# A Case of HIV-associated Eosinophilic Colitis and Eosinophilic Inflammation of the Esophagus

Charles Altfillisch MD[1]; Kyle Yuquimpo DO[2]; Matthew Moore MD[2]; Maryam Abdo MD[3]; Jessica Newman DO[4]; Salih Samo MD[2]
1 – Department of Medicine; 2 – Division of Gastroenterology, Hepatology, & Motility; 3 – Department of Pathology; 4 – Division of Infection Diseases

## Introduction

Primary eosinophilic gastroenteritis (EoGE) is a rare inflammatory disorder of the stomach and bowel. A variety of factors including food allergies, infections, malignancy and medications have been associated with EoGE though exact pathogenesis is unclear. We present a unique case of a 33-year old patient with HIV diagnosed with biopsy-proven eosinophilic colitis and eosinophilic inflammation of the esophagus.

## Case Description

A 33-year-old patient with HIV on ART presented to clinic with severe right-sided and epigastric abdominal pain as well as intermittent hard stools. A CT scan revealed right-sided colitis and she was prescribed levofloxacin and metronidazole. Her symptoms initially improved, however she then developed recurrent epigastric pain with cough and shortness of breath prompting presentation to the ED where imaging revealed worsening small and large bowel thickening with fat stranding.

Laboratory workup was remarkable for peripheral eosinophilia with absolute eosinophils of 10.95 K/UL (prior range 0.2-1.4 K/UL) and an elevated IgE. Initial infectious workup was negative. Upper endoscopy revealed localized erosions in the prepyloric region and scattered spots of erythematous mucosa in the sigmoid colon. Histopathological assessment of biopsies was suggestive of eosinophilic colitis and inflammation of the esophagus.

A Strongyloides IgG was mildly positive at 1.0 (reference range < 0.9 = negative). Ivermectin was initiated for two days with a prednisone taper. Her symptoms essentially resolved in two days and eosinophil count dropped from 13.92 to 0.85 K/UL.

## Histology and Endoscopy

**Figure 1.** Presence of colonic transmural eosinophilic infiltrates (arrows)

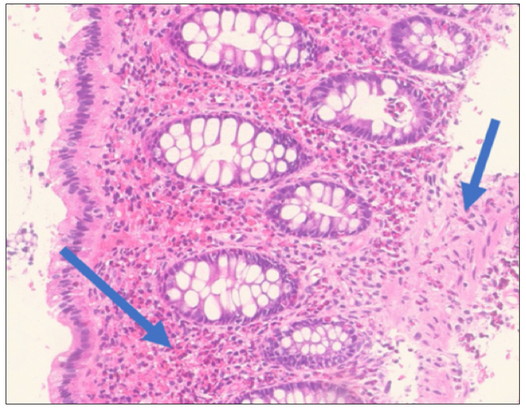


**Figure 2.** Patchy erythema of the sigmoid colon

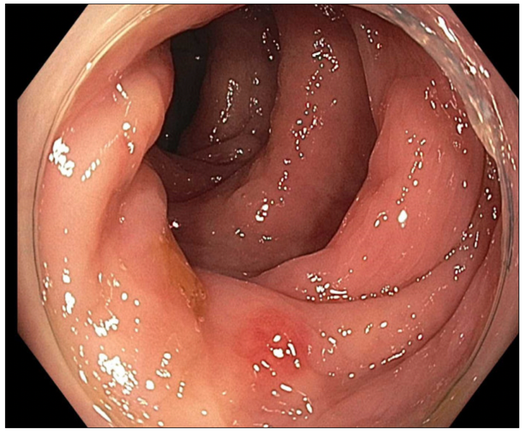
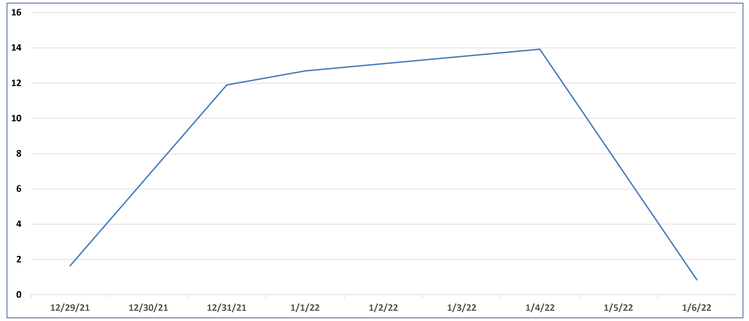


**Figure 3.** Change in absolute eosinophils (K/UL) over time




## Discussion

We present an unusual case of HIV-associated, eosinophilic colitis diagnosed on biopsy (>/= 15 eosinophils per high power field). Literature describing HIV-associated eosinophilic colitis is rare.

One case of eosinophilic colitis associated with emtricitabine/tenofovir has been published and another case has reported changing ART resulting in the resolution of symptoms. Our patient had been stable on Biktarvy for > 3 years prior to her abrupt onset of symptoms with good immunologic and virologic control and no perceived side effects. She had no recurrence of symptoms to date on the same therapy.

It is not clear if the Strongyloides was related as the patient had no previous testing and no recent history of travel abroad or other likely recent exposures.

HIV patients are twice as likely to have EoE vs non-HIV patients. In patients with HIV presenting with relapsing and remitting abdominal pain with marked eosinophilia, EoGE should be considered.

## Contact

- Charles Altfillisch
- University of Kansas Medical Center, Department of Internal Medicine
- caltfillisch@kumc.edu
- (641) 455-4554

## References

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