

Feasibility of a New Generation Single Use Duodenoscope in a Patient With Roux-en-Y Gastric Bypass

Baylor St. Luke's Medical Center

Basim Ali, MD¹, Tara Keihanian, MD MPH², Wasif M. Abidi, MD PhD²

¹ Department of Medicine, Baylor College of Medicine, Houston, TX ² Department of Medicine, Section of Gastroenterology and Hepatology, Baylor College of Medicine, Houston, TX

Introduction

- Single-use duodenoscopes decrease the risk of crosscontamination and can limit costs by eliminating the need for processing and repair.
- The "aScope Duodeno" by Ambu® is a fully disposable, single use duodenoscope, but experience in its use for complex endoscopic retrograde cholangiopancreatography (ERCP) is limited.

Case

- A 32-year-old female with a history of a Roux-en-Y gastric bypass for obesity, and cirrhosis secondary to alcohol use disorder, status-post liver transplant, presented with ascending cholangitis and choledocholithiasis.
- Initially a percutaneous transhepatic internal-external biliary drain was placed for biliary decompression. To address the obstructive stones, a staged endoscopic ultrasound-guided transgastric ERCP (EDGE) procedure was performed (Fig 1).
- First, a lumen-apposing metal stent (LAMS) was placed to connect the gastric pouch and the bypassed stomach. Two weeks later, an ERCP was performed through the LAMS using a traditional, reusable duodenoscope. (Fig 2-A).
- Given persistent elevation in alkaline phosphatase and concern for a retained biliary stone, the patient underwent a repeat ERCP in three weeks.

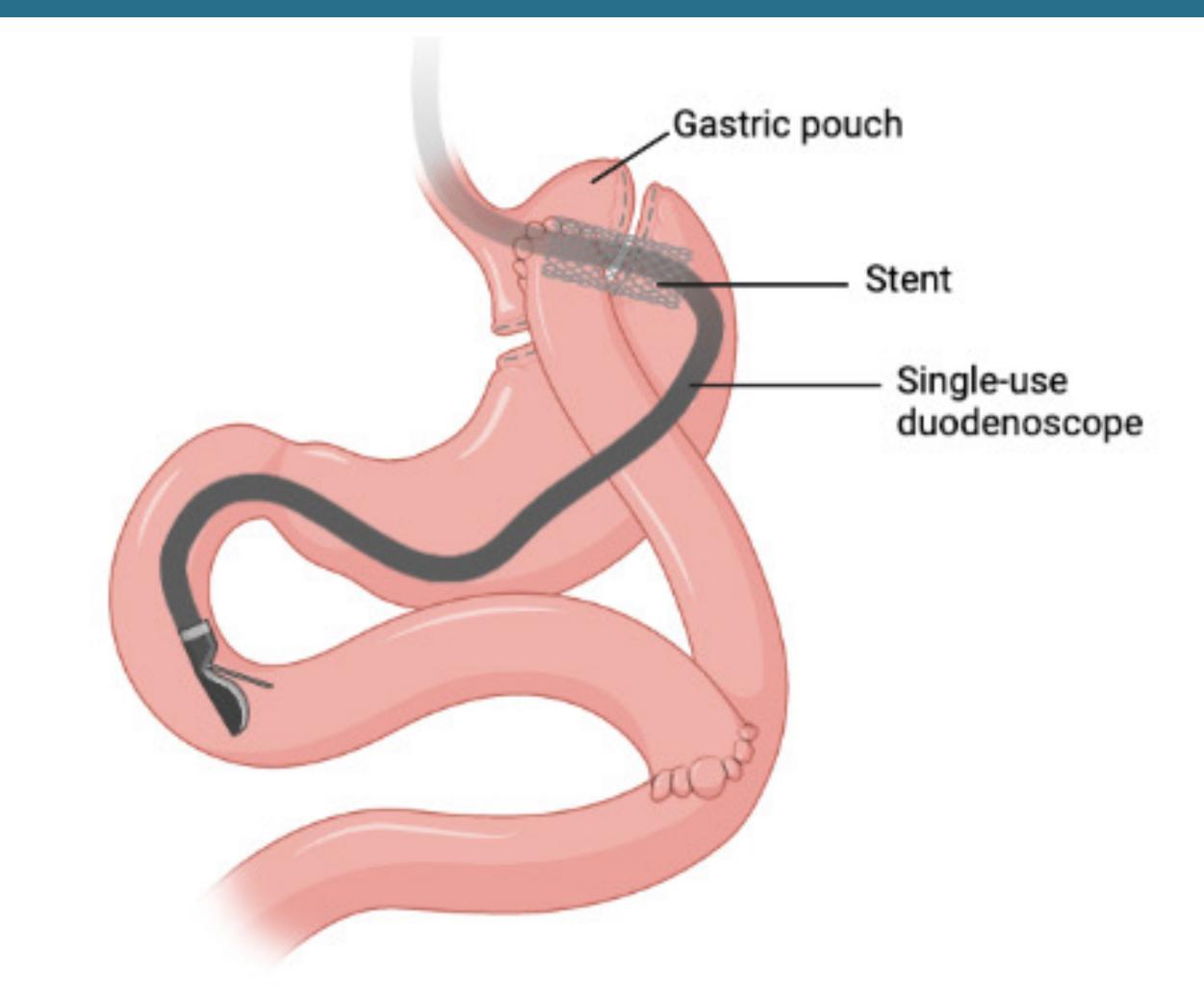


Figure 1 | Illustration of endoscopic ultrasound-guided transgastric ERCP (EDGE) procedure in a patient with a history of Roux-en-Y gastric bypass procedure.

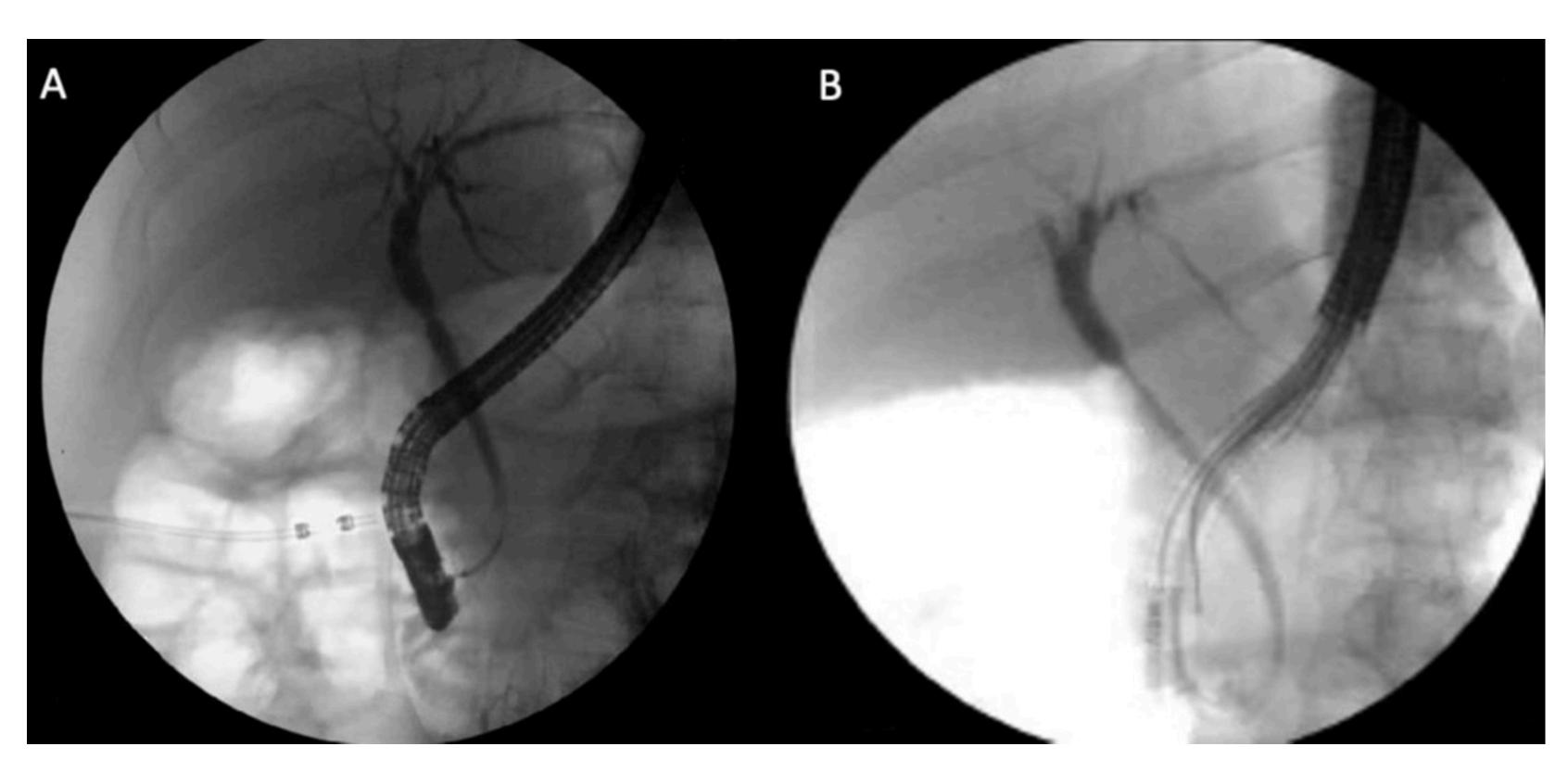


Figure 2 | (A) Traditional endoscope being used to extract stones (B) aScope Duodeno being used to fully clear the biliary ducts on follow-up ERCP with transparent distal end under fluoroscopy.

Case

- This time, the Ambu® single use duodenoscope was advanced through the LAMS to the level of ampulla. Balloon sweep of the CBD was unremarkable for residual stones or debris. (Fig 2- B).
- Due to the high flexibility of the scope and its light weight, the procedure was performed with technical ease.
- As the distal portion of the insertion tube and the flexible portion of the Ambu® scope are transparent under fluoroscopy, an unobstructed cholangiogram was obtained with minimal contrast and limited need to maneuver the scope.
- The LAMS was then removed, and the iatrogenic gastrogastric fistula was closed with an endoscopic tacking system.

Conclusions

 The single use aScope Duodeno can provide advantages in endoscopic retrograde pancreatography with limitations in maneuverability, as shown in this procedure in a patient with a Roux-en-Y gastric bypass performed through a LAMSbased iatrogenic gastro-gastric fistula.

Disclosures

- Figure 1 was created using BioRender®
- Basim Ali, Tara Keihanian: None
- Wasif Abidi: Ambu USA (Consultant), Apollo Endosurgery (Consultant), ConMEd (Consultant), GI dynamics (Grant/Research Support)

Contact