



## Letter to the Editor: Initial Experience with Endoscopic Pyloromyotomy, with Description and Video of Technique

Laurent Monino<sup>1,2</sup> · V. Vitton<sup>2</sup> · M. Barthet<sup>2</sup> · J. M. Gonzalez<sup>2</sup>

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We read with interest the article by Hedberg et al. whom reported their initial experience of endoscopic pyloromyotomy (G-POEM) combined with measures of pyloric distensibility with Endoflip before and after procedure.<sup>1</sup> The physiopathology of gastroparesis is complex and involves gastric and/or pyloric motor dysfunction. Gastric emptying scintigraphy allows for confirming the diagnosis of gastroparesis, defined as the percentage of remaining radioisotope at 2 h (%2) > 60% and at 4H (%H4) > 10%.<sup>2</sup> Pylorospasm or increase pyloric tone is one of the causes of delayed gastric emptying. The significant increase of pyloric distensibility after G-POEM, reported by Hedberg et al., is very encouraging and objectively confirms the interest of G-POEM in the management of gastroparesis with low pyloric distensibility. This method of evaluation of pyloric distensibility could complete the interpretation of gastric scintigraphy and help to select the best responder to G-POEM as suggested by Jacques et al.<sup>3</sup> With this series, Hedberg et al. confirm the first promising results of G-POEM in gastroparesis with improvement symptoms in more than 70%<sup>3–5</sup> of case. However, a digestive neuropathy can also be involved in a delayed gastric emptying. Gastric electrical stimulation (GES) is another therapeutic option for management of gastroparesis resistant to medical therapy. Some studies have reported an improvement in symptoms, particularly on nausea and vomiting, in 70% of patients at 6 and 12 months.<sup>6,7</sup> However, GES has suffered from its high cost and its adverse events that have limited its development.<sup>8</sup>

In this article, Hedberg et al. report a failure of G-POEM that they have finally addressed associating a GES. Our center is

pioneer in treatment of gastroparesis with the first clinical case of European's G-POEM<sup>9</sup> and with one of the largest series published.<sup>4</sup> In case of GES failure, G-POEM was no contraindicated and could help to relieve some patients.<sup>10</sup> In our experience, contrary to Heldeberg et al., we perform G-POEM in five patients with GES failure. Etiologies of gastroparesis were diabetes for four patients and postoperative for one. In all of these, the endoscopic procedure was completed without adverse events. Three of five patients (two diabetics and one postoperative gastroparesis) improved their symptoms (nausea and vomiting) and decreased of their GCSI score at 3, 6, and 12 months. Thus, in our experience, failure of GES is not a predictive factor of no response to G-POEM and inversely. Due to complex physiopathology of gastroparesis, it is difficult to select patients before a procedure (GES or G-POEM) whom will improve by GES or G-POEM or both. As suggested by Hedberg et al. Endoflip could predict the best responders to endoscopic pyloromyotomy and may help to choose the best therapeutic strategy. However, in our experience, both treatments may be associated in case of failure of one of the two.

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### Compliance with Ethical Standards

**Conflict of Interest** Pr. Barthet and Dr. Gonzalez is consultant for Boston Scientific. None of the other authors have conflict of interest to disclose.

✉ Laurent Monino  
laurent.monino@uclouvain.be; monino.laurent@hotmail.fr

<sup>1</sup> Departement of Hepatogastroenterology, Cliniques Universitaires Saint Luc, Université Catholique de Louvain, 1200 Brussels, Belgium

<sup>2</sup> Department of Hepatogastroenterology, Assistance Publique des Hôpitaux de Marseille, Hôpital Nord, Aix-Marseille Université, Chemin des Bourrely, 13015 Marseille, France

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