Ileocecal Stricture as a Manifestation of Disseminated Histoplasmosis in an Immunosuppressed Patient: A Case Report

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Background

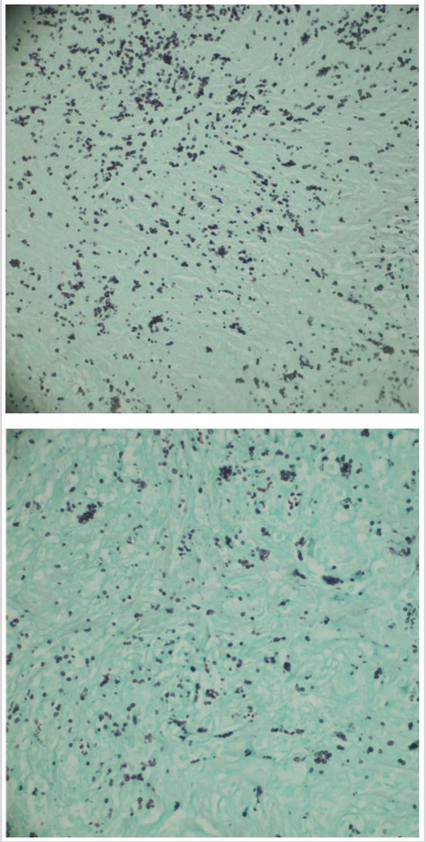
Histoplasmosis is an endemic fungal disease caused by the dimorphic fungus, *Histoplasma capsulatum*. In immunocompromised individuals, it can spread from the lungs throughout the body via macrophages, leading to disseminated disease which can affect multiple organ systems. Here, we describe a case of intestinal stricture as a manifestation of disseminated histoplasmosis in an immunosuppressed patient with Crohn's disease (CD).

Case Description

Our patient is a 74 y/o male with a history of severe perianal fistulizing CD who has been in remission on infliximab and mercaptopurine for the past decade. He initially presented with a 5-month history of fevers, fatigue, and marked weight loss, though multiple physician evaluations failed to reveal a cause for his presentation. Ultimately, he developed a profound pancytopenia requiring blood transfusions and a bone marrow biopsy, and a urine antigen test confirmed a diagnosis of histoplasmosis. Infliximab was discontinued, and he was first treated with intravenous (IV) and subsequently oral itraconazole with improvement of his symptoms and resolution of his pancytopenia. A few months later he developed recurrent abdominal pain, vomiting, and weight loss. He had multiple emergency department visits for presumed small bowel obstructions (SBOs) that quickly resolved with conservative therapy. After several episodes, he developed an SBO that failed to resolve and underwent surgical evaluation which showed two distinct ileal strictures. The pathology for the distal ileal stricture was typical for active ileal CD. The pathology of the proximal stricture, however, showed multiple tiny yeast-like microorganisms associated with granulomata, with fungal staining revealed gastrointestinal histoplasmosis. The patient ultimately was maintained on oral itraconazole to treat the histoplasmosis and started on risankizumab for his CD.

Discussion

There are very few published reports of ileal stenosis secondary to histoplasmosis, and it has rarely been reported to cause SBO. Given our patient's history of fistulizing inflammatory bowel disease (IBD), his presentation of SBO secondary to an ileal stricture could have been attributed to his Crohn's disease. Our case illustrates why diagnosis of GI histoplasmosis can often be delayed in IBD patients given the significant overlap in clinical manifestations and pathologic findings. Early diagnosis with endoscopic biopsy and prompt treatment is paramount in preventing severe complications such as bowel perforation, hemorrhage, and progressive fungal infection.



Grocott's methenamine silver (GMS) stain of a specimen from the proximal ileal stricture highlighting multiple tiny yeast-like microorganisms consistent with histoplasmosis.