Endoscopic Management of Gallstones after Cholecysto-Duodenal Fistula

DALHOUSIE UNIVERSITY

Adele Orovec, MD[1]; Jacqueline Beaumont, MD[1]; Dana Farina, MD[2]; James Ellsmere, MD MS[1]

[1] Division of General & Gastrointestinal Surgery [2] Division of Digestive Care & Endoscopy, Dalhousie University, Halifax, Nova Scotia

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Background

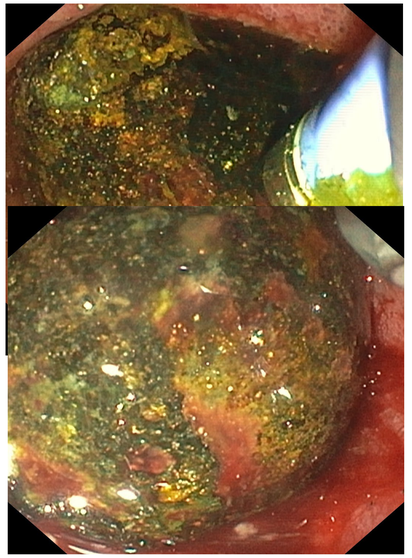
Bouveret Syndrome is a form of gallstone ileus in which a gallstone causes gastric outlet obstruction after it migrates through a fistulous tract between the gallbladder and duodenum. Bouveret syndrome represents approximately 1-3% of cases of gallstone ileus and is thus extremely rare. There are no guidelines on management of patients with Bouveret syndrome.

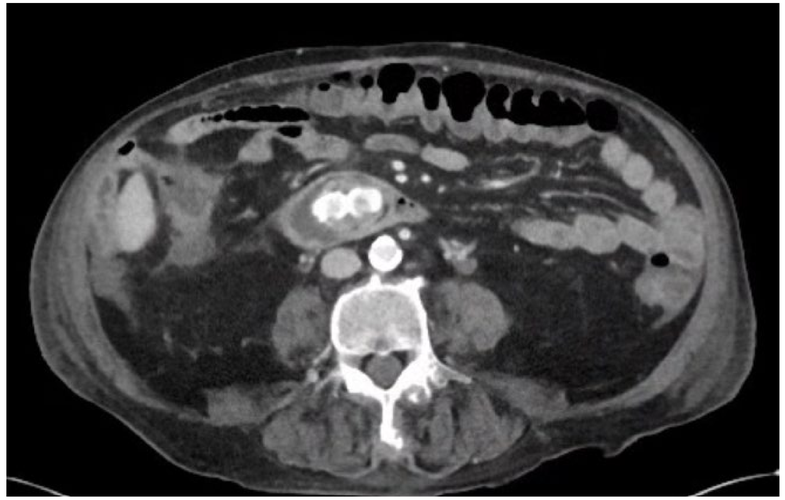
Case Report

An 86-year-old comorbid male presented to the emergency department with shortness of breath and chest pain. He was admitted to cardiology in complete heart block with plan for pacemaker insertion. During this admission he experienced an episode of coffee-ground emesis and melena, associated with abdominal pain and ongoing nausea, vomiting, and inability to tolerate a diet. He remained hemodynamically stable. A CT-scan demonstrated a 4.5cm calcific gallstone in the 3rd portion of the duodenum with proximal duodenal and gastric distention suggesting partial obstruction. There was a cholecysto-duodenal fistula involving the 1st portion of the duodenum with associated pneumobilia. Endoscopy was attempted, using a side-viewing scope, the stone was fractured with electrohydraulic lithotripsy (EHL) and spyscope, then once the pieces were small enough, they were crushed with mechanical lithotripsy and stone fragments were removed.









Discussion

We have presented a case of endoscopic management of gastric outlet obstruction secondary to a gallstone ileus after cholecysto-duodenal fistula formation. Using EHL the obstructing stones were broken apart and then removed from the duodenum. This is an effective minimally invasive technique to manage this complex gallstone complication that historically required a laparotomy.