Clip-anchoring technique: a fast, cheap, and efficient way to close a gastric peroral endoscopic pyloromyotomy tunnel

► **Fig. 1** Incisions for clip placement made at the beginning of the procedure.

► **Fig. 2** Incisions used to anchor a clip.

► **Fig. 3** Clip in position.

► **Fig. 4** Full closure of tunnel with three clips.

► **Video 1** Gastric peroral endoscopic pyloromyotomy with clip-anchoring technique to ease the tunnel closure.

Gastric peroral endoscopic pyloromyotomy (G-POEM) is a treatment option for refractory gastroparesis [1]. The technique is similar to the esophageal peroral endoscopic myotomy [2]. However, tunnel closure may be difficult because of the gastric mucosa stretching at the end of the procedure.

We report here the case of a 38-year-old woman suffering from severe diabetic gastroparesis. She had already undergone unsuccessful pyloric botulinum toxin injections. The gastric emptying time was 146 minutes at preoperative scintigraphy.

We decided to perform a G-POEM (► **Video 1**). After the submucosal injection, a 1-cm incision was made using an Endocut I effect 2 current, 5 cm above

the pylorus. Immediately after, the same current was used to make three small incisions on each side of the tunnel entrance (► **Fig. 1**) to allow clip anchoring at the end of the procedure. The rest of the procedure was a standard G-POEM: after the submucosal trimming inside the tunnel to the pyloric arch, a deep pyloromyotomy was made. The previously made incisions were used to place three clips to ease the tunnel closure (clip anchoring technique, ► **Fig. 2**, ► **Fig. 3**, ► **Fig. 4**). The overall procedure lasted 25 minutes and the tunnel closing lasted

3 minutes. There were no complications after the procedure, except an early dumping syndrome the day after the procedure, which is a common adverse event after a G-POEM [3].

To our knowledge, this is the first ever case report showing the clip-anchoring technique to close a G-POEM tunnel. This technique is effective and easy. It is also cheaper than the use of over-the-scope clips recently described [4].

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Competing interests

The authors declare that they have no conflict of interest.

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