Coccidioidal Peritonitis: A Review of 13 cases

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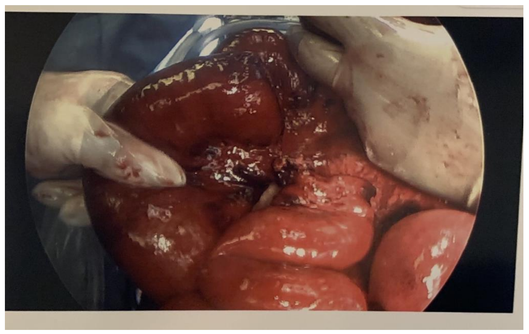
Abstract

- Though rare, coccidioidal peritonitis has been reported multiple times. The first case reported was in 1939[1,2]
- Relatively rare presentation of Coccidioidomycosis
- 31 cases previously described (none have more than 1 case)
- This larger case series describes thirteen new cases previously unreported from California
- Common presentations are vague abdominal pain, nausea and vomiting, and subtle ascites[3,4]
- Imaging may demonstrate ascites, mesenteric or peritoneal "caking"
- The differential diagnosis includes coccidioidomycosis, tuberculosis, abdominal malignancies including ascites, mesenteric caking or mass lesions[5,6]
- Signs and symptoms of coccidioidal peritonitis can be extremely subtle or more obvious and may require evaluation including imaging, serologic evaluation, biopsy with histopathology and/or culture for definitive diagnosis
- Treatment is a lengthy course of high dose azole, typically fluconazole for a period of three years. Liposomal amphotericin B is rarely required[7]
- Follow-up post treatment entails a minimum of two years with appropriate coccidioidal serologic monitoring[7]
- This case series demonstrates the subtle presentation of abdominal symptoms in coccidioidal peritonitis



Transition point surrounded by adhesive disease

Methods

This study was approved by the Kern Medical Institutional Review Board. ICD 9 and ICD 10 codes were used to query Kern Medical's electronic health record for a period of 10 years. A search of the Valley Fever Institute database was also used for case finding.

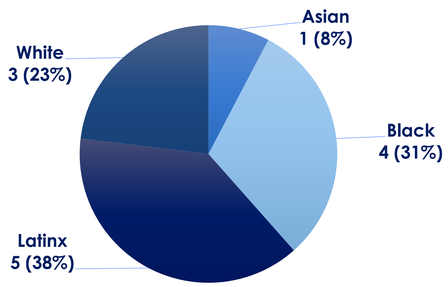
Cases were submitted by infectious disease colleagues from: Kern Medical (Infectious Disease, Gynecology & General Surgery), Stanford University, Cedars Sinai, and Ventura County Medical Hospital.

Inclusion criteria: Compatible illness, imaging plus histopathologic and/or serologic confirmation

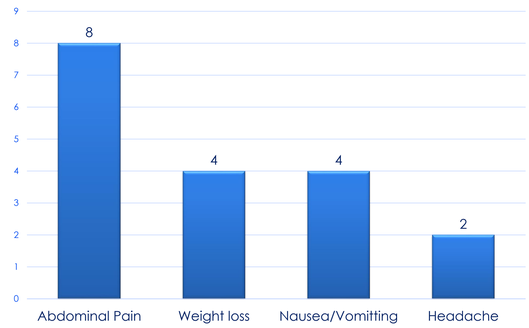
Exclusion criteria: Inadequate data for diagnosis or analysis, secondary coccidioidal peritonitis related to ventriculoperitoneal shunt in coccidioidal meningitis

Results

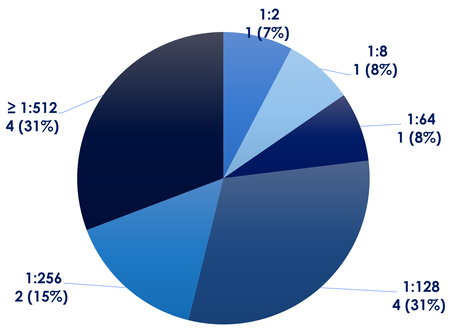
Ethnicity (n = 13)



Presenting symptoms (n = 13)

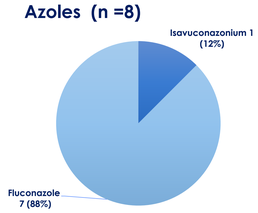


Complement Fixation Titers (n = 13)

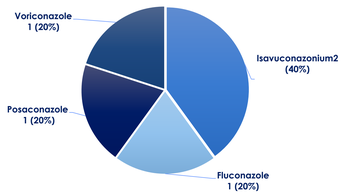


Therapy (n = 13)

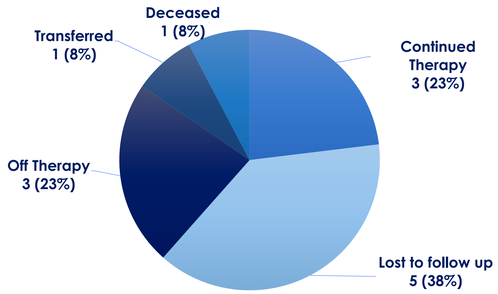
Azoles (n =8)

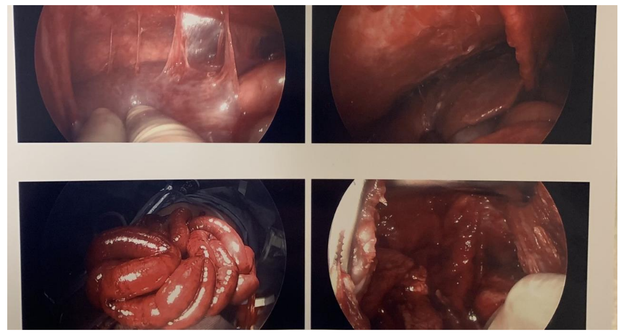


Amphotericin B Liposomal (n =5)



Outcomes (n = 13)





Top left: Adhesions from liver to peritoneum
Bottom left: Dilated small intestine with multiple transition points due to appendix
Bottom right: Multiple viscous adhesions interloop

Conclusions

- These patient symptoms should raise clinical suspicion, be taken seriously, and evaluated thoroughly as early treatment ensures better prognosis and outcomes
- This diagnosis should be suspected especially within, and sometimes outside, endemic regions, with Tb and carcinomatosis[8]
- This patient series demonstrates the subtle presentation of abdominal symptoms in coccidioidal peritonitis[9]
- Treatment entails high dose azole, typically fluconazole for a period of approximately 3 years[7]
- A minimum of 2-year follow-up post treatment with appropriate coccidioidal serologic monitoring is required[7]

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