Chronic Diarrhea: A Rare Presentation of Eosinophilic Granulomatosis with Polyangiitis

[1]K. Tavakolian MD, [2]J. Gennett, [1]N. Udongwo MD, [1]V. Pannu MD, [1]S. Shah MD, [1]M. Elsawaf MD

[1]Hackensack Meridian Jersey Shore University Medical Center, Neptune, NJ; [2]Saint Georges University, School Of Medicine

Space for QR Code if required

INTRODUCTION

Diarrhea is a common occurrence with a significant healthcare burden, responsible for nearly 1 million emergency department (ED) visits per year. Chronic diarrhea affects up to 5% of adults and is defined by greater than four weeks of symptoms. In resource-abundant countries, the most common etiologies include irritable bowel syndrome, inflammatory bowel disease, malabsorption syndromes, chronic infections, and drug-induced. We describe a case of chronic diarrhea with an unusual etiology, eosinophilic granulomatosis with polyangiitis (EGPA).

CASE PRESENTATION

A 60-year-old man with a history of asthma and nasal polyps presented to the ED with nonbloody diarrhea starting 5 weeks prior. Associated symptoms included a dry cough. Of note, the patient was prescribed montelukast for asthma roughly one year prior to admission. Vital signs on presentation were normal and physical exam was unremarkable. A complete infectious workup was negative including autoimmune testing for antineutrophil cytoplasmic antibody (ANCA) panel. However, the patient had profound eosinophilia. A computed tomography scan of the chest and abdomen revealed scattered ground-glass opacities in bilateral lungs and a moderate amount of fluid throughout the colon. Upper and lower endoscopy with biopsy demonstrated chronic inflammation with marked eosinophilia in lamina propria of the gastroesophageal junction, gastric antrum, and duodenum. Nasal polyp biopsy results were obtained and consistent with vasculitis. The patient was diagnosed with chronic diarrhea secondary to montelukast induced EGPA. Montelukast was discontinued and his symptoms resolved with corticosteroids.

DISCUSSION

EGPA is the rarest ANCA-associated vasculitis and affects small to medium-size vessels. It is characterized by eosinophilic granulomatous inflammation and an association with asthma and eosinophilia. Typical organs involved include peripheral nerves, paranasal sinuses, and lungs. Gastrointestinal manifestations are rare, and some studies have shown increased mortality in these patients. Numerous case reports have shown an association with montelukast and the development of EGPA. Glucocorticoid therapy leads to remission in a majority of patients, however, a relapsing disease course is common. Immunosuppressant maintenance therapy is controversial, and some studies have shown rituximab and mepolizumab to be effective in treating ANCA-positive and ANCA-negative EGPA, respectively.

Correspondent Author:
Kameron Tavakolian, MD
Department of Medicine,
Jersey Shore University Medical Center
kameron.tavakolian@hmhn.org
1945 Route 33, Neptune, NJ, 07753