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Introduction

- Histoplasmosis is an endemic mycosis commonly found in the Ohio River valley.
- Most patients present with pulmonary symptoms.
- We report a presentation of disseminated peritoneal histoplasmosis initially mimicking peritoneal carcinomatosis in a patient with rheumatoid arthritis on a TNF-alpha inhibitor.

Take Home Points

- Histoplasmosis is a granulomatous disease that can affect multiple organ systems.
- Patients that are on Tumor Necrosis Factor (TNF)-alpha inhibitor therapy are at higher risk of disseminated infection and atypical presentations.¹
- Disseminated histoplasmosis with peritoneal implants have been rarely described in patients on TNF-alpha inhibitors.

Case

- A 43-year-old female with known history of rheumatoid arthritis (RA) on leflunomide, infliximab, and recent steroid course presented to the ED for 9 days of abdominal pain and shortness of breath.
- **Physical Exam**
 - Febrile (101.2°), tachycardic (134), tachypneic (25), and required supplemental oxygen
- **Imaging/Labs**
 - CT chest/abdomen/pelvis demonstrated right-sided pleural effusion, diffuse mesenteric nodules along the anterior abdominal wall concerning for malignancy, and moderate ascites (**Figure A**)
 - Tumor marker CA 125 was elevated at 341 U/mL
- **Clinical Course**
 - Surgical oncology was consulted for diagnostic laparoscopy with drainage of ascites, which was initially concerning for peritoneal carcinomatosis.
 - Biopsy revealed chronic inflammation, granulomas, and fungal yeast cells with morphological features consistent with histoplasmosis.
 - Initial broad antibiotic therapy for sepsis of unknown origin was transitioned to itraconazole and she was eventually discharged.
 - Her RA treatment was switched to Upadacitinib, with some control of her symptoms.
 - More than a year after hospitalization, she remains on itraconazole due to persistent histoplasmosis.

Figures & Tables

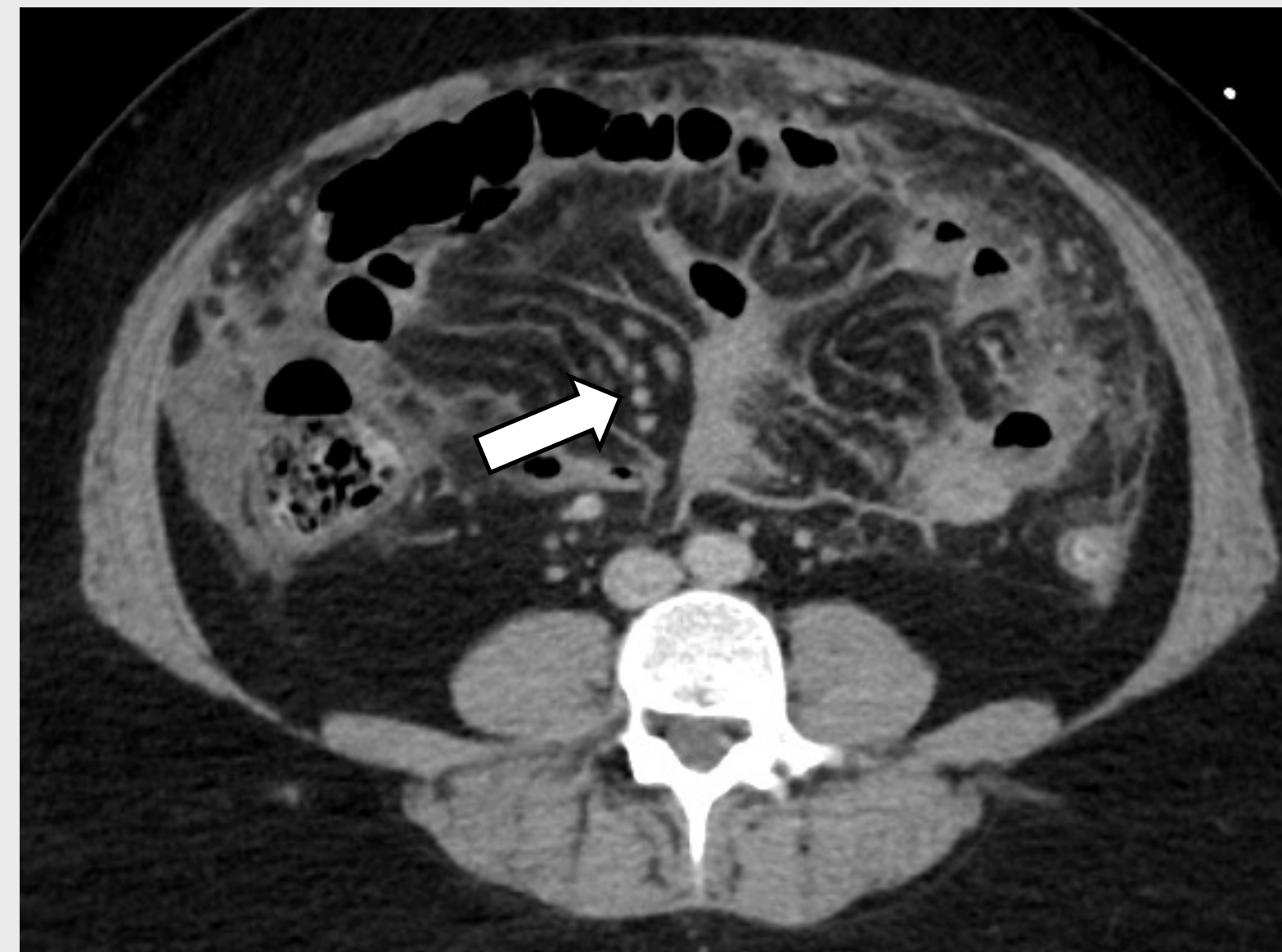


Figure A: Diffuse nodularity to the mesentery most prevalent along anterior abdominal wall right paracolic gutter regions concerning for metastatic disease to the mesentery (Arrow). Mild bowel wall thickening seen involving descending colon.

Discussion

- Diagnosis of histoplasmosis can be challenging because of its heterogeneous presentation.
- Disseminated histoplasmosis with peritoneal implants is exceedingly rare, and most cases have been reported in ESRD patients on continuous peritoneal dialysis.²
- Other cases of peritoneal histoplasmosis have been reported in immunosuppressed patients, which mimic pathologies such as malignancy and inflammatory bowel disease.¹
- It is essential to be vigilant of uncommon presentations of common disease, especially in immunocompromised patients.

References:

1. Jain, Nina et al. "A Case of Disseminated Histoplasmosis in a Patient with Rheumatoid Arthritis on Abatacept." *Journal of general internal medicine* vol. 33,5 (2018): 769-772. doi:10.1007/s11606-018-4383-0.
2. Sardar, Asjad et al. "Histoplasma Peritonitis: An Extremely Rare Complication of Peritoneal Dialysis." *Case reports in nephrology* vol. 2018 8015230. 10 May. 2018, doi:10.1155/2018/8015230.

