Rectal cytomegalovirus ulcer in an immunocompetent patient: an uncommon cause of lower gastrointestinal bleeding

Keywords: Cytomegalovirus. Gastrointestinal bleeding. Immunocompetent.

Dear Editor,

Cytomegalovirus (CMV) infection has a high seroprevalence among the general population. Infection is most often asymptomatic or mild in immunocompetent individuals. Cytomegalovirus reactivation is usually seen in immunocompromised patients such as patients with human immunodeficiency virus (HIV) infection, transplant recipients and individuals on immunosuppressants. Furthermore, gastrointestinal tract involvement is common in these patients (1).

Case report

We report the case of an 80-year-old male patient who presented with hematochezia without hemodynamic compromise and with a history of laryngeal squamous-cell carcinoma that was operated on two weeks before the bleeding episode. Upon physical examination, his abdomen was soft and non-tender, anal inspection revealed no fissures or hemorrhoids and the digital rectal exam was normal. Hemoglobin levels decreased from 11.6 to 9.9 mg/dl and no other significant laboratory findings were present.

A colonoscopy was performed that revealed an ulcer with a whitish base and well-delimited borders (Fig. 1A). Biopsy findings suggested active colitis with cytopathic changes consistent with cytomegalovirus infection (Fig. 1B). Diagnostic tests such as HIV serology and venereal disease research laboratory (VDRL) were negative, and CMV viral load by PCR was < 200 copies/ml (undetectable). Ganciclovir was initiated, which obtained an adequate clinical response.

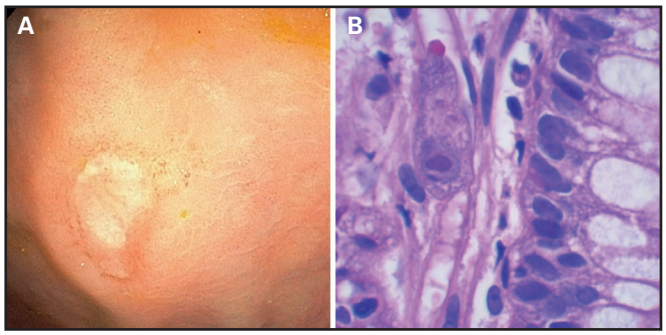

Fig. 1. *A. Colonoscopy: rectal ulcer with regular borders. B. Rectal ulcer histology.*

Discussion

Gastrointestinal compromise due to CMV may develop during primary infection or viral reactivation; the colon is the most commonly involved whereas rectal compromise is rare (2,3). Factors reported in association with CMV colitis development in immunocompetent patients include prior use of corticosteroids, blood transfusion and advanced age (1). Clinical presentation includes abdominal pain (52 %), diarrhea (70 %) and hematochezia (27 %), among others. Endoscopic findings range from erythema to ulcers, pseudo proliferative lesions and fistula (2).

Histologic study represents the diagnostic gold standard with findings including fibroblasts or endothelial cells exhibiting augmented nuclei with intranuclear basophilic inclusion bodies and perinuclear halos resembling owl eyes (4). These histologic findings may be supported by immunohistochemistry or biopsy PCR (4). Currently, CMV infection is treated with antivirals such as ganciclovir or valganciclovir for two to three weeks in immunocompromised patients, and immunocompetent individuals under special circumstances (5).

Conflict of interest: the authors declare no conflict of interest.

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