Response

Yervant Ichkhanian  
*Henry Ford Health System, yichkha1@hfhs.org*

Juliana Yang

Mouen A. Khashab

Follow this and additional works at: [https://scholarlycommons.henryford.com/internalmedicine_articles](https://scholarlycommons.henryford.com/internalmedicine_articles)

**Recommended Citation**

EUS-guided enteroenteral bypass for transenteric ERCP: building on prior knowledge

To the Editor:

We read with interest the article from Ichkhanian et al.1 On the basis of our experience, we fully agree that EUS-guided enteroenteral anastomosis is a safe and effective technique to gain access to the biliary tree and perform ERCP in patients with surgically altered anatomy. Indeed, the present article is not the first report of such a procedure. In 2014, Perez-Miranda et al2 reported the first EUS-guided transenteric anastomosis performed to treat a recurrent biliary malignancy in altered anatomy. Similarly, the same technique was described by our group to treat a benign biliary stricture after Roux-en-Y reconstruction.3 Then, in April 2019, a wider series reported the same procedure on 32 patients, after Whipple pancreaticoduodenectomy or other surgery with Roux-en-Y reconstruction.4 Successful placement of enteroenteric lumen-apposing metal stents was achieved in 31 of 32 patients (96.9%), and in all of them ERCP was performed.

In conclusion, the present study confirms EUS-guided enteroenteral bypass as a valuable option to perform ERCP in patients with surgically altered anatomy, especially, as the authors stated, when multiple procedures are needed. The current article builds on several years of previously published work and emphasizes the growing role of this procedure.

DISCLOSURE

All authors disclosed no financial relationships.

Massimiliano Mutignani, MD
Giulia Bonato, MD
Lorenzo Dioscoridi, MD, PhD
Francesco Pugliese, MD
Marcello Cintolo, MD
Edoardo Forti, MD
Digestive and Interventional Endoscopy Unit
Grande Ospedale Metropolitano Niguarda
Milan, Italy

REFERENCES


Response:

We appreciate the interest of Mutignani et al1 in our article on EUS-directed transenteric ERCP (EDEE) for the management of pancreatobiliary disease in patients with non–Roux-en-Y gastric bypass surgical anatomy.2 In our case series, we highlighted the experience of 7 international tertiary care centers on performing de novo enteroenteral anastomosis using a lumen-apposing metal stent (LAMS) for the management of pancreatobiliary (PB) diseases in patients with non-RYGB surgically altered anatomy. Mutignani et al1 appropriately highlighted the promising outcomes of EDEE for the management of pancreatobiliary diseases, particularly in cases where multiple interventions are anticipated.

EDEE is a technically challenging procedure, and an essential step is the identification of the afferent or the target limb in the setting of complex altered anatomy. In the case series reported by Mutignani et al2 in April 2019, a percutaneous transhepatic biliary drainage (PTBD) catheter was used to opacify and distend the afferent limb in the majority of cases. This was followed by transluminal advancement and deployment of a biflanged fully covered self-expandable metal stent. For patients who have initially undergone percutaneous biliary decompression, the PTBD catheter can be used to inject saline/contrast solution to distend the afferent limb and facilitate subsequent EDEE.

We propose that PTBD for the sole purpose of facilitating EDEE can often be avoided. We have previously described the “direct EUS puncture” technique for identifying and opacifying the afferent limb as opposed to using other techniques such as PTBD.4 In the direct technique, the afferent limb is identified by EUS by following the hepatic duct insertion into the small bowel. This small bowel loop is punctured with a 19-gauge needle, and saline/contrast solution is injected. Filling of the afferent limb (and possibly opacification of the biliary tree) confirms accessing the correct limb. This is then followed directly with the advancement of a cautery-tipped lumen-apposing metal stent. In our study, the majority (15/18) of patients underwent EDEE by the direct technique, and none required PTBD before EDEE. We believe this decreases the overall invasiveness of this approach and diminishes the number of procedures required.

DISCLOSURE

Dr Khashab is a consultant for Boston Scientific, Medtronic, and Olympus. The other authors disclosed no financial relationships.
To the Editor:

Recently, Tate et al \(^1\) reported in a size-matched cohort study that en bloc EMR e-EMR offered no long-term advantage for predicted benign colonic laterally spreading lesions \(\leq 25\) mm but was associated with an increased risk of major deep mural injury. We read the report with interest and would like to raise several concerns. We would appreciate the authors’ clarification of some details.

First, complete en bloc resection of laterally spreading tumors (LSTs), especially for lesions \(>20\) mm, is generally difficult by simple EMR; piecemeal endoscopic mucosal resection (p-EMR) and endoscopic submucosal dissection (ESD) are often introduced.\(^2\) It is very important to do a preoperative assessment and determine the indication for EMR. Although the diagnostic accuracy of pit pattern reaches 83\%, a preceding biopsy can provide clearer pathologic results without increasing the rates of incomplete tumor resection and adverse events.\(^3,4\) Did the patients in the study undergo forceps biopsies before EMR, and was the result of pathologic analysis of the biopsy specimen consistent with the postoperative pathologic changes?

Second, we noticed that \(>10\)% of macroscopically complete resections by e-EMR did not achieve R0 resection histologically. Additional treatments such as thermal ablation and hot avulsion were required.\(^5\) In this cohort study, e-EMR was chosen for the cases of suspected submucosal invasion. On Supplementary Table 1, surgical histopathologic analysis confirmed more residual cancer after successful index e-EMR versus p-EMR. Instead of simple size matching, tumor type and invasion risk should be discussed and analyzed by propensity score matching to reduce the conclusion bias.

Third, Burgess et al \(^6\) reported that deep mural injury during EMR was associated with lesion size and significant submucosal fibrosis. Fibrosis may indicate potential invasion or lymphovascular involvement, especially in the nongranular pseudodepressed type and nodular mixed type.\(^7\) Subtype analysis of LSTs should be suggested. For p-EMR, Terasaki et al \(^2\) concluded that the local recurrence rate was significantly higher for lesions that were resected in \(\geq 3\) pieces in comparison with lesions resected in 2 pieces or en bloc. It would be helpful to list the number of pieces resected by p-EMR and to make a subgroup analysis.

DISCLOSURE

All authors disclosed no financial relationships.