### **MULTIMEDIA ARTICLE**





# Hemobilia as a Complication of Transhepatic Percutaneous Biliary Drainage: a Rare Indication for Laparoscopic Common Bile Duct Exploration

Patricio Bernardo Lynn<sup>1</sup> • Elizabeth Mesa Warnack<sup>1</sup> • Manish Parikh<sup>1</sup> • Akuezunkpa Ude Welcome<sup>1</sup>

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#### Abstract

**Background** Hemobilia is the presence of blood in the biliary tree and is a frequent complication after percutaneous transhepatic biliary drainage (PTBD). Most of these episodes are self-limited; nevertheless, in less than 5% of cases, hemobilia is clinically significant, requiring an intervention (hepatic artery embolization, stenting, or percutaneous thrombin injection). Adequate treatment requires control of hemorrhage and restoration of bile flow. Surgery is the last resort and is indicated when the other modalities fail.

**Methods** A 65-year-old man with multiple comorbidities was admitted with cholangitis. The patient underwent PTBD (Figure 1) but had persistent cholestasis. Thus, he underwent endoscopic cholangiopancreatography (ERCP), in which a plastic stent was misplaced within the common bile duct (CBD) and could not be removed (Figure 2). Afterwards, as the patient had persistently high bilirubin levels and the previously placed stent was malpositioned, the decision was made to proceed with laparoscopic cholecystectomy and CBD exploration.

**Results** The operation was performed with choledocoscope guidance, and the CBD was closed over a T-tube. The operative time was 280 min. Postoperative course was uneventful; the T-tube was clamped 1 week after discharge. Four weeks postoperatively, the T-tube cholangiogram showed a patent extrahepatic biliary tree with no filling defects (Figure 3). The T-tube was then removed. **Conclusions** Biliary obstruction secondary to hemobilia is a rare occurrence after PTBD. Surgical CBD exploration is required when conservative management and endoscopic treatment fail and can be done successfully through a minimally invasive approach.

**Keywords** Hemobilia · Common bile duct exploration · Laparoscopy · Cholangitis

**Author's Contributions** • Patricio B. Lynn, MD: Investigation; writing—original draft; writing—review and editing; visualization

- Elizabeth Mesa Warnack, MD: Investigation; writing—original draft; writing—review and editing; visualization
- Manish Parikh, MD: Conceptualization; writing—review and editing; supervision
- Akuezunkpa Ude-Welcome, MD: Conceptualization; writing—review and editing; supervision

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- Akuezunkpa Ude Welcome
  Akuezunkpa.udewelcome@nyulangone.org
- General Surgery Division, NYU Langone Health Bellevue Hospital, 550 1st Avenue, New York, NY |10016, USA

# **Compliance with Ethical Standards**

**Conflict of Interest** The authors declare that they have no conflict of interest.

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