Unusual endoscopic findings in an immunosuppressed patient

Immunosuppressed patients are susceptible to infections by opportunistic agents such as *Leishmania* that could cause visceral leishmaniasis with gastrointestinal involvement in up to 10% of cases.

We report a 41-year-old man with human immunodeficiency virus (HIV) infection stage C3 with CD4 lymphocytes 81/mm³, 4,070 leukocytes (47.2% lymphocytes, 0.0% eosinophils, rest of differential normal) treated with antiretroviral therapy (dolutegravir/abacavir/lamivudine) with good adherence. He also reported mesangiocapillary glomerulonephritis type-1, hepatocutaneous porphyria, and a 7-year history of recurrent visceral leishmaniasis treated with liposomal amphotericin B as secondary prophylaxis. Esophagogastroduodenoscopy and colonoscopy indicated for chronic diarrhea and anemia performed 5 years ago displayed antral erythema, mild nodular appearance in the duodenal mucosa, and normal colonic mucosa. Gastric, duodenal, and colonic biopsies revealed *Leishmania spp* despite treatment with liposomal amphotericin B.

A video capsule endoscopy (VCE) was now indicated for persistent diarrhea. Enteropathy with atrophic and patchy, marked edema of the villi, and whitish nodularity with a “river bedrock” appearance (▶Fig. 1–3) in the duodenum and jejunum were identified (▶Video 1). Further gastric and duodenal biopsies showed an accumulation of macrophages in the lamina propria of the mucosa with intracytoplasmatic *Leishmania spp* (▶Fig. 4). Treatment with meglumine antimoniate was initiated owing to previous failure with liposomal amphotericin B, without response.

Some cases of visceral leishmaniasis showing non-specific findings (atrophy, edema, and whitish nodular mucosa) on esophagogastroduodenoscopy have been reported [1,2], with the mucosa appearing normal in up of 45% of cases [3,4]. There is only one case reporting...
VCE findings of visceral leishmaniasis in an immunocompromised patient with a diffuse intestinal atrophic pattern [5]. We observed a similar enteropathy, although in a patchy distribution, on VCE and esophagogastroduodenoscopy. Atrophic enteropathy displayed as a “river bedrock” appearance would be a possible sign of an advanced stage of life-threatening visceral leishmaniasis. VCE may provide useful information on diagnoses, extension, and severity of gastrointestinal lesions in patients with severe immunosuppression and gastrointestinal symptoms.

Endoscopy_UCTN_Code_CCL_1AC_2AG

Competing interests

The authors declare that they have no conflict of interest.

The authors

Victoria Alejandra Jimenez-Garcia1,2, Rafael Romero-Castro1,2, Juan Rios-Martin3, Federico Argüelles-Arias4,5, Adoracion Valiente-Mendez6, Pedro Hergueta-Delgado1, Angel Caunedo-Alvarez1,4
1 Virgen Macarena University Hospital, Gastroenterology Division, Sevilla, Spain
2 Hospital Vithas Nisa Sevilla, Endoscopy Unit, Sevilla, Spain
3 Virgen Macarena University Hospital, Pathology Division, Sevilla, Spain
4 Virgen Macarena University Hospital, Gastroenterology Division, Sevilla, Spain
5 University of Seville, Department of Medicine, Seville, Spain
6 Virgen Macarena University Hospital; Unidad Clínica de Enfermedades Infecciosas, Microbiología y Medicina Preventiva; Universidad de Sevilla and Instituto de Biomedicina de Sevilla, Seville, Spain

References


Corresponding author

Victoria Alejandra Jimenez-Garcia, MD, PhD
Virgen Macarena University Hospital, Endoscopy Division, Av. Dr. Fedriani s/n, 41009, Seville, Spain
drajimenezg@hotmail.com