

The Hooking Technique for Retrograde Freehand Access during Direct Cholangioscopy (with Video)

Vincent Zimmer¹

Keywords: Biliary stone disease, Cholangioscopy, Endoscopic retrograde cholangiopancreatography.

Euroasian Journal of Hepato-Gastroenterology (2023): 10.5005/jp-journals-10018-1358

Dear Editor

A 72-year-old male patient presented with acute biliary-type abdominal pain and signs of acute cholangitis including an elevated bilirubin level of 7.5 mg/dL. Percutaneous ultrasound indicated gallbladder stones and bile duct dilation, such that the patient proceeded to endoscopic retrograde cholangiopancreatography (ERCP). After difficult biliary access due to prepapillary stone impaction, biliary plastic stenting was performed and stone clearance was postponed. At repeat ERCP, a large residual stone emerged estimated at 15 mm within a the distally tapered bile duct. Next, endoscopic large-balloon papillary dilation up to 15 mm was performed (Fig. 1A), and the stone could be extracted without complications. As is our institutional practice, direct cholangioscopy (DC) in the freehand technique was indicated on a low-threshold basis, given marked proximal bile duct dilation well >25 mm (compare air cholangiogram in A) associated with significant reduction in sensitivity for stone detection on cholangiography. Failure of prograde freehand access, implementing the J-manuever and using a 5.6 mm pediatric gastroscope, led us to immediate switching to the “hooking technique” (Fig. 1B, Suppl Video). This implies a retrograde freehand intubation approach by gentle endoscope withdrawal, at the same time, reducing loop formation (Fig. 1C). Full cholangioscopy firmly excluded remnant stones in this grossly dilated common bile duct, and the procedure was terminated in a timely manner¹ (Fig. 1D).

DC still lacks widespread dissemination related to perceived technical difficulty including “J maneuvering” or, alternatively, the so-called “hooking technique” after scope retroflexion in the duodenum.

Department of Medicine II, Saarland University Medical Center, Homburg, Deutschland, Germany

Corresponding Author: Vincent Zimmer, Department of Medicine II, Saarland University Medical Center, Homburg, Deutschland, Germany, Phone: +496841173755, e-mail: vincent.zimmer@gmx.de

How to cite this article: Zimmer V. The Hooking Technique for Retrograde Freehand Access during Direct Cholangioscopy (with Video). *Euroasian J Hepato-Gastroenterol* 2023;13(1):40.

Source of support: Nil

Conflict of interest: None

ORCID

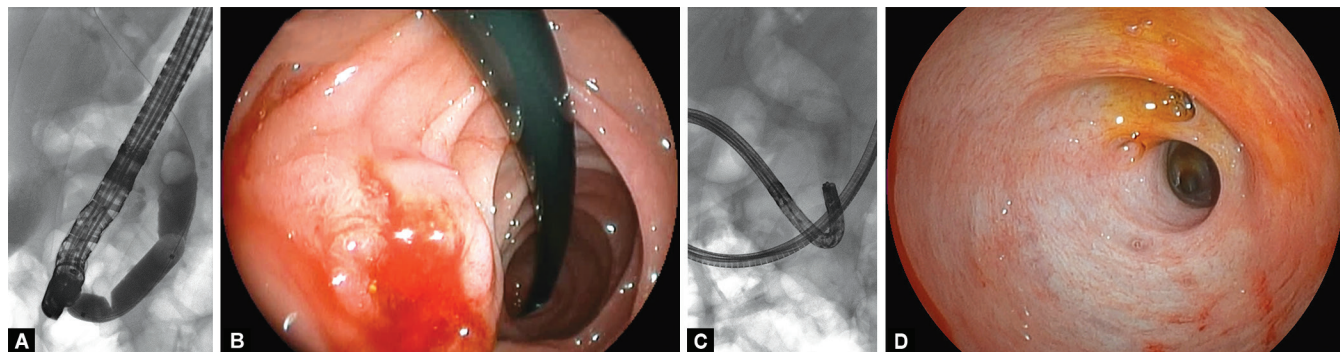
Vincent Zimmer  <https://orcid.org/0000-0002-6298-4717>

SUPPLEMENTARY MATERIAL

A supplementary video to this article is available online on the website of www.ejohg.com.

REFERENCE

1. Lee TH, Moon JH, Lee YN, et al. A preliminary study on the efficacy of single-operator cholangioscopy with a new basket for residual stone retrieval after mechanical lithotripsy. *Dig Dis Sci* 2021. DOI: 10.1007/s10620-021-07068-1.



Figs 1A to D: (A) Endoscopic papillary large-balloon dilation (EPLBD) to facilitate extraction of large common bile duct stone; (B) The papilla after EPLBD in retroflexed visualization prior to biliary access involving the “hooking technique” (Suppl Video); (C) Fluoroscopy illustrating scope tip entry into the biliary system (note marked aerobilia); (D) High-quality cholangioscopy firmly excluded remnant stones in this grossly dilated bile duct