ENDOSCOPIC DUODENAL MASS WITH LYMPHADENOPATHY: A CASE OF GASTROINTESTINAL COCCIDIOIDOMYCOSIS

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1. Introduction

Coccidioides is endemic to the SW region of the US. Clinical presentation of infection varies greatly with the majority of cases being asymptomatic. When symptomatic, Coccidioides infection usually results in a self-limited pulmonary illness. Disseminated disease accounts for 1% of cases and usually occurs in patients who are immunocompromised. GI infection with Coccidioides is exceedingly rare with less than 10 cases present in the literature. We present the case of disseminated coccidiomycosis that included the GI tract.

2. Case Description

51 yo Caucasian male presented to the emergency room with a 1d history of lethargy and confusion. His past medical history included HTN, HLP, Sleeve Gastrectomy, and previously treated Aspergillus pulmonary infection. VS on presentation were significant for fever of 104F. His physical examination findings were largely unremarkable except for his neurologic assessment which was significant for decreased awareness and lethargy. There were no focal deficits. Lab work including CBC and CMP were unremarkable. CT scan of the brain demonstrated a subacute appearing right lentiform infarction. MRI was then undertaken and showed leptomeningeal findings most consistent with meningitis. He was started on empiric antibiotics for meningitis with the addition of acyclovir and amphotericin. LP was significant for a total protein of 154, glucose of 30, polys 12 (elevated) and elevated eosinophils (2). CSF gram stain and VDRL were negative. Coccidiomycosis IgG and IgM were both positive. CT A/P with contrast showed thickened appearance of distal duodenum with associated mesenteric and retroperitoneal lymphadenopathy.

To further characterize the duodenal abnormality and evaluate cause of anemia EGD and Colonoscopy were undertaken. The EGD was unremarkable except for the presence of an ulcerated mass with a small amount of oozing blood in the second and third portion of the duodenum. Biopsies of the affected area demonstrated mixed inflammation with numerous intramucosal fungal spherules consistent with Coccidioides species. Colonoscopy was limited by poor preparation however the cecum was reached and no obstructing mass was identified. The patient was continued on amphotericin B with gradual overall improvement in his condition. He was transitioned to oral lifelong fluconazole. Repeat EGD will be undertaken in three months.

4. Endoscopic Findings and Pathology

Figure 1: Endoscopic Finding

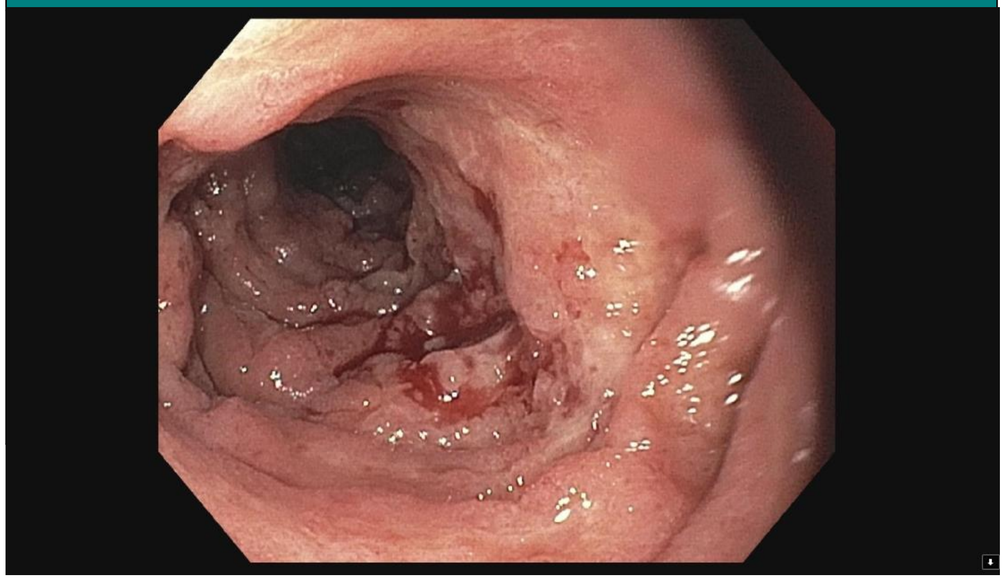


Figure 2 Coccidioides Life Cycle

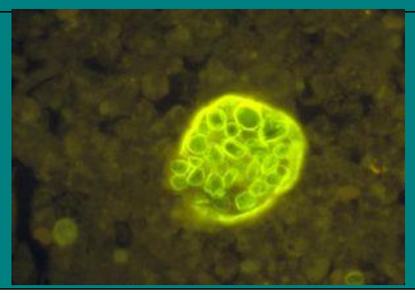


Figure 3 Microscopic Appearance of Coccidioides Infection of Small Intestine

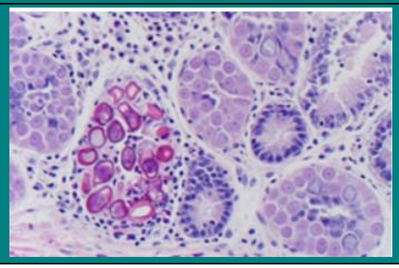
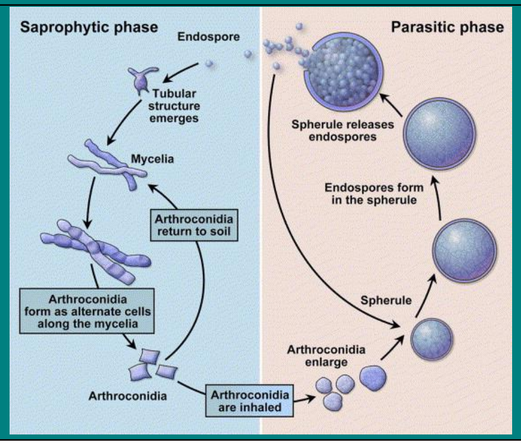


Figure 4: Coccidioides Life Cycle



5. CONCLUSIONS

Gastrointestinal infection with Coccidioides is exceedingly rare but should be considered in patients living in endemic regions. Early evaluation and management is imperative to lessen morbidity and mortality.