

Disseminated Histoplasmosis Involving the Whole Colon: It's Ulcers All the Way Down

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INTRODUCTION

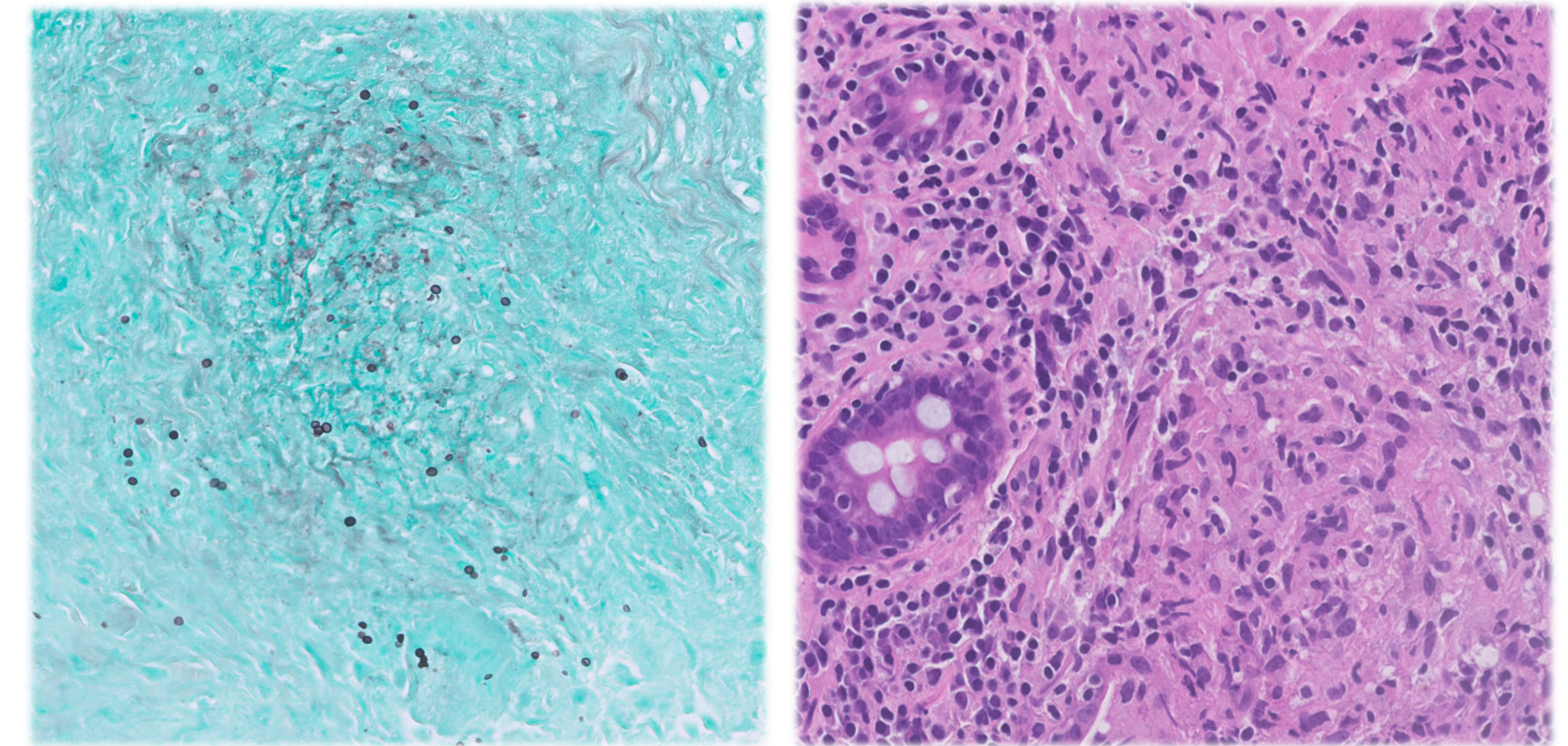
- Histoplasma capsulatum is a dimorphic fungus endemic to river valleys of Eastern and Central U.S. that is spread via inhalation of spores from contaminated soil.
- Disseminated Histoplasmosis (DH) spreads through the **reticuloendothelial system via parasitized macrophages** and can cause severe infection in immunocompromised patients.
- Gastrointestinal involvement in DH is **frequently seen**, but it is not uncommon for patients to be **asymptomatic**.
- We present a case of DH with pan-colonic ulcerations in a renal transplant patient.

CASE PRESENTATION

- 83-year-old male with **deceased donor renal transplantation** on immunosuppression therapies presented with profound weakness. **Restarted on hemodialysis** one month prior for **declining** renal allograft function.
- Initial workup showed pneumonia on imaging, elevated **procalcitonin**, **alkaline phosphatase**, and **pancytopenia**. Developed **hematochezia** with worsening anemia which prompted colonoscopy.
- Deep and **innumerable ulcers measuring >1 cm in the whole colon**. **One large ulcer with a visible vessel** near the hepatic flexure was treated with epinephrine, electrocautery, and endoclip for hemostasis.
- Ulcer biopsy revealed **granulomatous inflammation with fungal yeast forms** morphologically compatible with Histoplasma. Bone marrow pathology was suggestive of **fungal infiltration**, but marrow and blood cultures were negative.
- Lives in old, **mold infested home** and has history of exploring caves.



Above: Large ulcer in the cecum which was biopsied.
Below: Numerous ulcers seen diffusely throughout the colon.



GMS (L) and H&E (R) stain of colonic mucosa with patchy ulceration and granulomatous inflammation including fungal yeast forms, morphologically compatible with Histoplasma.

DISCUSSION

- For healthy individuals, exposures to Histoplasma generally occur as asymptomatic and/or self-limiting pulmonary infection.
- **Disseminated Histoplasmosis** is often undiagnosed and **carries high mortality if untreated**. These patients usually had past exposures with dormant inoculation that is **reactivated after immunosuppression**.
- GI involvement is common but can be non-symptomatic or with **only vague abdominal complaints** from colonic fungal invasion.
- Suspicion of DH should be met with a low threshold for endoscopic evaluation and **requires tissue biopsy for diagnosis**.