LETTERS TO THE EDITOR

EUS-guided gastroenterostomy: Less is more! The wireless EUS-guided gastroenterostomy simplified technique



For patients with either benign or malignant gastric outlet obstruction, surgical gastroenterostomy, the standard of care for many years, seems to be losing ground to EUS-guided gastroenterostomy.¹⁻³ Various technical approaches to this endoscopic technique have been described, although the direct method, using only a nasojejunal catheter, 19-gauge needle, and lumen-apposing metal stent, has been suggested as the preferred method.⁴ In the February issue of *VideoGIE*, Irani et al⁵ gave their expert overview of 5 different EUS-guided gastroenterostomy techniques in their technical review "EUS-guided gastroenterostomy: techniques from East to West." Although we completely agree with the authors that superiority of 1 of 5 techniques has not been proven to date, we would like to add a sixth approach, which may also potentially improve cost effectiveness and time efficiency.

From 2017 to 2020, a total of 45 EUS-guided gastroenterostomy procedures were performed at the University Hospitals Leuven (Belgium) and San Raffaele Scientific Institute (Milan, Italy) using a needle and wireless direct method, which we named the wireless EUS-guided gastroenterostomy simplified technique (WEST). This technique involves infusion of water into the small bowel through a nasojejunal catheter and subsequent EUS transgastric identification of the distended loop by visualization of both the catheter and fluid cavitation during injection, followed by "free-hand" direct penetration of the electrocautery-enhanced lumen-apposing metal stent and its immediate deployment.⁶ In our opinion, confirmatory puncture by a 19-gauge needle and guidewire cannulation is an unnecessary step once the distended small bowel and nasojejunal catheter are visualized adequately by EUS; it increases costs and procedure duration and may lead to a false sense of security. (A contrast-injected loop might be either a distant jejunoileal loop or even large intestine.) Although one could argue that omitting this step could increase technical failures, using WEST we have only identified 1 unrelated technical failure (2.2%), due to the inability to advance the nasojejunal catheter through the duodenal stenosis.

Similar to various other aspects of modern medicine, we think that in the context of WEST, less is more.

DISCLOSURE

Dr Bronswijk received travel grants from Taewoong, Takeda, and Prion Medical. Dr Vanella received travel grants from Mylan and Alfasigma. Dr Van der Merwe holds the Cook Chair in Interventional Endoscopy and bolds consultancy agreements with Cook, Pentax, and Olympus. Dr Laleman co-chairs the Boston Scientific Chair in Therapeutic Biliopancreatic Endoscopy with Dr Van der Merwe and has consultancy agreements with Boston Scientific and Cook. Dr van Malenstein holds a consultancy agreement with Boston Scientific. All other authors disclosed no financial relationships.

Abbreviation: WEST, wireless EUS-guided gastroenterostomy simplified technique.

Michiel Bronswijk, MD Hannah van Malenstein, MD, PhD Wim Laleman, MD, PhD Schalk Van der Merwe, MD, PhD Department of Gastroenterology and Hepatology University Hospitals Gasthuisberg, University of Leuven

Leuven, Belgium

Giuseppe Vanella, MD

Maria Chiara Petrone, MD

Paolo Giorgio Arcidiacono, MD, PhD Pancreatobiliary Endoscopy and EUS Division IRCSS San Raffaele Scientific Institute, Vita-Salute San Raffaele University Milan, Italy

REFERENCES

- Khashab MA, Kumbhari V, Grimm IS, et al. EUS-guided gastroenterostomy: the first U.S. clinical experience (with video). Gastrointest Endosc 2015;82:932-8.
- James TW, Greenberg S, Grimm IS, et al. EUS-guided gastroenteric anastomosis as a bridge to definitive treatment in benign gastric outlet obstruction. Gastrointest Endosc 2020;91:537-42.
- Khashab MA, Bukhari M, Baron TH, et al. International multicenter comparative trial of endoscopic ultrasonography-guided gastroenterostomy versus surgical gastrojejunostomy for the treatment of malignant gastric outlet obstruction. Endosc Int Open 2017;5:E275-81.
- Chen YI, Kunda R, Storm AC, et al. EUS-guided gastroenterostomy: a multicenter study comparing the direct and balloon-assisted techniques. Gastrointest Endosc 2018;87:1215-21.
- 5. Irani S, Itoi T, Baron TH, et al. EUS-guided gastroenterostomy: techniques from East to West. VideoGIE 2019;5:48-50.
- 6. Bronswijk M, Fransen L, Vanella G, et al. Successful treatment of superior mesenteric artery syndrome by endoscopic ultrasound-guided gastrojejunostomy. Endoscopy. Epub 2020 June 19.

https://doi.org/10.1016/j.vgie.2020.06.012

Response:



We would like to thank Bronswijk et al¹ for their cogent comments and for their series on performing EUS-guided gastroenterostomy.²

We agree that cost efficiency is unquestionably an important part of health care in a world of finite resources