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**Hybrid biliary interventions for  
Roux-en-Y anatomy**

We would like to congratulate Kedia et al. on their recent report describing the development of endoscopic retrograde cholangiopancreatography (ERCP) for Roux-en-Y anatomy (EDGE) [1]. The report described a two-stage procedure involving percutaneous endoscopic gastrostomy (PEG), followed by ERCP through the gastrostomy 3–9 days later. It is an invaluable contribution in an era of widespread bariatric surgery performed on relatively young patients, some of whom will certainly require biliary interventions at some point in the future. However, as surgeon endoscopists we cannot refrain from commenting on the evolving concept of minimally invasive techniques in this field.

Given that laparoscopic and open surgical access to the bypassed stomach can be achieved easily with small incisions, the invasiveness and the complexity, both technically and conceptually, of these “minimally invasive” procedures seems questionable. We cannot deny the feasibility and usefulness of the technique in selected cases; however, the surgical ap-

proach seems to be an unquestionable gold standard.

The advantages of surgical access include: single-stage procedure, limited resources required, short procedure time (30 minutes added to ERCP), and a safer gastrotomy closure. Performing the one-stage percutaneous technique, as described by Attam et al., raises concern about possible leaks [2]. Following the two-stage percutaneous procedure reported by Kedia et al., 2/6 patients experienced localized infection at the PEG site (cases with a shorter time between stages). In a one-stage percutaneous procedure, these infections could have resulted in a leak into the peritoneal cavity as a result of no firm adherence between the stomach and abdominal wall. Diagnosis and management of infections in obese patients is troublesome. Repeated access could be achieved by introducing a single incision port into the stomach, as we described for repeated drainage of walled-off pancreatic necrosis [3]. The port could also prevent infection by acting as a physical impermeable membrane and enable repeated interventions including external biliary drainage for lavage in patients with cholangitis.

The demand for percutaneous endoscopic procedures is predicted to increase as the population of individuals with gastric bypass reach the age when biliary problems emerge. Therefore, attempts to improve

these techniques, and their dissemination in journals such as *Endoscopy*, will ensure that we will not be unprepared.

**Competing interests:** None

#### References

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- 3 Kobiela J, Hac S, Sledzinski Z. Single-port transgastric access for repeated debridement of infected pancreatic necrotic tissue. *Endoscopy* 2010; 42: E354–355

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