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Case Report

Single Balloon Enteroscopy Assisted Endoscopic Retrograde Cholangiopancreatography and Precut Sphincterotomy for Treatment of Retained Common Bile Duct Stone in Billroth II Gastrectomy Patient

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Performing Endoscopic Retrograde Cholangiopancreaticography (ERCP) with a standard duodenoscope in a patient having a surgically altered anatomy such as Billroth II gastrectomy or Roux-en-Y anastomosis can be technically challenging and sometimes impossible. Thus ERCP has a low success rate in these patients.[1-3] It may be easier to identify the afferent limb using end-viewing endoscope than side-viewing endoscope.[4] Single-balloon enteroscopy (SBE) may improve the ability to identify the biliary and pancreatic orifice allowing endoscopists to perform intervention.[5]

Report here is the case of successful use of SBE for performing ERCP in a patient status post Roux-en-Y procedure. A 78-year-old man underwent a subtotal gastrectomy with Billroth II Roux-en-Y anastomosis for a perforated peptic ulcer 10 years ago. He also underwent an opened cholecystectomy for complicated acute cholecystitis. He currently presented with acute ascending cholangitis. MRCP revealed biliary tract dilatation and multiple CBD stones (Figure 1). ERCP using a duodenoscope were unsuccessful because of failure to reach the afferent limb. We therefore performed procedure using single balloon enteroscope (SIF-Q180, Olympus Optical Co, Ltd, Tokyo, Japan). The scope could reach the ampulla (Figure 2) and CBD cannulation was obtained with a 7-Fr Soehendra dilator. Cholangiogram showed marked dilatation of CBD with multiple CBD stones (Figure 3). Precut sphincterotomy was done with an isolated-tip papillotome (Iso-Tome; MTW Endoskopie, Wesel, Germany) (Figure 4) because the standard catheter was too short for the scope. CBD stones were then removed using combination of balloon catheter and Dormia basket (Figure 5). He was recovered without any complication.

In conclusion SBE-guided ERCP can be an alternative method for performing ERCP procedures

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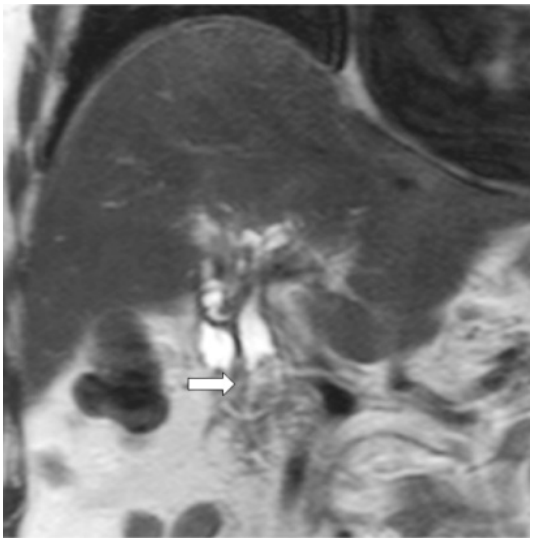

Figure 1. MRCP showed multiple filling defects (white arrow) inside dilated CBD.

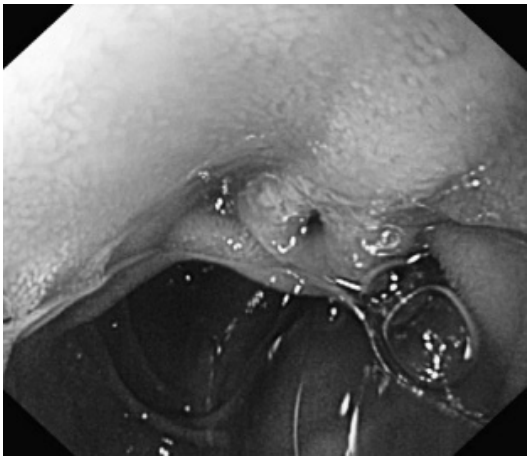

Figure 2. The Single Balloon Endoscope at the ampulla.

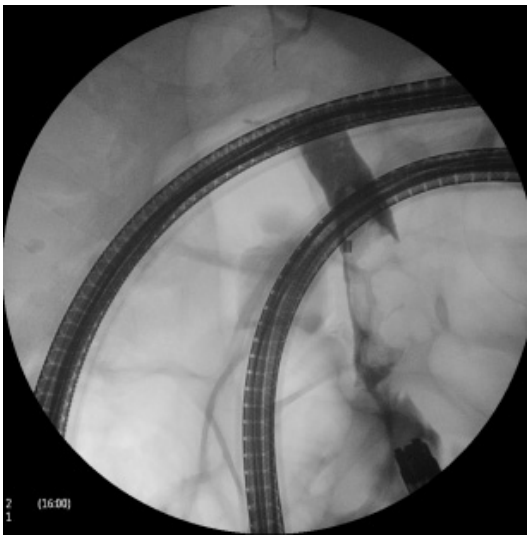

Figure 3. Cholangiogram revealing multiple retained CBD stones inside marked dilatation of CBD.

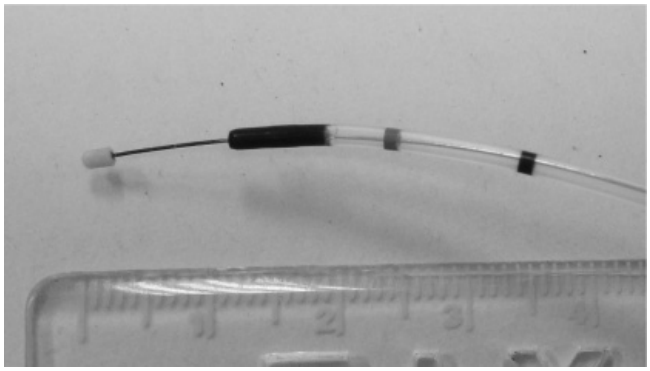

Figure 4. Iso-Tome with semi-oval-shaped tip of epoxide adhesive used for precut sphincterotomy

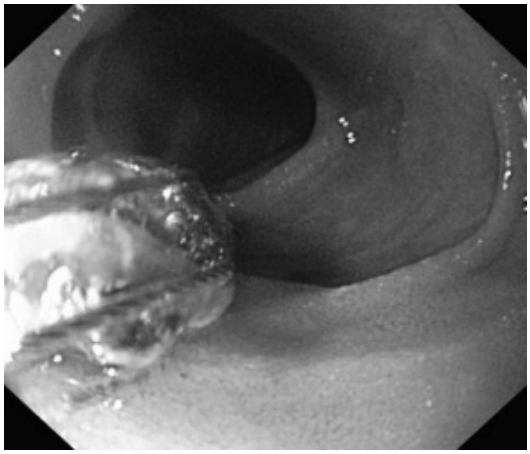

Figure 5. CBD stones removed with Dormia basket.

in patients with surgical altered anatomy. However, the use of the accessory devices may be limited and the procedure can be costly. Thus, the utility of this procedure should be limited to selected patients.

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