome, and display foamy amphophilic cytoplasm with ingested erythrocytes. Cysts are not seen in tissue. The presence of tissue invasion of infective trophozoites is characteristic of *E. histolytica* infection (6–8). The PAS-D stain enhances recognition of the amebas.

The other diagnostic methods for amebic colitis are stool microscopy and antigen detection, PCR, and serology (9). Stool microscopy has limited sensitivity and specificity (less than 60%). Erythrophagocytosis is considered pathognomonic of *E. histolytica* infection for morphological stool microscopic diagnosis and may be used to differentiate this organism from *Entamoeba dispar*. However, erythrophagocytosis (as seen in Fig. 1C in the photo quiz) is not necessary for diagnosis when there is evidence of tissue invasion or extraintestinal infection. (9) Stool antigen detection has excellent (>95%) sensitivity and specificity, and some assays can differentiate between *E. histolytica* and *E. dispar*. PCR offers similar specificity (>90%) and moderate sensitivity (>70%) but is more costly and time-consuming to perform than stool antigen detection. Serology is less useful for diagnosis in patients who live in or frequently travel to regions of high endemicity, as it may be difficult to differentiate between recent and past infections. (9) This patient had a negative stool ova-and-parasite examination result on one sample.
Additional samples were not obtained, as diagnosis was obtained via tissue histopathology as described above.

Amebic colitis is treated with high-dose oral metronidazole for 7 to 10 days, followed by an intraluminal agent such as paromomycin, diiodohydroxyquinoline, or diloxanide furoate for the intraluminal cyst stage (1).

The patient received metronidazole followed by oral paromomycin. Additional history revealed unprotected anal insertive and receptive sex with male partners. Repeat endoscopy was performed 2 days after the first one, with no evidence of malignancy on the second biopsy. Ameboma may often be confused with colonic cancer, although in rare cases they may coexist (10). It is therefore important to repeat the endoscopy to ensure there is no coexisting malignancy. While amebiasis is commonly associated with exposure to contaminated food and water, this case serves as a reminder that this disease can be transmitted sexually (2, 3, 11). HIV and sexually transmitted infection screening should be considered for patients with appropriate risk factors.

REFERENCES