How to reduce the ecological impact of gastric peroral endoscopic myotomy: a small effort for the environment



It is already common knowledge that endoscopic procedures are responsible for the production of large amounts of waste, mostly owing to the usage of a high number of disposable instruments [1]. Gastric peroral endoscopic myotomy (G-POEM) is a well-known procedure used for the treatment of refractory gastroparesis [2]. Like most submucosal endoscopic procedures, this technique requires the injection of a premixed methylene blue/glycerol solution into the submucosa, in order to raise a mucosal bleb and create the space to make a safe mucosal cut. This step is usually performed with a routine single-use sclerotherapy needle [2]; however, a DualKnife could also be used for the same purpose, allowing the use of one disposable injection needle to be spared.

We report the case of a 31-year-old patient who was suffering from refractory gastroparesis secondary to diabetes mellitus type 1, who was referred to our center for G-POEM treatment. After the ideal mucosal entry site had been identified, we opted to use the DualKnife for the initial injection, as well as during the rest of the procedure (> Video 1). This was easily performed without any extra inconvenience or difficulty during the whole endoscopic intervention.

This case illustrates that, even if the DualKnife is shorter than the sclerotherapy needle, it can have the same efficacy and performance for submucosal injection as the latter. This approach has multiple advantages as it offers a time-saving during submucosal endoscopy by eliminating an instrument change and, most importantly, it leads to a significant reduction in waste production and the associated ecological footprint of the procedure.

Endoscopy_UCTN_Code_TTT_1AU_2AF





Competing interests

The authors declare that they have no conflict of interest.

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Endoscopy 2022; 54: E899 DOI 10.1055/a-1847-7490 ISSN 0013-726X published online 1.7.2022

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Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

