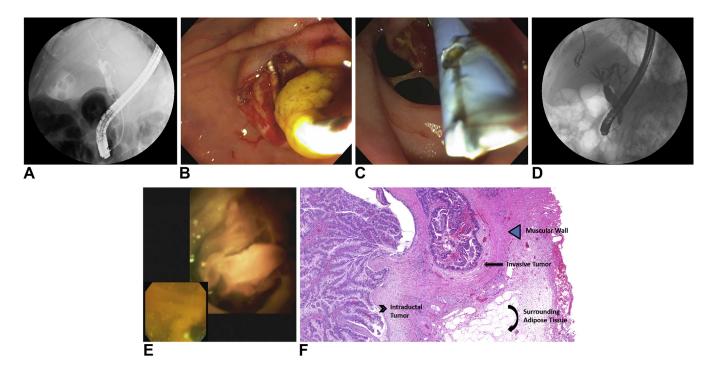
## VIDEO

## Invasive intraductal papillary carcinoma of the bile duct masquerading as a common hepatic duct stone





**Figure 1. A**, Cholangiogram from initial ERCP revealing cholelithiasis and filling defect in common hepatic duct. **B**, Sludge extracted from the bile duct. **C**, Plastic biliary stent placed. **D**, Cholangiogram from second ERCP with persistent common hepatic duct filling defect. **E**, Cholangioscopic image showing papillary neoplastic lesion in the bile duct. **F**, Histopathologic slide showing invasive carcinoma (H&E, orig. mag. ×40).

An otherwise healthy 81-year-old woman presented to her physician with a single episode of right upper quadrant (RUQ) pain, sudden in onset and cessation, lasting 30 minutes. A CT scan of the abdomen had incidentally been obtained 9 months prior, demonstrating cholelithiasis. Because of this, the pain was thought to be caused by related symptomatic cholelithiasis. Transabdominal US redemonstrated cholelithiasis, sludge, and an 8-mm common bile duct (CBD). She was referred to our pancreaticobiliary clinic. MRCP showed 1 filling defect in the cystic duct and a second in the proximal common hepatic duct (CHD). Serum liver chemistry findings, however, were normal. This prompted an ERCP, during which a mid-CBD filling defect was seen and extracted. A second filling defect at the confluence of the left and right intrahepatic ducts could not be extracted; thus, a plastic biliary stent was placed (Figs. 1A-C). The patient experienced RUQ pain 3 days after ERCP, ultimately leading to a cholecystectomy for suspicion of acute cholecystitis

based on the previously seen cystic duct stone. Histopathologic examination of the resected gallbladder revealed chronic active cholecystitis and cholelithiasis. Seven weeks later, repeated ERCP demonstrated a persistent filling defect at the confluence of the left and right hepatic ducts (Fig. 1D). This defect could not be extracted, and digital cholangioscopy was undertaken. Cholangioscopy revealed a polypoid neoplasm in the proximal CHD, which was friable (Fig. 1E). Several biopsy specimens were obtained but were negative for dysplasia or malignancy (Video 1, available online at www.VideoGIE.org). After discussion at our multidisciplinary pancreaticobiliary meeting, it was thought that the likelihood of sampling error was high and that the lesion might be harboring, or would later degenerate into, invasive cancer. Recent MRI did not demonstrate local lymph node involvement; thus, EUS was deferred. Because operative morbidity and mortality would be relatively low in the absence of a concomitant

Written transcript of the video audio is available online at www.VideoGIE.org.

liver resection, surgery was recommended. The patient ultimately underwent extrahepatic bile duct resection with Roux-en-Y biliary reconstruction. The final histopathologic diagnosis was focally invasive papillary bile duct carcinoma, staged at pT1MxNx (Fig. 1F). The patient opted against adjuvant chemotherapy.

## DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

Zachary L. Smith, DO, Kimberly E. Daniel, MD, Division of Gastroenterology and Hepatology, Mamta Pant, MD, Department of Pathology, Kulwinder S. Dua, MD, Murad Aburajab, MD, Division of Gastroenterology and Hepatology, Medical College of Wisconsin, Milwaukee, Wisconsin, USA

Copyright © 2016 The Authors. Published by Elsevier, Inc. on behalf of the American Society for Gastrointestinal Endoscopy. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

http://dx.doi.org/10.1016/j.vgie.2016.09.004