

## Hepatobiliary Fascioliasis: An Uncommon Cause of Biliary Obstruction in the United States

Jeff Basile, MD<sup>1</sup>, M. Stanley Branch, MD<sup>1</sup>, Svetang V. Desai, MD<sup>1</sup>, Christopher Arnold, MD<sup>2</sup>, Alastair Smith, MB, CHB, FRCP<sup>1</sup>, and Tzu-Hao Lee, MD<sup>3</sup>

<sup>1</sup>Division of Gastroenterology, Department of Medicine, Duke University Medical Center, Durham, NC

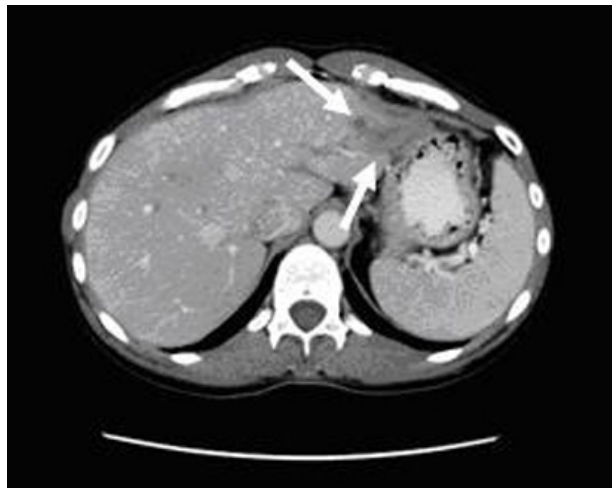
<sup>2</sup>Division of Infectious Diseases, Department of Medicine, Duke University Medical Center, Durham, NC

<sup>3</sup>Department of Internal Medicine, Duke University Medical Center, Durham, NC

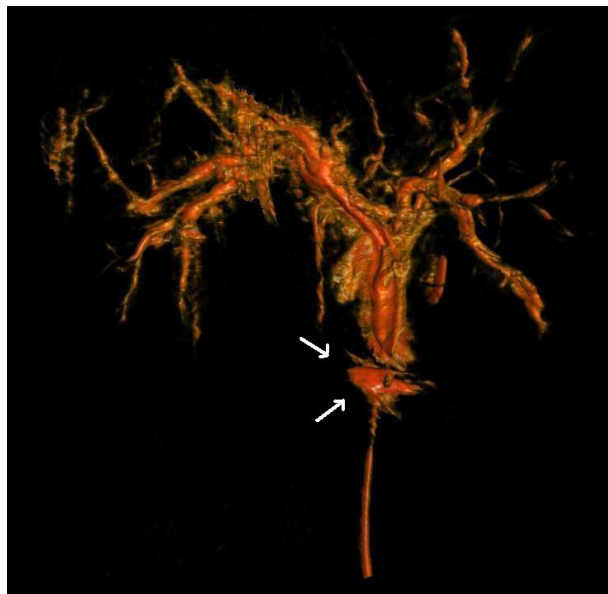
### Case Report

A 43-year-old woman presented with recurring upper abdominal pain. She had a 5-year history of symptomatic cholelithiasis without improvement following cholecystectomy. She had no prior history of elevated liver tests or jaundice. Her travel history was pertinent for annual trips to the Bahamas. On admission, the patient had a bilirubin of 4.7 mg/dL and liver enzymes more than 5 times the upper limit of normal. Abdominal computed tomography (CT) scan demonstrated a wedge-shaped area of decreased attenuation in liver segment III (Figure 1). Endoscopic retrograde cholangiopancreatography (ERCP) revealed a curvilinear filling defect within the distal common bile duct (Figure 2). Following papillary sphincterotomy, a living parasite was removed from the common bile duct (Video 1) and confirmed by pathology as *Fasciola hepatica* (Figure 3). Nitazoxanide was prescribed. Her liver enzymes normalized after 1 week of therapy, and symptoms resolved completely. Magnetic resonance imaging (MRI) 4 months later demonstrated resolution of all imaging abnormalities.

We describe the case of a healthy patient with biliary obstruction caused by hepatobiliary fascioliasis, likely from eating raw vegetables or watercress in a developing area of the Caribbean, where outbreaks of this



**Figure 1.** Abdominal CT scan showing a wedge-shaped area of decreased attenuation in liver segment III.



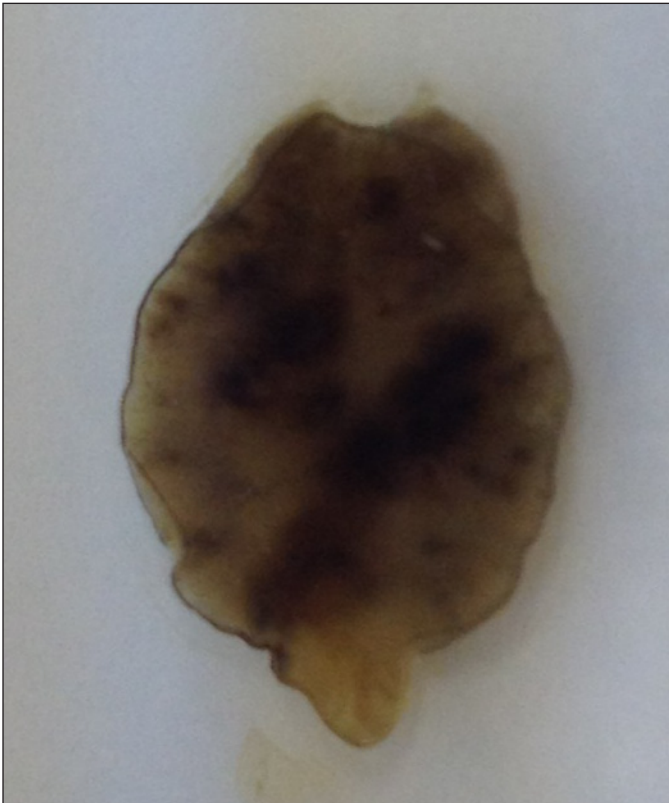
**Figure 2.** Rotational fluoroscopic 3-D reconstruction image taken during ERCP showing a curvilinear filling defect in the distal common bile duct (white arrows) secondary to obstruction from *Fasciola hepatica*.

ACG Case Rep J 2014;1(3):124–125. doi:10.14309/crj.2014.24. Published online: April 4, 2014.

**Correspondence:** Jeffrey Basile, Durham University Medical Center, 3913 Durham, NC, 27710 (jeffrey.basile@duke.edu).

**Copyright:** © 2014 Basile et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

trematode have been noted.<sup>1,2</sup> Further awareness of fascioliasis may help facilitate the diagnosis and management of this rare yet treatable cause of hepatobiliary disease in the United States.



**Figure 3.** Image of the liver fluke, *Fasciola hepatica*, captured during ERCP.

**Video 1.** Video demonstrating removal of *Fasciola hepatica* from the common bile duct after retrieval balloon sweep during ERCP. Please view the video at <http://acgcasereports.gi.org/?p=1944>.

## Disclosures

Author contributions: All authors contributed equally to the preparation of this manuscript. J. Basile is the article guarantor.

Financial disclosure: The authors report no conflicts of interest or financial support for this article.

Informed consent was obtained for this case report.

Received: October 10, 2013; Accepted: January 16, 2014

## Publish your work in ACG Case Reports Journal

ACG Case Reports Journal is a peer-reviewed, open-access publication that provides GI fellows, private practice clinicians, and other members of the health care team an opportunity to share interesting case reports with their peers and with leaders in the field. Visit <http://acgcasereports.gi.org> for submission guidelines. Submit your manuscript online at <http://mc.manuscriptcentral.com/acgcr>.

## References

1. Mas-Coma S, Valero MA, Bargues MD. Chapter 2. Fasciola, lymnaeids and human fascioliasis, with a global overview on disease transmission, epidemiology, evolutionary genetics, molecular epidemiology and control. *Adv Parasitol.* 2009;69:41–146.
2. Fried B, Graczyk TK, Tamang L. Food-borne intestinal trematodiasis in humans. *Parasitol Res.* 2004;93(2):159–170.