Isolated Ileal Stricture Secondary to Antigen-Negative GI Histoplasmosis in a Patient on Immunosuppressive Therapy

Kyle M. Rowe, MD, Michael Green, MD, Fredy Nehme, MD, and Nathan Tofteland, MD, FACG

Department of Internal Medicine, University of Kansas School of Medicine, Wichita, KS

ABSTRACT

We present a case of antigen-negative disseminated histoplasmosis manifesting as an isolated ileal stricture in a patient on chronic infliximab and methotrexate. Diagnosis can be challenging due to imperfect tests, and this condition should remain in the differential, even with negative testing. Mortality of untreated disseminated histoplasmosis can be as high as 80%.

INTRODUCTION

Gastrointestinal (GI) histoplasmosis is a form of disseminated histoplasmosis. It is a rare and potentially life-threatening infection, most often presenting in immunocompromised hosts in endemic areas. Symptomatology is highly variable and non-specific. It rarely has been reported to cause small bowel obstruction, and the majority of these obstructive cases have been reported in patients with acquired immune deficiency syndrome (AIDS). Diagnosis can be challenging as serum and urine Histoplasma capsulatum antigen testing is not 100% sensitive, and this condition should remain in the differential even with negative testing. GI histoplasmosis has the potential to mimic chronic inflammatory bowel disease, and further immunosuppression without pathologic confirmation is potentially harmful. Mortality of untreated disseminated histoplasmosis can be as high as 80%.

CASE REPORT

A 73-year-old white woman was referred to our tertiary care gastroenterology service for 7 months of progressive nausea, post-prandial abdominal pain, non-bloody diarrhea, and a 13.5-kg weight loss over the same time period. Her past medical history was significant only for rheumatoid arthritis (RA), for which she was being treated with both subcutaneous methotrexate and infliximab infusions. An initial workup by her primary care physician, including complete metabolic panel, liver function tests, complete blood count, upper endoscopy/colonoscopy, and abdominal computed tomography (CT) scan, was non-revealing. An upper abdominal series with small bowel follow-through showed findings suggestive of ileal stricture without obstruction, and she was referred to our service for small bowel enteroscopy.

The patient underwent repeat esophagogastroduodenoscopy, which again was non-revealing. On upper balloon enteroscopy, a benign-appearing intrinsic severe stenosis measuring 10 mm in length by 3 mm inner diameter with associated ulcerations was found in the distal ileum (Figure 1). The endoscope was unable traverse the stenosis. Cold forceps biopsies were obtained, and a through-the-scope balloon dilation (8–10 mm) was performed. The scope then was able to pass, and examination of the remaining portions of the ileum had normal appearance.

Microscopic examination of the stricture biopsies showed acute ulcerative and granulomatous ileitis with inflammatory granulation tissue positive for plentiful fungal organisms morphologically typical of Histoplasma species.
Figure 2. Grocott-Gomori’s methenamine silver stain from small bowel biopsy demonstrating Histoplasma capsulatum.
80%. Tissue diagnosis may be required, especially in the case of negative Histoplasma antigen testing.

DISCLOSURES
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