IDCases 19 (2020) e00666

Contents lists available at ScienceDirect

IDCases

journal homepage: www.elsevier.com/locate/idcr

Case illustrated

Histoplasmosis of the gallbladder

Cassidy Claassen[a], Christopher Grove[b], Paul Saleeb[a,*]

[a] Institute of Human Virology, University of Maryland School of Medicine, Baltimore, MD, USA
[b] Department of Pathology, Carroll Hospital Center, Westminster, MD, USA

ARTICLE INFO

Article history:
Received 4 November 2019
Accepted 4 November 2019

Keywords:
Histoplasmosis
Gallbladder

ABSTRACT

Histoplasmosis of the gallbladder is an extremely rare condition. We present the case of cholecystitis due to progressive, disseminated histoplasmosis in an immunocompetent woman.

A 33-year-old woman with history of seizure disorder and thyroidectomy for papillary adenocarcinoma was hospitalized following a seizure resulting in a motor vehicle accident (MVA). Radiologic imaging revealed no fractures; however, CT imaging demonstrated innumerable hypodense lesions in her liver and spleen. Following discharge, she underwent a liver biopsy that demonstrated non-necrotizing granulomata; bacterial, mycobacterial, and fungal staining of the tissue revealed no organisms. She remained asymptomatic and underwent serial imaging of her abdomen, during which time the lesions remained unchanged in size and number. Four years later, she developed biliary colic and underwent a cholecystectomy. Histopathology revealed chronic inflammation in the gallbladder. A cystic duct lymph node contained a necrotizing granuloma (Fig. 1), and fungal elements consistent with histoplasmosis were seen with Gomori Methenamine-Silver (GMS) staining (Fig. 2).

The patient was referred to our clinic for management of disseminated histoplasmosis. Further querying revealed that she had been experiencing intermittent fevers, night sweats, and weight loss for months preceding the cholecystectomy. She also reported that prior to the MVA she had lived in a house that had a severe bat infestation and abundant guano. Additional workup included a chest CT that showed numerous pulmonary calcifications and a brain MRI that did not reveal any lesions. Of note, her Histoplasma serum antibodies were only reactive at a 1:1 dilution, consistent with chronic infection, and urine Histoplasma antigen was negative. She was treated with itraconazole for 24 months, during which time her symptoms completely resolved.

Disseminated histoplasmosis is commonly associated with pulmonary, hepatic, and splenic involvement. Infiltration of the gallbladder, though, is an extremely rare manifestation of disease—even in immunocompromised hosts. Instances of acalculous cholecystitis due to histoplasmosis in HIV-infected individuals

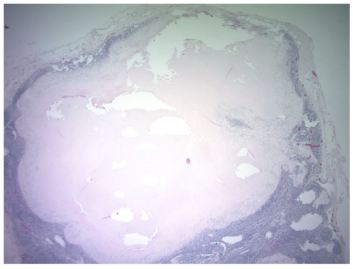

Fig. 1. Cystic duct lymph node with necrotizing granuloma.

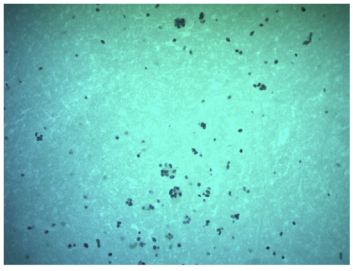

Fig. 2. Gomori Methenamine-Silver (GMS) stain of cystic duct lymph node with fungal elements consistent with histoplasmosis.

* Corresponding author.
E-mail address: psaleeb@ihv.umaryland.edu (P. Saleeb).

https://doi.org/10.1016/j.idcr.2019.e00666

histoplasmosis have been described in the literature [1,2]. To the best of our knowledge, this is the first published case describing cholecystitis in an immunocompetent individual. Our patient likely developed progressive disseminated histoplasmosis in her lungs, liver, and gallbladder due to her prolonged co-habitation with bats.

Authors' contribution

Drs. Claassen and Saleeb contributed equally in the clinical management of this patient and in writing the case presentation. Dr. Grove obtained and processed the clinical images and provided a histopathologic interpretation of them.

Funding source

There is no funding source for this manuscript.

Declaration of Competing Interest

None.

References

[1] Shinha T, Zabarsky G. Acalculous cholecystitis due to Histoplasma capsulatum in a patient with HIV infection. ACG Care Rep J 2015;2(July (4)):245–6.
[2] Alalave J, Bustamante B, Soto L, Caceres J, Seas C. Acalculous cholecystitis caused by Histoplasma capsulatum in a severely immunosuppressed HIV-infected patient. J Infect Dev Ctries 2011;5(March (3)):235–8.