Abstract

Antiretroviral therapy (ART) has drastically improved the morbidity and mortality in patients infected with HIV. However, the initiation of ART has the potential to unmask and exacerbate opportunistic infections and autoimmune diseases. Although a variety of autoimmune diseases have been reported in association with ART initiation in HIV, there is very little literature describing inflammatory colitis in the setting of ART initiation.

Herein we report the case of a 39-year-old male newly diagnosed with HIV and CNS toxoplasmosis who developed persistent diarrhea after starting trimethoprim and sulfamethoxazole (TMP/SMX) that significantly worsened following discontinuation of TMP/SMX and initiation of ART. A comprehensive infectious workup was negative. Computed tomography revealed small bowel enteritis with abnormal thickening and inflammation in the terminal ileum. Colonoscopy revealed acute terminal ileitis and ulcerations with histological evidence of fibrinous exudation and granulation tissue, but no chronic changes suggestive of inflammatory bowel disease. These symptomatic idiopathic terminal ileal ulcerations may have developed in the setting of ART initiation and may represent an early or limited form of Crohn’s disease. Although there have been cases of ulcerative colitis unmasked in HIV patients following ART initiation, to the best of our knowledge, this is the first case report demonstrating ART therapy unmasking an idiopathic terminal ileum ulceration in a patient with newly diagnosed HIV.
**Figure A:** Coronal view of CT abdomen and pelvis revealing long segment of thickened inflamed terminal ileum with fat stranding along with mesenteric edema and mesenteric venous engorgement.
**Figure B:** Ileoscopy revealing ulcerated and inflamed mucosa in the terminal ileum along with fibrinous exudates.

**Figure C:** Colonoscopy revealing ulcerated and inflamed mucosa at the base of the cecum along with fibrinous exudates.

**Figure D:** Hematoxylin and Eosin stain, 40X. Revealing terminal ileum mucosa with exudate and granulation tissue, along with polarized foreign body.
Figure E: Hematoxylin and Eosin stain, 100X. Revealing small intestinal mucosa, exudate and granulation tissue with no evidence of granulomas. Viral cytopathic effect is not seen and CMV immunostaining is negative.